

ADA/ABA

Handbook

**Accessibility Guidelines
for Buildings and
Facilities**

BNI Building News

***BNi* Building News**

Editor-In-Chief

William D. Mahoney, P.E.

Technical Services

Ana Varela

Cover Design

Robert O. Wright

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LOS ANGELES

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ANAHEIM

1612 S. Clementine St.
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NEW ENGLAND

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Chapter 1: Protruding Objects (continued)

Advisory
Protrusion Limits

307.2

When a cane is used and the element is in the detectable range, it gives a person sufficient time to detect the element with the cane before there is body contact.

Elements located on circulation paths, including operable elements, must comply with requirements for protruding objects.

For example, awnings and their supporting structures cannot reduce the minimum required vertical clearance.

Similarly, casement windows, when open, cannot encroach more than 4 inches (100 mm) into circulation paths above 27 inches (686mm).

307.3

Post-Mounted Objects

Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305mm) maximum when located 27 inches (686mm) minimum and 80 inches (2032mm) maximum above the finish floor or ground.

Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305mm), the lowest edge of such sign or obstruction shall be 27 inches (686mm) maximum or 80 inches (2032mm) minimum above the finish floor or ground.

See Figure 307.3 - p. 491.

EXCEPTION:

The sloping portions of handrails serving stairs and ramps shall not be required to comply with 307.3 - (above).

307.4

Vertical Clearance

Vertical clearance shall be 80 inches (2032mm) high minimum.

Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2032mm) high.

The leading edge of such guardrail or barrier shall be located 27 inches (686mm) maximum above the finish floor or ground.

See Figure 307.4 - p. 492.

Chapter 1: Protruding Objects (continued)

EXCEPTION:

Door closers and door stops shall be permitted to be 78 inches (1981mm) minimum above the finish floor or ground.

307.5

Required Clear Width

Protruding objects shall not reduce the clear width required for accessible routes.

Chapter 2:

OPERABLE PARTS

205
205.1

Operable Parts General

Operable parts on accessible elements, accessible routes, and in accessible rooms and spaces shall comply with this Chapter - 309.

EXCEPTIONS:

1. Operable parts that are intended for use only by service or maintenance personnel shall not be required to comply with this Chapter - 309.
2. Electrical or communication receptacles serving a dedicated use shall not be required to comply with this Chapter - 309.
3. Where two or more outlets are provided in a kitchen above a length of counter top that is uninterrupted by a sink or appliance, one outlet shall not be required to comply with this Chapter - 309.
4. Floor electrical receptacles shall not be required to comply with this Chapter - 309.
5. HVAC diffusers shall not be required to comply with this Chapter - 309.
6. Except for light switches, where redundant controls are provided for a single element, one control in each space shall not be required to comply with this Chapter - 309.
7. Cleats and other boat securement devices shall not be required to comply with 309.3 - (following page).
8. Exercise machines and exercise equipment shall not be required to comply with this Chapter - 309.

205.1

Advisory
General

Controls covered by 205.1 - (above) include, but are not limited to, light switches, circuit breakers, duplexes and other convenience receptacles, environmental and appliance controls, plumbing fixture controls, and security and intercom systems.

Chapter 2: Operable Parts (continued)

301 **General**
301.1 **Scope**

The provisions of this Chapter - 309, Chapters 1 - 307 - pp. 30-32, 42-46 - 302-306 - pp. 227-236 and 47 - 308 - pp. 237-239 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

309 **Operable Parts**
309.1 **General**

Operable parts shall comply with this Chapter - 309.

309.2 **Clear Floor Space**

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided.

309.3 **Height**

Operable parts shall be placed within one or more of the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239.

309.4 **Operation**

Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.

The force required to activate operable parts shall be 5 pounds (22.2 N) maximum.

EXCEPTION:

Gas pump nozzles shall not be required to provide operable parts that have an activating force of 5 pounds (22.2 N) maximum.

206.2.1 *Advisory*
Site Arrival Points

EXCEPTION 2:

Access from site arrival points may include vehicular ways. Where a vehicular way, or a portion of a vehicular way, is provided for pedestrian travel, such as within a shopping center or shopping mall parking lot, this exception does not apply.

206.2.2 **Within a Site**

At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

EXCEPTION:

An accessible route shall not be required between accessible buildings, accessible facilities, accessible elements, and accessible spaces if the only means of access between them is a vehicular way not providing pedestrian access.

206.2.2 *Advisory*
Within a Site

An accessible route is required to connect to the boundary of each area of sport activity.

Examples of areas of sport activity include: soccer fields, basketball courts, baseball fields, running tracks, skating rinks, and the area surrounding a piece of gymnastic equipment.

While the size of an area of sport activity may vary from sport to sport, each includes only the space needed to play.

Where multiple sports fields or courts are provided, an accessible route is required to each field or area of sport activity.

206.2.3 **Multi-Story Buildings and Facilities**

At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.

Chapter 3: Accessible Routes (continued)

EXCEPTIONS:

1. In private buildings or facilities that are less than three stories or that have less than 3000 square feet (279 m²) per story, an accessible route shall not be required to connect stories provided that the building or facility is not a shopping center, a shopping mall, the professional office of a health care provider, a terminal, depot or other station used for specified public transportation, an airport passenger terminal, or another type of facility as determined by the Attorney General.
2. Where a two story public building or facility has one story with an occupant load of five or fewer persons that does not contain public use space, that story shall not be required to be connected to the story above or below.
3. In detention and correctional facilities, an accessible route shall not be required to connect stories where cells with mobility features required to comply with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325, all common use areas serving cells with mobility features required to comply with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325, and all public use areas are on an accessible route.
4. In residential facilities, an accessible route shall not be required to connect stories where residential dwelling units with mobility features required to comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330, all common use areas serving residential dwelling units with mobility features required to comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330, and public use areas serving residential dwelling units are on an accessible route.
5. Within multi-story transient lodging guest rooms with mobility features required to comply with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141, an accessible route shall not be required to connect stories provided that spaces complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141, are on an accessible route and sleeping accommodations for two persons minimum are provided on a story served by an accessible route.
6. In air traffic control towers, an accessible route shall not be required to serve the cab and the floor immediately below the cab.
7. Where exceptions for alterations to qualified historic buildings or facilities are permitted by Section 8: Existing Buildings and Facilities - 202.5 - p. 24, an accessible route shall not be required to stories located above or below the accessible story.

Chapter 3: Accessible Routes (continued)

Advisory

206.2.3 *Multi-Story Buildings and Facilities*

Spaces and elements located on a level not required to be served by an accessible route must fully comply with this document.

While a mezzanine may be a change in level, it is not a story.

If an accessible route is required to connect stories within a building or facility, the accessible route must serve all mezzanines.

Advisory

206.2.3 *Multi-Story Buildings and Facilities*

EXCEPTION 4:

Where common use areas are provided for the use of residents, it is presumed that all such common use areas “serve” accessible dwelling units unless use is restricted to residents occupying certain dwelling units.

For example, if all residents are permitted to use all laundry rooms, then all laundry rooms “serve” accessible dwelling units.

However, if the laundry room on the first floor is restricted to use by residents on the first floor, and the second floor laundry room is for use by occupants of the second floor, then first floor accessible units are “served” only by laundry rooms on the first floor.

In this example, an accessible route is not required to the second floor provided that all accessible units and all common use areas serving them are on the first floor.

206.2.3.1 **Stairs and Escalators in Existing Buildings**

In alterations and additions, where an escalator or stair is provided where none existed previously and major structural modifications are necessary for the installation, an accessible route shall be provided between the levels served by the escalator or stair unless exempted by 206.2.3 - Exceptions 1-7 - (preceding page).

206.2.4 **Spaces and Elements**

At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility which are otherwise connected by a circulation path unless exempted by 206.2.3 - Exceptions 1-7 - (preceding page).

Chapter 3: Accessible Routes (continued)

EXCEPTIONS:

1. Raised courtroom stations, including judge's benches, clerk's stations, bailiff's stations, deputy clerk's stations, and court reporter's stations shall not be required to provide vertical access provided that the required clear floor space, maneuvering space, and, if appropriate, electrical service are installed at the time of initial construction to allow future installation of a means of vertical access complying with Chapter 50: Ramps - 405 - pp. 252-256, Chapter 52: Elevators - 407 - pp. 259-272, Chapter 53: Limited Use/Limited Application Elevators - 408 - pp. 273-275 or Chapter 55: Platform Lifts - 410 - pp. 279-282 without requiring substantial reconstruction of the space.
2. In assembly areas with fixed seating required to comply with Chapter 19: Assembly Areas - 221 - pp. 121-127, an accessible route shall not be required to serve fixed seating where wheelchair spaces required to be on an accessible route are not provided.
3. Accessible routes shall not be required to connect mezzanines where buildings or facilities have no more than one story.

In addition, accessible routes shall not be required to connect stories or mezzanines where multi-story buildings or facilities are exempted by this Chapter - 206.2.3 - Exceptions 1-7 - p. 37.

206.2.4

*Advisory
Spaces and Elements*

Accessible routes must connect all spaces and elements required to be accessible including, but not limited to, raised areas and speaker platforms.

206.2.4

*Advisory
Spaces and Elements*

EXCEPTION 1:

The exception does not apply to areas that are likely to be used by members of the public who are not employees of the court such as jury areas, attorney areas, or witness stands.

206.2.5

Restaurants and Cafeterias

In restaurants and cafeterias, an accessible route shall be provided to all dining areas, including raised or sunken dining areas, and outdoor dining areas.

Chapter 3: Accessible Routes (continued)

EXCEPTIONS:

1. In buildings or facilities not required to provide an accessible route between stories, an accessible route shall not be required to a mezzanine dining area where the mezzanine contains less than 25 percent of the total combined area for seating and dining and where the same decor and services are provided in the accessible area.
2. In alterations, an accessible route shall not be required to existing raised or sunken dining areas, or to all parts of existing outdoor dining areas where the same services and decor are provided in an accessible space usable by the public and not restricted to use by people with disabilities.
3. In sports facilities, tiered dining areas providing seating required to comply with Chapter 19: Assembly Areas - 221 - pp. 121-127 shall be required to have accessible routes serving at least 25 percent of the dining area provided that accessible routes serve seating complying with Chapter 19: Assembly Areas - 221 - pp. 121-127 and each tier is provided with the same services.

206.2.5

Advisory
Restaurants and Cafeterias

EXCEPTION 1:

Examples of “same services” include, but are not limited to, bar service, rooms having smoking and non-smoking sections, lotto and other table games, carry-out, and buffet service.

Examples of “same decor” include, but are not limited to, seating at or near windows and railings with views, areas designed with a certain theme, party and banquet rooms, and rooms where entertainment is provided.

206.2.6

Performance Areas

Where a circulation path directly connects a performance area to an assembly seating area, an accessible route shall directly connect the assembly seating area with the performance area.

An accessible route shall be provided from performance areas to ancillary areas or facilities used by performers unless exempted by this Chapter - 206.2.3 - Exceptions 1-7 - p. 37.

206.2.7

Press Boxes

Press boxes in assembly areas shall be on an accessible route.

EXCEPTIONS:

1. An accessible route shall not be required to press boxes in bleachers that have points of entry at only one level provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.
2. An accessible route shall not be required to free-standing press boxes that are elevated above grade 12 feet (3658mm) minimum provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.

206.2.7

Advisory
Press Boxes

EXCEPTION 2:

Where a facility contains multiple assembly areas, the aggregate area of the press boxes in each assembly area is to be calculated separately.

For example, if a university has a soccer stadium with three press boxes elevated 12 feet (3658mm) or more above grade and each press box is 150 square feet (14 m²), then the aggregate area of the soccer stadium press boxes is less than 500 square feet (46 m²) and Exception 2 applies to the soccer stadium.

If that same university also has a football stadium with two press boxes elevated 12 feet (3658 mm) or more above grade and one press box is 250 square feet (23 m²), and the second is 275 square feet (26 m²), then the aggregate area of the football stadium press boxes is more than 500 square feet (46 m²) and Exception 2 does not apply to the football stadium.

206.2.8

Employee Work Areas

Common use circulation paths within employee work areas shall comply with this Chapter - 402.

EXCEPTIONS:

1. Common use circulation paths located within employee work areas that are less than 1000 square feet (93 m²) and defined by permanently installed partitions, counters, casework, or furnishings shall not be required to comply with this Chapter - 402.
2. Common use circulation paths located within employee work areas that are an integral component of work area equipment shall not be required to comply with this Chapter - 402.

Chapter 3: Accessible Routes (continued)

3. Common use circulation paths located within exterior employee work areas that are fully exposed to the weather shall not be required to comply with this Chapter - 402.

206.2.8 *Advisory*
Employee Work Areas

EXCEPTION 1:

Modular furniture that is not permanently installed is not directly subject to these requirements.

The Department of Justice ADA regulations provide additional guidance regarding the relationship between these requirements and elements that are not part of the built environment.

Additionally, the Equal Employment Opportunity Commission (EEOC) implements Title I of the ADA which requires non-discrimination in the workplace.

EEOC and provide guidance regarding employer's obligations to provide reasonable accommodations for employees with disabilities.

206.2.8 *Advisory*
Employee Work Areas

EXCEPTION 2:

Large pieces of equipment, such as electric turbines or water pumping apparatus, may have stairs and elevated walkways used for overseeing or monitoring purposes which are physically part of the turbine or pump.

However, passenger elevators used for vertical transportation between stories are not considered "work area equipment" as defined in Section 6: Definitions - 106.5 - p. 20.

206.2.9 **Amusement Rides**

See Chapter 32: Amusement Rides - 206.2.9, 206.2.9.1 and 206.2.9.2 - p. 166.

206.2.10 **Recreational Boating Facilities**

See Chapter 33: Recreational Boating Facilities - 206.2.10 - p. 177.

Chapter 3: Accessible Routes (continued)

206.2.11 **Bowling Lanes**

Where bowling lanes are provided, at least 5 percent, but no fewer than one of each type of bowling lane, shall be on an accessible route.

206.2.12 **Court Sports**

In court sports, at least one accessible route shall directly connect both sides of the court.

206.2.13 **Exercise Machines and Equipment**

See Chapter 34: Exercise Machines and Equipment - 206.2.13 - p. 186.

206.2.14 **Fishing Piers and Platforms**

See Chapter 35: Fishing Piers and Platforms - 206.2.14 - p. 188.

206.2.15 **Golf Facilities**

See Chapter 36: Golf Facilities - 206.2.15 - p. 192.

206.2.16 **Miniature Golf Facilities**

See Chapter 37: Miniature Golf Facilities - 206.2.16 - p. 196.

206.2.17 **Play Areas**

See Chapter 38: Play Areas - 206.2.17, 206.2.17.1 and 206.2.17.2 - p. 200.

206.3 **Location**

Accessible routes shall coincide with or be located in the same area as general circulation paths.

Where circulation paths are interior, required accessible routes shall also be interior.

206.3 *Advisory
Location*

The accessible route must be in the same area as the general circulation path.

This means that circulation paths, such as vehicular ways designed for pedestrian traffic, walks, and unpaved paths that are designed to be routinely used by pedestrians must be accessible or have an accessible route nearby.

Chapter 3: Accessible Routes (continued)

Additionally, accessible vertical interior circulation must be in the same area as stairs and escalators, not isolated in the back of the facility.

206.4 Entrances

See Chapter 4: Entrances - 206.4 - pp. 47-49.

206.4.1 Public Entrances

See Chapter 4: Entrances - 206.4.1 - p. 47.

206.4.2 Parking Structure Entrances

See Chapter 4: Entrances - 206.4.2 - p. 47.

206.4.3 Entrances from Tunnels or Elevated Walkways

See Chapter 4: Entrances - 206.4.3 - p. 48.

206.4.4 Transportation Facilities

See Chapter 4: Entrances - 206.4.4 - pp. 48 & 49.

206.4.4.1 Location

See Chapter 4: Entrances - 206.4.4.1 - p. 48.

206.4.4.2 Direct Connections

See Chapter 4: Entrances - 206.4.4.2 - p. 48.

206.4.4.3 Key Stations and Intercity Rail Stations

See Chapter 4: Entrances - 206.4.4.3 - p. 48.

206.4.5 Tenant Spaces

See Chapter 4: Entrances - 206.4.5 - p. 49.

206.4.6 Residential Dwelling Unit Primary Entrance

See Chapter 4: Entrances - 206.4.6 - p. 49.

Chapter 3: Accessible Routes (continued)

206.4.7 **Restricted Entrances**

See Chapter 4: Entrances - 206.4.7 - p. 49.

206.4.8 **Service Entrances**

See Chapter 4: Entrances - 206.4.8 - p. 49.

206.4.9 **Entrances for Inmates or Detainees**

See Chapter 4: Entrances - 206.4.9 - p. 49.

206.5 **Doors - Doorways - Gates**

See Chapter 49: Doors - Doorways - Gates - 206.5-206.5.4 - p. 242.

206.6 **Elevators**

See Chapter 52: Elevators - 206.6-206.6.1 - p. 259.

206.7 **Platform Lifts**

See Chapter 55: Platform Lifts - 206.7-206.7.10 - pp. 279-281.

206.8 **Security Barriers**

Security barriers, including but not limited to, security bollards and security check points, shall not obstruct a required accessible route or accessible means of egress.

EXCEPTION:

Where security barriers incorporate elements that cannot comply with these requirements such as certain metal detectors, fluoroscopes, or other similar devices, the accessible route shall be permitted to be located adjacent to security screening devices.

The accessible route shall permit persons with disabilities passing around security barriers to maintain visual contact with their personal items to the same extent provided others passing through the security barrier.

Chapter 3: Accessible Routes (continued)

401 **General**
401.1 **Scope**

The provisions of this Chapter - 402, Chapters 48-55 - 403 - pp. 240 & 241, 404-409 - pp. 243-278, and 410 - pp. 281 & 282 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

402 **Accessible Routes**
402.1 **General**

Accessible routes shall comply with this Chapter - 402.

402.2 **Components**

Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts.

All components of an accessible route shall comply with the applicable requirements of Chapters 3 and 4 - 206 and 206.4 - 35-49.

402.2 *Advisory*
Components

Walking surfaces must have running slopes not steeper than 1:20, see Chapter 48: Walking Surfaces - 403.3 - p. 240.

Other components of accessible routes, such as ramps Chapter 50: Ramps - 405 - pp. 252-256 and curb ramps Chapter 51: Curb Ramps - 406 - pp. 257 & 258, are permitted to be more steeply sloped.

Chapter 4:

ENTRANCES

206.4

Entrances

Entrances shall be provided in accordance with this Chapter - 206.4.

Entrance doors, doorways, and gates shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 and shall be on an accessible route complying with Chapter 3: Accessible Routes - 402 - p. 46.

EXCEPTIONS:

1. Where an alteration includes alterations to an entrance, and the building or facility has another entrance complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 that is on an accessible route, the altered entrance shall not be required to comply with this Chapter - 206.4 unless required by Section 8: Existing Buildings and Facilities - 202.4 - p. 23.
2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by Section 8: Existing Buildings and Facilities - 202.5 - p. 24, no more than one public entrance shall be required to comply with this Chapter - 206.4.

Where no public entrance can comply with this Chapter - 206.4 under criteria established in Section 8: Existing Buildings and Facilities - 202.5 - Exception - p. 24, then either an unlocked entrance not used by the public shall comply with this Chapter - 206.4; or a locked entrance complying with this Chapter - 206.4 with a notification system or remote monitoring shall be provided.

206.4.1

Public Entrances

In addition to entrances required by 206.4.2-206.4.9 - (below & following pages), at least 60 percent of all public entrances shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

206.4.2

Parking Structure Entrances

Where direct access is provided for pedestrians from a parking structure to a building or facility entrance, each direct access to the building or facility entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

206.4.3

Entrances from Tunnels or Elevated Walkways

Where direct access is provided for pedestrians from a pedestrian tunnel or elevated walkway to a building or facility, at least one direct entrance to the building or facility from each tunnel or walkway shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

Chapter 4: Entrances (continued)

206.4.4

Transportation Facilities

In addition to the requirements of 206.4.2, 206.4.6, and 206.4.5-206.4.9 - (preceding page, above & following pages), transportation facilities shall provide entrances in accordance with 206.4.4 - (below).

206.4.4.1

Location

In transportation facilities, where different entrances serve different transportation fixed routes or groups of fixed routes, at least one public entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

EXCEPTION:

Entrances to key stations and existing intercity rail stations retrofitted in accordance with 49 CFR 37.49 or 49 CFR 37.51 shall not be required to comply with 206.4.4.1 - (above).

206.4.4.2

Direct Connections

Direct connections to other facilities shall provide an accessible route complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 from the point of connection to boarding platforms and all transportation system elements required to be accessible.

Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and all transportation system elements required to be accessible.

EXCEPTION:

In key stations and existing intercity rail stations, existing direct connections shall not be required to comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

206.4.4.3

Key Stations and Intercity Rail Stations

Key stations and existing intercity rail stations required by Subpart C of 49 CFR part 37 to be altered, shall have at least one entrance complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

206.4.5

Tenant Spaces

At least one accessible entrance to each tenancy in a facility shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

Chapter 4: Entrances (continued)

EXCEPTION:

Self-service storage facilities not required to comply with Chapter 23: Storage - 225.3 - p. 144 shall not be required to be on an accessible route.

206.4.6 **Residential Dwelling Unit Primary Entrance**

In residential dwelling units, at least one primary entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

The primary entrance to a residential dwelling unit shall not be to a bedroom.

206.4.7 **Restricted Entrances**

Where restricted entrances are provided to a building or facility, at least one restricted entrance to the building or facility shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

206.4.8 **Service Entrances**

If a service entrance is the only entrance to a building or to a tenancy in a facility, that entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

206.4.9 **Entrances for Inmates or Detainees**

Where entrances used only by inmates or detainees and security personnel are provided at judicial facilities, detention facilities, or correctional facilities, at least one such entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

206.5 **Doors - Doorways - Gates**

See Chapter 49: Doors - Doorways - Gates - 206.5-206.5.4 - p. 242.

Chapter 5:

ACCESSIBLE MEANS OF EGRESS

207

Accessible Means of Egress

207.1

General

Means of egress shall comply with section 1003.2.13 of the International Building Code (2000 edition and 2001 Supplement) or section 1007 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Section 5: Referenced Standards - 105 - pp. 10 & 11).

EXCEPTIONS:

1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel.
2. Areas of refuge shall not be required in detention and correctional facilities.

207.2

Platform Lifts

Standby power shall be provided for platform lifts permitted by section 1003.2.13.4 of the International Building Code (2000 edition and 2001 Supplement) or section 1007.5 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Section 5: Referenced Standards - 105 - pp. 10 & 11) to serve as a part of an accessible means of egress.

Chapter 6:

PARKING SPACES

208

Parking Spaces

208.1

General

Where parking spaces are provided, parking spaces shall be provided in accordance with this Chapter - 208.

EXCEPTION:

Parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles, or vehicular impound shall not be required to comply with this Chapter - 208 provided that lots accessed by the public are provided with a passenger loading zone complying with Chapter 7: Passenger Loading Zones and Bus Stops - 503 - pp. 61 & 62.

208.2

Minimum Number

Parking spaces complying with this Chapter - 502 shall be provided in accordance with Table 208.2 - (following page) except as required by 208.2.1, 208.2.2 and 208.2.3 - (following pages).

Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.

Chapter 6: Parking Spaces (continued)

Table 208.2
Parking Spaces

<i>Total Number of Parking Spaces Provided in Parking Facility</i>	<i>Minimum Number of Required Accessible Parking Spaces</i>
<i>1 to 25</i>	<i>1</i>
<i>26 to 50</i>	<i>2</i>
<i>51 to 75</i>	<i>3</i>
<i>76 to 100</i>	<i>4</i>
<i>101 to 150</i>	<i>5</i>
<i>151 to 200</i>	<i>6</i>
<i>201 to 300</i>	<i>7</i>
<i>301 to 400</i>	<i>8</i>
<i>401 to 500</i>	<i>9</i>
<i>501 to 1000</i>	<i>2 percent of total</i>
<i>1001 and over</i>	<i>20, plus 1 for each 100, or fraction thereof, over 1000</i>

Advisory
Minimum Number

208.2

The term "parking facility" is used 208.2 - (preceding page) instead of the term "parking lot" so that it is clear that both parking lots and parking structures are required to comply with this chapter.

The number of parking spaces required to be accessible is to be calculated separately for each parking facility; the required number is not to be based on the total number of parking spaces provided in all of the parking facilities provided on the site.

208.2.1

Hospital Outpatient Facilities

Ten percent of patient and visitor parking spaces provided to serve hospital outpatient facilities shall comply with this Chapter - 502.

Chapter 6: Parking Spaces (continued)

Advisory

208.2.1 *Hospital Outpatient Facilities*

The term “outpatient facility” is not defined in this document but is intended to cover facilities or units that are located in hospitals and that provide regular and continuing medical treatment without an overnight stay.

Doctor’s offices, independent clinics, or other facilities not located in hospitals are not considered hospital outpatient facilities for purposes of this document.

208.2.2 **Rehabilitation Facilities and Outpatient Physical Therapy Facilities**

Twenty percent of patient and visitor parking spaces provided to serve rehabilitation facilities specializing in treating conditions that affect mobility and outpatient physical therapy facilities shall comply with this Chapter - 502.

Advisory

208.2.2 *Rehabilitation Facilities and Outpatient Physical Therapy Facilities*

Conditions that affect mobility include conditions requiring the use or assistance of a brace, cane, crutch, prosthetic device, wheelchair, or powered mobility aid; arthritic, neurological, or orthopedic conditions that severely limit one’s ability to walk; respiratory diseases and other conditions which may require the use of portable oxygen; and cardiac conditions that impose significant functional limitations.

208.2.3 **Residential Facilities**

Parking spaces provided to serve residential facilities shall comply with 208.2.3 - (below & following page).

208.2.3.1 **Parking for Residents**

Where at least one parking space is provided for each residential dwelling unit, at least one parking space complying with this Chapter - 502 shall be provided for each residential dwelling unit required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330.

208.2.3.2 **Additional Parking Spaces for Residents**

Where the total number of parking spaces provided for each residential dwelling unit exceeds one parking space per residential dwelling unit, 2 percent, but no fewer than one space, of all the parking spaces not covered by 208.2.3.1 - (above) shall comply with this Chapter - 502.

Chapter 6: Parking Spaces (continued)

208.2.3.3 **Parking for Guests, Employees, and other Non-Residents**

Where parking spaces are provided for persons other than residents, parking shall be provided in accordance with this Chapter - Table 208.2 - p. 52.

208.2.4 **Van Parking Spaces**

For every six or fraction of six parking spaces required by 208.2 - (preceding page & above) to comply with this Chapter - 502, at least one shall be a van parking space complying with this Chapter - 502.

208.3 **Location**

Parking facilities shall comply with 208.3 - (below & following page).

208.3.1 **General**

Parking spaces complying with this Chapter - 502, that serve a particular building or facility shall be located on the shortest accessible route from parking to an entrance complying with Chapter 4: Entrances - 206.4 - pp. 47-49.

Where parking serves more than one accessible entrance, parking spaces complying with this Chapter - 502 shall be dispersed and located on the shortest accessible route to the accessible entrances.

In parking facilities that do not serve a particular building or facility, parking spaces complying with this Chapter - 502 shall be located on the shortest accessible route to an accessible pedestrian entrance of the parking facility.

EXCEPTIONS:

1. All van parking spaces shall be permitted to be grouped on one level within a multi-story parking facility.

2. Parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee, and user convenience.

Chapter 6: Parking Spaces (continued)

208.3.1 *Advisory*
General

EXCEPTION 2:

Factors that could affect “user convenience” include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.

208.3.2 **Residential Facilities**

In residential facilities containing residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330, parking spaces provided in accordance with this Chapter - 208.2.3.1 - p. 53 shall be located on the shortest accessible route to the residential dwelling unit entrance they serve.

Spaces provided in accordance with this Chapter - 208.2.3.2 - p. 53 shall be dispersed throughout all types of parking provided for the residential dwelling units.

EXCEPTION:

Parking spaces provided in accordance with this Chapter - 208.2.3.2 - p. 53 shall not be required to be dispersed throughout all types of parking if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance, parking fee, and user convenience.

208.3.2 *Advisory*
Residential Facilities

EXCEPTION:

Factors that could affect “user convenience” include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.

501 **General**
501.1 **Scope**

The provisions of this Chapter - 502, Chapters 7, 8 - 503 and 504 - pp. 61-65, and 56 - 505 - pp. 283-287 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - 204-243 - pp. 20-226 or where referenced by a requirement in this document.

Chapter 6: Parking Spaces (continued)

502

Parking Spaces

502.1

General

Car and van parking spaces shall comply with this Chapter - 502.

Where parking spaces are marked with lines, width measurements of parking spaces and access aisles shall be made from the centerline of the markings.

EXCEPTION:

Where parking spaces or access aisles are not adjacent to another parking space or access aisle, measurements shall be permitted to include the full width of the line defining the parking space or access aisle.

502.2

Vehicle Spaces

Car parking spaces shall be 96 inches (2438mm) wide minimum and van parking spaces shall be 132 inches (3353mm) wide minimum, shall be marked to define the width, and shall have an adjacent access aisle complying with 502.3 - (below & following page).

See Figure 502.2 - p. 519.

EXCEPTION:

Van parking spaces shall be permitted to be 96 inches (2438mm) wide minimum where the access aisle is 96 inches (2438mm) wide minimum.

502.3

Access Aisle

Access aisles serving parking spaces shall comply with 502.3 - (below & following page).

Access aisles shall adjoin an accessible route.

Two parking spaces shall be permitted to share a common access aisle.

See Figure 502.3 - p. 519.

502.3

Advisory Access Aisle

Accessible routes must connect parking spaces to accessible entrances.

In parking facilities where the accessible route must cross vehicular traffic lanes, marked crossings enhance pedestrian safety, particularly for people using wheelchairs and other mobility aids.

Chapter 6: Parking Spaces (continued)

Where possible, it is preferable that the accessible route not pass behind parked vehicles.

502.3.1 **Width**

Access aisles serving car and van parking spaces shall be 60 inches (1524mm) wide minimum.

502.3.2 **Length**

Access aisles shall extend the full length of the parking spaces they serve.

502.3.3 **Marking**

Access aisles shall be marked so as to discourage parking in them.

502.3.3 *Advisory Marking*

The method and color of marking are not specified by these requirements but may be addressed by State or local laws or regulations.

Because these requirements permit the van access aisle to be as wide as a parking space, it is important that the aisle be clearly marked.

502.3.4 **Location**

Access aisles shall not overlap the vehicular way.

Access aisles shall be permitted to be placed on either side of the parking space except for angled van parking spaces which shall have access aisles located on the passenger side of the parking spaces.

502.3.4 *Advisory Location*

Wheelchair lifts typically are installed on the passenger side of vans.

Many drivers, especially those who operate vans, find it more difficult to back into parking spaces than to back out into comparatively unrestricted vehicular lanes.

For this reason, where a van and car share an access aisle, consider locating the van space so that the access aisle is on the passenger side of the van space.

Chapter 6: Parking Spaces (continued)

502.4 Floor or Ground Surfaces

Parking spaces and access aisles serving them shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228.

Access aisles shall be at the same level as the parking spaces they serve.

Changes in level are not permitted.

EXCEPTION:

Slopes not steeper than 1:48 shall be permitted.

Advisory

502.4 *Floor or Ground Surfaces*

Access aisles are required to be nearly level in all directions to provide a surface for wheelchair transfer to and from vehicles.

The exception allows sufficient slope for drainage.

Built-up curb ramps are not permitted to project into access aisles and parking spaces because they would create slopes greater than 1:48.

502.5 Vertical Clearance

Parking spaces for vans and access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489mm) minimum.

Advisory

502.5 *Vertical Clearance*

Signs provided at entrances to parking facilities informing drivers of clearances and the location of van accessible parking spaces can provide useful customer assistance.

502.6 Identification

Parking space identification signs shall include the International Symbol of Accessibility complying with Chapter 14: Signs - 703.7.2.1 - p. 95.

Signs identifying van parking spaces shall contain the designation “van accessible.”

Signs shall be 60 inches (1524mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

Chapter 6: Parking Spaces (continued)

502.6 *Advisory*
Identification

The required "van accessible" designation is intended to be informative, not restrictive, in identifying those spaces that are better suited for van use.

Enforcement of motor vehicle laws, including parking privileges, is a local matter.

502.7 **Relationship to Accessible Routes**

Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes.

502.7 *Advisory*
Relationship to Accessible Routes

Wheel stops are an effective way to prevent vehicle overhangs from reducing the clear width of accessible routes.

Chapter 7:

PASSENGER LOADING ZONES AND BUS STOPS

209 **Passenger Loading Zones and Bus Stops** 209.1 **General**

Passenger loading zones shall be provided in accordance with this Chapter - 209.

209.2 **Type**

Where provided, passenger loading zones shall comply with 209.2 - (below).

209.2.1 **Passenger Loading Zones**

Passenger loading zones, except those required to comply with 209.2.2 and 209.2.3 - (below), shall provide at least one passenger loading zone complying with this Chapter - 503 in every continuous 100 linear feet (30 480mm) of loading zone space, or fraction thereof.

209.2.2 **Bus Loading Zones**

In bus loading zones restricted to use by designated or specified public transportation vehicles, each bus bay, bus stop, or other area designated for lift or ramp deployment shall comply with Chapter 16: Transportation Facilities - 810.2 - pp. 105 & 106.

209.2.2 *Advisory* *Bus Loading Zones*

The terms “designated public transportation” and “specified public transportation” are defined by the Department of Transportation at 49 CFR 37.3 in regulations implementing the Americans with Disabilities Act.

These terms refer to public transportation services provided by public or private entities, respectively.

For example, designated public transportation vehicles include buses and vans operated by public transit agencies, while specified public transportation vehicles include tour and charter buses, taxis and limousines, and hotel shuttles operated by private entities.

209.2.3 **On-Street Bus Stops**

On-street bus stops shall comply with Chapter 16: Transportation Facilities - 810.2 - pp. 105 & 106 to the maximum extent practicable.

Chapter 7: Passenger Loading Zones and Bus Stops (continued)

209.3 Medical Care and Long-Term Care Facilities

At least one passenger loading zone complying with this Chapter - 503 shall be provided at an accessible entrance to licensed medical care and licensed long-term care facilities where the period of stay exceeds twenty-four hours.

209.4 Valet Parking

Parking facilities that provide valet parking services shall provide at least one passenger loading zone complying with this Chapter - 503.

209.5 Mechanical Access Parking Garages

Mechanical access parking garages shall provide at least one passenger loading zone complying with this Chapter - 503 at vehicle drop-off and vehicle pick-up areas.

501 General 501.1 Scope

The provisions of this Chapter - 503, Chapters 6 - 502 - pp. 55-59, 8 - 504 - pp. 63-65, 56 - 505 - pp. 283-287 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

503 Passenger Loading Zones 503.1 General

Passenger loading zones shall comply with this Chapter - 503.

503.2 Vehicle Pull-Up Space

Passenger loading zones shall provide a vehicular pull-up space 96 inches (2438mm) wide minimum and 20 feet (6096mm) long minimum.

503.3 Access Aisle

Passenger loading zones shall provide access aisles complying with this Chapter - 503 adjacent to the vehicle pull-up space.

Access aisles shall adjoin an accessible route and shall not overlap the vehicular way.

503.3.1 Width

Access aisles serving vehicle pull-up spaces shall be 60 inches (1524mm) wide minimum.

Chapter 7: Passenger Loading Zones and Bus Stops (continued)

503.3.2

Length

Access aisles shall extend the full length of the vehicle pull-up spaces they serve.

503.3.3

Marking

Access aisles shall be marked so as to discourage parking in them.

See Figure 503.3 - p. 520.

503.4

Floor and Ground Surfaces

Vehicle pull-up spaces and access aisles serving them shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228.

Access aisles shall be at the same level as the vehicle pull-up space they serve.

Changes in level are not permitted.

EXCEPTION:

Slopes not steeper than 1:48 shall be permitted.

503.5

Vertical Clearance

Vehicle pull-up spaces, access aisles serving them, and a vehicular route from an entrance to the passenger loading zone, and from the passenger loading zone to a vehicular exit shall provide a vertical clearance of 114 inches (2896mm) minimum.

Chapter 8: Stairways (continued)

504.2 Treads and Risers

All steps on a flight of stairs shall have uniform riser heights and uniform tread depths.

Risers shall be 4 inches (102mm) high minimum and 7 inches (178mm) high maximum.

Treads shall be 11 inches (279mm) deep minimum.

504.3 Open Risers

Open risers are not permitted.

504.4 Tread Surface

Stair treads shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228.

Changes in level are not permitted.

EXCEPTION: Treads shall be permitted to have a slope not steeper than 1:48.

504.4 *Advisory* Tread Surface

Consider providing visual contrast on tread nosings, or at the leading edges of treads without nosings, so that stair treads are more visible for people with low vision.

504.5 Nosings

The radius of curvature at the leading edge of the tread shall be 1/2-inch (12.7mm) maximum.

Nosings that project beyond risers shall have the underside of the leading edge curved or beveled.

Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical.

The permitted projection of the nosing shall extend 1-1/2 inches (38mm) maximum over the tread below.

See Figure 504.5 - p. 521.

504.6 Handrails

Stairs shall have handrails complying with Chapter 56: Handrails - 505 - pp. 283-287.

Chapter 8: Stairways (continued)

504.7

Wet Conditions

Stair treads and landings subject to wet conditions shall be designed to prevent the accumulation of water.

Chapter 9:

DRINKING FOUNTAINS

211 **Drinking Fountains**
211.1 **General**

Where drinking fountains are provided on an exterior site, on a floor, or within a secured area they shall be provided in accordance with this Chapter - 211.

EXCEPTION:

In detention or correctional facilities, drinking fountains only serving holding or housing cells not required to comply with Chapter 30: Detention Facilities and Correctional Facilities - 232 - pp. 157-159 shall not be required to comply with this Chapter - 211.

211.2 **Minimum Number**

No fewer than two drinking fountains shall be provided.

One drinking fountain shall comply with 602.1-602.6 - (following pages) and one drinking fountain shall comply with this Chapter - 602.7 - p. 68.

EXCEPTION:

Where a single drinking fountain complies with 602.1-602.6 and 602.7 - (following pages), it shall be permitted to be substituted for two separate drinking fountains.

211.3 **More Than Minimum Number**

Where more than the minimum number of drinking fountains specified in 211.2 - (above) are provided, 50 percent of the total number of drinking fountains provided shall comply with 602.1 - 602.6 - (following pages), and 50 percent of the total number of drinking fountains provided shall comply with this Chapter - 602.7 - p. 68.

EXCEPTION:

Where 50 percent of the drinking fountains yields a fraction, 50 percent shall be permitted to be rounded up or down provided that the total number of drinking fountains complying with this Chapter - 211 equals 100 percent of drinking fountains.

Chapter 9: Drinking Fountains (continued)

601 **General**
601.1 **Scope**

The provisions of this Chapter - 602, Chapters 12 - 611 - pp. 78 & 79, 39 - 612 - p. 214, 57-64 - 603-610 - pp. 288-317 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

602 **Drinking Fountains**
602.1 **General**

Drinking fountains shall comply with Chapter 1: Protruding Objects - 307 - pp. 30-32 and this Chapter - 602.

602.2 **Clear Floor Space**

Units shall have a clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 positioned for a forward approach and centered on the unit.

Knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236 shall be provided.

EXCEPTION:

A parallel approach complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be permitted at units for children's use where the spout is 30 inches (762mm) maximum above the finish floor or ground and is 3-1/2 inches (89mm) maximum from the front edge of the unit, including bumpers.

602.3 **Operable Parts**

Operable parts shall comply with Chapter 2: Operable Parts - 309 - p. 34.

602.4 **Spout Height**

Spout outlets shall be 36 inches (914mm) maximum above the finish floor or ground.

602.5 **Spout Location**

The spout shall be located 15 inches (381mm) minimum from the vertical support and 5 inches (127mm) maximum from the front edge of the unit, including bumpers.

See Figure 602.5 - p. 526.

Chapter 9: Drinking Fountains (continued)

602.6

Water Flow

The spout shall provide a flow of water 4 inches (102mm) high minimum and shall be located 5 inches (127mm) maximum from the front of the unit.

The angle of the water stream shall be measured horizontally relative to the front face of the unit.

Where spouts are located less than 3 inches (76mm) of the front of the unit, the angle of the water stream shall be 30 degrees maximum.

Where spouts are located between 3 inches (76mm) and 5 inches (127mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum.

Advisory

602.6

Water Flow

The purpose of requiring the drinking fountain spout to produce a flow of water 4 inches (102mm) high minimum is so that a cup can be inserted under the flow of water to provide a drink of water for an individual who, because of a disability, would otherwise be incapable of using the drinking fountain.

602.7

Drinking Fountains for Standing Persons

Spout outlets of drinking fountains for standing persons shall be 38 inches (965mm) minimum and 43 inches (1092mm) maximum above the finish floor or ground.

Chapter 10:

KITCHENS - KITCHENETTES - SINKS

212 **Kitchens - Kitchenettes - Sinks**
212.1 **General**

Where provided, kitchens, kitchenettes, and sinks shall comply with this Chapter - 212.

212.2 **Kitchens and Kitchenettes**

Kitchens and kitchenettes shall comply with this Chapter - 804.

212.3 **Sinks**

Where sinks are provided, at least 5 percent, but no fewer than one, of each type provided in each accessible room or space shall comply with Chapter 60: Lavatories and Sinks - 606 - pp. 301-303.

EXCEPTION:

Mop or service sinks shall not be required to comply with 212.3 - (above).

801 **General**
801.1 **Scope**

The provisions of this Chapter - 804, Chapters 16 - 810 - pp. 105-110, 20-23 - 803 - pp. 129 & 130, 805 - pp. 133 & 134, 806 - pp. 139-142, 811 - p. 145, 66-69 - 802 - pp. 319-323, 807-809 - pp. 324-332 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

Advisory
801.1 *Scope*

Facilities covered by these requirements are also subject to the requirements of the other sections and chapters.

For example, Chapter 22: Transient Lodging Guest Rooms - 806 - pp. 139-142 addresses guest rooms in transient lodging facilities while Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 contains the technical specifications for dining surfaces.

If a transient lodging facility contains a restaurant, the restaurant must comply with requirements in other chapters such as those applicable to certain dining surfaces.

Chapter 10: Kitchens - Kitchenettes - Sinks (continued)

804.3 Kitchen Work Surface

In residential dwelling units required to comply with Chapter 69: Residential Dwelling Units - 809 - pp. 328-332, at least one 30 inches (762mm) wide minimum section of counter shall provide a kitchen work surface that complies with 804.3 - (below).

804.3.1 Clear Floor or Ground Space

A clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 positioned for a forward approach shall be provided.

The clear floor or ground space shall be centered on the kitchen work surface and shall provide knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236.

EXCEPTION:

Cabinetry shall be permitted under the kitchen work surface provided that all of the following conditions are met:

- (a) the cabinetry can be removed without removal or replacement of the kitchen work surface;
- (b) the finish floor extends under the cabinetry;
- and
- (c) the walls behind and surrounding the cabinetry are finished.

804.3.2 Height

The kitchen work surface shall be 34 inches (864mm) maximum above the finish floor or ground.

EXCEPTION:

A counter that is adjustable to provide a kitchen work surface at variable heights, 29 inches (737mm) minimum and 36 inches (914mm) maximum, shall be permitted.

804.3.3 Exposed Surfaces

There shall be no sharp or abrasive surfaces under the work surface counters.

804.4 Sinks

Sinks shall comply with Chapter 60: Lavatories and Sinks - 606 - pp. 301-303.

804.5 **Storage**

At least 50 percent of shelf space in storage facilities shall comply with Chapter 23: Storage - 811 - p. 145.

804.6 **Appliances**

Where provided, kitchen appliances shall comply with 804.6 - (below & following page).

804.6.1 **Clear Floor or Ground Space**

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided at each kitchen appliance.

Clear floor or ground spaces shall be permitted to overlap.

804.6.2 **Operable Parts**

All appliance controls shall comply with Chapter 2: Operable Parts - 309 - p. 34.

EXCEPTIONS:

1. Appliance doors and door latching devices shall not be required to comply with Chapter 2: Operable Parts - 309.4 - p. 34.
2. Bottom-hinged appliance doors, when in the open position, shall not be required to comply with Chapter 2: Operable Parts - 309.3 - p. 34.

804.6.3 **Dishwasher**

Clear floor or ground space shall be positioned adjacent to the dishwasher door.

The dishwasher door, in the open position, shall not obstruct the clear floor or ground space for the dishwasher or the sink.

804.6.4 **Range or Cooktop**

Where a forward approach is provided, the clear floor or ground space shall provide knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236.

Where knee and toe space is provided, the underside of the range or cooktop shall be insulated or otherwise configured to prevent burns, abrasions, or electrical shock.

The location of controls shall not require reaching across burners.

Chapter 10: Kitchens - Kitchenettes - Sinks (continued)

804.6.5 **Oven**

Ovens shall comply with 804.6.5 - (below).

804.6.5.1 **Side-Hinged Door Ovens**

Side-hinged door ovens shall have the work surface required by this Chapter - 804.3 - p. 71 positioned adjacent to the latch side of the oven door.

804.6.5.2 **Bottom-Hinged Door Ovens**

Bottom-hinged door ovens shall have the work surface required by Chapter - 804.3 - p. 71 positioned adjacent to one side of the door.

804.6.5.3 **Controls**

Ovens shall have controls on front panels.

804.6.6 **Refrigerator/Freezer**

Combination refrigerators and freezers shall have at least 50 percent of the freezer space 54 inches (1372mm) maximum above the finish floor or ground.

The clear floor or ground space shall be positioned for a parallel approach to the space dedicated to a refrigerator/freezer with the centerline of the clear floor or ground space offset 24 inches (610mm) maximum from the centerline of the dedicated space.

Chapter 11:

TOILET FACILITIES AND BATHING FACILITIES

213 **Toilet Facilities and Bathing Facilities** 213.1 **General**

Where toilet facilities and bathing facilities are provided, they shall comply with this Chapter - 213.

Where toilet facilities and bathing facilities are provided in facilities permitted by Chapter 3: Accessible Routes - 206.2.3 - Exceptions 1 and 2 - p. 37 not to connect stories by an accessible route, toilet facilities and bathing facilities shall be provided on a story connected by an accessible route to an accessible entrance.

213.2 **Toilet Rooms and Bathing Rooms**

Where toilet rooms are provided, each toilet room shall comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

Where bathing rooms are provided, each bathing room shall comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

EXCEPTIONS:

1. In alterations where it is technically infeasible to comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289 altering existing toilet or bathing rooms shall not be required where a single unisex toilet room or bathing room complying with 213.2.1 - (following page) is provided and located in the same area and on the same floor as existing inaccessible toilet or bathing rooms.
2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by Section 8: Existing Buildings and Facilities - 202.5 - p. 24, no fewer than one toilet room for each sex complying with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289 or one unisex toilet room complying with 213.2.1 - (following page) shall be provided.
3. Where multiple single user portable toilet or bathing units are clustered at a single location, no more than 5 percent of the toilet units and bathing units at each cluster shall be required to comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

Portable toilet units and bathing units complying with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289 shall be identified by the International Symbol of Accessibility complying with Chapter 14: Signs - 703.7.2.1 - p. 95.

Chapter 11: Toilet Facilities and Bathing Facilities (continued)

4. Where multiple single user toilet rooms are clustered at a single location, no more than 50 percent of the single user toilet rooms for each use at each cluster shall be required to comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

Advisory

213.2 *Toilet Rooms and Bathing Rooms*

These requirements allow the use of unisex (or single-user) toilet rooms in alterations when technical infeasibility can be demonstrated.

Unisex toilet rooms benefit people who use opposite sex personal care assistants.

For this reason, it is advantageous to install unisex toilet rooms in addition to accessible single-sex toilet rooms in new facilities.

Advisory

213.2 *Toilet Rooms and Bathing Rooms*

EXCEPTIONS 3 and 4:

A "cluster" is a group of toilet rooms proximate to one another.

Generally, toilet rooms in a cluster are within sight of, or adjacent to, one another.

213.2.1 **Unisex (Single-Use or Family) Toilet and Unisex Bathing Rooms**

Unisex toilet rooms shall contain not more than one lavatory, and two water closets without urinals or one water closet and one urinal.

Unisex bathing rooms shall contain one shower or one shower and one bathtub, one lavatory, and one water closet.

Doors to unisex toilet rooms and unisex bathing rooms shall have privacy latches.

213.3 **Plumbing Fixtures and Accessories**

Plumbing fixtures and accessories provided in a toilet room or bathing room required to comply with 213.2 - (preceding page & above) shall comply with 213.3 - (below & following pages).

213.3.1 **Toilet Compartments**

Where toilet compartments are provided, at least one toilet compartment shall comply with Chapter 58: Water Closets and Toilet Compartments - 604.8.1 - pp. 294-296.

Chapter 11: Toilet Facilities and Bathing Facilities (continued)

In addition to the compartment required to comply with Chapter 58: Water Closets and Toilet Compartments - 604.8.1 - pp. 294-296, at least one compartment shall comply with Chapter 58: Water Closets and Toilet Compartments - 604.8.2 - pp. 296 & 297 where six or more toilet compartments are provided, or where the combination of urinals and water closets totals six or more fixtures.

Advisory

213.3.1

Toilet Compartments

A toilet compartment is a partitioned space that is located within a toilet room, and that normally contains no more than one water closet.

A toilet compartment may also contain a lavatory.

A lavatory is a sink provided for hand washing.

Full-height partitions and door assemblies can comprise toilet compartments where the minimum required spaces are provided within the compartment.

213.3.2

Water Closets

Where water closets are provided, at least one shall comply with Chapter 58: Water Closets and Toilet Compartments - 604 - pp. 290-299.

213.3.3

Urinals

Where more than one urinal is provided, at least one shall comply with Chapter 59: Urinals - 605 - p. 300.

213.3.4

Lavatories

Where lavatories are provided, at least one shall comply with Chapter 60: Lavatories and Sinks - 606 - pp. 301-303 and shall not be located in a toilet compartment.

213.3.5

Mirrors

Where mirrors are provided, at least one shall comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

213.3.6

Bathing Facilities

Where bathtubs or showers are provided, at least one bathtub complying with Chapter 61: Bathtubs - 607 - pp. 304-307 or at least one shower complying with Chapter 62: Shower Compartments - 608 - pp. 308-313 shall be provided.

213.3.7

Coat Hooks and Shelves

Where coat hooks or shelves are provided in toilet rooms without toilet compartments, at least one of each type shall comply with Chapter 57: Toilet and Bathing Rooms - 603.4 - p. 289.

Where coat hooks or shelves are provided in toilet compartments, at least one of each type complying with Chapter 58: Water Closets and Toilet Compartments - 604.8.3 - p. 297 shall be provided in toilet compartments required to comply with 213.3.1 - (preceding pages).

Where coat hooks or shelves are provided in bathing facilities, at least one of each type complying with Chapter 57: Toilet and Bathing Rooms - 603.4 - p. 289 shall serve fixtures required to comply with 213.3.6 - (preceding page).

611.4

Height

Top loading machines shall have the door to the laundry compartment located 36 inches (914mm) maximum above the finish floor.

Front loading machines shall have the bottom of the opening to the laundry compartment located 15 inches (381mm) minimum and 36 inches (914mm) maximum above the finish floor.

See Figure 611.4 - p. 550.

Chapter 13:

FIRE ALARM SYSTEMS

215 **Fire Alarm Systems**
215.1 **General**

Where fire alarm systems provide audible alarm coverage, alarms shall comply with this Chapter - 215.

EXCEPTION:

In existing facilities, visible alarms shall not be required except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

215.1 *Advisory*
General

Unlike audible alarms, visible alarms must be located within the space they serve so that the signal is visible.

Facility alarm systems (other than fire alarm systems) such as those used for tornado warnings and other emergencies are not required to comply with the technical criteria for alarms in this Chapter - 702.

Every effort should be made to ensure that such alarms can be differentiated in their signal from fire alarms systems and that people who need to be notified of emergencies are adequately safeguarded.

Consult local fire departments and prepare evacuation plans taking into consideration the needs of every building occupant, including people with disabilities.

215.2 **Public and Common Use Areas**

Alarms in public use areas and common use areas shall comply with this Chapter - 702.

215.3 **Employee Work Areas**

Where employee work areas have audible alarm coverage, the wiring system shall be designed so that visible alarms complying with this Chapter - 702 can be integrated into the alarm system.

215.4 **Transient Lodging**

Guest rooms required to comply with Chapter 22: Transient Lodging Guest Rooms - 224.4 - pp. 137-138 shall provide alarms complying with this Chapter - 702.

Chapter 13: Fire Alarm Systems (continued)

215.5 Residential Facilities

Where provided in residential dwelling units required to comply with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332, alarms shall comply with this Chapter - 702.

701 General 701.1 Scope

The provisions of this Chapter - 702, Chapters 14 - 703 - pp. 87-96, 15 - 704 - pp. 100-103, 17 - 706 - pp. 112-114, 18 - 707 - pp. 115-120, 28 - 708 - pp. 153 & 154, and 65 - 705 - p. 318 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

702 Fire Alarm Systems 702.1 General

Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Section 5: Referenced Standards - 105 - p. 11), except that the maximum allowable sound level of audible notification appliances complying with section 4-3.2.1 of NFPA 72 (1999 edition) shall have a sound level no more than 110 dBA at the minimum hearing distance from the audible appliance.

In addition, alarms in guest rooms required to provide communication features shall comply with sections 4-3 and 4-4 of NFPA 72 (1999 edition) or sections 7.4 and 7.5 of NFPA 72 (2002 edition).

EXCEPTION:

Fire alarm systems in medical care facilities shall be permitted to be provided in accordance with industry practice.

Chapter 14:

SIGNS

216
216.1

Signs General

Signs shall be provided in accordance with this Chapter - 216 and shall comply with this Chapter - 703.

EXCEPTIONS:

1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with this Chapter - 216.
2. In parking facilities, signs shall not be required to comply with 216.2, 216.3, and 216.6-216.12 - (below & following pages).
3. Temporary, 7 days or less, signs shall not be required to comply with this Chapter - 216.
4. In detention and correctional facilities, signs not located in public use areas shall not be required to comply with this Chapter - 216.

216.2

Designations

Interior and exterior signs identifying permanent rooms and spaces shall comply with this Chapter - 703.1, 703.2, and 703.5 - pp. 87-89 & pp. 91-94.

Where pictograms are provided as designations of permanent interior rooms and spaces, the pictograms shall comply with this Chapter - 703.6 - pp. 94 & 95 and shall have text descriptors complying with this Chapter - 703.2 and 703.5 - pp. 91-94.

EXCEPTION:

Exterior signs that are not located at the door to the space they serve shall not be required to comply with this Chapter - 703.2 - pp. 87-89.

216.2

Advisory Designations

216.2 - (above) applies to signs that provide designations, labels, or names for interior rooms or spaces where the sign is not likely to change over time.

Chapter 14: Signs (continued)

Examples include interior signs labeling restrooms, room and floor numbers or letters, and room names.

Tactile text descriptors are required for pictograms that are provided to label or identify a permanent room or space.

Pictograms that provide information about a room or space, such as “no smoking,” occupant logos, and the International Symbol of Accessibility, are not required to have text descriptors.

216.3 **Directional and Informational Signs**

Signs that provide direction to or information about interior spaces and facilities of the site shall comply with this Chapter - 703.5 - pp. 91-94.

Advisory

216.3 *Directional and Informational Signs*

Information about interior spaces and facilities includes rules of conduct, occupant load, and similar signs.

Signs providing direction to rooms or spaces include those that identify egress routes.

216.4 **Means of Egress**

Signs for means of egress shall comply with 216.4 - (below & following page).

216.4.1 **Exit Doors**

Doors at exit passageways, exit discharge, and exit stairways shall be identified by tactile signs complying with this Chapter - 703.1, 703.2, and 703.5 - pp. 87-89 & pp. 91-94.

Advisory

216.4.1 *Exit Doors*

An exit passageway is a horizontal exit component that is separated from the interior spaces of the building by fire-resistance-rated construction and that leads to the exit discharge or public way.

The exit discharge is that portion of an egress system between the termination of an exit and a public way.

Chapter 14: Signs (continued)

216.4.2

Areas of Refuge

Signs required by section 1003.2.13.5.4 of the International Building Code (2000 edition) or section 1007.6.4 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Section 5: Referenced Standards - 105 - pp. 10 & 11) to provide instructions in areas of refuge shall comply with this Chapter - 703.5 - pp. 91-94.

216.4.3

Directional Signs

Signs required by section 1003.2.13.6 of the International Building Code (2000 edition) or section 1007.7 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Section 5: Referenced Standards - 105 - pp. 10 & 11) to provide directions to accessible means of egress shall comply with this Chapter - 703.5 - pp. 91-94.

216.5

Parking

Parking spaces complying with Chapter 6: Parking Spaces - 502 - pp. 55-59 shall be identified by signs complying with Chapter 6: Parking Spaces - 502.6 - p. 58.

EXCEPTIONS:

1. Where a total of four or fewer parking spaces, including accessible parking spaces, are provided on a site, identification of accessible parking spaces shall not be required.
2. In residential facilities, where parking spaces are assigned to specific residential dwelling units, identification of accessible parking spaces shall not be required.

216.6

Entrances

Where not all entrances comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251, entrances complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 shall be identified by the International Symbol of Accessibility complying with this Chapter - 703.7.2.1 - p. 95.

Directional signs complying with this Chapter - 703.5 - pp. 91-94 that indicate the location of the nearest entrance complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 shall be provided at entrances that do not comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

216.6

Advisory Entrances

Where a directional sign is required, it should be located to minimize backtracking.

Chapter 14: Signs (continued)

In some cases, this could mean locating a sign at the beginning of a route, not just at the inaccessible entrances to a building.

216.7 **Elevators**

Where existing elevators do not comply with Chapter 52: Elevators - 407 - pp. 259-272, elevators complying with Chapter 52: Elevators - 407 - pp. 259-272, shall be clearly identified with the International Symbol of Accessibility complying with this Chapter - 703.7.2.1 - p. 95.

216.8 **Toilet Rooms and Bathing Rooms**

Where existing toilet rooms or bathing rooms do not comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289, directional signs indicating the location of the nearest toilet room or bathing room complying with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289 within the facility shall be provided.

Signs shall comply with this Chapter - 703.5 - pp. 91-94 and shall include the International Symbol of Accessibility complying with this Chapter - 703.7.2.1 - p. 95.

Where existing toilet rooms or bathing rooms do not comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289, the toilet rooms or bathing rooms complying with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289, shall be identified by the International Symbol of Accessibility complying with this Chapter - 703.7.2.1 - p. 95.

Where clustered single user toilet rooms or bathing facilities are permitted to use exceptions to Chapter 11: Toilet Facilities and Bathing Rooms - 213.2 - pp. 74 & 75, toilet rooms or bathing facilities complying with Chapter 11: Toilet Facilities and Bathing Rooms - 603 - pp. 288 & 289 shall be identified by the International Symbol of Accessibility complying with this Chapter - 703.7.2.1 - p. 95 unless all toilet rooms and bathing facilities comply with Chapter 11: Toilet Facilities and Bathing Rooms - 603 - pp. 288 & 289.

216.9 **TTYs**

Identification and directional signs for public TTYs shall be provided in accordance with 216.9 - (below & following page).

216.9.1 **Identification Signs**

Public TTYs shall be identified by the International Symbol of TTY complying with this Chapter - 703.7.2.2 - p. 95.

216.9.2 **Directional Signs**

Directional signs indicating the location of the nearest public TTY shall be provided at all banks of public pay telephones not containing a public TTY.

Chapter 14: Signs (continued)

In addition, where signs provide direction to public pay telephones, they shall also provide direction to public TTYs.

Directional signs shall comply with this Chapter - 703.5 - pp. 91-94 and shall include the International Symbol of TTY complying with this Chapter - 703.7.2.2 - p. 95.

216.10 **Assistive Listening Systems**

Each assembly area required by Chapter 17: Assistive Listening Systems - 219 - pp. 111 & 112 to provide assistive listening systems shall provide signs informing patrons of the availability of the assistive listening system.

Assistive listening signs shall comply with this Chapter - 703.5 - pp. 91-94 and shall include the International Symbol of Access for Hearing Loss complying with this Chapter - 703.7.2.4 - p. 96.

EXCEPTION:

Where ticket offices or windows are provided, signs shall not be required at each assembly area provided that signs are displayed at each ticket office or window informing patrons of the availability of assistive listening systems.

216.11 **Check-Out Aisles**

Where more than one check-out aisle is provided, check-out aisles complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be identified by the International Symbol of Accessibility complying with this Chapter - 703.7.2.1 - p. 95.

Where check-out aisles are identified by numbers, letters, or functions, signs identifying check-out aisles complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be located in the same location as the check-out aisle identification.

EXCEPTION:

Where all check-out aisles serving a single function comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336, signs complying with this Chapter - 703.7.2.1 - p. 95 shall not be required.

216.12 **Amusement Rides**

Signs identifying the type of access provided on amusement rides shall be provided at entries to queues and waiting lines.

In addition, where accessible unload areas also serve as accessible load areas, signs indicating the location of the accessible load and unload areas shall be provided at entries to queues and waiting lines.

Chapter 14: Signs (continued)

Advisory

216.12

Amusement Rides

Amusement rides designed primarily for children, amusement rides that are controlled or operated by the rider, and amusement rides without seats, are not required to provide wheelchair spaces, transfer seats, or transfer systems, and need not meet the sign requirements in 216.12 - (above).

The load and unload areas of these rides must, however, be on an accessible route and must provide turning space.

701

General

701.1

Scope

The provisions of this Chapter - 703, Chapters 13 - 702 - p. 81, 15 - 704 - pp. 100-103, 17 - 706 - pp. 112-114, 18 - 707 - pp. 115-120, 28 - 708 - pp. 153 & 154, and 65 - 705 - p. 318, shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

703

Signs

703.1

General

Signs shall comply with this Chapter - 703.

Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

703.2

Raised Characters

Raised characters shall comply with 703.2 - (below & following pages) and shall be duplicated in Braille complying with this Chapter - 703.3 - pp. 89 & 90.

Raised characters shall be installed in accordance with this Chapter - 703.4 - pp. 90 & 91.

Advisory

703.2

Raised Characters

Signs that are designed to be read by touch should not have sharp or abrasive edges.

703.2.1

Depth

Raised characters shall be 1/32 inch (0.794mm) minimum above their background.

703.2.2

Case

Characters shall be uppercase.

703.2.3

Style

Characters shall be sans serif.

Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.2.4

Character Proportions

Characters shall be selected from fonts where the width of the uppercase letter “O” is 55 percent minimum and 110 percent maximum of the height of the uppercase letter “I”.

703.2.5

Character Height

Character height measured vertically from the baseline of the character shall be 5/8 inch (15.9mm) minimum and 2 inches (51mm) maximum based on the height of the uppercase letter “I”.

See Figure 703.2.5 - p. 551.

EXCEPTION:

Where separate raised and visual characters with the same information are provided, raised character height shall be permitted to be 1/2 inch (12.7mm) minimum.

703.2.6

Stroke Thickness

Stroke thickness of the uppercase letter “I” shall be 15 percent maximum of the height of the character.

703.2.7

Character Spacing

Character spacing shall be measured between the two closest points of adjacent raised characters within a message, excluding word spaces.

Where characters have rectangular cross sections, spacing between individual raised characters shall be 1/8 inch (3.2mm) minimum and 4 times the raised character stroke width maximum.

Where characters have other cross sections, spacing between individual raised characters shall be 1/16 inch (1.6mm) minimum and 4 times the raised character stroke width maximum at the base of the cross sections, and 1/8 inch (3.2mm) minimum and 4 times the raised character stroke width maximum at the top of the cross sections.

Characters shall be separated from raised borders and decorative elements 3/8 inch (9.5mm) minimum.

703.2.8

Line Spacing

Spacing between the baselines of separate lines of raised characters within a message shall be 135 percent minimum and 170 percent maximum of the raised character height.

703.3

Braille

Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4 - (below & following pages).

703.3.1

Dimensions and Capitalization

Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1 - (following page).

The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

See Figure 703.3.1 - p. 552.

Chapter 14: Signs (continued)

Table 703.3.1
Braille Dimensions

<i>Measurement Range</i>	<i>Minimum in inches</i>	<i>Maximum in inches</i>
<i>Dot base diameter</i>	<i>0.059-inch (1.5mm)</i>	<i>0.063-inch (1.6mm)</i>
<i>Distance between two dots in same cell, measured center to center</i>	<i>0.090-inch (2.3mm)</i>	<i>0.100-inch (2.5mm)</i>
<i>Distance between corresponding dots in adjacent cells, measured center to center</i>	<i>0.241-inch (6.1mm)</i>	<i>0.300-inch (7.6mm)</i>
<i>Dot Height</i>	<i>0.025-inch (0.6mm)</i>	<i>0.037-inch (0.9mm)</i>
<i>Distance between corresponding dots from one cell to the cell directly below, measured center to center</i>	<i>0.395-inch (10.0mm)</i>	<i>0.400-inch (10.1mm)</i>

703.3.2

Position

Braille shall be positioned below the corresponding text.

If text is multi-lined, braille shall be placed below the entire text.

Braille shall be separated 3/8 inch (9.5mm) minimum from any other tactile characters and 3/8 inch (9.5mm) minimum from raised borders and decorative elements.

See Figure 703.3.2 - p. 553.

EXCEPTION:

Braille provided on elevator car controls shall be separated 3/16 inch (4.8mm) minimum and shall be located either directly below or adjacent to the corresponding raised characters or symbols.

703.4

Installation Height and Location

Signs with tactile characters shall comply with 703.4 - (following page).

703.4.1

Height Above Finish Floor or Ground

Tactile characters on signs shall be located 48 inches (1219mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest tactile character and 60 inches (1524mm) maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character.

See Figure 703.4.1 - p. 554.

EXCEPTION:

Tactile characters for elevator car controls shall not be required to comply with 703.4.1 - (above).

703.4.2

Location

Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side.

Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf.

Where a tactile sign is provided at double doors with two active leaves, the sign shall be located to the right of the right hand door.

Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall.

Signs containing tactile characters shall be located so that a clear floor space of 18 inches (457mm) minimum by 18 inches (457mm) minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

See Figure 703.4.2 - p. 555.

EXCEPTION:

Signs with tactile characters shall be permitted on the push side of doors with closers and without hold-open devices.

703.5

Visual Characters

Visual characters shall comply with 703.5 - (following pages).

EXCEPTION:

Where visual characters comply with this Chapter - 703.2 - pp. 87-89 and are accompanied by Braille complying with this Chapter - 703.3 - pp. 89 & 90, they shall not be required to comply with 703.5.2-703.5.9 - (below & following pages).

703.5.1 **Finish and Contrast**

Characters and their background shall have a non-glare finish.

Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

Advisory
Finish and Contrast

703.5.1

Signs are more legible for persons with low vision when characters contrast as much as possible with their background.

Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and its background colors and textures.

703.5.2 **Case**

Characters shall be uppercase or lowercase or a combination of both.

703.5.3 **Style**

Characters shall be conventional in form.

Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.5.4 **Character Proportions**

Characters shall be selected from fonts where the width of the uppercase letter “O” is 55 percent minimum and 110 percent maximum of the height of the uppercase letter “I”.

703.5.5 **Character Height**

Minimum character height shall comply with Table 703.5.5 - (following page).

Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign.

Chapter 14: Signs (continued)

Character height shall be based on the uppercase letter "T".

*Table 703.5.5
Visual Character Height*

<i>Height to Finish Floor or Ground from Baseline of Character</i>	<i>Minimum Viewing Distance</i>	<i>Minimum Character Height</i>
<i>40" - ≤ 70" (1016mm - 1778mm)</i>	<i>≤ 6 feet (1829mm)</i>	<i>5/8-inch (16mm)</i>
<i>40" - ≤ 70" (1016mm - 1778mm)</i>	<i>> 6 feet (1829mm)</i>	<i>5/8-inch (16mm), plus 1/8-inch (3.2mm) per foot per foot (305mm) of viewing distance above 72 inches (1829mm)</i>
<i>> 70" - ≤ 120" (1778mm - 3048mm)</i>	<i>≤ 15 feet (4572mm)</i>	<i>2 inches (51mm)</i>
<i>> 70" - ≤ 120" (1778mm - 3048mm)</i>	<i>> 15 feet (4572mm)</i>	<i>2 inches (51mm), plus 1/8-inch (3.2mm) per foot per (305mm) of viewing distance above 15 feet (4572mm)</i>
<i>> 120" (3048mm)</i>	<i>≤ 21 feet (6400mm)</i>	<i>3 inches (76mm)</i>
<i>> 120" (3048mm)</i>	<i>> 21 feet (6400mm)</i>	<i>3 inches (76mm), plus 1/8-inch (3.2mm) per foot (305mm) of viewing distance above 21 feet (6400mm)</i>

703.5.6 Height From Finish Floor or Ground

Visual characters shall be 40 inches (1016mm) minimum above the finish floor or ground.

EXCEPTION:

Visual characters indicating elevator car controls shall not be required to comply with 703.5.6 - (above).

703.5.7 **Stroke Thickness**

Stroke thickness of the uppercase letter “T” shall be 10 percent minimum and 30 percent maximum of the height of the character.

703.5.8 **Character Spacing**

Character spacing shall be measured between the two closest points of adjacent characters, excluding word spaces.

Spacing between individual characters shall be 10 percent minimum and 35 percent maximum of character height.

703.5.9 **Line Spacing**

Spacing between the baselines of separate lines of characters within a message shall be 135 percent minimum and 170 percent maximum of the character height.

703.6 **Pictograms**

Pictograms shall comply with 703.6 - (below & following page).

703.6.1 **Pictogram Field**

Pictograms shall have a field height of 6 inches (152mm) minimum.

Characters and Braille shall not be located in the pictogram field.

See Figure 703.6.1 - p. 556.

703.6.2 **Finish and Contrast**

Pictograms and their field shall have a non-glare finish.

Pictograms shall contrast with their field with either a light pictogram on a dark field or a dark pictogram on a light field.

703.6.2 *Advisory*
Finish and Contrast

Signs are more legible for persons with low vision when characters contrast as much as possible with their background.

Chapter 14: Signs (continued)

Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

703.6.3 **Text Descriptors**

Pictograms shall have text descriptors located directly below the pictogram field.

Text descriptors shall comply with this Chapter - 703.2, 703.3 and 703.4 - pp. 87-91.

703.7 **Symbols of Accessibility**

Symbols of accessibility shall comply with 703.7 - (below & following page).

703.7.1 **Finish and Contrast**

Symbols of accessibility and their background shall have a non-glare finish.

Symbols of accessibility shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.

Advisory
Finish and Contrast

703.7.1

Signs are more legible for persons with low vision when characters contrast as much as possible with their background.

Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

703.7.2 **Symbols**

703.7.2.1 **International Symbol of Accessibility**

The International Symbol of Accessibility shall comply with Figure 703.7.2.1 - p. 557.

703.7.2.2 **International Symbol of TTY**

The International Symbol of TTY shall comply with Figure 703.7.2.2 - p. 557.

703.7.2.3 **Volume Control Telephones**

Telephones with a volume control shall be identified by a pictogram of a telephone handset with radiating sound waves on a square field such as shown in Figure 703.7.2.3 - p. 557.

703.7.2.4

Assistive Listening Systems

Assistive listening systems shall be identified by the International Symbol of Access for Hearing Loss complying with Figure 703.7.2.4 - p. 557.

Chapter 15:

TELEPHONES

217 **Telephones**
 217.1 **General**

Where coin-operated public pay telephones, coinless public pay telephones, public closed-circuit telephones, public courtesy phones, or other types of public telephones are provided, public telephones shall be provided in accordance with this Chapter - 217 for each type of public telephone provided.

For purposes of this chapter, a bank of telephones shall be considered to be two or more adjacent telephones.

Advisory
 217.1 *General*

These requirements apply to all types of public telephones including courtesy phones at airports and rail stations that provide a free direct connection to hotels, transportation services, and tourist attractions.

217.2 **Wheelchair Accessible Telephones**

Where public telephones are provided, wheelchair accessible telephones complying with this Chapter - 704.2 - pp. 100 & 101 shall be provided in accordance with Table 217.2 - (below).

EXCEPTION:

Drive-up only public telephones shall not be required to comply with 217.2 - (above).

*Table 217.2
 Wheelchair Accessible Telephones*

<i>Number of Telephones Provided on a Floor, Level, or Exterior Site</i>	<i>Minimum Number of Required Wheelchair Accessible Telephones</i>
<i>1 or more single units</i>	<i>1 per floor, level, and exterior site</i>
<i>1 bank</i>	<i>1 per floor, level, and exterior site</i>
<i>2 or more banks</i>	<i>1 per bank</i>

217.3 **Volume Controls**

All public telephones shall have volume controls complying with this Chapter - 704.3 - p. 102.

Chapter 15: Telephones (continued)

217.4 TTYs

TTYs complying with this Chapter - 704.4 - pp. 102 & 103 shall be provided in accordance with 217.4 - (below & following pages).

217.4 *Advisory* TTYs

Separate requirements are provided based on the number of public pay telephones provided at a bank of telephones, within a floor, a building, or on a site.

In some instances one TTY can be used to satisfy more than one of these requirements.

For example, a TTY required for a bank can satisfy the requirements for a building.

However, the requirement for at least one TTY on an exterior site cannot be met by installing a TTY in a bank inside a building.

Consideration should be given to phone systems that can accommodate both digital and analog transmissions for compatibility with digital and analog TTYs.

217.4.1 **Bank Requirement**

Where four or more public pay telephones are provided at a bank of telephones, at least one public TTY complying with this Chapter - 704.4 - pp. 102 & 103 shall be provided at that bank.

EXCEPTION:

TTYs shall not be required at banks of telephones located within 200 feet (60 960mm) of, and on the same floor as, a bank containing a public TTY.

217.4.2 **Floor Requirement**

TTYs in public buildings shall be provided in accordance with 217.4.2.1 - (below).

TTYs in private buildings shall be provided in accordance with 217.4.2.2 - (following page).

217.4.2.1 **Public Buildings**

Where at least one public pay telephone is provided on a floor of a public building, at least one public TTY shall be provided on that floor.

Chapter 15: Telephones (continued)

217.4.2.2 **Private Buildings**

Where four or more public pay telephones are provided on a floor of a private building, at least one public TTY shall be provided on that floor.

217.4.3 **Building Requirement**

TTYs in public buildings shall be provided in accordance with 217.4.3.1 - (below).

TTYs in private buildings shall be provided in accordance with 217.4.3.2 - (below).

217.4.3.1 **Public Buildings**

Where at least one public pay telephone is provided in a public building, at least one public TTY shall be provided in the building.

Where at least one public pay telephone is provided in a public use area of a public building, at least one public TTY shall be provided in the public building in a public use area.

217.4.3.2 **Private Buildings**

Where four or more public pay telephones are provided in a private building, at least one public TTY shall be provided in the building.

217.4.4 **Exterior Site Requirement**

Where four or more public pay telephones are provided on an exterior site, at least one public TTY shall be provided on the site.

217.4.5 **Rest Stops, Emergency Roadside Stops, and Service Plazas**

Where at least one public pay telephone is provided at a public rest stop, emergency roadside stop, or service plaza, at least one public TTY shall be provided.

217.4.6 **Hospitals**

Where at least one public pay telephone is provided serving a hospital emergency room, hospital recovery room, or hospital waiting room, at least one public TTY shall be provided at each location.

217.4.7 **Transportation Facilities**

In transportation facilities, in addition to the requirements of 217.4.1-217.4.4 - (preceding page & above), where at least one public pay telephone serves a particular entrance to a bus or rail facility, at least one public TTY shall be provided to serve that entrance.

Chapter 15: Telephones (continued)

In airports, in addition to the requirements of 217.4.1-217.4.4 - (preceding pages), where four or more public pay telephones are located in a terminal outside the security areas, a concourse within the security areas, or a baggage claim area in a terminal, at least one public TTY shall be provided in each location.

217.4.8 **Detention and Correctional Facilities**

In detention and correctional facilities, where at least one pay telephone is provided in a secured area used only by detainees or inmates and security personnel, at least one TTY shall be provided in at least one secured area.

217.5 **Shelves for Portable TTYs**

Where a bank of telephones in the interior of a building consists of three or more public pay telephones, at least one public pay telephone at the bank shall be provided with a shelf and an electrical outlet in accordance with this Chapter - 704.5 - p. 103.

EXCEPTIONS:

1. Secured areas of detention and correctional facilities where shelves and outlets are prohibited for purposes of security or safety shall not be required to comply with 217.5 - (above).
2. The shelf and electrical outlet shall not be required at a bank of telephones with a TTY.

701 **General** 701.1 **Scope**

The provisions of this Chapter - 704, Chapters 13 - 702 - p. 81, 14 - 703 - pp. 87-96, 17 - 706 - pp. 112-114, 18 - 707 - pp. 115-120, 28 - 708 - pp. 153 & 154, and 65 - 705 - p. 318 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

704 **Telephones** 704.1 **General**

Public telephones shall comply with this Chapter - 704.

704.2 **Wheelchair Accessible Telephones**

Wheelchair accessible telephones shall comply with 704.2 - (following page).

Chapter 15: Telephones (continued)

704.2.1 **Clear Floor or Ground Space**

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided.

The clear floor or ground space shall not be obstructed by bases, enclosures, or seats.

Advisory

704.2.1 *Clear Floor or Ground Space*

Because clear floor and ground space is required to be unobstructed, telephones, enclosures and related telephone book storage cannot encroach on the required clear floor or ground space and must comply with the provisions for protruding objects.

See Chapter 1: Protruding Objects - 307 - pp. 30-32.

704.2.1.1 **Parallel Approach**

Where a parallel approach is provided, the distance from the edge of the telephone enclosure to the face of the telephone unit shall be 10 inches (254mm) maximum.

See Figure 704.2.1.1 - p. 558.

704.2.1.2 **Forward Approach**

Where a forward approach is provided, the distance from the front edge of a counter within the telephone enclosure to the face of the telephone unit shall be 20 inches (508mm) maximum.

See Figure 704.2.1.2 - p. 558.

704.2.2 **Operable Parts**

Operable parts shall comply with Chapter 2: Operable Parts - 309 - p. 34.

Telephones shall have push-button controls where such service is available.

704.2.3 **Telephone Directories**

Telephone directories, where provided, shall be located in accordance with Chapter 2: Operable Parts - 309 - p. 34.

704.2.4 **Cord Length**

The cord from the telephone to the handset shall be 29 inches (737mm) long minimum.

Chapter 15: Telephones (continued)

704.3

Volume Control Telephones

Public telephones required to have volume controls shall be equipped with a receive volume control that provides a gain adjustable up to 20 dBA minimum.

For incremental volume control, provide at least one intermediate step of 12 dBA of gain minimum. An automatic reset shall be provided.

Advisory

704.3

Volume Control Telephones

Amplifiers on pay phones are located in the base or the handset or are built into the telephone.

Most are operated by pressing a button or key.

If the microphone in the handset is not being used, a mute button that temporarily turns off the microphone can also reduce the amount of background noise which the person hears in the earpiece.

If a volume adjustment is provided that allows the user to set the level anywhere from the base volume to the upper requirement of 20 dBA, there is no need to specify a lower limit.

If a stepped volume control is provided, one of the intermediate levels must provide 12 dBA of gain.

Consider compatibility issues when matching an amplified handset with a phone or phone system.

Amplified handsets that can be switched with pay telephone handsets are available.

Portable and in-line amplifiers can be used with some phones but are not practical at most public phones covered by these requirements.

704.4

TTYs

TTYs required at a public pay telephone shall be permanently affixed within, or adjacent to, the telephone enclosure.

Where an acoustic coupler is used, the telephone cord shall be sufficiently long to allow connection of the TTY and the telephone receiver.

Advisory

704.4

TTYs

Ensure that sufficient electrical service is available where TTYs are to be installed.

Chapter 15: Telephones (continued)

704.4.1

Height

When in use, the touch surface of TTY keypads shall be 34 inches (864mm) minimum above the finish floor.

EXCEPTION:

Where seats are provided, TTYs shall not be required to comply with 704.4.1 - (below).

704.4.1

Advisory Height

A telephone with a TTY installed underneath cannot also be a wheelchair accessible telephone because the required 34 inches (864mm) minimum keypad height can cause the highest operable part of the telephone, usually the coin slot, to exceed the maximum permitted side and forward reach ranges.

See Chapter 47: Reach Ranges - 308 - pp. 237-239.

704.4.1

Advisory Height

EXCEPTION:

While seats are not required at TTYs, reading and typing at a TTY is more suited to sitting than standing.

Facilities that often provide seats at TTYs include, but are not limited to, airports and other passenger terminals or stations, courts, art galleries, and convention centers.

704.5

TTY Shelf

Public pay telephones required to accommodate portable TTYs shall be equipped with a shelf and an electrical outlet within or adjacent to the telephone enclosure.

The telephone handset shall be capable of being placed flush on the surface of the shelf.

The shelf shall be capable of accommodating a TTY and shall have 6 inches (152mm) minimum vertical clearance above the area where the TTY is to be placed.

Chapter 16:

TRANSPORTATION FACILITIES

218 **Transportation Facilities**

218.1 **General**

Transportation facilities shall comply with this Chapter - 218.

218.2 **New and Altered Fixed Guideway Stations**

New and altered stations in rapid rail, light rail, commuter rail, intercity rail, high speed rail, and other fixed guideway systems shall comply with this Chapter - 810.5-810.10 - pp. 106-110.

218.3 **Key Stations and Existing Intercity Rail Stations**

Key stations and existing intercity rail stations shall comply with this Chapter - 810.5-810.10 - pp. 106-110.

218.4 **Bus Shelters**

Where provided, bus shelters shall comply with this Chapter - 810.3 - p. 106.

218.5 **Other Transportation Facilities**

In other transportation facilities, public address systems shall comply with this Chapter - 810.7 - p. 109 and clocks shall comply with this Chapter - 810.8 - p. 109.

801 **General**

801.1 **Scope**

The provisions of this Chapter - 810, Chapters 10 - 804 - pp. 70-73, 20-22 - 803 - pp. 129 & 130, 805 - pp. 133 & 134, 806 - pp. 139-142, 23 - 811 - p. 145, 66-69 - 802, 807-809 - pp. 319-332 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

Advisory

801.1 Scope

Facilities covered by these requirements are also subject to the requirements of the other sections and chapters.

For example, Chapter 22: Transient Lodging Guest Rooms - 806 - pp. 139-142 addresses guest rooms in transient lodging facilities while Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 contains the technical specifications for dining surfaces.

810.3 **Bus Shelters**

Bus shelters shall provide a minimum clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 entirely within the shelter.

Bus shelters shall be connected by an accessible route complying with Chapter 3: Accessible Routes - 402 - p. 46 to a boarding and alighting area complying with 810.2 - (preceding page & above).

See Figure 810.3 - p. 567.

810.4 **Bus Signs**

Bus route identification signs shall comply with Chapter 14: Signs - 703.5.1-703.5.4 - p. 92 and 703.5.7 and 703.5.8 - p. 94.

In addition, to the maximum extent practicable, bus route identification signs shall comply with Chapter 14: Signs - 703.5.5 - pp. 92 & 93.

EXCEPTION:

Bus schedules, timetables and maps that are posted at the bus stop or bus bay shall not be required to comply.

810.5 **Rail Platforms**

Rail platforms shall comply with 810.5 - (below & following page).

810.5.1 **Slope**

Rail platforms shall not exceed a slope of 1:48 in all directions.

EXCEPTION:

Where platforms serve vehicles operating on existing track or track laid in existing roadway, the slope of the platform parallel to the track shall be permitted to be equal to the slope (grade) of the roadway or existing track.

810.5.2 **Detectable Warnings**

Platform boarding edges not protected by platform screens or guards shall have detectable warnings complying with Chapter 65: Detectable Warnings - 705 - p. 318 along the full length of the public use area of the platform.

810.5.3 Platform and Vehicle Floor Coordination

Station platforms shall be positioned to coordinate with vehicles in accordance with the applicable requirements of 36 CFR Part 1192.

Low-level platforms shall be 8 inches (203mm) minimum above top of rail.

EXCEPTION:

Where vehicles are boarded from sidewalks or street-level, low-level platforms shall be permitted to be less than 8 inches (203mm).

Advisory

810.5.3 Platform and Vehicle Floor Coordination

The height and position of a platform must be coordinated with the floor of the vehicles it serves to minimize the vertical and horizontal gaps, in accordance with the ADA Accessibility Guidelines for Transportation Vehicles (36 CFR Part 1192).

The vehicle guidelines, divided by bus, van, light rail, rapid rail, commuter rail, intercity rail, are available at www.access-board.gov.

The preferred alignment is a high platform, level with the vehicle floor.

In some cases, the vehicle guidelines permit use of a low platform in conjunction with a lift or ramp.

Most such low platforms must have a minimum height of eight inches above the top of the rail.

Some vehicles are designed to be boarded from a street or the sidewalk along the street and the exception permits such boarding areas to be less than 8 inches (203mm) high.

810.6 Rail Station Signs

Rail station signs shall comply with 810.6 - (following pages).

EXCEPTION:

Signs shall not be required to comply with 810.6.1 and 810.6.2 - (below & following pages) where audible signs are remotely transmitted to hand-held receivers, or are user- or proximity-actuated.

Chapter 16: Transportation Facilities (continued)

Advisory

810.6

Rail Station Signs Exception

Emerging technologies such as an audible sign systems using infrared transmitters and receivers may provide greater accessibility in the transit environment than traditional Braille and raised letter signs.

The transmitters are placed on or next to print signs and transmit their information to an infrared receiver that is held by a person.

By scanning an area, the person will hear the sign.

This means that signs can be placed well out of reach of Braille readers, even on parapet walls and on walls beyond barriers.

Additionally, such signs can be used to provide wayfinding information that cannot be efficiently conveyed on Braille signs.

810.6.1

Entrances

Where signs identify a station or its entrance, at least one sign at each entrance shall comply with Chapter 14: Signs - 703.2 - pp. 87-89 and shall be placed in uniform locations to the maximum extent practicable.

Where signs identify a station that has no defined entrance, at least one sign shall comply with Chapter 14: Signs - 703.2 - pp. 87-89 and shall be placed in a central location.

810.6.2

Routes and Destinations

Lists of stations, routes and destinations served by the station which are located on boarding areas, platforms, or mezzanines shall comply with Chapter 14: Signs - 703.5 - pp. 91-94.

At least one tactile sign identifying the specific station and complying with Chapter 14: Signs - 703.2 - pp. 87-89 shall be provided on each platform or boarding area.

Signs covered by this requirement shall, to the maximum extent practicable, be placed in uniform locations within the system.

EXCEPTION:

Where sign space is limited, characters shall not be required to exceed 3 inches (76mm).

Chapter 16: Transportation Facilities (continued)

Advisory

810.6.2

Routes and Destinations

Route maps are not required to comply with the informational sign requirements in this document.

810.6.3

Station Names

Stations covered by this section shall have identification signs complying with Chapter 14: Signs - 703.5 - pp. 91-94.

Signs shall be clearly visible and within the sight lines of standing and sitting passengers from within the vehicle on both sides when not obstructed by another vehicle.

Advisory

810.6.3

Station Names

It is also important to place signs at intervals in the station where passengers in the vehicle will be able to see a sign when the vehicle is either stopped at the station or about to come to a stop in the station.

The number of signs necessary may be directly related to the size of the lettering displayed on the sign.

810.7

Public Address Systems

Where public address systems convey audible information to the public, the same or equivalent information shall be provided in a visual format.

810.8

Clocks

Where clocks are provided for use by the public, the clock face shall be uncluttered so that its elements are clearly visible.

Hands, numerals and digits shall contrast with the background either light-on-dark or dark-on-light.

Where clocks are installed overhead, numerals and digits shall comply with Chapter 14: Signs - 703.5 - pp. 91-94.

810.9

Escalators

Where provided, escalators shall comply with the sections 6.1.3.5.6 and 6.1.3.6.5 of ASME A17.1 (incorporated by reference, see "Referenced Standards" in Section 5: Referenced Standards - 105 - p. 7) and shall have a clear width of 32 inches (813mm) minimum.

EXCEPTION:

Existing escalators in key stations shall not be required to comply with 810.9 - (above).

810.10

Track Crossings

Where a circulation path serving boarding platforms crosses tracks, it shall comply with Chapter 3: Accessible Routes - 402 - p. 46.

See Figure 810.10 - p. 568.

EXCEPTION:

Openings for wheel flanges shall be permitted to be 2-1/2 inches (64mm) maximum.

Chapter 17:

ASSISTIVE LISTENING SYSTEMS

219 **Assistive Listening Systems**
219.1 **General**

Assistive listening systems shall be provided in accordance with this Chapter - 219 and shall comply with this Chapter - 706.

219.2 **Required Systems**

In each assembly area where audible communication is integral to the use of the space, an assistive listening system shall be provided.

EXCEPTION:

Other than in courtrooms, assistive listening systems shall not be required where audio amplification is not provided.

219.3 **Receivers**

Receivers complying with this Chapter - 706.2 - p. 113 shall be provided for assistive listening systems in each assembly area in accordance with Table 219.3 - (following page).

Twenty-five percent minimum of receivers provided, but no fewer than two, shall be hearing-aid compatible in accordance with this Chapter - 706.3 - p. 113.

EXCEPTIONS:

1. Where a building contains more than one assembly area and the assembly areas required to provide assistive listening systems are under one management, the total number of required receivers shall be permitted to be calculated according to the total number of seats in the assembly areas in the building provided that all receivers are usable with all systems.
2. Where all seats in an assembly area are served by an induction loop assistive listening system, the minimum number of receivers required by Table 219.3 - (following page) to be hearing-aid compatible shall not be required to be provided.

Chapter 17: Assistive Listening Systems (continued)

*Table 219.3
Receivers for Assistive Listening Systems*

<i>Capacity of Seating in Assembly Area</i>	<i>Minimum Number of Required Receivers</i>	<i>Minimum Number of Required Receivers Required to be Hearing-Aid Compatible</i>
<i>50 or less</i>	<i>2</i>	<i>2</i>
<i>51 to 200</i>	<i>2, plus 1 per 25 seats over 50 seats¹</i>	<i>2</i>
<i>201 to 500</i>	<i>2, plus 1 per 25 seats over 50 seats¹</i>	<i>1 per 4 receivers¹</i>
<i>501 to 1000</i>	<i>20, plus 1 per 33 seats over 500 seats¹</i>	<i>1 per 4 receivers¹</i>
<i>1001 to 2000</i>	<i>35, plus 1 per 50 seats over 1000 seats¹</i>	<i>1 per 4 receivers¹</i>
<i>2001 and over</i>	<i>55, plus 1 per 100 seats over 2000 seats¹</i>	<i>1 per 4 receivers¹</i>

¹Or fraction thereof.

701 **General**
701.1 **Scope**

The provisions of this Chapter - 706, Chapters 13-15 - 702 - p. 81, 703 - pp. 87-96, 704 - pp. 100-103, 18 - 707 - pp. 115-120, 28 - 708 - pp. 153 & 154, 65 - 705 - p. 318 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

706 **Assistive Listening Systems**
706.1 **General**

Assistive listening systems required in assembly areas shall comply with this Chapter - 706.

706.1 *Advisory*
General

Assistive listening systems are generally categorized by their mode of transmission.

There are hard-wired systems and three types of wireless systems: induction loop, infrared, and FM radio transmission.

Chapter 17: Assistive Listening Systems (continued)

Each has different advantages and disadvantages that can help determine which system is best for a given application.

For example, an FM system may be better than an infrared system in some open-air assemblies since infrared signals are less effective in sunlight.

On the other hand, an infrared system is typically a better choice than an FM system where confidential transmission is important because it will be contained within a given space.

The technical standards for assistive listening systems describe minimum performance levels for volume, interference, and distortion.

Sound pressure levels (SPL), expressed in decibels, measure output sound volume. Signal-to-noise ratio (SNR or S/N), also expressed in decibels, represents the relationship between the loudness of a desired sound (the signal) and the background noise in a space or piece of equipment.

The higher the SNR, the more intelligible the signal.

The peak clipping level limits the distortion in signal output produced when high-volume sound waves are manipulated to serve assistive listening devices.

Selecting or specifying an effective assistive listening system for a large or complex venue requires assistance from a professional sound engineer.

The Access Board has published technical assistance on assistive listening devices and systems.

706.2 **Receiver Jacks**

Receivers required for use with an assistive listening system shall include a 1/8 inch (3.2mm) standard mono jack.

706.3 **Receiver Hearing-Aid Compatibility**

Receivers required to be hearing-aid compatible shall interface with telecoils in hearing aids through the provision of neckloops.

Advisory

706.3 *Receiver Hearing-Aid Compatibility*

Neckloops and headsets that can be worn as neckloops are compatible with hearing aids.

Receivers that are not compatible include earbuds, which may require removal of hearing aids, earphones, and headsets that must be worn over the ear, which can create disruptive interference in the transmission and can be uncomfortable for people wearing hearing aids.

706.4 **Sound Pressure Level**

Assistive listening systems shall be capable of providing a sound pressure level of 110 dBA minimum and 118 dBA maximum with a dynamic range on the volume control of 50 dBA.

706.5 **Signal-to-Noise Ratio**

The signal-to-noise ratio for internally generated noise in assistive listening systems shall be 18 dBA minimum.

706.6 **Peak Clipping Level**

Peak clipping shall not exceed 18 dBA of clipping relative to the peaks of speech.

Chapter 18:

AUTOMATIC TELLER MACHINES AND FARE MACHINES

220 **Automatic Teller Machines and Fare Machines**
220.1 **General**

Where automatic teller machines or self-service fare vending, collection, or adjustment machines are provided, at least one of each type provided at each location shall comply with this Chapter - 707.

Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type shall comply with Chapter 23: Storage - 811 - p. 145.

220.1 *Advisory*
General

If a bank provides both interior and exterior ATMs, each such installation is considered a separate location.

Accessible ATMs, including those with speech and those that are within reach of people who use wheelchairs, must provide all the functions provided to customers at that location at all times.

For example, it is unacceptable for the accessible ATM only to provide cash withdrawals while inaccessible ATMs also sell theater tickets.

701 **General**
701.1 **Scope**

The provisions of this Chapter - 707, Chapters 13-15 - 702 - p. 18, 703 - pp. 87-96, 704 - pp. 100-103, 17 - 706 - pp. 112-114, 28 - 708 - pp. 153 & 154, 65 - 705 - p. 318 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

707 **Automatic Teller Machines and Fare Machines**

707 *Advisory*
Automatic Teller Machines and Fare Machines

Interactive transaction machines (ITMs), other than ATMs, are not covered by this Chapter - 707.

However, for entities covered by the ADA, the Department of Justice regulations that implement the ADA provide additional guidance regarding the relationship between these requirements and elements that are not directly addressed by these requirements.

Chapter 18: Automatic Teller Machines and Fare Machines (continued)

Federal procurement law requires that ITMs purchased by the Federal government comply with standards issued by the Access Board under Section 508 of the Rehabilitation Act of 1973, as amended.

This law covers a variety of products, including computer hardware and software, websites, phone systems, fax machines, copiers, and similar technologies.

For more information on Section 508 consult the Access Board's website at www.access-board.gov.

707.1 **General**

Automatic teller machines and fare machines shall comply with this Chapter - 707.

Advisory
707.1 *General*

If fare cards have one tactually distinctive corner they can be inserted with greater accuracy.

Token collection devices that are designed to accommodate tokens which are perforated can allow a person to distinguish more readily between tokens and common coins.

Place accessible gates and fare vending machines in close proximity to other accessible elements when feasible so the facility is easier to use.

707.2 **Clear Floor or Ground Space**

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided.

EXCEPTION:

Clear floor or ground space shall not be required at drive-up only automatic teller machines and fare machines.

707.3 **Operable Parts**

Operable parts shall comply with Chapter 2: Operable Parts - 309 - p. 34.

Unless a clear or correct key is provided, each operable part shall be able to be differentiated by sound or touch, without activation.

EXCEPTION:

Drive-up only automatic teller machines and fare machines shall not be required to comply with Chapter 2: Operable Parts - 309.2 and 309.3 - p. 34.

707.4

Privacy

Automatic teller machines shall provide the opportunity for the same degree of privacy of input and output available to all individuals.

Advisory

707.4

Privacy

In addition to people who are blind or visually impaired, people with limited reach who use wheelchairs or have short stature, who cannot effectively block the ATM screen with their bodies, may prefer to use speech output.

Speech output users can benefit from an option to render the visible screen blank, thereby affording them greater personal security and privacy.

707.5

Speech Output

Machines shall be speech enabled.

Operating instructions and orientation, visible transaction prompts, user input verification, error messages, and all displayed information for full use shall be accessible to and independently usable by individuals with vision impairments.

Speech shall be delivered through a mechanism that is readily available to all users, including but not limited to, an industry standard connector or a telephone handset.

Speech shall be recorded or digitized human, or synthesized.

EXCEPTIONS:

1. Audible tones shall be permitted instead of speech for visible output that is not displayed for security purposes, including but not limited to, asterisks representing personal identification numbers.
2. Advertisements and other similar information shall not be required to be audible unless they convey information that can be used in the transaction being conducted.
3. Where speech synthesis cannot be supported, dynamic alphabetic output shall not be required to be audible.

Advisory
Speech Output

707.5

If an ATM provides additional functions such as dispensing coupons, selling theater tickets, or providing copies of monthly statements, all such functions must be available to customers using speech output.

To avoid confusion at the ATM, the method of initiating the speech mode should be easily discoverable and should not require specialized training.

For example, if a telephone handset is provided, lifting the handset can initiate the speech mode.

707.5.1 **User Control**

Speech shall be capable of being repeated or interrupted

Volume control shall be provided for the speech function.

EXCEPTION:

Speech output for any single function shall be permitted to be automatically interrupted when a transaction is selected.

707.5.2 **Receipts**

Where receipts are provided, speech output devices shall provide audible balance inquiry information, error messages, and all other information on the printed receipt necessary to complete or verify the transaction.

EXCEPTIONS:

1. Machine location, date and time of transaction, customer account number, and the machine identifier shall not be required to be audible.
2. Information on printed receipts that duplicates information available on-screen shall not be required to be presented in the form of an audible receipt.
3. Printed copies of bank statements and checks shall not be required to be audible.

707.6 **Input**

Input devices shall comply with 707.6 - (following pages).

707.6.1 **Input Controls**

At least one tactilely discernible input control shall be provided for each function.

Where provided, key surfaces not on active areas of display screens, shall be raised above surrounding surfaces.

Where membrane keys are the only method of input, each shall be tactilely discernable from surrounding surfaces and adjacent keys.

707.6.2 **Numeric Keys**

Numeric keys shall be arranged in a 12-key ascending or descending telephone keypad layout.

The number five key shall be tactilely distinct from the other keys.

See Figure 707.6.2 - p. 560.

Advisory
Numeric Keys

707.6.2

Telephone keypads and computer keyboards differ in one significant feature, ascending versus descending numerical order.

Both types of keypads are acceptable, provided the computer-style keypad is organized similarly to the number pad located at the right on most computer keyboards, and does not resemble the line of numbers located above the computer keys.

707.6.3 **Function Keys**

Function keys shall comply with 707.6.3 - (below).

707.6.3.1 **Contrast**

Function keys shall contrast visually from background surfaces.

Characters and symbols on key surfaces shall contrast visually from key surfaces.

Visual contrast shall be either light-on-dark or dark-on-light.

EXCEPTION:

Tactile symbols required by 707.6.3.2 - (following page) shall not be required to comply with 707.6.3.1 - (above).

707.6.3.2 **Tactile Symbols**

Function key surfaces shall have tactile symbols as follows: Enter or Proceed key: raised circle; Clear or Correct key: raised left arrow; Cancel key: raised letter ex; Add Value key: raised plus sign; Decrease Value key: raised minus sign.

707.7 **Display Screen**

The display screen shall comply with 707.7 - (below).

EXCEPTION:

Drive-up only automatic teller machines and fare machines shall not be required to comply with 707.7.1 - (below).

707.7.1 **Visibility**

The display screen shall be visible from a point located 40 inches (1016mm) above the center of the clear floor space in front of the machine.

707.7.2 **Characters**

Characters displayed on the screen shall be in a sans serif font.

Characters shall be 3/16 inch (4.8mm) high minimum based on the uppercase letter "I".

Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

707.8 **Braille Instructions**

Braille instructions for initiating the speech mode shall be provided.

Braille shall comply with Chapter 14: Signs - 703.3 - pp. 89 & 90.

Chapter 19:

ASSEMBLY AREAS

221 **Assembly Areas**
221.1 **General**

Assembly areas shall provide wheelchair spaces, companion seats, and designated aisle seats complying with this Chapter - 221 and Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802 - pp. 319-323.

In addition, lawn seating shall comply with this Chapter - 221.5 - p. 127.

221.2 **Wheelchair Spaces**

Wheelchair spaces complying with 221.2 - (below & following pages) shall be provided in assembly areas with fixed seating.

221.2.1 **Number and Location**

Wheelchair spaces shall be provided complying with 221.2.1 - (below & following pages).

221.2.1.1 **General Seating**

Wheelchair spaces complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.1 - pp. 319 & 320 shall be provided in accordance with Table 221.2.1.1 - (following page).

Chapter 19: Assembly Areas (continued)

*Table 221.2.1.1
Number of Wheelchair Spaces in Assembly Areas*

<i>Number of Seats</i>	<i>Minimum Number of Required Wheelchair Spaces</i>
<i>4 to 25</i>	<i>1</i>
<i>26 to 50</i>	<i>2</i>
<i>51 to 150</i>	<i>4</i>
<i>151 to 300</i>	<i>5</i>
<i>301 to 500</i>	<i>6</i>
<i>501 to 5000</i>	<i>6, plus 1 for each 150, or fraction thereof, between 501 through 5000</i>
<i>5001 and over</i>	<i>36, plus 1 for each 200, or fraction thereof, over 5000</i>

221.2.1.2 Luxury Boxes, Club Boxes, and Suites in Arenas, Stadiums, and Grandstands

In each luxury box, club box, and suite within arenas, stadiums, and grandstands, wheelchair spaces complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.1 - pp. 319 & 320 shall be provided in accordance with Table 221.2.1.1 - (above).

Advisory

221.2.1.2 Luxury Boxes, Club Boxes, and Suites in Arenas, Stadiums, and Grandstands

The number of wheelchair spaces required in luxury boxes, club boxes, and suites within an arena, stadium, or grandstand is to be calculated box by box and suite by suite.

221.2.1.3 Other Boxes

In boxes other than those required to comply with 221.2.1.2 - (above), the total number of wheelchair spaces required shall be determined in accordance with Table 221.2.1.1 - (above).

Wheelchair spaces shall be located in not less than 20 percent of all boxes provided.

Wheelchair spaces shall comply with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.1 - pp. 319 & 320.

Chapter 19: Assembly Areas (continued)

221.2.1.3 *Advisory*
Other Boxes

The provision for seating in “other boxes” includes box seating provided in facilities such as performing arts auditoria where tiered boxes are designed for spatial and acoustical purposes.

The number of wheelchair spaces required in boxes covered by 221.2.1.3 - (preceding page) is calculated based on the total number of seats provided in these other boxes.

The resulting number of wheelchair spaces must be located in no fewer than 20 percent of the boxes covered by this chapter.

For example, a concert hall has 20 boxes, each of which contains 10 seats, totaling 200 seats.

In this example, 5 wheelchair spaces would be required, and they must be placed in at least 4 of the boxes.

Additionally, because the wheelchair spaces must also meet the dispersion requirements of 221.2.3 - (following pages), the boxes containing these wheelchair spaces cannot all be located in one area unless an exception to the dispersion requirements applies.

221.2.1.4 **Team or Player Seating**

At least one wheelchair space complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.1 - pp. 319 & 320 shall be provided in team or player seating areas serving areas of sport activity.

EXCEPTION:

Wheelchair spaces shall not be required in team or player seating areas serving bowling lanes not required to comply with Chapter 3: Accessible Routes - 206.2.11 - p. 43.

221.2.2 **Integration**

Wheelchair spaces shall be an integral part of the seating plan.

221.2.2 *Advisory*
Integration

The requirement that wheelchair spaces be an “integral part of the seating plan” means that wheelchair spaces must be placed within the footprint of the seating area.

Wheelchair spaces cannot be segregated from seating areas.

Chapter 19: Assembly Areas (continued)

For example, it would be unacceptable to place only the wheelchair spaces, or only the wheelchair spaces and their associated companion seats, outside the seating areas defined by risers in an assembly area.

221.2.3 **Lines of Sight and Dispersion**

Wheelchair spaces shall provide lines of sight complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.2 - pp. 321 & 322 and shall comply with 221.2.3 - (below & following page).

In providing lines of sight, wheelchair spaces shall be dispersed.

Wheelchair spaces shall provide spectators with choices of seating locations and viewing angles that are substantially equivalent to, or better than, the choices of seating locations and viewing angles available to all other spectators.

When the number of wheelchair spaces required by 221.2.1 - (preceding pages) has been met, further dispersion shall not be required.

EXCEPTION:

Wheelchair spaces in team or player seating areas serving areas of sport activity shall not be required to comply with 221.2.3 - (above, below & following page).

Advisory

221.2.3 *Lines of Sight and Dispersion*

Consistent with the overall intent of the ADA, individuals who use wheelchairs must be provided equal access so that their experience is substantially equivalent to that of other members of the audience.

Thus, while individuals who use wheelchairs need not be provided with the best seats in the house, neither may they be relegated to the worst.

221.2.3.1 **Horizontal Dispersion**

Wheelchair spaces shall be dispersed horizontally.

EXCEPTIONS:

1. Horizontal dispersion shall not be required in assembly areas with 300 or fewer seats if the companion seats required by this Chapter - 221.3 - p. 126 and wheelchair spaces are located within the 2nd or 3rd quartile of the total row length.

Chapter 19: Assembly Areas (continued)

Intermediate aisles shall be included in determining the total row length.

If the row length in the 2nd and 3rd quartile of a row is insufficient to accommodate the required number of companion seats and wheelchair spaces, the additional companion seats and wheelchair spaces shall be permitted to be located in the 1st and 4th quartile of the row.

2. In row seating, two wheelchair spaces shall be permitted to be located side-by-side.

Advisory

221.2.3.1

Horizontal Dispersion

Horizontal dispersion of wheelchair spaces is the placement of spaces in an assembly facility seating area from side-to-side or, in the case of an arena or stadium, around the field of play or performance area.

221.2.3.2

Vertical Dispersion

Wheelchair spaces shall be dispersed vertically at varying distances from the screen, performance area, or playing field.

In addition, wheelchair spaces shall be located in each balcony or mezzanine that is located on an accessible route.

EXCEPTIONS:

1. Vertical dispersion shall not be required in assembly areas with 300 or fewer seats if the wheelchair spaces provide viewing angles that are equivalent to, or better than, the average viewing angle provided in the facility.
2. In bleachers, wheelchair spaces shall not be required to be provided in rows other than rows at points of entry to bleacher seating.

Advisory

221.2.3.2

Vertical Dispersion

When wheelchair spaces are dispersed vertically in an assembly facility they are placed at different locations within the seating area from front-to-back so that the distance from the screen, stage, playing field, area of sports activity, or other focal point is varied among wheelchair spaces.

Chapter 19: Assembly Areas (continued)

221.2.3.2 *Advisory*
Vertical Dispersion

EXCEPTION 2:

Points of entry to bleacher seating may include, but are not limited to, cross aisles, concourses, vomitories, and entrance ramps and stairs.

Vertical, center, or side aisles adjoining bleacher seating that are stepped or tiered are not considered entry points.

221.3 **Companion Seats**

At least one companion seat complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.3 - p. 322 shall be provided for each wheelchair space required by this Chapter - 221.2.1 - pp. 121-123.

221.4 **Designated Aisle Seats**

At least 5 percent of the total number of aisle seats provided shall comply with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.4 - pp. 322 & 323 and shall be the aisle seats located closest to accessible routes.

EXCEPTION:

Team or player seating areas serving areas of sport activity shall not be required to comply with 221.4 - (above).

221.4 *Advisory*
Designated Aisle Seats

When selecting which aisle seats will meet the requirements of Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.4 - pp. 322 & 323, those aisle seats which are closest to, not necessarily on, accessible routes must be selected first.

For example, an assembly area has two aisles (A and B) serving seating areas with an accessible route connecting to the top and bottom of Aisle A only.

The aisle seats chosen to meet Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.4 - pp. 322 & 323 must be those at the top and bottom of Aisle A, working toward the middle.

Only when all seats on Aisle A would not meet the five percent minimum would seats on Aisle B be designated.

221.5

Lawn Seating

Lawn seating areas and exterior overflow seating areas, where fixed seats are not provided, shall connect to an accessible route.

Chapter 20:

DRESSING - FITTING - LOCKER ROOMS

222 **Dressing - Fitting - Locker Rooms**
222.1 **General**

Where dressing rooms, fitting rooms, or locker rooms are provided, at least 5 percent, but no fewer than one, of each type of use in each cluster provided shall comply with this Chapter - 803.

EXCEPTION:

In alterations, where it is technically infeasible to provide rooms in accordance with 222.1 - (above), one room for each sex on each level shall comply with this Chapter - 803.

Where only unisex rooms are provided, unisex rooms shall be permitted.

222.1 *Advisory*
General

A "cluster" is a group of rooms proximate to one another.

Generally, rooms in a cluster are within sight of, or adjacent to, one another.

Different styles of design provide users varying levels of privacy and convenience.

Some designs include private changing facilities that are close to core areas of the facility, while other designs use space more economically and provide only group dressing facilities.

Regardless of the type of facility, dressing, fitting, and locker rooms should provide people with disabilities rooms that are equally private and convenient to those provided others.

For example, in a physician's office, if people without disabilities must traverse the full length of the office suite in clothing other than their street clothes, it is acceptable for people with disabilities to be asked to do the same.

222.2 **Coat Hooks and Shelves**

Where coat hooks or shelves are provided in dressing, fitting or locker rooms without individual compartments, at least one of each type shall comply with this Chapter - 803.5.

Where coat hooks or shelves are provided in individual compartments at least one of each type complying with this Chapter - 803.5 shall be provided in individual compartments in dressing, fitting, or locker rooms required to comply with 222.1 - (above).

Chapter 20: Dressing - Fitting - Locker Rooms (continued)

801 **General**
801.1 **Scope**

The provisions of this Chapter - 803, Chapters 10 - 804 - pp. 70-73, 16 - 810 - pp. 105-110, 21-23 - 811 - p. 145, 66-69 - 802, 807-809 - pp. 319-332 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

801.1 *Advisory*
Scope

Facilities covered by these requirements are also subject to the requirements of the other sections and chapters.

For example, Chapter 22: Transient Lodging Guest Rooms - 806 - pp. 139-142 addresses guest rooms in transient lodging facilities while Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 contains the technical specifications for dining surfaces.

If a transient lodging facility contains a restaurant, the restaurant must comply with requirements in other chapters such as those applicable to certain dining surfaces.

803 **Dressing - Fitting - Locker Rooms**
803.1 **General**

Dressing, fitting, and locker rooms shall comply with this Chapter - 803.

803.1 *Advisory*
General

Partitions and doors should be designed to ensure people using accessible dressing and fitting rooms privacy equivalent to that afforded other users of the facility.

Chapter 70: Benches - 903.5 - p. 334 requires dressing room bench seats to be installed so that they are at the same height as a typical wheelchair seat, 17 inches (432mm) to 19 inches (483mm).

However, wheelchair seats can be lower than dressing room benches for people of short stature or children using wheelchairs.

803.2 **Turning Space**

Turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232 shall be provided within the room.

Chapter 20: Dressing - Fitting - Locker Rooms (continued)

803.3 **Door Swing**

Doors shall not swing into the room unless a clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305.3 - p. 233 is provided beyond the arc of the door swing.

803.4 **Benches**

A bench complying with Chapter 70: Benches - 903 - pp. 333 & 334 shall be provided within the room.

803.5 **Coat Hooks and Shelves**

Coat hooks provided within the room shall be located within one of the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239.

Shelves shall be 40 inches (1016mm) minimum and 48 inches (1219mm) maximum above the finish floor or ground.

Chapter 21:

MEDICAL CARE AND LONG-TERM CARE FACILITIES

223 **Medical Care and Long-Term Care Facilities**
223.1 **General**

In licensed medical care facilities and licensed long-term care facilities where the period of stay exceeds twenty-four hours, patient or resident sleeping rooms shall be provided in accordance with this Chapter - 223.

EXCEPTION:

Toilet rooms that are part of critical or intensive care patient sleeping rooms shall not be required to comply with Chapter 11: Toilet Facilities and Bathing Rooms - 603 - pp. 288 & 289.

223.1 *Advisory*
General

Because medical facilities frequently reconfigure spaces to reflect changes in medical specialties, 223.1 - (above & below) does not include a provision for dispersion of accessible patient or resident sleeping rooms.

The lack of a design requirement does not mean that covered entities are not required to provide services to people with disabilities where accessible rooms are not dispersed in specialty areas.

Locate accessible rooms near core areas that are less likely to change over time.

While dispersion is not required, the flexibility it provides can be a critical factor in ensuring cost effective compliance with applicable civil rights laws, including Titles II and III of the ADA and Section 504 of the Rehabilitation Act of 1973, as amended.

Additionally, all types of features and amenities should be dispersed among accessible sleeping rooms to ensure equal access to and a variety of choices for all patients and residents.

223.1.1 **Alterations**

Where sleeping rooms are altered or added, the requirements of this Chapter - 223 shall apply only to the sleeping rooms being altered or added until the number of sleeping rooms complies with the minimum number required for new construction.

Chapter 21: Medical Care and Long-Term Care Facilities (continued)

*Advisory
Alterations*

223.1.1

In alterations and additions, the minimum required number is based on the total number of sleeping rooms altered or added instead of on the total number of sleeping rooms provided in a facility.

As a facility is altered over time, every effort should be made to disperse accessible sleeping rooms among patient care areas such as pediatrics, cardiac care, maternity, and other units.

In this way, people with disabilities can have access to the full-range of services provided by a medical care facility.

223.2 **Hospitals, Rehabilitation Facilities, Psychiatric Facilities
and Detoxification Facilities**

Hospitals, rehabilitation facilities, psychiatric facilities and detoxification facilities shall comply with 223.2 - (below).

223.2.1 **Facilities Not Specializing in Treating Conditions
that Affect Mobility**

In facilities not specializing in treating conditions that affect mobility, at least 10 percent, but no fewer than one, of the patient sleeping rooms shall provide mobility features complying with this Chapter - 805.

223.2.2 **Facilities Specializing in Treating Conditions that Affect Mobility**

In facilities specializing in treating conditions that affect mobility, 100 percent of the patient sleeping rooms shall provide mobility features complying with this Chapter - 805.

Advisory

223.2.2 **Facilities Specializing in Treating Conditions that Affect Mobility**

Conditions that affect mobility include conditions requiring the use or assistance of a brace, cane, crutch, prosthetic device, wheelchair, or powered mobility aid; arthritic, neurological, or orthopedic conditions that severely limit one's ability to walk; respiratory diseases and other conditions which may require the use of portable oxygen; and cardiac conditions that impose significant functional limitations.

Facilities that may provide treatment for, but that do not specialize in treatment of such conditions, such as general rehabilitation hospitals, are not subject to this requirement but are subject to 223.2.1 - (above).

Chapter 21: Medical Care and Long-Term Care Facilities (continued)

223.3 Long-Term Care Facilities

In licensed long-term care facilities, at least 50 percent, but no fewer than one, of each type of resident sleeping room shall provide mobility features complying with this Chapter - 805.

801 General 801.1 Scope

The provisions of this Chapter - 805, Chapters 10 - 804 - pp. 70-73, 16 - 810 - pp. 105-110, 20 - 803 - pp. 129 & 130, 22 - 806 - pp. 139-142, 23 - 811 - p. 145, 66-69 - 802, 807-809 - pp. 319- 332 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

801.1 *Advisory* *Scope*

Facilities covered by these requirements are also subject to the requirements of the other sections and chapters.

For example, Chapter 22: Transient Lodging Guest Rooms - 806 - pp. 139-142 addresses guest rooms in transient lodging facilities while Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 contains the technical specifications for dining surfaces.

If a transient lodging facility contains a restaurant, the restaurant must comply with requirements in other chapters such as those applicable to certain dining surfaces.

805 Medical Care and Long-Term Care Facilities 805.1 General

Medical care facility and long-term care facility patient or resident sleeping rooms required to provide mobility features shall comply with this Chapter - 805.

805.2 Turning Space

Turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232 shall be provided within the room.

805.3 Clear Floor or Ground Space

A clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided on each side of the bed.

The clear floor space shall be positioned for parallel approach to the side of the bed.

805.4

Toilet and Bathing Rooms

Toilet and bathing rooms that are provided as part of a patient or resident sleeping room shall comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

Where provided, no fewer than one water closet, one lavatory, and one bathtub or shower shall comply with the applicable requirements of Chapters 57-64 - 603-610 - pp. 288-317.

Chapter 22: Transient Lodging Guest Rooms (continued)

224.1.2

Guest Room Doors and Doorways

Entrances, doors, and doorways providing user passage into and within guest rooms that are not required to provide mobility features complying with this Chapter - 806.2 - pp. 139-141 shall comply with Chapter 49: Doors - Doorways - Gates - 404.2.3 - pp. 243 & 244.

EXCEPTION:

Shower and sauna doors in guest rooms that are not required to provide mobility features complying with this Chapter - 806.2 - pp. 139-141 shall not be required to comply with Chapter 49: Doors - Doorways - Gates - 404.2.3 - pp. 243 & 244.

Advisory

224.1.2

Guest Room Doors and Doorways

Because of the social interaction that often occurs in lodging facilities, an accessible clear opening width is required for doors and doorways to and within all guest rooms, including those not required to be accessible.

This applies to all doors, including bathroom doors, that allow full user passage.

Other requirements for doors and doorways in Chapter 49: Doors - Doorways - Gates - 404.2.3 - pp. 243 & 244 do not apply to guest rooms not required to provide mobility features.

224.2

Guest Rooms with Mobility Features

In transient lodging facilities, guest rooms with mobility features complying with this Chapter - 806.2 - pp. 139-141 shall be provided in accordance with Table 224.2 - (following page).

Chapter 22: Transient Lodging Guest Rooms (continued)

*Table 224.2
Guest Rooms with Mobility Features*

<i>Total Number of Guest Rooms Provided</i>	<i>Minimum Number of Required Rooms Without Roll-in Showers</i>	<i>Minimum Number of Required Rooms With Roll-in Showers</i>	<i>Total Number of Required Rooms</i>
<i>1 to 25</i>	<i>1</i>	<i>0</i>	<i>1</i>
<i>26 to 50</i>	<i>2</i>	<i>0</i>	<i>2</i>
<i>51 to 75</i>	<i>3</i>	<i>1</i>	<i>4</i>
<i>76 to 100</i>	<i>4</i>	<i>1</i>	<i>5</i>
<i>101 to 150</i>	<i>5</i>	<i>2</i>	<i>7</i>
<i>151 to 200</i>	<i>6</i>	<i>2</i>	<i>8</i>
<i>201 to 300</i>	<i>7</i>	<i>3</i>	<i>10</i>
<i>301 to 400</i>	<i>8</i>	<i>4</i>	<i>12</i>
<i>401 to 500</i>	<i>9</i>	<i>4</i>	<i>13</i>
<i>501 to 1000</i>	<i>2 percent of total</i>	<i>1 percent of total</i>	<i>3 percent of total</i>
<i>1001 and over</i>	<i>20, plus 1 for each 100, or fraction thereof, over 1000</i>	<i>10, plus 1 for each 100, or fraction thereof, over 1000</i>	<i>30, plus 2 for each 100, or fraction thereof, over 1000</i>

224.3

Beds

In guest rooms having more than 25 beds, 5 percent minimum of the beds shall have clear floor space complying with this Chapter - 806.2.3 - p. 140.

224.4

Guest Rooms with Communication Features

In transient lodging facilities, guest rooms with communication features complying with this Chapter - 806.3 - pp. 141 & 142 shall be provided in accordance with Table 224.4 - (following page).

Chapter 22: Transient Lodging Guest Rooms (continued)

*Table 224.4
Guest Rooms with Communication Features*

<i>Total Number of Guest Rooms Provided</i>	<i>Minimum Number of Required Guest Rooms With Communication Features</i>
<i>2 to 25</i>	<i>2</i>
<i>26 to 50</i>	<i>4</i>
<i>51 to 75</i>	<i>7</i>
<i>76 to 100</i>	<i>9</i>
<i>101 to 150</i>	<i>12</i>
<i>151 to 200</i>	<i>14</i>
<i>201 to 300</i>	<i>17</i>
<i>301 to 400</i>	<i>20</i>
<i>401 to 500</i>	<i>22</i>
<i>501 to 1000</i>	<i>5 percent of total</i>
<i>1001 and over</i>	<i>50, plus 3 for each 100 over 1000</i>

224.5

Dispersion

Guest rooms required to provide mobility features complying with 806.2 - (following pages) and guest rooms required to provide communication features complying with this Chapter - 806.3 - pp. 141 & 142 shall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests.

Where the minimum number of guest rooms required to comply with this Chapter - 806 is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds, and amenities.

At least one guest room required to provide mobility features complying with 806.2 - (following pages) shall also provide communication features complying with this Chapter - 806.3 - pp. 141 & 142.

Not more than 10 percent of guest rooms required to provide mobility features complying with 806.2 - (following pages) shall be used to satisfy the minimum number of guest rooms required to provide communication features complying with this Chapter - 806.3 - pp. 141 & 142.

Chapter 22: Transient Lodging Guest Rooms (continued)

806.2 *Advisory*
Guest Rooms

The requirements in 806.2 - (preceding page, below & following pages) do not include requirements that are common to all accessible spaces.

For example, closets in guest rooms must comply with the applicable provisions for storage specified in scoping.

806.2.1 **Living and Dining Areas**

Living and dining areas shall be accessible.

806.2.2 **Exterior Spaces**

Exterior spaces, including patios, terraces and balconies, that serve the guest room shall be accessible.

806.2.3 **Sleeping Areas**

At least one sleeping area shall provide a clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 on both sides of a bed.

The clear floor space shall be positioned for parallel approach to the side of the bed.

EXCEPTION:

Where a single clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 positioned for parallel approach is provided between two beds, a clear floor or ground space shall not be required on both sides of a bed.

806.2.4 **Toilet and Bathing Facilities**

No fewer than one water closet, one lavatory, and one bathtub or shower shall comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

In addition, required roll-in shower compartments shall comply with Chapter 62: Shower Compartments - 608.2.2 or 608.2.3 - pp. 308 & 309.

806.2.4.1 **Vanity Counter Top Space**

If vanity counter top space is provided in non-accessible guest toilet or bathing rooms, comparable vanity counter top space, in terms of size and proximity to the lavatory, shall also be provided in accessible guest toilet or bathing rooms.

Chapter 22: Transient Lodging Guest Rooms (continued)

Advisory

806.2.4.1 *Vanity Counter Top Space*

This provision is intended to ensure that accessible guest rooms are provided with comparable vanity counter top space.

806.2.5 **Kitchens and Kitchenettes**

Kitchens and kitchenettes shall comply with Chapter 10: Kitchens - Kitchenettes - Sinks - 804 - pp. 70-73.

806.2.6 **Turning Space**

Turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232 shall be provided within the guest room.

806.3 **Guest Rooms with Communication Features**

Guest rooms required to provide communication features shall comply with 806.3 - (below & following page).

Advisory

806.3 *Guest Rooms with Communication Features*

In guest rooms required to have accessible communication features, consider ensuring compatibility with adaptive equipment used by people with hearing impairments.

To ensure communication within the facility, as well as on commercial lines, provide telephone interface jacks that are compatible with both digital and analog signal use.

If an audio headphone jack is provided on a speaker phone, a cutoff switch can be included in the jack so that insertion of the jack cuts off the speaker.

If a telephone-like handset is used, the external speakers can be turned off when the handset is removed from the cradle.

For headset or external amplification system compatibility, a standard subminiature jack installed in the telephone will provide the most flexibility.

806.3.1 **Alarms**

Where emergency warning systems are provided, alarms complying with Chapter 13: Fire Alarm Systems - 702 - p. 81 shall be provided.

Chapter 22: Transient Lodging Guest Rooms (continued)

806.3.2

Notification Devices

Visible notification devices shall be provided to alert room occupants of incoming telephone calls and a door knock or bell.

Notification devices shall not be connected to visible alarm signal appliances.

Telephones shall have volume controls compatible with the telephone system and shall comply with Chapter 15: Telephones - 704.3 - p. 102.

Telephones shall be served by an electrical outlet complying with Chapter 2: Operable Parts - 309 - p. 34 located within 48 inches (1219mm) of the telephone to facilitate the use of a TTY.

Chapter 23:

STORAGE

225 **Storage**
225.1 **General**

Storage facilities shall comply with this Chapter - 225.

225.2 **Storage**

Where storage is provided in accessible spaces, at least one of each type shall comply with this Chapter - 811.

225.2 *Advisory*
Storage

Types of storage include, but are not limited to, closets, cabinets, shelves, clothes rods, hooks, and drawers.

Where provided, at least one of each type of storage must be within the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239; however, it is permissible to install additional storage outside the reach ranges.

225.2.1 **Lockers**

Where lockers are provided, at least 5 percent, but no fewer than one of each type, shall comply with this Chapter - 811.

225.2.1 *Advisory*
Lockers

Different types of lockers may include full-size and half-size lockers, as well as those specifically designed for storage of various sports equipment.

225.2.2 **Self-Service Shelving**

Self-service shelves shall be located on an accessible route complying with Chapter 3: Accessible Routes - 402 - p. 46.

Self-service shelving shall not be required to comply with Chapter 47: Reach Ranges - 308 - pp. 237-239.

Chapter 23: Storage (continued)

225.2.2 *Advisory*
Self-Service Shelving

Self-service shelves include, but are not limited to, library, store, or post office shelves.

225.3 **Self-Service Storage Facilities**

Self-service storage facilities shall provide individual self-service storage spaces complying with these requirements in accordance with Table 225.3 - (below).

Table 225.3
Self-Service Storage Facilities

<i>Total Spaces in Facilities</i>	<i>Minimum Number of Spaces Required to be Accessible</i>
<i>1 to 200</i>	<i>5 percent, but no fewer than 1</i>
<i>201 and over</i>	<i>10, plus 2 percent of total number of units over 200</i>

225.3 *Advisory*
Self-Service Storage Facilities

Although there are no technical requirements that are unique to self-service storage facilities, elements and spaces provided in facilities containing self-service storage spaces required to comply with these requirements must comply with this document where applicable.

For example: the number of storage spaces required to comply with these requirements must provide Accessible Routes complying with Chapters 3 and 4 - 206 and 206.4 - pp. 35-49; Accessible Means of Egress complying with Chapter 5: Accessible Means of Egress - 207 - p. 50; Parking Spaces complying with Chapter 6: Parking Spaces - 208 - pp. 51-55; and, where provided, other public use or common use elements and facilities such as toilet rooms, drinking fountains, and telephones must comply with the applicable requirements of this document.

225.3.1 **Dispersion**

Individual self-service storage spaces shall be dispersed throughout the various classes of spaces provided.

Where more classes of spaces are provided than the number required to be accessible, the number of spaces shall not be required to exceed that required by Table 225.3 - (above).

Self-service storage spaces complying with Table 225.3 - (above) shall not be required to be dispersed among buildings in a multi-building facility.

Chapter 23: Storage (continued)

801 **General**
801.1 **Scope**

The provisions of this Chapter - 811, Chapters 10 - 804 - pp. 70-73, 16 - 810 - pp. 105-110, 20-22 - 803 - pp. 129 & 130, 805 - pp. 133 & 134, 806 - pp. 139-142, 66-69 - 802, 807-809 - pp. 319-332 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

801.1 *Advisory*
Scope

Facilities covered by these requirements are also subject to the requirements of the other sections and chapters.

For example, Chapter 22: Transient Lodging Guest Rooms - 806 - pp. 139-142 addresses guest rooms in transient lodging facilities while Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 contains the technical specifications for dining surfaces.

If a transient lodging facility contains a restaurant, the restaurant must comply with requirements in other chapters such as those applicable to certain dining surfaces.

811 **Storage**
811.1 **General**

Storage shall comply with this Chapter - 811.

811.2 **Clear Floor or Ground Space**

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided.

811.3 **Height**

Storage elements shall comply with at least one of the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239.

811.4 **Operable Parts**

Operable parts shall comply with Chapter 2: Operable Parts - 309 - p. 34.

Chapter 24:

DINING SURFACES AND WORK SURFACES

226 **Dining Surfaces and Work Surfaces**
226.1 **General**

Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with this Chapter - 902.

In addition, where work surfaces are provided for use by other than employees, at least 5 percent shall comply with this Chapter - 902.

EXCEPTIONS:

1. Sales counters and service counters shall not be required to comply with this Chapter - 902.
2. Check writing surfaces provided at check-out aisles not required to comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall not be required to comply with this Chapter - 902.

226.1 *Advisory*
General

In facilities covered by the ADA, this requirement does not apply to work surfaces used only by employees.

However, the ADA and, where applicable, Section 504 of the Rehabilitation Act of 1973, as amended, provide that employees are entitled to "reasonable accommodations."

With respect to work surfaces, this means that employers may need to procure or adjust work stations such as desks, laboratory and work benches, fume hoods, reception counters, teller windows, study carrels, commercial kitchen counters, and conference tables to accommodate the individual needs of employees with disabilities on an "as needed" basis.

Consider work surfaces that are flexible and permit installation at variable heights and clearances.

226.2 **Dispersion**

Dining surfaces and work surfaces required to comply with this Chapter - 908 shall be dispersed throughout the space or facility containing dining surfaces and work surfaces.

Chapter 24: Dining Surfaces and Work Surfaces (continued)

901 **General**
901.1 **Scope**

The provisions of this Chapter - 902, Chapters 70 - 903 - pp. 333 & 334, 71 - 904 - pp. 335-337 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

902 **Dining Surfaces and Work Surfaces**
902.1 **General**

Dining surfaces and work surfaces shall comply with 902.2 and 902.3 - (below).

EXCEPTION:

Dining surfaces and work surfaces for children's use shall be permitted to comply with 902.4 - (below & following page).

902.1 *Advisory*
General

Dining surfaces include, but are not limited to, bars, tables, lunch counters, and booths.

Examples of work surfaces include writing surfaces, study carrels, student laboratory stations, baby changing and other tables or fixtures for personal grooming, coupon counters, and where covered by the ABA scoping provisions, employee work stations.

902.2 **Clear Floor or Ground Space**

A clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 positioned for a forward approach shall be provided.

Knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236 shall be provided.

902.3 **Height**

The tops of dining surfaces and work surfaces shall be 28 inches (711mm) minimum and 34 inches (864mm) maximum above the finish floor or ground.

902.4 **Dining Surfaces and Work Surfaces for Children's Use**

Accessible dining surfaces and work surfaces for children's use shall comply with 902.4 - (following page).

Chapter 24: Dining Surfaces and Work Surfaces (continued)

EXCEPTION:

Dining surfaces and work surfaces that are used primarily by children 5 years and younger shall not be required to comply with 902.4 - (preceding page & below) where a clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 positioned for a parallel approach is provided.

902.4.1 **Clear Floor or Ground Space**

A clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 positioned for forward approach shall be provided.

Knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236 shall be provided, except that knee clearance 24 inches (610mm) minimum above the finish floor or ground shall be permitted.

902.4.2 **Height**

The tops of tables and counters shall be 26 inches (660mm) minimum and 30 inches (762mm) maximum above the finish floor or ground.

Chapter 25:

SALES AND SERVICE

227 **Sales and Service**
 227.1 **General**

Where provided, check-out aisles, sales counters, service counters, food service lines, queues, and waiting lines shall comply with this Chapter - 227 and 904.

227.2 **Check-out Aisles**

Where check-out aisles are provided, check-out aisles complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be provided in accordance with Table 227.2 - (below).

Where check-out aisles serve different functions, check-out aisles complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be provided in accordance with Table 227.2 - (below) for each function.

Where check-out aisles are dispersed throughout the building or facility, check-out aisles complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be dispersed.

EXCEPTION:

Where the selling space is under 5000 square feet (465 m²) no more than one check-out aisle complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be required.

*Table 227.2
 Check-out Aisles*

<i>Number of Check-Out Aisles of Each Function</i>	<i>Minimum Number of Check-Out Aisles of Each Function Required to Comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336</i>
<i>1 to 4</i>	<i>1</i>
<i>5 to 8</i>	<i>2</i>
<i>9 to 15</i>	<i>3</i>
<i>16 and over</i>	<i>3, plus 20 percent of additional aisles</i>

Chapter 25: Sales and Service (continued)

227.2.1

Altered Check-Out Aisles

Where check-out aisles are altered, at least one of each check-out aisle serving each function shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 until the number of check-out aisles complies with 227.2 - (preceding page & above).

227.3

Counters

Where provided, at least one of each type of sales counter and service counter shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4 - pp. 336 & 337.

Where counters are dispersed throughout the building or facility, counters complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4 - pp. 336 & 337 also shall be dispersed.

227.3

Advisory Counters

Types of counters that provide different services in the same facility include, but are not limited to, order, pick-up, express, and returns.

One continuous counter can be used to provide different types of service.

For example, order and pick-up are different services.

It would not be acceptable to provide access only to the part of the counter where orders are taken when orders are picked-up at a different location on the same counter.

Both the order and pick-up section of the counter must be accessible.

227.4

Food Service Lines

Food service lines shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.5 - p. 337.

Where self-service shelves are provided, at least 50 percent, but no fewer than one, of each type provided shall comply with Chapter 47: Reach Ranges - 308 - pp. 237-239.

227.5

Queues and Waiting Lines

Queues and waiting lines servicing counters or check-out aisles required to comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 or 904.4 - pp. 335-337 shall comply with Chapter 48: Walking Surfaces - 403 - pp. 240 & 241.

Chapter 26:

DEPOSITORIES - VENDING MACHINES CHANGE MACHINES - MAIL BOXES FUEL DISPENSERS

228 Depositories - Vending Machines - Change Machines - Mail Boxes and Fuel Dispensers

228.1 General

Where provided, at least one of each type of depository, vending machine, change machine, and fuel dispenser shall comply with Chapter 2: Operable Parts - 309 - p. 34.

EXCEPTION:

Drive-up only depositories shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.

228.1 *Advisory* *General*

Depositories include, but are not limited to, night receptacles in banks, post offices, video stores, and libraries.

228.2 Mail Boxes

Where mail boxes are provided in an interior location, at least 5 percent, but no fewer than one, of each type shall comply with Chapter 2: Operable Parts - 309 - p. 34.

In residential facilities, where mail boxes are provided for each residential dwelling unit, mail boxes complying with Chapter 2: Operable Parts - 309 - p. 34 shall be provided for each residential dwelling unit required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330.

Chapter 27:

WINDOWS

229

Windows

229.1

General

Where glazed openings are provided in accessible rooms or spaces for operation by occupants, at least one opening shall comply with Chapter 2: Operable Parts - 309 - p. 34.

Each glazed opening required by an administrative authority to be operable shall comply with Chapter 2: Operable Parts - 309 - p. 34.

EXCEPTION:

1. Glazed openings in residential dwelling units required to comply with Chapter 69: Residential Dwelling Units - 809 - pp. 328-332 shall not be required to comply with this Chapter - 229.
2. Glazed openings in guest rooms required to provide communication features and in guest rooms required to comply with Chapter 49: Doors - Doorways - Gates - 206.5.3 - p. 242 shall not be required to comply with this Chapter - 229.

Chapter 28:

TWO-WAY COMMUNICATION SYSTEMS

230 **Two-Way Communication Systems**
230.1 **General**

Where a two-way communication system is provided to gain admittance to a building or facility or to restricted areas within a building or facility, the system shall comply with this Chapter - 708.

230.1 *Advisory*
General

This requirement applies to facilities such as office buildings, courthouses, and other facilities where admittance to the building or restricted spaces is dependent on two-way communication systems.

701 **General**
701.1 **Scope**

The provisions of this Chapter - 708, Chapters 13-15 - 702 - p. 81, 703 - pp. 87-96, 704 - pp. 100-103, 17 - 706 - pp. 112-114, 18 - 707 - pp. 115-120, and 65 - 705 - p. 318 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

708 **Two-Way Communication Systems**
708.1 **General**

Two-way communication systems shall comply with this Chapter - 708.

708.1 *Advisory*
General

Devices that do not require handsets are easier to use by people who have a limited reach.

708.2 **Audible and Visual Indicators**

The system shall provide both audible and visual signals.

708.2 *Advisory*
Audible and Visual Indicators

A light can be used to indicate visually that assistance is on the way.

Signs indicating the meaning of visual signals should be provided.

708.3 **Handsets**

Handset cords, if provided, shall be 29 inches (737mm) long minimum.

708.4 **Residential Dwelling Unit Communication Systems**

Communications systems between a residential dwelling unit and a site, building, or floor entrance shall comply with 708.4 - (below).

708.4.1 **Common Use or Public Use System Interface**

The common use or public use system interface shall include the capability of supporting voice and TTY communication with the residential dwelling unit interface.

708.4.2 **Residential Dwelling Unit Interface**

The residential dwelling unit system interface shall include a telephone jack capable of supporting voice and TTY communication with the common use or public use system interface.

Chapter 29:

JUDICIAL FACILITIES

231 **Judicial Facilities**
231.1 **General**

Judicial facilities shall comply with this Chapter - 231.

231.2 **Courtrooms**

Each courtroom shall comply with this Chapter - 808.

231.3 **Holding Cells**

Where provided, central holding cells and court-floor holding cells shall comply with 231.3 - (below).

231.3.1 **Central Holding Cells**

Where separate central holding cells are provided for adult male, juvenile male, adult female, or juvenile female, one of each type shall comply with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

Where central holding cells are provided and are not separated by age or sex, at least one cell complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325 shall be provided.

231.3.2 **Court-Floor Holding Cells**

Where separate court-floor holding cells are provided for adult male, juvenile male, adult female, or juvenile female, each courtroom shall be served by one cell of each type complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

Where court-floor holding cells are provided and are not separated by age or sex, courtrooms shall be served by at least one cell complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

Cells may serve more than one courtroom.

231.4 **Visiting Areas**

Visiting areas shall comply with 231.4 - (following page).

Chapter 29: Judicial Facilities (continued)

231.4.1

Cubicles and Counters

At least 5 percent, but no fewer than one, of cubicles shall comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 on both the visitor and detainee sides.

Where counters are provided, at least one shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4.2 - pp. 336 & 337 on both the visitor and detainee sides.

EXCEPTION:

The detainee side of cubicles or counters at non-contact visiting areas not serving holding cells required to comply with this Chapter - 231 shall not be required to comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 or Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4.2 - pp. 336 & 337.

231.4.2

Partitions

Where solid partitions or security glazing separate visitors from detainees at least one of each type of cubicle or counter partition shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.6 - p. 337.

Chapter 30:

DETENTION FACILITIES AND CORRECTIONAL FACILITIES

232 **Detention Facilities and Correctional Facilities**
232.1 **General**

Buildings, facilities, or portions thereof, in which people are detained for penal or correction purposes, or in which the liberty of the inmates is restricted for security reasons shall comply with this Chapter - 232.

232.1 *Advisory*
General

Detention facilities include, but are not limited to, jails, detention centers, and holding cells in police stations.

Correctional facilities include, but are not limited to, prisons, reformatories, and correctional centers.

232.2 **General Holding Cells and General Housing Cells**

General holding cells and general housing cells shall be provided in accordance with 232.2 - (below).

EXCEPTION:

Alterations to cells shall not be required to comply except to the extent determined by the Attorney General.

232.2 *Advisory*
General Holding Cells and General Housing Cells

Accessible cells or rooms should be dispersed among different levels of security, housing categories, and holding classifications (e.g., male/female and adult/juvenile) to facilitate access.

Many detention and correctional facilities are designed so that certain areas (e.g., "shift" areas) can be adapted to serve as different types of housing according to need.

For example, a shift area serving as a medium-security housing unit might be redesignated for a period of time as a high-security housing unit to meet capacity needs.

Placement of accessible cells or rooms in shift areas may allow additional flexibility in meeting requirements for dispersion of accessible cells or rooms.

Chapter 30: Detention Facilities and Correctional Facilities (continued)

Advisory

232.2 *General Holding Cells and General Housing Cells Exception*

Although these requirements do not specify that cells be accessible as a consequence of an alteration, Title II of the ADA requires that each service, program, or activity conducted by a public entity, when viewed in its entirety, be readily accessible to and usable by individuals with disabilities.

This requirement must be met unless doing so would fundamentally alter the nature of a service, program, or activity or would result in undue financial and administrative burdens.

232.2.1 **Cells with Mobility Features**

At least 2 percent, but no fewer than one, of the total number of cells in a facility shall provide mobility features complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

232.2.1.1 **Beds**

In cells having more than 25 beds, at least 5 percent of the beds shall have clear floor space complying with Chapter 67: Holding Cells and Housing Cells - 807.2.3 - p. 325.

232.2.2 **Cells with Communication Features**

At least 2 percent, but no fewer than one, of the total number of general holding cells and general housing cells equipped with audible emergency alarm systems and permanently installed telephones within the cell shall provide communication features complying with Chapter 67: Holding Cells and Housing Cells - 807.3 - pp. 324 & 325.

232.3 **Special Holding Cells and Special Housing Cells**

Where special holding cells or special housing cells are provided, at least one cell serving each purpose shall provide mobility features complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

Cells subject to this requirement include, but are not limited to, those used for purposes of orientation, protective custody, administrative or disciplinary detention or segregation, detoxification, and medical isolation.

EXCEPTION:

Alterations to cells shall not be required to comply except to the extent determined by the Attorney General.

Chapter 30: Detention Facilities and Correctional Facilities (continued)

232.4

Medical Care Facilities

Patient bedrooms or cells required to comply with Chapter 21: Medical Care and Long-Term Care Facilities - 223 - pp. 131-133 shall be provided in addition to any medical isolation cells required to comply with 232.3 - (preceding page).

232.5

Visiting Areas

Visiting areas shall comply with 232.5 - (below).

232.5.1

Cubicles and Counters

At least 5 percent, but no fewer than one, of cubicles shall comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 on both the visitor and detainee sides.

Where counters are provided, at least one shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4.2 - pp. 336 & 337 on both the visitor and detainee or inmate sides.

EXCEPTION:

The inmate or detainee side of cubicles or counters at non-contact visiting areas not serving holding cells or housing cells required to comply with 232 shall not be required to comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 or Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4.2 - pp. 336 & 337.

232.5.2

Partitions

Where solid partitions or security glazing separate visitors from detainees or inmates at least one of each type of cubicle or counter partition shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.6. - p. 337.

Chapter 31:

RESIDENTIAL FACILITIES

233

Residential Facilities

233.1

General

Facilities with residential dwelling units shall comply with this Chapter - 233.

Advisory

233.1

General

This Chapter - 233 outlines the requirements for residential facilities subject to the Americans with Disabilities Act of 1990.

The facilities covered by this Chapter - 233, as well as other facilities not covered by this chapter, may still be subject to other Federal laws such as the Fair Housing Act and Section 504 of the Rehabilitation Act of 1973, as amended.

For example, the Fair Housing Act requires that certain residential structures having four or more multi-family dwelling units, regardless of whether they are privately owned or federally assisted, include certain features of accessible and adaptable design according to guidelines established by the U.S. Department of Housing and Urban Development (HUD).

These laws and the appropriate regulations should be consulted before proceeding with the design and construction of residential facilities.

Residential facilities containing residential dwelling units provided by entities subject to HUD's Section 504 regulations and residential dwelling units covered by this Chapter - 233.3 - pp. 162-165 must comply with the technical and scoping requirements in Sections 1-9 - pp. 1-29 and Chapters 1-71 - pp. 30-337 included this document.

This Chapter - 233 is not a stand-alone section; this section only addresses the minimum number of residential dwelling units within a facility required to comply with Chapters 10 - 804 - pp. 70-73, 16 - 810 - pp. 105-110, 20-23 - 803 - pp. 129 & 130, 805 - pp. 133 & 134, 806 - pp. 139-142, 811 - p. 145, 66-69 - 802, 807-809 - pp. 319-332.

However, residential facilities must also comply with the requirements of this document.

Chapter 31: Residential Facilities (continued)

For example: Chapter 49: Doors - Doorways - Gates - 206.5.4 - p. 242 requires all doors and doorways providing user passage in residential dwelling units providing mobility features to comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251; Chapter 55: Platform Lifts - 206.7.6 - p. 280 permits platform lifts to be used to connect levels within residential dwelling units providing mobility features; Chapter 6: Parking Spaces - 208 - pp. 51-55 provides general scoping for accessible parking and Chapter 6: Parking Spaces - 208.2.3.1 - p. 53 specifies the required number of accessible parking spaces for each residential dwelling unit providing mobility features; Chapter 26: Depositories - Vending Machines - Change Machines - Mail Boxes - Fuel Dispensers - 228.2 - p. 151 requires mail boxes to be within reach ranges when they serve residential dwelling units providing mobility features; play areas are addressed in Chapter 38: Play Areas - 240 - pp. 200-205 and swimming pools are addressed in Chapter 40: Swimming Pools - Wading Pools - Spas - 242 - pp. 215 & 216.

There are special provisions applicable to facilities containing residential dwelling units at: Section 8: Existing Buildings and Facilities - Exception 3 to 202.3 - p. 22; Exception to 202.4 - p. 23; Section 9: General Exceptions - 203.8 - p. 28; and Chapter 3: Accessible Routes - Exception 4 to 206.2.3 - p. 37.

233.2 **Residential Dwelling Units Provided by Entities Subject to HUD Section 504 Regulations**

Where facilities with residential dwelling units are provided by entities subject to regulations issued by the Department of Housing and Urban Development (HUD) under Section 504 of the Rehabilitation Act of 1973, as amended, such entities shall provide residential dwelling units with mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 in a number required by the applicable HUD regulations.

Residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 shall be on an accessible route as required by Chapters 3 and 4 - 206 and 206.4 - pp. 35-49.

In addition, such entities shall provide residential dwelling units with communication features complying with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332 in a number required by the applicable HUD regulations.

Entities subject to 233.2 - (above) shall not be required to comply with 233.3 - (following pages).

Advisory

233.2 *Residential Dwelling Units Provided by Entities Subject to HUD Section 504 Regulations*

233.2 - (above) requires that entities subject to HUD's regulations implementing Section 504 of the Rehabilitation Act of 1973, as amended, provide residential dwelling units containing mobility features and residential dwelling units containing communication features complying with these regulations in a number specified in HUD's Section 504 regulations.

Chapter 31: Residential Facilities (continued)

Further, the residential dwelling units provided must be dispersed according to HUD's Section 504 criteria.

In addition, 233.2 - (preceding page) defers to HUD the specification of criteria by which the technical requirements of this document will apply to alterations of existing facilities subject to HUD's Section 504 regulations.

233.3 Residential Dwelling Units Provided by Entities Not Subject to HUD Section 504 Regulations

Facilities with residential dwelling units provided by entities not subject to regulations issued by the Department of Housing and Urban Development (HUD) under Section 504 of the Rehabilitation Act of 1973, as amended, shall comply with 233.3 - (below & following pages).

233.3.1 Minimum Number - New Construction

Newly constructed facilities with residential dwelling units shall comply with 233.3.1 - (below).

EXCEPTION:

Where facilities contain 15 or fewer residential dwelling units, the requirements of 233.3.1.1 and 233.3.1.2 - (below) shall apply to the total number of residential dwelling units that are constructed under a single contract, or are developed as a whole, whether or not located on a common site.

233.3.1.1 Residential Dwelling Units with Mobility Features

In facilities with residential dwelling units, at least 5 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 and shall be on an accessible route as required by Chapters 3 and 4 - 206 and 206.4 - pp. 35-49.

233.3.1.2 Residential Dwelling Units with Communication Features

In facilities with residential dwelling units, at least 2 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide communication features complying with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332.

233.3.2 Residential Dwelling Units for Sale

Residential dwelling units offered for sale shall provide accessible features to the extent required by regulations issued by Federal agencies under the Americans with Disabilities Act or Section 504 of the Rehabilitation Act of 1973, as amended.

Chapter 31: Residential Facilities (continued)

Advisory

233.3.2 *Residential Dwelling Units for Sale*

A public entity that conducts a program to build housing for purchase by individual home buyers must provide access according to the requirements of the ADA regulations and a program receiving Federal financial assistance must comply with the applicable Section 504 regulation.

233.3.3 **Additions**

Where an addition to an existing building results in an increase in the number of residential dwelling units, the requirements of 233.3.1 - (preceding page) shall apply only to the residential dwelling units that are added until the total number of residential dwelling units complies with the minimum number required by 233.3.1 - (preceding page).

Residential dwelling units required to comply with 233.3.1.1 - (preceding page) shall be on an accessible route as required by Chapters 3 and 4 - 206 and 206.4 - pp. 35-49.

233.3.4 **Alterations**

Alterations shall comply with 233.3.4 - (below).

EXCEPTION:

Where compliance with Chapter 69: Residential Dwelling Units - 809.2, 809.3, or 809.3 - pp. 328-330 is technically infeasible, or where it is technically infeasible to provide an accessible route to a residential dwelling unit, the entity shall be permitted to alter or construct a comparable residential dwelling unit to comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 provided that the minimum number of residential dwelling units required by 233.3.1.1 and 233.3.1.2 - (preceding page), as applicable, is satisfied.

Advisory

233.3.4 *Alterations*

EXCEPTION:

A substituted dwelling unit must be comparable to the dwelling unit that is not made accessible.

Factors to be considered in comparing one dwelling unit to another should include the number of bedrooms; amenities provided within the dwelling unit; types of common spaces provided within the facility; and location with respect to community resources and services, such as public transportation and civic, recreational, and mercantile facilities.

Chapter 31: Residential Facilities (continued)

233.3.4.1 **Alterations to Vacated Buildings**

Where a building is vacated for the purposes of alteration, and the altered building contains more than 15 residential dwelling units, at least 5 percent of the residential dwelling units shall comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 and shall be on an accessible route as required by Chapters 3 and 4 - 206 and 206.4 - pp. 35-49.

In addition, at least 2 percent of the residential dwelling units shall comply with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332.

Advisory

233.3.4.1 *Alterations to Vacated Buildings*

This provision is intended to apply where a building is vacated with the intent to alter the building.

Buildings that are vacated solely for pest control or asbestos removal are not subject to the requirements to provide residential dwelling units with mobility features or communication features.

233.3.4.2 **Alterations to Individual Residential Dwelling Units**

In individual residential dwelling units, where a bathroom or a kitchen is substantially altered, and at least one other room is altered, the requirements of this Chapter - 233.3.1 - p. 162 shall apply to the altered residential dwelling units until the total number of residential dwelling units complies with the minimum number required by this Chapter - 233.3.1.1 and 233.3.1.2 - p. 162.

Residential dwelling units required to comply with this Chapter - 233.3.1.1 - p. 162 shall be on an accessible route as required by Chapters 3 and 4 - 206 and 206.4 - pp. 35-49.

EXCEPTION:

Where facilities contain 15 or fewer residential dwelling units, the requirements of Chapter - 233.3.1.1 and 233.3.1.2 - p. 162 shall apply to the total number of residential dwelling units that are altered under a single contract, or are developed as a whole, whether or not located on a common site.

Advisory

233.3.4.2 *Alterations to Individual Residential Dwelling Units*

233.3.4.2 - (above) uses the terms “substantially altered” and “altered.”

A substantial alteration to a kitchen or bathroom includes, but is not limited to, alterations that are changes to or rearrangements in the plan configuration, or replacement of cabinetry.

Chapter 31: Residential Facilities (continued)

Substantial alterations do not include normal maintenance or appliance and fixture replacement, unless such maintenance or replacement requires changes to or rearrangements in the plan configuration, or replacement of cabinetry.

The term "alteration" is defined both in Section 6: Definitions - 106 - p. 14 of these requirements and in the Department of Justice ADA regulations.

233.3.5

Dispersion

Residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 and residential dwelling units required to provide communication features complying with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332 shall be dispersed among the various types of residential dwelling units in the facility and shall provide choices of residential dwelling units comparable to, and integrated with, those available to other residents.

EXCEPTION:

Where multi-story residential dwelling units are one of the types of residential dwelling units provided, one-story residential dwelling units shall be permitted as a substitute for multi-story residential dwelling units where equivalent spaces and amenities are provided in the one-story residential dwelling unit.

Chapter 32:

AMUSEMENT RIDES

206.2.9 Amusement Rides

Amusement rides required to comply with this Chapter - 234 shall provide accessible routes in accordance with 206.2.9 - (below).

Accessible routes serving amusement rides shall comply with Chapter 3 - 402 - p. 46 and Chapters 48-55 - 403-410 - pp. 240-282 except as modified by this Chapter - 1002.2 - pp. 170-176.

206.2.9.1 Load and Unload Areas

Load and unload areas shall be on an accessible route.

Where load and unload areas have more than one loading or unloading position, at least one loading and unloading position shall be on an accessible route.

206.2.9.2 Wheelchair Spaces, Ride Seats Designed for Transfer and Transfer Devices

When amusement rides are in the load and unload position, wheelchair spaces complying with this Chapter - 1002.4 - pp. 171-173, amusement ride seats designed for transfer complying with this Chapter - 1002.5 - pp. 173 & 174, and transfer devices complying with this Chapter - 1002.6 - pp. 174-176, shall be on an accessible route.

234 Amusement Rides 234.1 General

Amusement rides shall comply with this Chapter - 234.

EXCEPTION:

Mobile or portable amusement rides shall not be required to comply with this Chapter - 234.

234.1 *Advisory* *General*

These requirements apply generally to newly designed and constructed amusement rides and attractions.

Chapter 32: Amusement Rides (continued)

A custom designed and constructed ride is new upon its first use, which is the first time amusement park patrons take the ride.

With respect to amusement rides purchased from other entities, new refers to the first permanent installation of the ride, whether it is used off the shelf or modified before it is installed.

Where amusement rides are moved after several seasons to another area of the park or to another park, the ride would not be considered newly designed or newly constructed.

Some amusement rides and attractions that have unique designs and features are not addressed by these requirements.

In those situations, these requirements are to be applied to the extent possible.

An example of an amusement ride not specifically addressed by these requirements includes “virtual reality” rides where the device does not move through a fixed course within a defined area.

An accessible route must be provided to these rides.

Where an attraction or ride has unique features for which there are no applicable scoping provisions, then a reasonable number, but at least one, of the features must be located on an accessible route.

Where there are appropriate technical provisions, they must be applied to the elements that are covered by the scoping provisions.

234.1 *Advisory*
General

EXCEPTION:

Mobile or temporary rides are those set up for short periods of time such as traveling carnivals, State and county fairs, and festivals.

The amusement rides that are covered by 234.1 - (preceding page) are ones that are not regularly assembled and disassembled.

234.2 **Load and Unload Areas**

Load and unload areas serving amusement rides shall comply with this Chapter - 1002.3 - p. 170.

Chapter 32: Amusement Rides (continued)

234.3

Minimum Number

Amusement rides shall provide at least one wheelchair space complying with this Chapter - 1002.4 - pp. 171-173, or at least one amusement ride seat designed for transfer complying with this Chapter - 1002.5 - pp. 173 & 174, or at least one transfer device complying with this Chapter - 1002.6 - pp. 174-176.

EXCEPTIONS:

1. Amusement rides that are controlled or operated by the rider shall not be required to comply with 234.3 - (above).
2. Amusement rides designed primarily for children, where children are assisted on and off the ride by an adult, shall not be required to comply with 234.3 - (above).
3. Amusement rides that do not provide amusement ride seats shall not be required to comply with 234.3 - (above).

234.3

Advisory Minimum Number

EXCEPTIONS:

1. *Amusement rides controlled or operated by the rider, designed for children, or rides without ride seats are not required to comply with 234.3 - (above).*
2. *These rides are not exempt from the other provisions in 234.3 - (above) requiring an accessible route to the load and unload areas and to the ride.*
3. *The exception does not apply to those rides where patrons may cause the ride to make incidental movements, but where the patron otherwise has no control over the ride.*

234.3

Advisory Minimum Number

EXCEPTION 2:

The exception is limited to those rides designed “primarily” for children, where children are assisted on and off the ride by an adult.

This exception is limited to those rides designed for children and not for the occasional adult user.

Chapter 32: Amusement Rides (continued)

An accessible route to and turning space in the load and unload area will provide access for adults and family members assisting children on and off these rides.

234.4 Existing Amusement Rides

Where existing amusement rides are altered, the alteration shall comply with 234.4 - (below).

Advisory

234.4 Existing Amusement Rides

Routine maintenance, painting, and changing of theme boards are examples of activities that do not constitute an alteration subject to this chapter.

234.4.1 Load and Unload Areas

Where load and unload areas serving existing amusement rides are newly designed and constructed, the load and unload areas shall comply with 1002.3 - (following page).

234.4.2 Minimum Number

Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with 234.3 - (preceding page).

1001 General 1001.1 Scope

The provisions of this Chapter - 1002, Chapters 33-38 - 1003 - pp. 180-185, 1004 - p. 187, 1005 - pp. 188-191, 1006 - pp. 194 & 195, 1007 - pp. 197-199, 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

Advisory

1001.1 Scope

Unless otherwise modified or specifically addressed in Chapter - 1002, Chapters 33-38 - 1003 - pp. 180-185, 1004 - p. 187, 1005 - pp. 188-191, 1006 - pp. 194 & 195, 1007 - pp. 197-199, 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226 all other ADAAG provisions apply to the design and construction of recreation facilities and elements.

The provisions in 1001.1 - (above) apply wherever these elements are provided.

For example, office buildings may contain a room with exercise equipment to which these sections and chapters.

Chapter 32: Amusement Rides (continued)

1002.4.1 Floor or Ground Surface

The floor or ground surface of wheelchair spaces shall be stable and firm.

1002.4.2 Slope

The floor or ground surface of wheelchair spaces shall have a slope not steeper than 1:48 when in the load and unload position.

1002.4.3 Gaps

Floors of amusement rides with wheelchair spaces and floors of load and unload areas shall be coordinated so that, when amusement rides are at rest in the load and unload position, the vertical difference between the floors shall be within plus or minus 5/8 inches (15.9mm) and the horizontal gap shall be 3 inches (76mm) maximum under normal passenger load conditions.

EXCEPTION:

Where compliance is not operationally or structurally feasible, ramps, bridge plates, or similar devices complying with the applicable requirements of 36 CFR 1192.83(c) shall be provided.

1002.4.3 *Advisory Gaps*

EXCEPTION:

36 CFR 1192.83(c) ADA Accessibility Guidelines for Transportation Vehicles - Light Rail Vehicles and Systems - Mobility Aid Accessibility is available at www.access-board.gov.

It includes provisions for bridge plates and ramps that can be used at gaps between wheelchair spaces and floors of load and unload areas.

1002.4.4 Clearances

Clearances for wheelchair spaces shall comply with 1002.4.4 - (following pages).

EXCEPTIONS:

1. Where provided, securement devices shall be permitted to overlap required clearances.
2. Wheelchair spaces shall be permitted to be mechanically or manually repositioned.

Chapter 32: Amusement Rides (continued)

3. Wheelchair spaces shall not be required to comply with Chapter 1: Protruding Objects - 307.4 - pp. 31 & 32.

1002.4.4 *Advisory
Clearances*

EXCEPTION 3:

This exception for protruding objects applies to the ride devices, not to circulation areas or accessible routes in the queue lines or the load and unload areas.

1002.4.4.1 **Width and Length**

Wheelchair spaces shall provide a clear width of 30 inches (762mm) minimum and a clear length of 48 inches (1219mm) minimum measured to 9 inches (229mm) minimum above the floor surface.

1002.4.4.2 **Side Entry**

Where wheelchair spaces are entered only from the side, amusement rides shall be designed to permit sufficient maneuvering clearance for individuals using a wheelchair or mobility aid to enter and exit the ride.

1002.4.4.2 *Advisory
Side Entry*

The amount of clear space needed within the ride, and the size and position of the opening are interrelated.

A 32-inch (813mm) clear opening will not provide sufficient width when entered through a turn into an amusement ride.

Additional space for maneuvering and a wider door will be needed where a side opening is centered on the ride.

For example, where a 42-inch (1067mm) opening is provided, a minimum clear space of 60 inches (1524mm) in length and 36 inches (914mm) in depth is needed to ensure adequate space for maneuvering.

1002.4.4.3 **Permitted Protrusions in Wheelchair Spaces**

Objects are permitted to protrude a distance of 6 inches (152mm) maximum along the front of the wheelchair space, where located 9 inches (229mm) minimum and 27 inches (686mm) maximum above the floor or ground surface of the wheelchair space.

Chapter 32: Amusement Rides (continued)

Objects are permitted to protrude a distance of 25 inches (635mm) maximum along the front of the wheelchair space, where located more than 27 inches (686mm) above the floor or ground surface of the wheelchair space.

See Figure 1002.4.4.3 - p. 572.

1002.4.5 **Ride Entry**

Openings providing entry to wheelchair spaces on amusement rides shall be 32 inches (813mm) minimum clear.

1002.4.6 **Approach**

One side of the wheelchair space shall adjoin an accessible route when in the load and unload position.

1002.4.7 **Companion Seats**

Where the interior width of the amusement ride is greater than 53 inches (1346mm), seating is provided for more than one rider, and the wheelchair is not required to be centered within the amusement ride, a companion seat shall be provided for each wheelchair space.

1002.4.7.1 **Shoulder-to-Shoulder Seating**

Where an amusement ride provides shoulder-to-shoulder seating, companion seats shall be shoulder-to-shoulder with the adjacent wheelchair space.

EXCEPTION:

Where shoulder-to-shoulder companion seating is not operationally or structurally feasible, compliance with this requirement shall be required to the maximum extent practicable.

1002.5 **Amusement Ride Seats Designed for Transfer**

Amusement ride seats designed for transfer shall comply with 1002.5 - (following page) when positioned for loading and unloading.

Advisory

1002.5 *Amusement Ride Seats Designed for Transfer*

The proximity of the clear floor or ground space next to an element and the height of the element one is transferring to are both critical for a safe and independent transfer.

Chapter 32: Amusement Rides (continued)

Providing additional clear floor or ground space both in front of and diagonal to the element will provide flexibility and will increase usability for a more diverse population of individuals with disabilities.

Ride seats designed for transfer should involve only one transfer.

Where possible, designers are encouraged to locate the ride seat no higher than 17 inches to 19 inches (432mm to 483mm) above the load and unload surface.

Where greater distances are required for transfers, providing gripping surfaces, seat padding, and avoiding sharp objects in the path of transfer will facilitate the transfer.

1002.5.1 **Clear Floor or Ground Space**

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided in the load and unload area adjacent to the amusement ride seats designed for transfer.

1002.5.2 **Transfer Height**

The height of amusement ride seats designed for transfer shall be 14 inches (356mm) minimum and 24 inches (610mm) maximum measured from the surface of the load and unload area.

1002.5.3 **Transfer Entry**

Where openings are provided for transfer to amusement ride seats, the openings shall provide clearance for transfer from a wheelchair or mobility aid to the amusement ride seat.

1002.5.4 **Wheelchair Storage Space**

Wheelchair storage spaces complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided in or adjacent to unload areas for each required amusement ride seat designed for transfer and shall not overlap any required means of egress or accessible route.

1002.6 **Transfer Devices for Use with Amusement Rides**

Transfer devices for use with amusement rides shall comply with 1002.6 - (following pages) when positioned for loading and unloading.

Chapter 32: Amusement Rides (continued)

Advisory

1002.6

Transfer Devices for Use with Amusement Rides

Transfer devices for use with amusement rides should permit individuals to make independent transfers to and from their wheelchairs or mobility devices.

There are a variety of transfer devices available that could be adapted to provide access onto an amusement ride.

Examples of devices that may provide for transfers include, but are not limited to, transfer systems, lifts, mechanized seats, and custom designed systems.

Operators and designers have flexibility in developing designs that will facilitate individuals to transfer onto amusement rides.

These systems or devices should be designed to be reliable and sturdy.

Designs that limit the number of transfers required from a wheelchair or mobility device to the ride seat are encouraged.

When using a transfer device to access an amusement ride, the least number of transfers and the shortest distance is most usable.

Where possible, designers are encouraged to locate the transfer device seat no higher than 17 inches to 19 inches (432mm to 483mm) above the load and unload surface.

Where greater distances are required for transfers, providing gripping surfaces, seat padding, and avoiding sharp objects in the path of transfer will facilitate the transfer.

Where a series of transfers are required to reach the amusement ride seat, each vertical transfer should not exceed 8 inches (203mm).

1002.6.1

Clear Floor or Ground Space

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided in the load and unload area adjacent to the transfer device.

1002.6.2

Transfer Height

The height of transfer device seats shall be 14 inches (356mm) minimum and 24 inches (610mm) maximum measured from the load and unload surface.

1002.6.3

Wheelchair Storage Space

Wheelchair storage spaces complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided in or adjacent to unload areas for each required transfer device and shall not overlap any required means of egress or accessible route.

Chapter 33:

RECREATIONAL BOATING FACILITIES

206.2.10

Recreational Boating Facilities

Boat slips required to comply with 235.2 - (below & following pages) and boarding piers at boat launch ramps required to comply with this Chapter - 235.3 - p. 179 shall be on an accessible route.

Accessible routes serving recreational boating facilities shall comply with Chapter 3 - 402 - p. 46 and Chapters 48-55 - 403-410 - pp. 240-282 except as modified by this Chapter - 1003.2 - pp. 180-182.

235

Recreational Boating Facilities

235.1

General

Recreational boating facilities shall comply with this Chapter - 235.

235.2

Boat Slips

Boat slips complying with this Chapter - 1003.3.1 - pp. 182 & 183 shall be provided in accordance with Table 235.2 - (following page).

Where the number of boat slips is not identified, each 40 feet (12 192mm) of boat slip edge provided along the perimeter of the pier shall be counted as one boat slip for the purpose of this chapter.

Chapter 33: Recreational Boating Facilities (continued)

Table 235.2
Boat Slips

<i>Total Number of Boat Slips Provided in Facility</i>	<i>Minimum Number of Required Accessible Boat Slips</i>
<i>1 to 25</i>	<i>1</i>
<i>26 to 50</i>	<i>2</i>
<i>51 to 100</i>	<i>3</i>
<i>101 to 150</i>	<i>4</i>
<i>151 to 300</i>	<i>5</i>
<i>301 to 400</i>	<i>6</i>
<i>401 to 500</i>	<i>7</i>
<i>501 to 600</i>	<i>8</i>
<i>601 to 700</i>	<i>9</i>
<i>701 to 800</i>	<i>10</i>
<i>801 to 900</i>	<i>11</i>
<i>901 to 1000</i>	<i>12</i>
<i>1001 and over</i>	<i>12, plus 1 for every 100, or fraction thereof, over 1000</i>

235.2 *Advisory Boat Slips*

The requirement for boat slips also applies to piers where boat slips are not demarcated.

For example, a single pier 25 feet (7620mm) long and 5 feet (1524mm) wide (the minimum width specified by this Chapter - 1003.3 - pp. 182-184)) allows boats to moor on three sides.

Because the number of boat slips is not demarcated, the total length of boat slip edge (55 feet, 16764mm) must be used to determine the number of boat slips provided (two).

This number is based on the specification in 235.2 - (preceding page & above) that each 40 feet (12192mm) of boat slip edge, or fraction thereof, counts as one boat slip.

In this example, Table 235.2 - (above) would require one boat slip to be accessible.

Chapter 33: Recreational Boating Facilities (continued)

235.2.1 **Dispersion**

Boat slips complying with this Chapter - 1003.3.1 - pp. 182 & 183 shall be dispersed throughout the various types of boat slips provided.

Where the minimum number of boat slips required to comply with this Chapter - 1003.3.1 - pp. 182 & 183 has been met, no further dispersion shall be required.

Advisory 235.2.1 *Dispersion*

Types of boat slips are based on the size of the boat slips; whether single berths or double berths, shallow water or deep water, transient or longer-term lease, covered or uncovered; and whether slips are equipped with features such as telephone, water, electricity or cable connections.

The term "boat slip" is intended to cover any pier area other than launch ramp boarding piers where recreational boats are moored for purposes of berthing, embarking, or disembarking.

For example, a fuel pier may contain boat slips, and this type of short term slip would be included in determining compliance with 235.2 - (preceding pages & above).

235.3 **Boarding Piers at Boat Launch Ramps**

Where boarding piers are provided at boat launch ramps, at least 5 percent, but no fewer than one, of the boarding piers shall comply with this Chapter - 1003.3.2 - p. 184.

206.2.10 **Recreational Boating Facilities**

Boat slips required to comply with 235.2 - (preceding pages & above). and boarding piers at boat launch ramps required to comply with 235.3 - (above) shall be on an accessible route.

Accessible routes serving recreational boating facilities shall comply with Chapters 3 and 4 - pp. 35-49, except as modified by 1003.2 - (following pages).

1001 **General** 1001.1 **Scope**

The provisions of this Chapter - 1003, Chapters 32 - 1002 - pp. 170-176, 34-38 - 1004 - p. 187, 1005 - pp. 188-191, 1006 - pp. 194 & 195, 1007 - pp. 197-199, 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

Chapter 33: Recreational Boating Facilities (continued)

1001.1 *Advisory*
Scope

Unless otherwise modified or specifically addressed in this Chapter - 1003, Chapters 32 - 1002 - pp. 170-176, 34-38 - 1004 - p. 187, 1005 - pp. 188-191, 1006 - pp. 194 & 195, 1007 - pp. 197-199, 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226, all other ADAAG provisions apply to the design and construction of recreation facilities and elements.

The provisions in 1001.1 - (preceding page) apply wherever these elements are provided.

For example, office buildings may contain a room with exercise equipment to which these sections and chapters would apply.

1003 **Recreational Boating Facilities**
1003.1 **General**

Recreational boating facilities shall comply with this Chapter - 1003.

1003.2 **Accessible Routes**

Accessible routes serving recreational boating facilities, including gangways and floating piers, shall comply with Chapters 3 and 4 - pp. 35-49 except as modified by the exceptions in 1003.2 - (below & following pages).

1003.2.1 **Boat Slips**

Accessible routes serving boat slips shall be permitted to use the exceptions in 1003.2.1 - (below & following page).

EXCEPTIONS:

1. Where an existing gangway or series of gangways is replaced or altered, an increase in the length of the gangway shall not be required to comply with 1003.2 - (above, below & following page) unless required by Section 8: Existing Buildings and Facilities - 202.4 - p. 23.
2. Gangways shall not be required to comply with the maximum rise specified in Chapter 50: Ramps - 405.6 - p. 253.
3. Where the total length of a gangway or series of gangways serving as part of a required accessible route is 80 feet (24 384mm) minimum, gangways shall not be required to comply with Chapter 50: Ramps - 405.2 - p. 252.

Chapter 33: Recreational Boating Facilities (continued)

4. Where facilities contain fewer than 25 boat slips and the total length of the gangway or series of gangways serving as part of a required accessible route is 30 feet (9144mm) minimum, gangways shall not be required to comply with Chapter 50: Ramps - 405.2 - p. 252.
5. Where gangways connect to transition plates, landings specified by Chapter 50: Ramps - 405.7 - pp. 253-255 shall not be required.
6. Where gangways and transition plates connect and are required to have handrails, handrail extensions shall not be required.

Where handrail extensions are provided on gangways or transition plates, the handrail extensions shall not be required to be parallel with the ground or floor surface.
7. The cross slope specified in Chapter 48: Walking Surfaces - 403.3 - p. 240 and Chapter 50: Ramps - 405.3 - p. 253 for gangways, transition plates, and floating piers that are part of accessible routes shall be measured in the static position.
8. Changes in level complying with Chapter 43: Changes in Level - 303.3 and 303.4 - pp. 229 & 230 shall be permitted on the surfaces of gangways and boat launch ramps.

*Advisory
Boat Slips*

1003.2.1

EXCEPTION 3:

The following example shows how exception 3 would be applied: A gangway is provided to a floating pier which is required to be on an accessible route.

The vertical distance is 10 feet (3048mm) between the elevation where the gangway departs the landside connection and the elevation of the pier surface at the lowest water level.

Exception 3 permits the gangway to be 80 feet (24 384mm) long.

Another design solution would be to have two 40-foot (12 192mm) plus continuous gangways joined together at a float, where the float (as the water level falls) will stop dropping at an elevation five feet below the landside connection.

The length of transition plates would not be included in determining if the gangway(s) meet the requirements of the exception.

Chapter 33: Recreational Boating Facilities (continued)

1003.2.2 **Boarding Piers at Boat Launch Ramps**

Accessible routes serving boarding piers at boat launch ramps shall be permitted to use the exceptions in 1003.2.2 - (below).

EXCEPTIONS:

1. Accessible routes serving floating boarding piers shall be permitted to use Exceptions 1, 2, 5, 6, 7 and 8 in 1003.2.1 - (preceding pages).
2. Where the total length of the gangway or series of gangways serving as part of a required accessible route is 30 feet (9144mm) minimum, gangways shall not be required to comply with Chapter 50: Ramps - 405.2 - p. 252.
3. Where the accessible route serving a floating boarding pier or skid pier is located within a boat launch ramp, the portion of the accessible route located within the boat launch ramp shall not be required to comply with Chapter 50: Ramps - 405 - pp. 252-256.

1003.3 **Clearances**

Clearances at boat slips and on boarding piers at boat launch ramps shall comply with 1003.3 - (below & following pages).

Advisory 1003.3 *Clearances*

Although the minimum width of the clear pier space is 60 inches (1524mm), it is recommended that piers be wider than 60 inches (1524mm) to improve the safety for persons with disabilities, particularly on floating piers.

1003.3.1 **Boat Slip Clearance**

Boat slips shall provide clear pier space 60 inches (1524mm) wide minimum and at least as long as the boat slips.

Each 10 feet (3048mm) maximum of linear pier edge serving boat slips shall contain at least one continuous clear opening 60 inches (1524mm) wide minimum.

See Figure 1003.3.1 - p. 573.

EXCEPTIONS:

1. Clear pier space shall be permitted to be 36 inches (914mm) wide minimum for a length of 24 inches (610mm) maximum, provided that multiple 36 inch (914mm) wide segments are separated by segments that are 60 inches (1524mm) wide minimum and 60 inches (1524mm) long minimum.

See Figure 1003.3.1 - Exception 1 - p. 574.

2. Edge protection shall be permitted at the continuous clear openings, provided that it is 4 inches (102mm) high maximum and 2 inches (51mm) wide maximum.

See Figure 1003.3.1 - Exception 2 - p. 574.

3. In existing piers, clear pier space shall be permitted to be located perpendicular to the boat slip and shall extend the width of the boat slip, where the facility has at least one boat slip complying with 1003.3 - (preceding page, above & following page), and further compliance with 1003.3 - (preceding page, above & following page) would result in a reduction in the number of boat slips available or result in a reduction of the widths of existing slips.

1003.3.1

*Advisory
Boat Slip Clearance*

EXCEPTION 3:

Where the conditions in Exception 3 are satisfied, existing facilities are only required to have one accessible boat slip with a pier clearance which runs the length of the slip.

All other accessible slips are allowed to have the required pier clearance at the head of the slip.

Under this Exception, at piers with perpendicular boat slips, the width of most "finger piers" will remain unchanged.

However, where mooring systems for floating piers are replaced as part of pier alteration projects, an opportunity may exist for increasing accessibility.

Piers may be reconfigured to allow an increase in the number of wider finger piers, and serve as accessible boat slips.

1003.3.2

Boarding Pier Clearances

Boarding piers at boat launch ramps shall provide clear pier space 60 inches (1524mm) wide minimum and shall extend the full length of the boarding pier.

Every 10 feet (3048mm) maximum of linear pier edge shall contain at least one continuous clear opening 60 inches (1524mm) wide minimum.

See Figure 1003.3.2 - p. 575.

EXCEPTIONS:

1. The clear pier space shall be permitted to be 36 inches (914mm) wide minimum for a length of 24 inches (610mm) maximum provided that multiple 36 inch (914mm) wide segments are separated by segments that are 60 inches (1524mm) wide minimum and 60 inches (1524mm) long minimum.

See Figure 1003.3.2 - Exception 1 - p. 576.

2. Edge protection shall be permitted at the continuous clear openings provided that it is 4 inches (102mm) high maximum and 2 inches (51mm) wide maximum.

See Figure 1003.3.2 - Exception 2 - p. 576.

Advisory

1003.3.2

Boarding Pier Clearances

These requirements do not establish a minimum length for accessible boarding piers at boat launch ramps.

The accessible boarding pier should have a length at least equal to that of other boarding piers provided at the facility.

If no other boarding pier is provided, the pier would have a length equal to what would have been provided if no access requirements applied.

The entire length of accessible boarding piers would be required to comply with the same technical provisions that apply to accessible boat slips.

For example, at a launch ramp, if a 20-foot (6096mm) long accessible boarding pier is provided, the entire 20 feet (6096mm) must comply with the pier clearance requirements in 1003.3 - (preceding pages & above).

Chapter 33: Recreational Boating Facilities (continued)

Likewise, if a 60-foot (18 288mm) long accessible boarding pier is provided, the pier clearance requirements in 1003.3 - (preceding pages) would apply to the entire 60 feet (18 288mm).

The following example applies to a boat launch ramp boarding pier: A chain of floats is provided on a launch ramp to be used as a boarding pier which is required to be accessible by 1003.3.2 - (preceding page).

At high water, the entire chain is floating and a transition plate connects the first float to the surface of the launch ramp.

As the water level decreases, segments of the chain end up resting on the launch ramp surface, matching the slope of the launch ramp.

Chapter 35:

FISHING PIERS AND PLATFORMS

206.2.14 Fishing Piers and Platforms

Fishing piers and platforms shall be on an accessible route.

Accessible routes serving fishing piers and platforms shall comply with Chapter 3 - 402 - p. 46 and Chapters 48-55 - 403-410 - pp. 240-282 except as modified by 1005.1 - (below & following page).

237 Fishing Piers and Platforms 237.1 General

Fishing piers and platforms shall comply with 1005 - (below).

1001 General 1001.1 Scope

The provisions of this Chapter - 1005, Chapters 32-34 - 1002 - pp. 170-176, 1003 - pp. 180-185, 1004 - p. 187, 36-38 - 1006 - pp. 194 & 195, 1007 - pp. 197-199, 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

1001.1 *Advisory* *Scope*

Unless otherwise modified or specifically addressed in this Chapter - 1005, Chapters 32-34 - 1002 - pp. 170-176, 1003 - pp. 180-185, 1004 - p. 187, 36-38 - 1006 - pp. 194 & 195, 1007 - pp. 197-199, 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226, all other ADAAG provisions apply to the design and construction of recreation facilities and elements.

The provisions in 1001.1 - (above) apply wherever these elements are provided.

For example, office buildings may contain a room with exercise equipment to which these sections would apply.

1005 Fishing Piers and Platforms 1005.1 Accessible Routes

Accessible routes serving fishing piers and platforms, including gangways and floating piers, shall comply with Chapter 3 - 402 - p. 46 and Chapters 48-55 - 403-410 - pp. 240-282.

Chapter 35: Fishing Piers and Platforms (continued)

EXCEPTIONS:

1. Accessible routes serving floating fishing piers and platforms shall be permitted to use Exceptions 1, 2, 5, 6, 7 and 8 in Chapter 33: Recreational Boating Facilities - 1003.2.1 - pp. 180 & 181.
2. Where the total length of the gangway or series of gangways serving as part of a required accessible route is 30 feet (9144mm) minimum, gangways shall not be required to comply with Chapter 50: Ramps - 405.2 - p. 252.

1005.2 **Railings**

Where provided, railings, guards, or handrails shall comply with 1005.2 - (below).

1005.2.1 **Height**

At least 25 percent of the railings, guards, or handrails shall be 34 inches (864mm) maximum above the ground or deck surface.

EXCEPTION:

Where a guard complying with sections 1003.2.12.1 and 1003.2.12.2 of the International Building Code (2000 edition) or sections 1012.2 and 1012.3 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Section 5: Referenced Standards - 105 - pp. 10 & 11) is provided, the guard shall not be required to comply with 1005.2.1 - (above).

1005.2.1.1 **Dispersion**

Railings, guards, or handrails required to comply with 1005.2.1 - (above) shall be dispersed throughout the fishing pier or platform.

*1005.2.1.1 **Advisory Dispersion***

Portions of the railings that are lowered to provide fishing opportunities for persons with disabilities must be located in a variety of locations on the fishing pier or platform to give people a variety of locations to fish.

Different fishing locations may provide varying water depths, shade (at certain times of the day), vegetation, and proximity to the shoreline or bank.

1005.3 **Edge Protection**

Where railings, guards, or handrails complying with 1005.2 - (preceding page) are provided, edge protection complying with 1005.3.1 or 1005.3.2 - (below) shall be provided.

Advisory

1005.3 *Edge Protection*

Edge protection is required only where railings, guards, or handrails are provided on a fishing pier or platform.

Edge protection will prevent wheelchairs or other mobility devices from slipping off the fishing pier or platform.

Extending the deck of the fishing pier or platform 12 inches (305mm) where the 34-inch (864mm) high railing is provided is an alternative design, permitting individuals using wheelchairs or other mobility devices to pull into a clear space and move beyond the face of the railing.

In such a design, curbs or barriers are not required.

1005.3.1 **Curb or Barrier**

Curbs or barriers shall extend 2 inches (51mm) minimum above the surface of the fishing pier or platform.

1005.3.2 **Extended Ground or Deck Surface**

The ground or deck surface shall extend 12 inches (305mm) minimum beyond the inside face of the railing.

Toe clearance shall be provided and shall be 30 inches (762mm) wide minimum and 9 inches (229mm) minimum above the ground or deck surface beyond the railing.

See Figure 1005.3.2 - p. 577.

1005.4 **Clear Floor or Ground Space**

At each location where there are railings, guards, or handrails complying with 1005.2.1 - (preceding page), a clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided.

Where there are no railings, guards, or handrails, at least one clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided on the fishing pier or platform.

Chapter 35: Fishing Piers and Platforms (continued)

1005.5

Turning Space

At least one turning space complying with Chapter 44: Turning Space - 304.3 - p. 232 shall be provided on fishing piers and platforms.

Chapter 36:

GOLF FACILITIES

206.2.15

Golf Facilities

At least one accessible route shall connect accessible elements and spaces within the boundary of the golf course.

In addition, accessible routes serving golf cart rental areas; bag drop areas; course weather shelters complying with 238.2.3 - (following page); course toilet rooms; and practice putting greens, practice teeing grounds, and teeing stations at driving ranges complying with 238.3 - (following page) shall comply with Chapter 3 - 402 - p. 46 and Chapters 48-55 - 403-410 - pp. 240-282 except as modified by this Chapter - 1006.2 - p. 194.

EXCEPTION:

Golf cart passages complying with this Chapter - 1006.3 - p. 195 shall be permitted to be used for all or part of accessible routes required by 206.2.15 - (above).

238

Golf Facilities

238.1

General

Golf facilities shall comply with this Chapter - 238.

238.2

Golf Courses

Golf courses shall comply with 238.2 - (below & following page).

238.2.1

Teeing Grounds

Where one teeing ground is provided for a hole, the teeing ground shall be designed and constructed so that a golf cart can enter and exit the teeing ground.

Where two teeing grounds are provided for a hole, the forward teeing ground shall be designed and constructed so that a golf cart can enter and exit the teeing ground.

Where three or more teeing grounds are provided for a hole, at least two teeing grounds, including the forward teeing ground, shall be designed and constructed so that a golf cart can enter and exit each teeing ground.

EXCEPTION:

In existing golf courses, the forward teeing ground shall not be required to be one of the teeing grounds on a hole designed and constructed so that a golf cart can enter and exit the teeing ground where compliance is not feasible due to terrain.

Chapter 36: Golf Facilities (continued)

238.2.2 **Putting Greens**

Putting greens shall be designed and constructed so that a golf cart can enter and exit the putting green.

238.2.3 **Weather Shelters**

Where provided, weather shelters shall be designed and constructed so that a golf cart can enter and exit the weather shelter and shall comply with this Chapter - 1006.4 - p. 195.

238.3 **Practice Putting Greens, Practice Teeing Grounds, and Teeing Stations at Driving Ranges**

At least 5 percent, but no fewer than one, of practice putting greens, practice teeing grounds, and teeing stations at driving ranges shall be designed and constructed so that a golf cart can enter and exit the practice putting greens, practice teeing grounds, and teeing stations at driving ranges.

1001 **General** 1001.1 **Scope**

The provisions of this Chapter - 1006, Chapters 32-35 - 1002 - pp. 170-176, 1003 - pp. 180-185, 1004 - p. 187, 1005 - pp. 188-191, 37 - 1007 - pp. 197-199, 38 - 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

1001.1 *Advisory* *Scope*

Unless otherwise modified or specifically addressed in this Chapter - 1006, Chapters 32-35 - 1002 - pp. 170-176, 1003 - pp. 180-185, 1004 - p. 187, 1005 - pp. 188-191, 37 - 1007 - pp. 197-199, 38 - 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226, all other ADAAG provisions apply to the design and construction of recreation facilities and elements.

The provisions in 1001.1 - (above) apply wherever these elements are provided.

For example, office buildings may contain a room with exercise equipment to which these sections and chapters would apply.

1006 **Golf Facilities** 1006.1 **General**

Golf facilities shall comply with this Chapter - 1006.

Chapter 36: Golf Facilities (continued)

1006.2 Accessible Routes

Accessible routes serving teeing grounds, practice teeing grounds, putting greens, practice putting greens, teeing stations at driving ranges, course weather shelters, golf cart rental areas, bag drop areas, and course toilet rooms shall comply with Chapter 3 - 402 - p. 46 and Chapters 48-55 - 403-410 - pp. 240-282 and shall be 48 inches (1219mm) wide minimum.

Where handrails are provided, accessible routes shall be 60 inches (1524mm) wide minimum.

EXCEPTION:

Handrails shall not be required on golf courses.

Where handrails are provided on golf courses, the handrails shall not be required to comply with Chapter 56: Handrails - 505 - pp. 283-287.

Advisory *Accessible Routes*

1006.2

The 48-inch (1219mm) minimum width for the accessible route is necessary to ensure passage of a golf cart on either the accessible route or the golf cart passage.

This is important where the accessible route is used to connect the golf cart rental area, bag drop areas, practice putting greens, practice teeing grounds, course toilet rooms, and course weather shelters.

These are areas outside the boundary of the golf course, but are areas where an individual using an adapted golf cart may travel.

A golf cart passage may not be substituted for other accessible routes to be located outside the boundary of the course.

For example, an accessible route connecting an accessible parking space to the entrance of a golf course clubhouse is not covered by this provision.

Providing a golf cart passage will permit a person that uses a golf cart to practice driving a golf ball from the same position and stance used when playing the game.

Additionally, the space required for a person using a golf cart to enter and maneuver within the teeing stations required to be accessible should be considered.

1006.3 Golf Cart Passages

Golf cart passages shall comply with 1006.3 - (below).

Chapter 36: Golf Facilities (continued)

1006.3.1

Clear Width

The clear width of golf cart passages shall be 48 inches (1219mm) minimum.

1006.3.2

Barriers

Where curbs or other constructed barriers prevent golf carts from entering a fairway, openings 60 inches (1524mm) wide minimum shall be provided at intervals not to exceed 75 yards (68 580mm).

1006.4

Weather Shelters

A clear floor or ground space 60 inches (1524mm) minimum by 96 inches (2438mm) minimum shall be provided within weather shelters.

Chapter 37:

MINIATURE GOLF FACILITIES

206.2.16

Miniature Golf Facilities

Holes required to comply with 239.2 - (below), including the start of play, shall be on an accessible route.

Accessible routes serving miniature golf facilities shall comply with Chapter 3 - 402 - p. 46 and Chapters 48-55 - 403-410 - pp. 240-282 except as modified by 1007.2 - (following pages).

239

Miniature Golf Facilities

239.1

General

Miniature golf facilities shall comply with this Chapter - 239.

239.2

Minimum Number

At least 50 percent of holes on miniature golf courses shall comply with this Chapter - 1007.3 - pp. 198 & 199.

Advisory

239.2

Minimum Number

Where possible, providing access to all holes on a miniature golf course is recommended.

If a course is designed with the minimum 50 percent accessible holes, designers or operators are encouraged to select holes which provide for an equivalent experience to the maximum extent possible.

239.3

Miniature Golf Course Configuration

Miniature golf courses shall be configured so that the holes complying with this Chapter - 1007.3 - pp. 198 & 199 are consecutive.

Miniature golf courses shall provide an accessible route from the last hole complying with this Chapter - 1007.3 - pp. 198 & 199 to the course entrance or exit without requiring travel through any other holes on the course.

EXCEPTION:

One break in the sequence of consecutive holes shall be permitted provided that the last hole on the miniature golf course is the last hole in the sequence.

Chapter 37: Miniature Golf Facilities (continued)

Advisory

239.3

Miniature Golf Course Configuration

Where only the minimum 50 percent of the holes are accessible, an accessible route from the last accessible hole to the course exit or entrance must not require travel back through other holes.

In some cases, this may require an additional accessible route.

Other options include increasing the number of accessible holes in a way that limits the distance needed to connect the last accessible hole with the course exit or entrance.

1001

General

1001.1

Scope

The provisions of this Chapter - 1007, Chapters 32-36 - 1002 - pp. 170-176, 1003 - pp. 180-185, 1004 - p. 187, 1005 - pp. 188-191, 1006 - pp. 194 & 195, 38 - 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

Advisory

1001.1

Scope

Unless otherwise modified or specifically addressed in this Chapter - 1007, Chapters 32-36 - 1002 - pp. 170-176, 1003 - pp. 180-185, 1004 - p. 187, 1005 - pp. 188-191, 1006 - pp. 194 & 195, 38 - 1008 - pp. 206-213, 40 - 1009 - pp. 217-225, 41 - 1010 - p. 226, all other ADAAG provisions apply to the design and construction of recreation facilities and elements.

The provisions in 1001.1 - (above) apply wherever these elements are provided.

For example, office buildings may contain a room with exercise equipment to which these sections and chapters would apply.

1007

Miniature Golf Facilities

1007.1

General

Miniature golf facilities shall comply with this Chapter - 1007.

1007.2

Accessible Routes

Accessible routes serving holes on miniature golf courses shall comply with Chapters 3 and 4 - pp. 35-49.

Accessible routes located on playing surfaces of miniature golf holes shall be permitted to use the exceptions in 1007.2 - (following page).

EXCEPTIONS:

1. Playing surfaces shall not be required to comply with Chapter 42: Floor or Ground Surfaces - 302.2 - pp. 227 & 228.
2. Where accessible routes intersect playing surfaces of holes, a 1-inch (25.4mm) maximum curb shall be permitted for a width of 32 inches (813mm) minimum.
3. A slope not steeper than 1:4 for a 4-inch (102mm) maximum rise shall be permitted.
4. Ramp landing slopes specified by Chapter 50: Ramps - 405.7.1 - p. 254 shall be permitted to be 1:20 maximum.
5. Ramp landing length specified by Chapter 50: Ramps - 405.7.3 - p. 254 shall be permitted to be 48 inches (1219mm) long minimum.
6. Ramp landing size specified by Chapter 50: Ramps - 405.7.4 - p. 254 shall be permitted to be 48 inches (1219mm) minimum by 60 inches (1524mm) minimum.
7. Handrails shall not be required on holes.

Where handrails are provided on holes, the handrails shall not be required to comply with Chapter 56: Handrails - 505 - pp. 283-287.

1007.3

Miniature Golf Holes

Miniature golf holes shall comply with 1007.3 - (below).

1007.3.1

Start of Play

A clear floor or ground space 48 inches (1219mm) minimum by 60 inches (1524mm) minimum with slopes not steeper than 1:48 shall be provided at the start of play.

1007.3.2

Golf Club Reach Range Area

All areas within holes where golf balls rest shall be within 36 inches (914mm) maximum of a clear floor or ground space 36 inches (914mm) wide minimum and 48 inches (1219mm) long minimum having a running slope not steeper than 1:20.

The clear floor or ground space shall be served by an accessible route.

See Figure 1007.3.2 - p. 578.

Chapter 37: Miniature Golf Facilities (continued)

Advisory

1007.3.2

Golf Club Reach Range Area

The golf club reach range applies to all holes required to be accessible. This includes accessible routes provided adjacent to or, where provided, on the playing surface of the hole.

Chapter 38:

PLAY AREAS

206.2.17

Play Areas

Play areas shall provide accessible routes in accordance with 206.2.17 - (below).

Accessible routes serving play areas shall comply with Chapter 3 - 402 - p. 46 and Chapters 48-55 - 403-410 - pp. 240-282 except as modified by this Chapter - 1008.2 - pp. 206-209.

206.2.17.1

Ground Level and Elevated Play Components

At least one accessible route shall be provided within the play area.

The accessible route shall connect ground level play components required to comply with this Chapter - 240.2.1 - pp. 202-205 and elevated play components required to comply with this Chapter - 240.2.2 - p. 204, including entry and exit points of the play components.

206.2.17.2

Soft Contained Play Structures

Where three or fewer entry points are provided for soft contained play structures, at least one entry point shall be on an accessible route.

Where four or more entry points are provided for soft contained play structures, at least two entry points shall be on an accessible route.

240

Play Areas

240.1

General

Play areas for children ages 2 and over shall comply with this Chapter - 240.

Where separate play areas are provided within a site for specific age groups, each play area shall comply with this Chapter - 240.

EXCEPTIONS:

1. Play areas located in family child care facilities where the proprietor actually resides shall not be required to comply with this Chapter - 240.
2. In existing play areas, where play components are relocated for the purposes of creating safe use zones and the ground surface is not altered or extended for more than one use zone, the play area shall not be required to comply with this Chapter - 240.
3. Amusement attractions shall not be required to comply with this Chapter - 240.

Chapter 38: Play Areas (continued)

4. Where play components are altered and the ground surface is not altered, the ground surface shall not be required to comply with this Chapter - 1008.2.6 - p. 209 unless required by Section 8: Existing Buildings and Facilities - 202.4 - p. 23.

Advisory

240.1

General

Play areas may be located on exterior sites or within a building.

Where separate play areas are provided within a site for children in specified age groups (e.g., preschool (ages 2 to 5) and school age (ages 5 to 12)), each play area must comply with this chapter.

Where play areas are provided for the same age group on a site but are geographically separated (e.g., one is located next to a picnic area and another is located next to a softball field), they are considered separate play areas and each play area must comply with this chapter.

240.1.1

Additions

Where play areas are designed and constructed in phases, the requirements of this Chapter - 240 shall apply to each successive addition so that when the addition is completed, the entire play area complies with all the applicable requirements of this Chapter - 240.

Advisory

240.1.1

Additions

These requirements are to be applied so that when each successive addition is completed, the entire play area complies with all applicable provisions.

For example, a play area is built in two phases.

In the first phase, there are 10 elevated play components and 10 elevated play components are added in the second phase for a total of 20 elevated play components in the play area.

When the first phase was completed, at least 5 elevated play components, including at least 3 different types, were to be provided on an accessible route.

When the second phase is completed, at least 10 elevated play components must be located on an accessible route, and at least 7 ground level play components, including 4 different types, must be provided on an accessible route.

At the time the second phase is complete, ramps must be used to connect at least 5 of the elevated play components and transfer systems are permitted to be used to connect the rest of the elevated play components required to be located on an accessible route.

240.2 **Play Components**

Where provided, play components shall comply with 240.2 - (below & following pages).

240.2.1 **Ground Level Play Components**

Ground level play components shall be provided in the number and types required by 240.2.1 - (below & following pages).

Ground level play components that are provided to comply with 240.2.1.1 - (following page) shall be permitted to satisfy the additional number required by 240.2.1.2 - (following pages) if the minimum required types of play components are satisfied.

Where two or more required ground level play components are provided, they shall be dispersed throughout the play area and integrated with other play components.

Advisory

240.2.1 *Ground Level Play Components*

Examples of ground level play components may include spring rockers, swings, diggers, and stand-alone slides.

When distinguishing between the different types of ground level play components, consider the general experience provided by the play component.

Examples of different types of experiences include, but are not limited to, rocking, swinging, climbing, spinning, and sliding.

A spiral slide may provide a slightly different experience from a straight slide, but sliding is the general experience and therefore a spiral slide is not considered a different type of play component from a straight slide.

Ground level play components accessed by children with disabilities must be integrated into the play area.

Designers should consider the optimal layout of ground level play components accessed by children with disabilities to foster interaction and socialization among all children.

Grouping all ground level play components accessed by children with disabilities in one location is not considered integrated.

Where a stand-alone slide is provided, an accessible route must connect the base of the stairs at the entry point to the exit point of the slide.

A ramp or transfer system to the top of the slide is not required.

Chapter 38: Play Areas (continued)

Where a sand box is provided, an accessible route must connect to the border of the sand box.

Accessibility to the sand box would be enhanced by providing a transfer system into the sand or by providing a raised sand table with knee clearance complying with this Chapter - 1008.4.3 - p. 213.

Ramps are preferred over transfer systems since not all children who use wheelchairs or other mobility devices may be able to use, or may choose not to use, transfer systems.

Where ramps connect elevated play components, the maximum rise of any ramp run is limited to 12 inches (305mm).

Where possible, designers and operators are encouraged to provide ramps with a slope less than the 1:12 maximum.

Berms or sculpted dirt may be used to provide elevation and may be part of an accessible route to composite play structures.

Platform lifts are permitted as a part of an accessible route.

Because lifts must be independently operable, operators should carefully consider the appropriateness of their use in unsupervised settings.

240.2.1.1 **Minimum Number and Types**

Where ground level play components are provided, at least one of each type shall be on an accessible route and shall comply with this Chapter - 1008.4 - pp. 211-213.

240.2.1.2 **Additional Number and Types**

Where elevated play components are provided, ground level play components shall be provided in accordance with Table 240.2.1.2 - (following page) and shall comply with this Chapter - 1008.4 - pp. 211-213.

EXCEPTION:

If at least 50 percent of the elevated play components are connected by a ramp and at least 3 of the elevated play components connected by the ramp are different types of play components, the play area shall not be required to comply with 240.2.1.2 - (above & following page).

Chapter 38: Play Areas (continued)

*Table 240.2.1.2
Number and Types of Ground Level Play
Components Required to be on an Accessible Routes*

<i>Number of Elevated Play Components</i>	<i>Minimum Number of Ground Level Play Components Required to be on an Accessible Route</i>	<i>Minimum Number of Different Types of Ground Level Play Components Required to be on an Accessible Route</i>
<i>1</i>	<i>Not applicable</i>	<i>Not applicable</i>
<i>2 to 4</i>	<i>1</i>	<i>1</i>
<i>5 to 7</i>	<i>2</i>	<i>2</i>
<i>8 to 10</i>	<i>3</i>	<i>3</i>
<i>11 to 13</i>	<i>4</i>	<i>3</i>
<i>14 to 16</i>	<i>5</i>	<i>3</i>
<i>17 to 19</i>	<i>6</i>	<i>3</i>
<i>20 to 22</i>	<i>7</i>	<i>4</i>
<i>23 to 25</i>	<i>8</i>	<i>4</i>
<i>26 and over</i>	<i>8, plus 1 for each additional 3, or fraction thereof, over 25</i>	<i>5</i>

*Advisory
Additional Number and Types*

240.2.1.2

Where a large play area includes two or more composite play structures designed for the same age group, the total number of elevated play components on all the composite play structures must be added to determine the additional number and types of ground level play components that must be provided on an accessible route.

240.2.2

Elevated Play Components

Where elevated play components are provided, at least 50 percent shall be on an accessible route and shall comply with this Chapter - 1008.4 - pp. 211-213.

*Advisory
Elevated Play Components*

240.2.2

A double or triple slide that is part of a composite play structure is one elevated play component.

Chapter 38: Play Areas (continued)

1008.2

Accessible Routes

Accessible routes serving play areas shall comply with Chapter 3 - 402 - p. 46, Chapters 48-55 - 403-410 - pp. 240-282 and 1008.2 - (below & following pages) and shall be permitted to use the exceptions in 1008.2.1-1008.2.3 - (below & following page).

Where accessible routes serve ground level play components, the vertical clearance shall be 80 inches high (2032mm) minimum.

1008.2.1

Ground Level and Elevated Play Components

Accessible routes serving ground level play components and elevated play components shall be permitted to use the exceptions in 1008.2.1 - (below).

EXCEPTIONS:

1. Transfer systems complying with this Chapter - 1008.3 - pp. 209-211 shall be permitted to connect elevated play components except where 20 or more elevated play components are provided no more than 25 percent of the elevated play components shall be permitted to be connected by transfer systems.
2. Where transfer systems are provided, an elevated play component shall be permitted to connect to another elevated play component as part of an accessible route.

1008.2.2

Soft Contained Play Structures

Accessible routes serving soft contained play structures shall be permitted to use the exception in 1008.2.2 - (below).

EXCEPTION:

Transfer systems complying with this Chapter - 1008.3 - pp. 209-211 shall be permitted to be used as part of an accessible route.

1008.2.3

Water Play Components

Accessible routes serving water play components shall be permitted to use the exceptions in 1008.2.3 - (following page).

Chapter 38: Play Areas (continued)

EXCEPTIONS:

1. Where the surface of the accessible route, clear floor or ground spaces, or turning spaces serving water play components is submerged, compliance with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228, Chapter 48: Walking Surfaces - 403.3 - p. 240, Chapter 50: Ramps - 405.2, 405.3 - pp. 252 & 253, and this Chapter - 1008.2.6 - p. 209 shall not be required.
2. Transfer systems complying with this Chapter - 1008.3 - pp. 209-211 shall be permitted to connect elevated play components in water.

Advisory

1008.2.3

Water Play Components

Personal wheelchairs and mobility devices may not be appropriate for submerging in water when using play components in water.

Some may have batteries, motors, and electrical systems that when submerged in water may cause damage to the personal mobility device or wheelchair or may contaminate the water.

Providing an aquatic wheelchair made of non-corrosive materials and designed for access into the water will protect the water from contamination and avoid damage to personal wheelchairs.

1008.2.4

Clear Width

Accessible routes connecting play components shall provide a clear width complying with 1008.2.4 - (below & following page).

1008.2.4.1

Ground Level

At ground level, the clear width of accessible routes shall be 60 inches (1524mm) minimum.

EXCEPTIONS:

1. In play areas less than 1000 square feet (93 m²), the clear width of accessible routes shall be permitted to be 44 inches (1118mm) minimum, if at least one turning space complying with Chapter 44: Turning Space - 304.3 - p. 232 is provided where the restricted accessible route exceeds 30 feet (9144mm) in length.
2. The clear width of accessible routes shall be permitted to be 36 inches (914mm) minimum for a distance of 60 inches (1524mm) maximum provided that multiple reduced width segments are separated by segments that are 60 inches (1524mm) wide minimum and 60 inches (1524mm) long minimum.

Chapter 38: Play Areas (continued)

1008.2.4.2

Elevated

The clear width of accessible routes connecting elevated play components shall be 36 inches (914mm) minimum.

EXCEPTIONS:

1. The clear width of accessible routes connecting elevated play components shall be permitted to be reduced to 32 inches (813mm) minimum for a distance of 24 inches (610mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1219mm) long minimum and 36 inches (914mm) wide minimum.
2. The clear width of transfer systems connecting elevated play components shall be permitted to be 24 inches (610mm) minimum.

1008.2.5

Ramps

Within play areas, ramps connecting ground level play components and ramps connecting elevated play components shall comply with 1008.2.5 - (below & following page).

1008.2.5.1

Ground Level

Ramp runs connecting ground level play components shall have a running slope not steeper than 1:16.

1008.2.5.2

Elevated

The rise for any ramp run connecting elevated play components shall be 12 inches (305mm) maximum.

1008.2.5.3

Handrails

Where required on ramps serving play components, the handrails shall comply with Chapter 56: Handrails - 505 - pp. 283-287 except as modified by 1008.2.5.3 - (below & following page).

EXCEPTIONS:

1. Handrails shall not be required on ramps located within ground level use zones.
2. Handrail extensions shall not be required.

1008.2.5.3.1

Handrail Gripping Surfaces

Handrail gripping surfaces with a circular cross section shall have an outside diameter of 0.95 inch (24mm) minimum and 1.55 inches (39mm) maximum.

Chapter 38: Play Areas (continued)

Where the shape of the gripping surface is non-circular, the handrail shall provide an equivalent gripping surface.

1008.2.5.3.2 **Handrail Height**

The top of handrail gripping surfaces shall be 20 inches (508mm) minimum and 28 inches (711mm) maximum above the ramp surface.

1008.2.6 **Ground Surfaces**

Ground surfaces on accessible routes, clear floor or ground spaces, and turning spaces shall comply with 1008.2.6 - (below).

Advisory 1008.2.6 *Ground Surfaces*

Ground surfaces must be inspected and maintained regularly to ensure continued compliance with the ASTM F 1951 standard.

The type of surface material selected and play area use levels will determine the frequency of inspection and maintenance activities.

1008.2.6.1 **Accessibility**

Ground surfaces shall comply with ASTM F 1951 (incorporated by reference, see “Referenced Standards” in Section 5: Referenced Standards - 105 - p. 9).

Ground surfaces shall be inspected and maintained regularly and frequently to ensure continued compliance with ASTM F 1951.

1008.2.6.2 **Use Zones**

Ground surfaces located within use zones shall comply with ASTM F 1292 (1999 edition or 2004 edition) (incorporated by reference, see “Referenced Standards” in Section 5: Referenced Standards - 105 - p. 9).

1008.3 **Transfer Systems**

Where transfer systems are provided to connect to elevated play components, transfer systems shall comply with 1008.3 - (following pages).

Advisory

1008.3

Transfer Systems

Where transfer systems are provided, consideration should be given to the distance between the transfer system and the elevated play components.

Moving between a transfer platform and a series of transfer steps requires extensive exertion for some children.

Designers should minimize the distance between the points where a child transfers from a wheelchair or mobility device and where the elevated play components are located.

Where elevated play components are used to connect to another elevated play component instead of an accessible route, careful consideration should be used in the selection of the play components used for this purpose.

1008.3.1

Transfer Platforms

Transfer platforms shall be provided where transfer is intended from wheelchairs or other mobility aids.

Transfer platforms shall comply with 1008.3.1 - (below & following page).

1008.3.1.1

Size

Transfer platforms shall have level surfaces 14 inches (356mm) deep minimum and 24 inches (610mm) wide minimum.

1008.3.1.2

Height

The height of transfer platforms shall be 11 inches (279mm) minimum and 18 inches (457mm) maximum measured to the top of the surface from the ground or floor surface.

1008.3.1.3

Transfer Space

A transfer space complying with Chapter 45: Clear Floor or Ground Space - 305.2 and 305.3 - p. 233 shall be provided adjacent to the transfer platform.

The 48-inch (1219mm) long minimum dimension of the transfer space shall be centered on and parallel to the 24 inch (610mm) long minimum side of the transfer platform.

The side of the transfer platform serving the transfer space shall be unobstructed.

1008.3.1.4 **Transfer Supports**

At least one means of support for transferring shall be provided.

See Figure 1008.3.1 - p. 579.

1008.3.2 **Transfer Steps**

Transfer steps shall be provided where movement is intended from transfer platforms to levels with elevated play components required to be on accessible routes.

Transfer steps shall comply with 1008.3.2 - (above & below).

1008.3.2.1 **Size**

Transfer steps shall have level surfaces 14 inches (356mm) deep minimum and 24 inches (610mm) wide minimum.

1008.3.2.2 **Height**

Each transfer step shall be 8 inches (203mm) high maximum.

1008.3.2.3 **Transfer Supports**

At least one means of support for transferring shall be provided.

See Figure 1008.3.2 - p. 580.

1008.3.2.3 *Advisory*
Transfer Supports

Transfer supports are required on transfer platforms and transfer steps to assist children when transferring.

Some examples of supports include a rope loop, a loop type handle, a slot in the edge of a flat horizontal or vertical member, poles or bars, or D rings on the corner posts.

1008.4 **Play Components**

Ground level play components on accessible routes and elevated play components connected by ramps shall comply with 1008.4 - (following pages).

1008.4.1

Turning Space

At least one turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232 shall be provided on the same level as play components.

Where swings are provided, the turning space shall be located immediately adjacent to the swing.

1008.4.2

Clear Floor or Ground Space

Clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305.2 and 305.3 - p. 233 shall be provided at play components.

Advisory

1008.4.2

Clear Floor or Ground Space

Clear floor or ground spaces, turning spaces, and accessible routes are permitted to overlap within play areas.

A specific location has not been designated for the clear floor or ground spaces or turning spaces, except swings, because each play component may require that the spaces be placed in a unique location.

Where play components include a seat or entry point, designs that provide for an unobstructed transfer from a wheelchair or other mobility device are recommended.

This will enhance the ability of children with disabilities to independently use the play component.

When designing play components with manipulative or interactive features, consider appropriate reach ranges for children seated in wheelchairs.

Table 1008.4.2 - (following page) provides guidance on reach ranges for children seated in wheelchairs.

These dimensions apply to either forward or side reaches.

The reach ranges are appropriate for use with those play components that children seated in wheelchairs may access and reach.

Where transfer systems provide access to elevated play components, the reach ranges are not appropriate.

Chapter 38: Play Areas (continued)

*Table 1008.4.2
Children's Reach Ranges*

<i>High (maximum)</i>	<i>Ages 3 and 4</i>	<i>Ages 5 through 8</i>	<i>Ages 9 through 12</i>
<i>High (maximum)</i>	<i>36 inches (914mm)</i>	<i>40 inches (1016mm)</i>	<i>44 inches (1118mm)</i>
<i>Low (minimum)</i>	<i>20 inches (508mm)</i>	<i>18 inches (457mm)</i>	<i>16 inches (406mm)</i>

1008.4.3 Play Tables

Where play tables are provided, knee clearance 24 inches (610mm) high minimum, 17 inches deep (432mm) minimum, and 30 inches (762mm) wide minimum shall be provided.

The tops of rims, curbs, or other obstructions shall be 31 inches (787mm) high maximum.

EXCEPTION:

Play tables designed and constructed primarily for children 5 years and younger shall not be required to provide knee clearance where the clear floor or ground space required by 1008.4.2 - (preceding page & above) is arranged for a parallel approach.

1008.4.4 Entry Points and Seats

Where play components require transfer to entry points or seats, the entry points or seats shall be 11 inches (279mm) minimum and 24 inches (610mm) maximum from the clear floor or ground space.

EXCEPTION:

Entry points of slides shall not be required to comply with 1008.4.4 - (above).

1008.4.5 Transfer Supports

Where play components require transfer to entry points or seats, at least one means of support for transferring shall be provided.

Chapter 39:

SAUNAS AND STEAM ROOMS

241 **Saunas and Steam Rooms**
241 **General**

Where provided, saunas and steam rooms shall comply with this Chapter - 612.

EXCEPTION:

Where saunas or steam rooms are clustered at a single location, no more than 5 percent of the saunas and steam rooms, but no fewer than one, of each type in each cluster shall be required to comply with this Chapter - 612.

601 **General**
601.1 **Scope**

The provisions of this Chapter - 612, Chapters 9 - 602 - pp. 67 & 68, 12 - 611 - pp. 78 & 79, 57-64 - 603-610 - pp. 288-317 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - pp. 30-226 or where referenced by a requirement in this document.

612 **Saunas and Steam Rooms**
612.1 **General**

Saunas and steam rooms shall comply with this Chapter - 612.

612.2 **Bench**

Where seating is provided in saunas and steam rooms, at least one bench shall comply with Chapter 70: Benches - 903 - pp. 333 & 334.

Doors shall not swing into the clear floor space required by Chapter 70: Benches - 903.2 - p. 333.

EXCEPTION:

A readily removable bench shall be permitted to obstruct the turning space required by 612.3 - (below) and the clear floor or ground space required by Chapter 70: Benches - 903.2 - p. 333.

612.3 **Turning Space**

A turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232 shall be provided within saunas and steam rooms.

Chapter 40:

SWIMMING POOLS - WADING POOLS - SPAS

242 **Swimming Pools - Wading Pools - Spas**
242.1 **General**

Swimming pools, wading pools, and spas shall comply with this Chapter - 242.

242.2 **Swimming Pools**

At least two accessible means of entry shall be provided for swimming pools.

Accessible means of entry shall be swimming pool lifts complying with this Chapter - 1009.2 - pp. 217-220; sloped entries complying with this Chapter - 1009.3 - 220 & 221; transfer walls complying with this Chapter - 1009.4 - pp. 221 & 222; transfer systems complying with this Chapter - 1009.5 - 223 & 224; and pool stairs complying with this Chapter - 1009.6 - pp. 224 & 225.

At least one accessible means of entry provided shall comply with this Chapter - 1009.2 or 1009.3 - pp. 217-221.

EXCEPTIONS:

1. Where a swimming pool has less than 300 linear feet (91 m) of swimming pool wall, no more than one accessible means of entry shall be required provided that the accessible means of entry is a swimming pool lift complying with this Chapter - 1009.2 - pp. 217-220 or sloped entry complying with this Chapter - 1009.3 - pp. 220 & 221.
2. Wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area shall not be required to provide more than one accessible means of entry provided that the accessible means of entry is a swimming pool lift complying with this Chapter - 1009.2 - pp. 217-220, a sloped entry complying with this Chapter - 1009.3 - pp. 220 & 221, or a transfer system complying with this Chapter - 1009.5 - pp. 223 & 224.
3. Catch pools shall not be required to provide an accessible means of entry provided that the catch pool edge is on an accessible route.

242.2 *Advisory*
Swimming Pools

Where more than one means of access is provided into the water, it is recommended that the means be different.

Chapter 40: Swimming Pools - Wading Pools - Spas (continued)

Providing different means of access will better serve the varying needs of people with disabilities in getting into and out of a swimming pool.

It is also recommended that where two or more means of access are provided, they not be provided in the same location in the pool.

Different locations will provide increased options for entry and exit, especially in larger pools.

242.2 *Advisory*
Swimming Pools

EXCEPTION

- 1: *Pool walls at diving areas and areas along pool walls where there is no pool entry because of landscaping or adjacent structures are to be counted when determining the number of accessible means of entry required.*

242.3 **Wading Pools**

At least one accessible means of entry shall be provided for wading pools.

Accessible means of entry shall comply with sloped entries complying with this Chapter - 1009.3 - pp. 220 & 221.

242.4 **Spas**

At least one accessible means of entry shall be provided for spas.

Accessible means of entry shall comply with swimming pool lifts complying with this Chapter - 1009.2 - pp. 217-220; transfer walls complying with this Chapter - 1009.4 - pp. 221 & 222; or transfer systems complying with this Chapter - 1009.5 - pp. 223 & 224.

EXCEPTION:

Where spas are provided in a cluster, no more than 5 percent, but no fewer than one, spa in each cluster shall be required to comply with 242.4 - (above).

1001 **General**
1001.1 **Scope**

The provisions of this Chapter - 1009, Chapters 32-38 - 1002 - pp. 170-176, 1003 - pp. 180-185, 1004 - p. 187, 1005 - pp. 188-191, 1006 - pp. 194 & 195, 1007 - pp. 197-199, 1008 - pp. 206-213, 41 - 1010 - p. 226 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

Chapter 40: Swimming Pools - Wading Pools - Spas (continued)

1001.1 *Advisory*
Scope

Unless otherwise modified or specifically addressed in this Chapter - 1009, Chapters 32-38 - 1002 - pp. 170-176, 1003 - pp. 180-185, 1004 - p. 187, 1005 - pp. 188-191, 1006 - pp. 194 & 195, 1007 - pp. 197-199, 1008 - pp. 206-213, 41 - 1010 - p. 226 all other ADAAG provisions apply to the design and construction of recreation facilities and elements.

The provisions in 1001.1 - (preceding page) apply wherever these elements are provided.

For example, office buildings may contain a room with exercise equipment to which these sections and chapters would apply.

1009 **Swimming Pools, Wading Pools, and Spas**
1009.1 **General**

Where provided, pool lifts, sloped entries, transfer walls, transfer systems, and pool stairs shall comply with this Chapter - 1009.

1009.2 **Pool Lifts**

Pool lifts shall comply with 1009.2 - (below & following pages).

1009.2 *Advisory*
Pool Lifts

There are a variety of seats available on pool lifts ranging from sling seats to those that are preformed or molded.

Pool lift seats with backs will enable a larger population of persons with disabilities to use the lift.

Pool lift seats that consist of materials that resist corrosion and provide a firm base to transfer will be usable by a wider range of people with disabilities.

Additional options such as armrests, head rests, seat belts, and leg support will enhance accessibility and better accommodate people with a wide range of disabilities.

1009.2.1 **Pool Lift Location**

Pool lifts shall be located where the water level does not exceed 48 inches (1219mm).

EXCEPTIONS:

1. Where the entire pool depth is greater than 48 inches (1219mm), compliance with 1009.2.1 - (above & following page) shall not be required.

2. Where multiple pool lift locations are provided, no more than one pool lift shall be required to be located in an area where the water level is 48 inches (1219mm) maximum.

1009.2.2 **Seat Location**

In the raised position, the centerline of the seat shall be located over the deck and 16 inches (406mm) minimum from the edge of the pool.

The deck surface between the centerline of the seat and the pool edge shall have a slope not steeper than 1:48.

See Figure 1009.2.2 - p. 581.

1009.2.3 **Clear Deck Space**

On the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat.

The space shall be 36 inches (914mm) wide minimum and shall extend forward 48 inches (1219 mm) minimum from a line located 12 inches (305mm) behind the rear edge of the seat.

The clear deck space shall have a slope not steeper than 1:48.

See Figure 1009.2.3 - p. 581.

1009.2.4 **Seat Height**

The height of the lift seat shall be designed to allow a stop at 16 inches (406mm) minimum to 19 inches (483mm) maximum measured from the deck to the top of the seat surface when in the raised (load) position.

See Figure 1009.2.4 - p. 581.

1009.2.5 **Seat Width**

The seat shall be 16 inches (406mm) wide minimum.

1009.2.6 **Footrests and Armrests**

Footrests shall be provided and shall move with the seat.

If provided, the armrest positioned opposite the water shall be removable or shall fold clear of the seat when the seat is in the raised (load) position.

EXCEPTION:

Footrests shall not be required on pool lifts provided in spas.

1009.2.7

Operation

The lift shall be capable of unassisted operation from both the deck and water levels.

Controls and operating mechanisms shall be unobstructed when the lift is in use and shall comply with Chapter 2: Operable Parts - 309.4 - p. 34.

Advisory

1009.2.7

Operation

Pool lifts must be capable of unassisted operation from both the deck and water levels.

This will permit a person to call the pool lift when the pool lift is in the opposite position.

It is extremely important for a person who is swimming alone to be able to call the pool lift when it is in the up position so he or she will not be stranded in the water for extended periods of time awaiting assistance.

The requirement for a pool lift to be independently operable does not preclude assistance from being provided.

1009.2.8

Submerged Depth

The lift shall be designed so that the seat will submerge to a water depth of 18 inches (457mm) minimum below the stationary water level.

See Figure 1009.2.8 - p. 582.

1009.2.9

Lifting Capacity

Single person pool lifts shall have a weight capacity of 300 pounds (136 kg) minimum and be capable of sustaining a static load of at least one and a half times the rated load.

Advisory

1009.2.9

Lifting Capacity

Single person pool lifts must be capable of supporting a minimum weight of 300 pounds (136 kg) and sustaining a static load of at least one and a half times the rated load.

Pool lifts should be provided that meet the needs of the population they serve.

Chapter 40: Swimming Pools - Wading Pools - Spas (continued)

Providing a pool lift with a weight capacity greater than 300 pounds (136 kg) may be advisable.

1009.3 **Sloped Entries**

Sloped entries shall comply with 1009.3 - (below & following page).

Advisory
1009.3 *Sloped Entries*

Personal wheelchairs and mobility devices may not be appropriate for submerging in water.

Some may have batteries, motors, and electrical systems that when submerged in water may cause damage to the personal mobility device or wheelchair or may contaminate the pool water.

Providing an aquatic wheelchair made of non-corrosive materials and designed for access into the water will protect the water from contamination and avoid damage to personal wheelchairs or other mobility aids.

1009.3.1 **Sloped Entries**

Sloped entries shall comply with Chapter 3 - 402 - p. 46 and Chapters 48-55 - 403-410 - pp. 240-282 except as modified in 1109.3.1-1109.3.3 - (below & following page).

EXCEPTION:

Where sloped entries are provided, the surfaces shall not be required to be slip resistant.

1009.3.2 **Submerged Depth**

Sloped entries shall extend to a depth of 24 inches (610mm) minimum and 30 inches (762mm) maximum below the stationary water level.

Where landings are required by Chapter 50: Ramps - 405.7 - pp. 253-255, at least one landing shall be located 24 inches (610mm) minimum and 30 inches (762mm) maximum below the stationary water level.

See Figure 1009.3.2 - p. 582.

EXCEPTION:

In wading pools, the sloped entry and landings, if provided, shall extend to the deepest part of the wading pool.

Chapter 40: Swimming Pools - Wading Pools - Spas (continued)

1009.3.3

Handrails

At least two handrails complying with Chapter 56: Handrails - 505 - pp. 283-287 shall be provided on the sloped entry.

The clear width between required handrails shall be 33 inches (838mm) minimum and 38 inches (965mm) maximum.

See Figure 1009.3.3 - p. 583.

EXCEPTIONS:

1. Handrail extensions specified by Chapter 56: Handrails - 505.10.1 - p. 286 shall not be required at the bottom landing serving a sloped entry.
2. Where a sloped entry is provided for wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area, the handrails shall not be required to comply with the clear width requirements of 1009.3.3 - (above).
3. Sloped entries in wading pools shall not be required to provide handrails complying with 1009.3.3 - (above).

If provided, handrails on sloped entries in wading pools shall not be required to comply with Chapter 56: Handrails - 505 - pp. 283-287.

1009.4

Transfer Walls

Transfer walls shall comply with 1009.4 - (below & following page).

1009.4.1

Clear Deck Space

A clear deck space of 60 inches (1524mm) minimum by 60 inches (1524mm) minimum with a slope not steeper than 1:48 shall be provided at the base of the transfer wall.

Where one grab bar is provided, the clear deck space shall be centered on the grab bar.

Where two grab bars are provided, the clear deck space shall be centered on the clearance between the grab bars.

See Figure 1009.4.1 - p. 584.

1009.4.2

Height

The height of the transfer wall shall be 16 inches (406mm) minimum and 19 inches (483mm) maximum measured from the deck.

See Figure 1009.4.2 - p. 585.

1009.4.3 **Wall Depth and Length**

The depth of the transfer wall shall be 12 inches (305mm) minimum and 16 inches (406mm) maximum.

The length of the transfer wall shall be 60 inches (1524mm) minimum and shall be centered on the clear deck space.

See Figure 1009.4.3 - p. 585.

1009.4.4 **Surface**

Surfaces of transfer walls shall not be sharp and shall have rounded edges.

1009.4.5 **Grab Bars**

At least one grab bar complying with Chapter 63: Grab Bars - 609 - pp. 314 & 315 shall be provided on the transfer wall.

Grab bars shall be perpendicular to the pool wall and shall extend the full depth of the transfer wall.

The top of the gripping surface shall be 4 inches (102mm) minimum and 6 inches (152mm) maximum above transfer walls.

Where one grab bar is provided, clearance shall be 24 inches (610mm) minimum on both sides of the grab bar.

Where two grab bars are provided, clearance between grab bars shall be 24 inches (610mm) minimum.

See Figure 1009.4.5 - p. 585.

EXCEPTION:

Grab bars on transfer walls shall not be required to comply with Chapter 63: Grab Bars - 609.4 - p. 315.

1009.5 **Transfer Systems**

Transfer systems shall comply with 1009.5 - (following page).

1009.5.1 **Transfer Platform**

A transfer platform shall be provided at the head of each transfer system.

Transfer platforms shall provide 19 inches (483mm) minimum clear depth and 24 inches (610mm) minimum clear width.

See Figure 1009.5.1 - p. 586.

1009.5.2 **Transfer Space**

A transfer space of 60 inches (1524mm) minimum by 60 inches (1524mm) minimum with a slope not steeper than 1:48 shall be provided at the base of the transfer platform surface and shall be centered along a 24-inch (610mm) minimum side of the transfer platform.

The side of the transfer platform serving the transfer space shall be unobstructed.

See Figure 1009.5.2 - p. 586.

1009.5.3 **Height**

The height of the transfer platform shall comply with 1009.4.2 - (preceding pages).

1009.5.4 **Transfer Steps**

Transfer step height shall be 8 inches (203mm) maximum.

The surface of the bottom tread shall extend to a water depth of 18 inches (457mm) minimum below the stationary water level.

See Figure 1009.5.4 - p. 587.

1009.5.4 *Advisory*
Transfer Steps

Where possible, the height of the transfer step should be minimized to decrease the distance an individual is required to lift up or move down to reach the next step to gain access.

1009.5.5 **Surface**

The surface of the transfer system shall not be sharp and shall have rounded edges.

Chapter 40: Swimming Pools - Wading Pools - Spas (continued)

1009.5.6

Size

Each transfer step shall have a tread clear depth of 14 inches (356mm) minimum and 17 inches (432mm) maximum and shall have a tread clear width of 24 inches (610mm) minimum.

See Figure 1009.5.6 - p. 587.

1009.5.7

Grab Bars

At least one grab bar on each transfer step and the transfer platform or a continuous grab bar serving each transfer step and the transfer platform shall be provided.

Where a grab bar is provided on each step, the tops of gripping surfaces shall be 4 inches (102mm) minimum and 6 inches (152mm) maximum above each step and transfer platform.

Where a continuous grab bar is provided, the top of the gripping surface shall be 4 inches (102mm) minimum and 6 inches (152mm) maximum above the step nosing and transfer platform.

Grab bars shall comply with Chapter 63: Grab Bars - 609 - pp. 314 & 315 and be located on at least one side of the transfer system.

The grab bar located at the transfer platform shall not obstruct transfer.

See Figure 1009.5.7 - p. 587.

EXCEPTION:

Grab bars on transfer systems shall not be required to comply with Chapter 63: Grab Bars - 609.4 - p. 315.

1009.6

Pool Stairs

Pool stairs shall comply with 1009.6 - (below & following page).

1009.6.1

Pool Stairs

Pool stairs shall comply with Chapter 8: Stairways - 504 - pp. 63-65.

EXCEPTION:

Pool step riser heights shall not be required to be 4 inches (102mm) high minimum and 7 inches (178mm) high maximum provided that riser heights are uniform.

Chapter 40: Swimming Pools - Wading Pools - Spas (continued)

1009.6.2

Handrails

The width between handrails shall be 20 inches (508mm) minimum and 24 inches (610mm) maximum.

Handrail extensions required by Chapter 56: Handrails - 505.10.3 - p. 287 shall not be required on pool stairs.

Chapter 42:

FLOOR OR GROUND SURFACES

301 **General**
301.1 **Scope**

The provisions of this Chapter - 302, Chapters 1 - 307 - pp. 30-32, 2 - 309 - p. 34, 43-46 - 303-306 - pp. 229-236, 47 - 308 - pp. 237-239 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

302 **Floor or Ground Surfaces**
302.1 **General**

Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with this Chapter - 302.

EXCEPTIONS:

1. Within animal containment areas, floor and ground surfaces shall not be required to be stable, firm, and slip resistant.
2. Areas of sport activity shall not be required to comply with this Chapter - 302.

302.1 *Advisory*
General

A stable surface is one that remains unchanged by contaminants or applied force, so that when the contaminant or force is removed, the surface returns to its original condition.

A firm surface resists deformation by either indentations or particles moving on its surface.

A slip-resistant surface provides sufficient frictional counterforce to the forces exerted in walking to permit safe ambulation.

302.2 **Carpet**

Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad.

Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture.

Pile height shall be 1/2-inch (12.7mm) maximum.

Chapter 42: Floor or Ground Surfaces (continued)

Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge.

Carpet edge trim shall comply with Chapter 43: Changes in Level - 303 - pp. 229 & 230.

See Figure 302.2 - p. 484.

302.2 *Advisory* *Carpet*

Carpets and permanently affixed mats can significantly increase the amount of force (roll resistance) needed to propel a wheelchair over a surface.

The firmer the carpeting and backing, the lower the roll resistance.

A pile thickness up to 1/2-inch (12.7mm) (measured to the backing, cushion, or pad) is allowed, although a lower pile provides easier wheelchair maneuvering.

If a backing, cushion or pad is used, it must be firm.

Preferably, carpet pad should not be used because the soft padding increases roll resistance.

302.3 **Openings**

Openings in floor or ground surfaces shall not allow passage of a sphere more than 1/2-inch (12.7mm) diameter except as allowed in Chapter 52: Elevators - 407.4.3 - p. 267, Chapter 54: Private Residence Elevators - 409.4.3 - pp. 276 & 277, Chapter 55: Platform Lifts - 410.4 - p. 282, Chapter 16: Transportation Facilities - 810.5.3 - p. 107 and 810.10 - p. 110.

Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

See Figure 302.3 - p. 484.

Chapter 43:

CHANGES IN LEVEL

301 **General**
301.1 **Scope**

The provisions of this Chapter - 303, Chapters 1 - 307 - pp. 30-32, 2 - 309 - p. 34, 42 - 302 - pp. 227 & 228, 44-46 - 304-306 - pp. 231-236, 47 - 308 - pp. 237-239 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

303 **Changes in Level**
303.1 **General**

Where changes in level are permitted in floor or ground surfaces, they shall comply with this Chapter - 303.

EXCEPTIONS:

1. Animal containment areas shall not be required to comply with this Chapter - 303.
2. Areas of sport activity shall not be required to comply with this Chapter - 303.

303.2 **Vertical**

Changes in level of 1/4-inch (6.4mm) high maximum shall be permitted to be vertical.

See Figure 303.2 - p. 485.

303.3 **Beveled**

Changes in level between 1/4-inch (6.4mm) high minimum and 1/2-inch (12.7mm) high maximum shall be beveled with a slope not steeper than 1:2.

See Figure 303.3 - p. 485.

303.3 *Advisory*
Beveled

A change in level of 1/2-inch (12.7mm) is permitted to be 1/4-inch (6.4mm) vertical plus 1/4-inch (6.4 mm) beveled.

However, in no case may the combined change in level exceed 1/2-inch (12.7mm).

Chapter 43: Changes in Level (continued)

Changes in level exceeding 1/2-inch (12.7mm) must comply with Chapter 50: Ramps - 405 - pp. 252-256 or Chapter 51: Curb Ramps - 406 - pp. 257 & 258.

303.4

Ramps

Changes in level greater than 1/2-inch (12.7mm) high shall be ramped, and shall comply with Chapter 50: Ramps - 405 - pp. 252-256 or Chapter 51: Curb Ramps - 406 - pp. 257 & 258.

Chapter 44:

TURNING SPACE

301 **General**
301.1 **Scope**

The provisions of this Chapter - 304, Chapters 1 - 307 - pp. 30-32, 2 - 309 - p. 34, 42 - 302 - pp. 227 & 228, 43 - 303 - pp. 229 & 230, 45 - 305 - pp. 233 & 234, 47 - 308 - pp. 237-239 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

304 **Turning Space**
304.1 **General**

Turning space shall comply with this Chapter - 304.

304.2 **Floor or Ground Surfaces**

Floor or ground surfaces of a turning space shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228.

Changes in level are not permitted.

EXCEPTION:

Slopes not steeper than 1:48 shall be permitted.

304.2 *Advisory*
Floor or Ground Surface

EXCEPTION:

As used in this chapter, the phrase "changes in level" refers to surfaces with slopes and to surfaces with abrupt rise exceeding that permitted in Chapter 43: Changes in Level - 303.3 - p. 229.

Such changes in level are prohibited in required clear floor and ground spaces, turning spaces, and in similar spaces where people using wheelchairs and other mobility devices must park their mobility aids such as in wheelchair spaces, or maneuver to use elements such as at doors, fixtures, and telephones.

The exception permits slopes not steeper than 1:48.

Chapter 44: Turning Space (continued)

304.3 **Size**

Turning space shall comply with 304.3.1 or 304.3.2 - (below).

304.3.1 **Circular Space**

The turning space shall be a space of 60 inches (1524mm) diameter minimum.

The space shall be permitted to include knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236.

304.3.2 **T-Shaped Space**

The turning space shall be a T-shaped space within a 60-inch (1524mm) square minimum with arms and base 36 inches (914mm) wide minimum.

Each arm of the T shall be clear of obstructions 12 inches (305mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610mm) minimum.

The space shall be permitted to include knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236 only at the end of either the base or one arm.

See Figure 304.3.2 - p. 486.

304.4 **Door Swing**

Doors shall be permitted to swing into turning spaces.

Chapter 45:

CLEAR FLOOR OR GROUND SPACE

301 **General**
301.1 **Scope**

The provisions of this Chapter - 305, Chapters 1 - 307 - pp. 30-32, 2 - 309 - p. 34, 42-44 - 302-304 - pp. 227-232, 46 - 306 - pp. 235 & 236, 47 - 308 - pp. 237-239 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

305 **Clear Floor or Ground Space**
305.1 **General**

Clear floor or ground space shall comply with this Chapter - 305.

305.2 **Floor or Ground Surfaces**

Floor or ground surfaces of a clear floor or ground space shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228.

Changes in level are not permitted.

EXCEPTION:

Slopes not steeper than 1:48 shall be permitted.

305.3 **Size**

The clear floor or ground space shall be 30 inches (762mm) minimum by 48 inches (1219mm) minimum.

See Figure 305.3 - p. 487.

305.4 **Knee and Toe Clearance**

Unless otherwise specified, clear floor or ground space shall be permitted to include knee and toe clearance complying with Chapter 46: Knee and Toe Clearances - 306 - pp. 235 & 236.

305.5 **Position**

Unless otherwise specified, clear floor or ground space shall be positioned for either forward or parallel approach to an element.

See Figure 305.5 - p. 488.

305.6

Approach

One full unobstructed side of the clear floor or ground space shall adjoin an accessible route or adjoin another clear floor or ground space.

305.7

Maneuvering Clearance

Where a clear floor or ground space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearance shall be provided in accordance with 305.7.1 and 305.7.2 - (below).

305.7.1

Forward Approach

Alcoves shall be 36 inches (914mm) wide minimum where the depth exceeds 24 inches (610mm).

See Figure 305.7.1 - p. 489.

305.7.2

Parallel Approach

Alcoves shall be 60 inches (1524mm) wide minimum where the depth exceeds 15 inches (381mm).

See Figure 305.7.2 - p. 489.

Chapter 46:

KNEE AND TOE CLEARANCE

301 **General**
301.1 **Scope**

The provisions of this Chapter - 306, Chapters 1 - 307 - pp. 30-32, 2 - 309 - p. 34, 42-45 - 302-305 - pp. 227-234, 47 - 308 - pp. 237-239 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

306 **Knee and Toe Clearance**
306.1 **General**

Where space beneath an element is included as part of clear floor or ground space or turning space, the space shall comply with this Chapter - 306.

Additional space shall not be prohibited beneath an element but shall not be considered as part of the clear floor or ground space or turning space.

306.1 *Advisory*
General

Clearances are measured in relation to the usable clear floor space, not necessarily to the vertical support for an element.

When determining clearance under an object for required turning or maneuvering space, care should be taken to ensure the space is clear of any obstructions.

306.2 **Toe Clearance**
306.2.1 **General**

Space under an element between the finish floor or ground and 9 inches (229mm) above the finish floor or ground shall be considered toe clearance and shall comply with 306.2 - (below & following page).

306.2.2 **Maximum Depth**

Toe clearance shall extend 25 inches (635mm) maximum under an element.

306.2.3 **Minimum Required Depth**

Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches (432mm) minimum under the element.

306.2.4 **Additional Clearance**

Space extending greater than 6 inches (152mm) beyond the available knee clearance at 9 inches (229mm) above the finish floor or ground shall not be considered toe clearance.

306.2.5 **Width**

Toe clearance shall be 30 inches (762mm) wide minimum.

See Figure 306.2 - p. 490.

306.3 **Knee Clearance**

306.3.1 **General**

Space under an element between 9 inches (229mm) and 27 inches (686mm) above the finish floor or ground shall be considered knee clearance and shall comply with 306.3 - (below).

306.3.2 **Maximum Depth**

Knee clearance shall extend 25 inches (635mm) maximum under an element at 9 inches (229mm) above the finish floor or ground.

306.3.3 **Minimum Required Depth**

Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches (279mm) deep minimum at 9 inches (229mm) above the finish floor or ground, and 8 inches (203mm) deep minimum at 27 inches (686mm) above the finish floor or ground.

306.3.4 **Clearance Reduction**

Between 9 inches (229mm) and 27 inches (686mm) above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1-inch (25.4mm) in depth for each 6 inches (152mm) in height.

306.3.5 **Width**

Knee clearance shall be 30 inches (762mm) wide minimum.

See Figure 306.3 - p. 490.

Chapter 47:

REACH RANGES

301 **General**
 301.1 **Scope**

The provisions of this Chapter - 308, Chapters 1 - 307 - pp. 30-32, 2 - 309 - p. 34, 42-46 - 302-306 - pp. 227-236 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

308 **Reach Ranges**
 308.1 **General**

Reach ranges shall comply with this Chapter - 308.

Advisory

308.1 *General*

Table 308.1 - (below) provides guidance on reach ranges for children according to age where building elements such as coat hooks, lockers, or operable parts are designed for use primarily by children.

These dimensions apply to either forward or side reaches.

Accessible elements and operable parts designed for adult use or children over age 12 can be located outside these ranges but must be within the adult reach ranges required by this Chapter - 308.

*Table 308.1
 Children's Reach Ranges*

<i>High (maximum)</i>	<i>Ages 3 and 4</i>	<i>Ages 5 through 8</i>	<i>Ages 9 through 12</i>
<i>High (maximum)</i>	<i>36 inches (914mm)</i>	<i>40 inches (1016mm)</i>	<i>44 inches (1118mm)</i>
<i>Low (minimum)</i>	<i>20 inches (508mm)</i>	<i>18 inches (457mm)</i>	<i>16 inches (406mm)</i>

308.2 **Forward Reach**
 308.2.1 **Unobstructed**

Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1219mm) maximum and the low forward reach shall be 15 inches (381mm) minimum above the finish floor or ground.

See Figure 308.2.1 - p. 493.

308.2.2

Obstructed High Reach

Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction.

The high forward reach shall be 48 inches (1219mm) maximum where the reach depth is 20 inches (508mm) maximum.

Where the reach depth exceeds 20 inches (508mm), the high forward reach shall be 44 inches (1118mm) maximum and the reach depth shall be 25 inches (635mm) maximum.

See Figure 308.2.2 - p. 493.

308.3

Side Reach

308.3.1

Unobstructed

Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1219mm) maximum and the low side reach shall be 15 inches (381mm) minimum above the finish floor or ground.

See Figure 308.3.1 - p. 494.

EXCEPTIONS:

1. An obstruction shall be permitted between the clear floor or ground space and the element where the depth of the obstruction is 10 inches (254mm) maximum.
2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1372mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

308.3.2

Obstructed High Reach

Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (864mm) maximum and the depth of the obstruction shall be 24 inches (610mm) maximum.

The high side reach shall be 48 inches (1219mm) maximum for a reach depth of 10 inches (254mm) maximum.

Where the reach depth exceeds 10 inches (254mm), the high side reach shall be 46 inches (1168mm) maximum for a reach depth of 24 inches (610mm) maximum.

See Figure 308.3.2 - p. 494.

Chapter 47: Reach Ranges (continued)

EXCEPTIONS:

1. The top of washing machines and clothes dryers shall be permitted to be 36 inches (914mm) maximum above the finish floor.
2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1372mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

Chapter 48:

WALKING SURFACES

401 **General**
401.1 **Scope**

The provisions of this Chapter - 403, Chapters 3 - 402 - p. 46, 49-55 - 404-409 - pp. 243-278, 410 - pp. 281 & 282 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

403 **Walking Surfaces**
403.1 **General**

Walking surfaces that are a part of an accessible route shall comply with this Chapter - 403.

403.2 **Floor or Ground Surface**

Floor or ground surfaces shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228.

403.3 **Slope**

The running slope of walking surfaces shall not be steeper than 1:20.

The cross slope of walking surfaces shall not be steeper than 1:48.

403.4 **Changes in Level**

Changes in level shall comply with Chapter 43: Changes in Level - 303 - pp 229 & 230.

403.5 **Clearances**

Walking surfaces shall provide clearances complying with 403.5 - (below & following page).

EXCEPTION:

Within employee work areas, clearances on common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

403.5.1 **Clear Width**

Except as provided in 403.5.2 and 403.5.3 - (following page), the clear width of walking surfaces shall be 36 inches (914mm) minimum.

See Figure 403.5.1 - p. 495.

EXCEPTION:

The clear width shall be permitted to be reduced to 32 inches (813mm) minimum for a length of 24 inches (610mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1219mm) long minimum and 36 inches (914mm) wide minimum.

403.5.2 Clear Width at Turn

Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1219mm) wide, clear width shall be 42 inches (1067mm) minimum approaching the turn, 48 inches (1219mm) minimum at the turn and 42 inches (1067mm) minimum leaving the turn.

See Figure 403.5.2 - p. 496.

EXCEPTION:

Where the clear width at the turn is 60 inches (1524mm) minimum compliance with 403.5.2 - (above) shall not be required.

403.5.3 Passing Spaces

An accessible route with a clear width less than 60 inches (1524mm) shall provide passing spaces at intervals of 200 feet (60 960mm) maximum.

Passing spaces shall be either: a space 60 inches (1524mm) minimum by 60 inches (1524mm) minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with Chapter 44: Turning Space - 304.3.2 - p. 232 where the base and arms of the T-shaped space extend 48 inches (1219mm) minimum beyond the intersection.

403.6 Handrails

Where handrails are provided along walking surfaces with running slopes not steeper than 1:20 they shall comply with Chapter 56: Handrails - 505 - pp. 283-287.

403.6 Advisory Handrails

Handrails provided in elevator cabs and platform lifts are not required to comply with the requirements for handrails on walking surfaces.

Chapter 49:

DOORS - DOORWAYS - GATES

206.5 **Doors - Doorways - Gates**

Doors, doorways, and gates providing user passage shall be provided in accordance with this Chapter - 206.5.

206.5.1 **Entrances**

Each entrance to a building or facility required to comply with Chapter 4: Entrances - 206.4 - pp. 47-49 shall have at least one door, doorway, or gate complying with this Chapter - 404.

206.5.2 **Rooms and Spaces**

Within a building or facility, at least one door, doorway, or gate serving each room or space complying with these requirements shall comply with this Chapter - 404.

206.5.3 **Transient Lodging Facilities**

In transient lodging facilities, entrances, doors, and doorways providing user passage into and within guest rooms that are not required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 shall comply with 404.2.3 - (following pages).

EXCEPTION:

Shower and sauna doors in guest rooms that are not required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 shall not be required to comply with 404.2.3 - (following pages).

206.5.4 **Residential Dwelling Units**

In residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330, all doors and doorways providing user passage shall comply with this Chapter - 404.

401 **General** 401.1 **Scope**

The provisions of this Chapter - 404, Chapters 3 - 402 - p. 46, 48 - 403 - pp. 240 & 241, 50-55 - 405-409 - pp. 252-278, 410 - pp. 281 & 282 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

Chapter 49: Doors - Doorways - Gates (continued)

404 **Doors - Doorways - Gates** 404.1 **General**

Doors, doorways, and gates that are part of an accessible route shall comply with this Chapter - 404.

EXCEPTION:

Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with this Chapter 404.2.7, 404.2.8, 404.2.9 - pp. 247-249, 404.3.2 and 404.3.4-404.3.7 - pp. 250 & 251.

404.1 *Advisory* *General Exception*

Security personnel must have sole control of doors that are eligible for the Exception at 404.1 - (above).

It would not be acceptable for security personnel to operate the doors for people with disabilities while allowing others to have independent access.

404.2 **Manual Doors, Doorways, and Manual Gates**

Manual doors and doorways and manual gates intended for user passage shall comply with 404.2 - (below & following pages).

404.2.1 **Revolving Doors, Gates, and Turnstiles**

Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

404.2.2 **Double-Leaf Doors and Gates**

At least one of the active leaves of doorways with two leaves shall comply with 404.2.3 and 404.2.4 - (below & following pages).

404.2.3 **Clear Width**

Door openings shall provide a clear width of 32 inches (813mm) minimum.

Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees.

Openings more than 24 inches (610mm) deep shall provide a clear opening of 36 inches (914mm) minimum.

Chapter 49: Doors - Doorways - Gates (continued)

There shall be no projections into the required clear opening width lower than 34 inches (864mm) above the finish floor or ground.

Projections into the clear opening width between 34 inches (864mm) and 80 inches (2032mm) above the finish floor or ground shall not exceed 4 inches (102mm).

See Figure 404.2.3 - p. 497.

EXCEPTIONS:

1. In alterations, a projection of 5/8 inch (15.9mm) maximum into the required clear width shall be permitted for the latch side stop.
2. Door closers and door stops shall be permitted to be 78 inches (1981mm) minimum above the finish floor or ground.

404.2.4

Maneuvering Clearances

Minimum maneuvering clearances at doors and gates shall comply with 404.2.4 - (below & following pages).

Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.

EXCEPTION:

Entry doors to hospital patient rooms shall not be required to provide the clearance beyond the latch side of the door.

404.2.4.1

Swinging Doors and Gates

Swinging doors and gates shall have maneuvering clearances complying with Table 404.2.4.1 - (following page).

See Figure 404.2.4.1 - pp. 498 & 499.

Chapter 49: Doors - Doorways - Gates (continued)

*Table 404.2.4.1
Maneuvering Clearances at Manual Swinging Doors and Gates*

<i>Type of Use</i>		<i>Minimum Maneuvering Clearance</i>	
<i>Approach Direction</i>	<i>Door or Gate Side</i>	<i>Perpendicular to Doorway</i>	<i>Parallel to Doorway (beyond latch side unless noted)</i>
<i>From front</i>	<i>Pull</i>	<i>60 inches (1524mm)</i>	<i>18 inches (457mm)</i>
<i>From front</i>	<i>Push</i>	<i>48 inches (1219mm)</i>	<i>0 inches (0mm)¹</i>
<i>From hinge side</i>	<i>Pull</i>	<i>60 inches (1524mm)</i>	<i>36 inches (914mm)</i>
<i>From hinge side</i>	<i>Pull</i>	<i>54 inches (1372mm)</i>	<i>42 inches (1067mm)</i>
<i>From hinge side</i>	<i>Push</i>	<i>42 inches (1067mm)²</i>	<i>22 inches (559mm)³</i>
<i>From latch side</i>	<i>Pull</i>	<i>48 inches (1219mm)⁴</i>	<i>24 inches (610mm)</i>
<i>From latch side</i>	<i>Push</i>	<i>42 inches (1067mm)⁴</i>	<i>24 inches (610mm)</i>

¹ *Add 12 inches (305mm) if closer and latch are provided.*

² *Add 6 inches (152mm) if closer and latch are provided.*

³ *Beyond hinge side.*

⁴ *Add 6 inches (152mm) if closer is provided.*

404.2.4.2 Doorways without Doors or Gates - Sliding Doors - Folding Doors

Doorways less than 36 inches (914mm) wide without doors or gates, sliding doors, or folding doors shall have maneuvering clearances complying with Table 404.2.4.2 - (following page).

See Figure 404.2.4.2 - p. 500.

Chapter 49: Doors - Doorways - Gates (continued)

*Table 404.2.4.2
Maneuvering Clearances at Doorways without Doors or Gates
Manual Sliding Doors - Manual Folding Doors*

<i>Approach Direction</i>	<i>Minimum Maneuvering Clearance</i>	
	<i>Perpendicular to Door</i>	<i>Parallel to Doorway (beyond stop/latch side unless noted)</i>
<i>From front</i>	<i>48 inches (1219mm)</i>	<i>0 inches (0mm)</i>
<i>From side¹</i>	<i>42 inches (1067mm)</i>	<i>0 inches (0mm)</i>
<i>From pocket/hinge side</i>	<i>42 inches (1067mm)</i>	<i>22 inches (559mm)²</i>
<i>From stop/latch side</i>	<i>42 inches (1067mm)</i>	<i>24 inches (610mm)</i>

¹ *Doorway with no door only.*

² *Beyond pocket/hinge side.*

404.2.4.3 Recessed Doors and Gates

Maneuvering clearances for forward approach shall be provided when any obstruction within 18 inches (457mm) of the latch side of a doorway projects more than 8 inches (203mm) beyond the face of the door, measured perpendicular to the face of the door or gate.

See Figure 404.2.4.3 - p. 501.

Advisory

404.2.4.3 Recessed Doors and Gates

A door can be recessed due to wall thickness or because of the placement of casework and other fixed elements adjacent to the doorway. This provision must be applied wherever doors are recessed.

404.2.4.4 Floor or Ground Surface

Floor or ground surface within required maneuvering clearances shall comply with Chapter 42: Floor or Ground Surfaces - 302 - p. 227 & 228.

Changes in level are not permitted.

EXCEPTIONS:

1. Slopes not steeper than 1:48 shall be permitted.

Chapter 49: Doors - Doorways - Gates (continued)

2. Changes in level at thresholds complying with 404.2.5 - (below) shall be permitted.

404.2.5

Thresholds

Thresholds, if provided at doorways, shall be 1/2 inch (12.7mm) high maximum.

Raised thresholds and changes in level at doorways shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228 and Chapter 43: Changes in Level - 303 - pp. 229 & 230.

EXCEPTION:

Existing or altered thresholds 3/4 inch (19.1mm) high maximum that have a beveled edge on each side with a slope not steeper than 1:2 shall not be required to comply with 404.2.5 - (above).

404.2.6

Doors in Series and Gates in Series

The distance between two hinged or pivoted doors in series and gates in series shall be 48 inches (1219mm) minimum plus the width of doors or gates swinging into the space.

See Figure 404.2.6 - p. 502.

404.2.7

Door and Gate Hardware

Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with Chapter 2: Operable Parts - 309.4 - p. 34.

Operable parts of such hardware shall be 34 inches (864mm) minimum and 48 inches (1219mm) maximum above the finish floor or ground.

Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

EXCEPTIONS:

1. Existing locks shall be permitted in any location at existing glazed doors without stiles, existing overhead rolling doors or grilles, and similar existing doors or grilles that are designed with locks that are activated only at the top or bottom rail.
2. Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1372mm) maximum above the finish floor or ground provided the self-latching devices are not also self-locking devices and operated by means of a key, electronic opener, or integral combination lock.

Advisory

404.2.7 *Door and Gate Hardware*

Door hardware that can be operated with a closed fist or a loose grip accommodates the greatest range of users.

Hardware that requires simultaneous hand and finger movements require greater dexterity and coordination, and is not recommended.

404.2.8 **Closing Speed**

Door and gate closing speed shall comply with 404.2.8 - (below).

404.2.8.1 **Door Closers and Gate Closers**

Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

404.2.8.2 **Spring Hinges**

Door and gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

404.2.9 **Door and Gate Opening Force**

Fire doors shall have a minimum opening force allowable by the appropriate administrative authority.

The force for pushing or pulling open a door or gate other than fire doors shall be as follows:

1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.
2. Sliding or folding doors: 5 pounds (22.2 N) maximum.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

Advisory

404.2.9 *Door and Gate Opening Force*

The maximum force pertains to the continuous application of force necessary to fully open a door, not the initial force needed to overcome the inertia of the door.

It does not apply to the force required to retract bolts or to disengage other devices used to keep the door in a closed position.

404.2.10

Door and Gate Surfaces

Swinging door and gate surfaces within 10 inches (254mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate.

Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch (1.6mm) of the same plane as the other.

Cavities created by added kick plates shall be capped.

EXCEPTIONS:

1. Sliding doors shall not be required to comply with 404.2.10 - (above).
2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at 60 degrees minimum from the horizontal shall not be required to meet the 10 inch (254mm) bottom smooth surface height requirement.
3. Doors and gates that do not extend to within 10 inches (254mm) of the finish floor or ground shall not be required to comply with 404.2.10 - (above).
4. Existing doors and gates without smooth surfaces within 10 inches (254mm) of the finish floor or ground shall not be required to provide smooth surfaces complying with 404.2.10 - (above) provided that if added kick plates are installed, cavities created by such kick plates are capped.

404.2.11

Vision Lights

Doors, gates, and side lights adjacent to doors or gates, containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one glazed panel located 43 inches (1092mm) maximum above the finish floor.

EXCEPTION:

Vision lights with the lowest part more than 66 inches (1676mm) from the finish floor or ground shall not be required to comply with 404.2.11 - (above).

404.3

Automatic and Power-Assisted Doors and Gates

Automatic doors and automatic gates shall comply with 404.3 - (below & following page).

Full-powered automatic doors shall comply with ANSI/BHMA A156.10 (incorporated by reference, see "Referenced Standards" in Section 5: Referenced Standards - 105 - p. 6).

Chapter 49: Doors - Doorways - Gates (continued)

Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see “Referenced Standards” in Section 5: Referenced Standards - 105 - pp. 6 & 7).

404.3.1 **Clear Width**

Doorways shall provide a clear opening of 32 inches (813mm) minimum in power-on and power-off mode.

The minimum clear width for automatic door systems in a doorway shall be based on the clear opening provided by all leaves in the open position.

404.3.2 **Maneuvering Clearance**

Clearances at power-assisted doors and gates shall comply with this Chapter - 404.2.4 - pp. 244-247.

Clearances at automatic doors and gates without standby power and serving an accessible means of egress shall comply with this Chapter - 404.2.4 - pp. 244-247.

EXCEPTION:

Where automatic doors and gates remain open in the power-off condition, compliance with this Chapter - 404.2.4 - pp. 244-247 shall not be required.

404.3.3 **Thresholds**

Thresholds and changes in level at doorways shall comply with this Chapter - 404.2.5 - p. 247.

404.3.4 **Doors in Series and Gates in Series**

Doors in series and gates in series shall comply with this Chapter - 404.2.6 - p. 247.

404.3.5 **Controls**

Manually operated controls shall comply with Chapter 2: Operable Parts - 309 - p. 34.

The clear floor space adjacent to the control shall be located beyond the arc of the door swing.

404.3.6 **Break Out Opening**

Where doors and gates without standby power are a part of a means of egress, the clear break out opening at swinging or sliding doors and gates shall be 32 inches (813mm) minimum when operated in emergency mode.

EXCEPTION:

Where manual swinging doors and gates comply with this Chapter - 404.2 - pp. 243-249 and serve the same means of egress compliance with 404.3.6 - (preceding page) shall not be required.

404.3.7 **Revolving Doors - Revolving Gates - Turnstiles**

Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

Chapter 50:

RAMPS

401 **General**
 401.1 **Scope**

The provisions of this Chapter - 405, Chapters 3 - 402 - p. 46, 48 - 403 - pp. 240 & 241, 49 - 404 - pp. 243-251, 51-55 - 406-409 - pp. 257-278, 410 - 281 & 282 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

405 **Ramps**
 405.1 **General**

Ramps on accessible routes shall comply with this Chapter - 405.

EXCEPTION:

In assembly areas, aisle ramps adjacent to seating and not serving elements required to be on an accessible route shall not be required to comply with this Chapter - 405.

405.2 **Slope**

Ramp runs shall have a running slope not steeper than 1:12.

EXCEPTION:

In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2 - (below) where such slopes are necessary due to space limitations.

*Table 405.2
 Maximum Ramp Slope and Rise for Existing Sites - Buildings - Facilities*

<i>Slope¹</i>	<i>Maximum Rise</i>
<i>Steeper than 1:10 but not steeper than 1:8</i>	<i>3 inches (76mm)</i>
<i>Steeper than 1:12 but not steeper than 1:10</i>	<i>6 inches (152mm)</i>

¹ *A slope steeper than 1:8 is prohibited.*

Chapter 50: Ramps (continued)

405.2 *Advisory*
Slope

To accommodate the widest range of users, provide ramps with the least possible running slope and, wherever possible, accompany ramps with stairs for use by those individuals for whom distance presents a greater barrier than steps, e.g., people with heart disease or limited stamina.

405.3 **Cross Slope**

Cross slope of ramp runs shall not be steeper than 1:48.

405.3 *Advisory*
Cross Slope

Cross slope is the slope of the surface perpendicular to the direction of travel.

Cross slope is measured the same way as slope is measured (i.e., the rise over the run).

405.4 **Floor or Ground Surfaces**

Floor or ground surfaces of ramp runs shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228.

Changes in level other than the running slope and cross slope are not permitted on ramp runs.

405.5 **Clear Width**

The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (914mm) minimum.

EXCEPTION:

Within employee work areas, the required clear width of ramps that are a part of common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

405.6 **Rise**

The rise for any ramp run shall be 30 inches (762mm) maximum.

405.7 **Landings**

Ramps shall have landings at the top and the bottom of each ramp run.

Chapter 50: Ramps (continued)

Landings shall comply with 405.7 - (preceding page, below & following pages).

405.7 *Advisory*
Landings

Ramps that do not have level landings at changes in direction can create a compound slope that will not meet the requirements of this document.

Circular or curved ramps continually change direction.

Curvilinear ramps with small radii also can create compound cross slopes and cannot, by their nature, meet the requirements for accessible routes.

A level landing is needed at the accessible door to permit maneuvering and simultaneously door operation.

405.7.1 **Slope**

Landings shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228.

Changes in level are not permitted.

EXCEPTION:

Slopes not steeper than 1:48 shall be permitted.

405.7.2 **Width**

The landing clear width shall be at least as wide as the widest ramp run leading to the landing.

405.7.3 **Length**

The landing clear length shall be 60 inches (1524mm) long minimum.

405.7.4 **Change in Direction**

Ramps that change direction between runs at landings shall have a clear landing 60 inches (1524mm) minimum by 60 inches (1524mm) minimum.

405.7.5 **Doorways**

Where doorways are located adjacent to a ramp landing, maneuvering clearances required by Chapter 49: Doors - Doorways - Gates - 404.2.4 - pp. 244-247 and 404.3.2 - p. 250 shall be permitted to overlap the required landing area.

Chapter 50: Ramps (continued)

See Figure 405.7 - p. 503.

405.8 **Handrails**

Ramp runs with a rise greater than 6 inches (152mm) shall have handrails complying with Chapter 56: Handrails - 505 - pp. 283-287.

EXCEPTION:

Within employee work areas, handrails shall not be required where ramps that are part of common use circulation paths are designed to permit the installation of handrails complying with Chapter 56: Handrails - 505 - pp. 283-287.

Ramps not subject to the exception to this Chapter - 405.5 - p. 253 shall be designed to maintain a 36 inch (914mm) minimum clear width when handrails are installed.

405.9 **Edge Protection**

Edge protection complying with 405.9.1 or 405.9.2 - (below & following page) shall be provided on each side of ramp runs and at each side of ramp landings.

EXCEPTIONS:

1. Edge protection shall not be required on ramps that are not required to have handrails and have sides complying with Chapter 51: Curb Ramps - 406.3 - p. 257.
2. Edge protection shall not be required on the sides of ramp landings serving an adjoining ramp run or stairway.
3. Edge protection shall not be required on the sides of ramp landings having a vertical drop-off of 1/2 inch (12.7mm) maximum within 10 inches (254mm) horizontally of the minimum landing area specified in 405.7 - (preceding pages & above).

405.9.1 **Extended Floor or Ground Surface**

The floor or ground surface of the ramp run or landing shall extend 12 inches (305mm) minimum beyond the inside face of a handrail complying with Chapter 56: Handrails - 505 - pp. 283-287.

See Figure 405.9.1 - p. 504.

405.9.1 *Advisory* *Extended Floor or Ground Surface*

The extended surface prevents wheelchair casters and crutch tips from slipping off the ramp surface.

405.9.2

Curb or Barrier

A curb or barrier shall be provided that prevents the passage of a 4-inch (102mm) diameter sphere, where any portion of the sphere is within 4 inches (102mm) of the finish floor or ground surface.

See Figure 405.9.2 - p. 504.

405.10

Wet Conditions

Landings subject to wet conditions shall be designed to prevent the accumulation of water.

Chapter 51:

CURB RAMPS

401 **General**
401.1 **Scope**

The provisions of this Chapter - 406, Chapters 3 - 402 - p. 46, 48-50 - 403 - pp. 240 & 241, 404 - pp. 243-251, 405 - pp. 252-256, 52-55 - 407-409 - pp. 259-278, 410 - pp. 281 & 282 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

406 **Curb Ramps**
406.1 **General**

Curb ramps on accessible routes shall comply with this Chapter - 406, Chapter 50: Ramps - 405.2-405.5 - pp. 252 & 253, and 405.10 - p. 256.

406.2 **Counter Slope**

Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20.

The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

See Figure 406.2 - p. 505.

406.3 **Sides of Curb Ramps**

Where provided, curb ramp flares shall not be steeper than 1:10.

See Figure 406.3 - p. 506.

406.4 **Landings**

Landings shall be provided at the tops of curb ramps.

The landing clear length shall be 36 inches (914 mm) minimum.

The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.

See Figure 406.4 - p. 507.

EXCEPTION:

In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.

406.5 **Location**

Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles.

Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.

406.6 **Diagonal Curb Ramps**

Diagonal or corner type curb ramps with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow.

The bottom of diagonal curb ramps shall have a clear space 48 inches (1219mm) minimum outside active traffic lanes of the roadway.

Diagonal curb ramps provided at marked crossings shall provide the 48 inches (1219mm) minimum clear space within the markings.

Diagonal curb ramps with flared sides shall have a segment of curb 24 inches (610mm) long minimum located on each side of the curb ramp and within the marked crossing.

See Figure 406.6 - p. 508.

406.7 **Islands**

Raised islands in crossings shall be cut through level with the street or have curb ramps at both sides.

Each curb ramp shall have a level area 48 inches (1219mm) long minimum by 36 inches (914mm) wide minimum at the top of the curb ramp in the part of the island intersected by the crossings.

Each 48-inch (1219mm) minimum by 36-inch (914 mm) minimum area shall be oriented so that the 48-inch (1219mm) minimum length is in the direction of the running slope of the curb ramp it serves.

The 48-inch (1219mm) minimum by 36 inch (914mm) minimum areas and the accessible route shall be permitted to overlap.

See Figure 406.7 - p. 509.

Chapter 52:

ELEVATORS

206.6

Elevators

Elevators provided for passengers shall comply with this Chapter - 407.

Where multiple elevators are provided, each elevator shall comply with this Chapter - 407.

EXCEPTIONS:

1. In a building or facility permitted to use the exceptions to Chapter 3: Accessible Routes - 206.2.3 - pp. 236-238 or permitted by Chapter 55: Platform Lifts - 206.7 - pp. 279-281 to use a platform lift, elevators complying with Chapter 53: Limited Use/Limited Application Elevators - 408 - pp. 273-275 shall be permitted.
2. Elevators complying with Chapter 53: Limited Use/Limited Application Elevators - 408 - pp. 273-275 or Chapter 54: Private Residence Elevators - 409 - pp. 276-278 shall be permitted in multi-story residential dwelling units.

206.6.1

Existing Elevators

Where elements of existing elevators are altered, the same element shall also be altered in all elevators that are programmed to respond to the same hall call control as the altered elevator and shall comply with the requirements of this Chapter - 407 for the altered element.

401

General

401.1

Scope

The provisions of this Chapter - 407, Chapters 3 - 402 - p. 46, 48-51 - 403-406 - pp. 240-258, 53-55 - 408 - pp. 273-275, 409 - pp. 276-278, 410 - pp. 281 & 282 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

407

Elevators

407.1

General

Elevators shall comply with this Chapter - 407 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Section 5: Referenced Standards - 105 - p. 7).

They shall be passenger elevators as classified by ASME A17.1.

Elevator operation shall be automatic.

407.1 *Advisory*
General

The ADA and other Federal civil rights laws require that accessible features be maintained in working order so that they are accessible to and usable by those people they are intended to benefit.

Building owners should note that the ASME Safety Code for Elevators and Escalators requires routine maintenance and inspections.

Isolated or temporary interruptions in service due to maintenance or repairs may be unavoidable; however, failure to take prompt action to effect repairs could constitute a violation of Federal laws and these requirements.

407.2 **Elevator Landing Requirements**

Elevator landings shall comply with 407.2 - (below & following pages).

407.2.1 **Call Controls**

Where elevator call buttons or keypads are provided, they shall comply with 407.2.1 - (below) and Chapter 2: Operable Parts - 309.4 - p. 34.

Call buttons shall be raised or flush.

EXCEPTION:

Existing elevators shall be permitted to have recessed call buttons.

407.2.1.1 **Height**

Call buttons and keypads shall be located within one of the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239, measured to the centerline of the highest operable part.

EXCEPTION:

Existing call buttons and existing keypads shall be permitted to be located at 54 inches (1372mm) maximum above the finish floor, measured to the centerline of the highest operable part.

407.2.1.2 **Size**

Call buttons shall be 3/4 inch (19.1mm) minimum in the smallest dimension.

EXCEPTION:

Existing elevator call buttons shall not be required to comply with 407.2.1.2 - (preceding page).

407.2.1.3 **Clear Floor or Ground Space**

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided at call controls.

Advisory

407.2.1.3 *Clear Floor or Ground Space*

The clear floor or ground space required at elevator call buttons must remain free of obstructions including ashtrays, plants, and other decorative elements that prevent wheelchair users and others from reaching the call buttons.

The height of the clear floor or ground space is considered to be a volume from the floor to 80 inches (2032mm) above the floor.

Recessed ashtrays should not be placed near elevator call buttons so that persons who are blind or visually impaired do not inadvertently contact them or their contents as they reach for the call buttons.

407.2.1.4 **Location**

The call button that designates the up direction shall be located above the call button that designates the down direction.

EXCEPTION:

Destination-oriented elevators shall not be required to comply with 407.2.1.4 - (above).

Advisory

407.2.1.4 *Location*

EXCEPTION:

A destination-oriented elevator system provides lobby controls enabling passengers to select floor stops, lobby indicators designating which elevator to use, and a car indicator designating the floors at which the car will stop.

Responding cars are programmed for maximum efficiency by reducing the number of stops any passenger experiences.

407.2.1.5 **Signals**

Call buttons shall have visible signals to indicate when each call is registered and when each call is answered.

EXCEPTIONS:

1. Destination-oriented elevators shall not be required to comply with 407.2.1.5 - (above) provided that visible and audible signals complying with 407.2.2 - (below & following page) indicating which elevator car to enter are provided.
2. Existing elevators shall not be required to comply with 407.2.1.5 - (above).

407.2.1.6 **Keypads**

Where keypads are provided, keypads shall be in a standard telephone keypad arrangement and shall comply with this Chapter - 407.4.7.2 - p. 270.

407.2.2 **Hall Signals**

Hall signals, including in-car signals, shall comply with 407.2.2 - (below & following page).

407.2.2.1 **Visible and Audible Signals**

A visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call and the car's direction of travel.

Where in-car signals are provided, they shall be visible from the floor area adjacent to the hall call buttons.

EXCEPTIONS:

1. Visible and audible signals shall not be required at each destination-oriented elevator where a visible and audible signal complying with 407.2.2 - (above, below & following page) is provided indicating the elevator car designation information.
2. In existing elevators, a signal indicating the direction of car travel shall not be required.

407.2.2.2 **Visible Signals**

Visible signal fixtures shall be centered at 72 inches (1829mm) minimum above the finish floor or ground.

Chapter 52: Elevators (continued)

The visible signal elements shall be 2-1/2 inches (64mm) minimum measured along the vertical centerline of the element.

Signals shall be visible from the floor area adjacent to the hall call button.

See Figure 407.2.2.2 - p. 510.

EXCEPTIONS:

1. Destination-oriented elevators shall be permitted to have signals visible from the floor area adjacent to the hoistway entrance.
2. Existing elevators shall not be required to comply with 407.2.2.2 - (preceding page).

407.2.2.3 Audible Signals

Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal annunciators that indicate the direction of elevator car travel.

Audible signals shall have a frequency of 1500 Hz. maximum.

Verbal annunciators shall have a frequency of 300 Hz. minimum and 3000 Hz. maximum.

The audible signal and verbal annunciator shall be 10 dBA minimum above ambient, but shall not exceed 80 dBA, measured at the hall call button.

EXCEPTIONS:

1. Destination-oriented elevators shall not be required to comply with 407.2.2.3 - (above) provided that the audible tone and verbal announcement is the same as those given at the call button or call button keypad.
2. Existing elevators shall not be required to comply with the requirements for frequency and dBA range of audible signals.

407.2.2.4 Differentiation

Each destination-oriented elevator in a bank of elevators shall have audible and visible means for differentiation.

407.2.3 Hoistway Signs

Signs at elevator hoistways shall comply with 407.2.3 - (following page).

Chapter 52: Elevators (continued)

407.2.3.1 **Floor Designation**

Floor designations complying with Chapter 14: Signs - 703.2 - pp.; 87-89 and 703.4.1 - p. 91 shall be provided on both jambs of elevator hoistway entrances.

Floor designations shall be provided in both tactile characters and braille.

Tactile characters shall be 2 inches (51mm) high minimum.

A tactile star shall be provided on both jambs at the main entry level.

See Figure 407.3.2.1 - p. 511.

407.2.3.2 **Car Designations**

Destination-oriented elevators shall provide tactile car identification complying with Chapter 14: Signs - 703.2 - pp. 87-89 on both jambs of the hoistway immediately below the floor designation.

Car designations shall be provided in both tactile characters and braille.

Tactile characters shall be 2 inches (51mm) high minimum.

See Figure 407.2.3.2 - p. 512.

407.3 **Elevator Door Requirements**

Hoistway and car doors shall comply with 407.3 - (below).

407.3.1 **Type**

Elevator doors shall be the horizontal sliding type.

Car gates shall be prohibited.

407.3.2 **Operation**

Elevator hoistway and car doors shall open and close automatically.

EXCEPTION:

Existing manually operated hoistway swing doors shall be permitted provided that they comply with Chapter 49: Doors - Doorways - Gates - 404.2.3 - pp. 243 & 244 and 404.2.9 - p. 248.

Car door closing shall not be initiated until the hoistway door is closed.

407.3.3 **Reopening Device**

Elevator doors shall be provided with a reopening device complying with 407.3.3 - (below) that shall stop and reopen a car door and hoistway door automatically if the door becomes obstructed by an object or person.

EXCEPTION:

Existing elevators with manually operated doors shall not be required to comply with 407.3.3 - (above & below).

407.3.3.1 **Height**

The device shall be activated by sensing an obstruction passing through the opening at 5 inches (127mm) nominal and 29 inches (737mm) nominal above the finish floor.

407.3.3.2 **Contact**

The device shall not require physical contact to be activated, although contact is permitted to occur before the door reverses.

407.3.3.3 **Duration**

Door reopening devices shall remain effective for 20 seconds minimum.

407.3.4 **Door and Signal Timing**

The minimum acceptable time from notification that a car is answering a call or notification of the car assigned at the means for the entry of destination information until the doors of that car start to close shall be calculated from the following equation:

$T = D / (1.5 \text{ ft/s})$ or $T = D / (455 \text{ mm/s}) = 5$ seconds minimum where T equals the total time in seconds and D equals the distance (in feet or millimeters) from the point in the lobby or corridor 60 inches (1524mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door.

EXCEPTIONS:

1. For cars with in-car lanterns, T shall be permitted to begin when the signal is visible from the point 60 inches (1524mm) directly in front of the farthest hall call button and the audible signal is sounded.
2. Destination-oriented elevators shall not be required to comply with 407.3.4 - (above).

407.3.5 **Door Delay**

Elevator doors shall remain fully open in response to a car call for 3 seconds minimum.

407.3.6 **Width**

The width of elevator doors shall comply with Table 407.4.1 - (following page).

EXCEPTION:

In existing elevators, a power-operated car door complying with Chapter 49: Doors - Doorways - Gates - 404.2.3 - pp. 243 & 244 shall be permitted.

407.4 **Elevator Car Requirements**

Elevator cars shall comply with 407.4 - (below & following pages).

407.4.1 **Car Dimensions**

Inside dimensions of elevator cars and clear width of elevator doors shall comply with Table 407.4.1 - (following page).

See Figure 407.4.1 - pp. 513 & 514.

EXCEPTION:

Existing elevator car configurations that provide a clear floor area of 16 square feet (1.5 m²) minimum and also provide an inside clear depth 54 inches (1372mm) minimum and a clear width 36 inches (914mm) minimum shall be permitted.

Chapter 52: Elevators (continued)

Table 407.4.1
Elevator Car Dimensions

Minimum Dimensions

<i>Door Location</i>	<i>Door Clear Width</i>	<i>Inside Car Side to Side</i>	<i>Inside Car Back Wall to Front Return</i>	<i>Inside Car Back Wall to Inside Face of Door</i>
<i>Centered</i>	<i>42 inches (1067mm)</i>	<i>80 inches (2032mm)</i>	<i>51 inches (1295mm)</i>	<i>54 inches (1372mm)</i>
<i>Side (off-centered)</i>	<i>36 inches (914mm)²</i>	<i>68 inches (1727mm)</i>	<i>51 inches (1295mm)</i>	<i>54 inches (1372mm)</i>
<i>Any</i>	<i>36 inches (914mm)²</i>	<i>54 inches (1372mm)</i>	<i>80 inches (2032mm)</i>	<i>80 inches (2032mm)</i>
<i>Any</i>	<i>36 inches (914mm)²</i>	<i>60 inches (1524mm)</i>	<i>60 inches (1524mm)</i>	<i>60 inches (1524mm)</i>

¹ A tolerance of minus 5/8 inch (15.9mm) is permitted.

² Other car configurations that provide a turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232 with the door closed shall be permitted.

407.4.2 **Floor Surfaces**

Floor surfaces in elevator cars shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228 and Chapter 43: Changes in Level - 303 - pp. 229 & 230.

407.4.3 **Platform to Hoistway Clearance**

The clearance between the car platform sill and the edge of any hoistway landing shall be 1 1/4-inch (32mm) maximum.

407.4.4 **Leveling**

Each car shall be equipped with a self-leveling feature that will automatically bring and maintain the car at floor landings within a tolerance of 1/2-inch (12.7mm) under rated loading to zero loading conditions.

407.4.5 **Illumination**

The level of illumination at the car controls, platform, car threshold and car landing sill shall be 5 foot candles (54 lux) minimum.

407.4.6

Elevator Car Controls

Where provided, elevator car controls shall comply with 407.4.6 - (below & following page) and Chapter 2: Operable Parts - 309.4 - p. 34.

EXCEPTION:

In existing elevators, where a new car operating panel complying with 407.4.6 - (above, below & following page) is provided, existing car operating panels shall not be required to comply with 407.4.6 - (above, below & following page).

407.4.6.1

Location

Controls shall be located within one of the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239.

EXCEPTIONS:

1. Where the elevator panel serves more than 16 openings and a parallel approach is provided, buttons with floor designations shall be permitted to be 54 inches (1372mm) maximum above the finish floor.
2. In existing elevators, car control buttons with floor designations shall be permitted to be located 54 inches (1372mm) maximum above the finish floor where a parallel approach is provided.

407.4.6.2

Buttons

Car control buttons with floor designations shall comply with 407.4.6.2 - (below) and shall be raised or flush.

EXCEPTION:

In existing elevators, buttons shall be permitted to be recessed.

407.4.6.2.1

Size

Buttons shall be 3/4 inch (19.1mm) minimum in their smallest dimension.

407.4.6.2.2

Arrangement

Buttons shall be arranged with numbers in ascending order

When two or more columns of buttons are provided they shall read from left to right.

407.4.6.3 **Keypads**

Car control keypads shall be in a standard telephone keypad arrangement and shall comply with 407.4.7.2 - (following page).

407.4.6.4 **Emergency Controls**

Emergency controls shall comply with 407.4.6.4 - (below).

407.4.6.4.1 **Height**

Emergency control buttons shall have their centerlines 35 inches (889mm) minimum above the finish floor.

407.4.6.4.2 **Location**

Emergency controls, including the emergency alarm, shall be grouped at the bottom of the panel.

407.4.7 **Designations and Indicators of Car Controls**

Designations and indicators of car controls shall comply with 407.4.7 - (below & following page).

EXCEPTION:

In existing elevators, where a new car operating panel complying with 407.4.7 - (below & following page) is provided, existing car operating panels shall not be required to comply with 407.4.7 - (below & following page).

407.4.7.1 **Buttons**

Car control buttons shall comply with 407.4.7.1 - (below).

407.4.7.1.1 **Type**

Control buttons shall be identified by tactile characters complying with Chapter 14: Signs - 703.2 - pp. 87-89.

407.4.7.1.2 **Location**

Raised character and Braille designations shall be placed immediately to the left of the control button to which the designations apply.

EXCEPTION:

Where space on an existing car operating panel precludes tactile markings to the left of the controls, markings shall be placed as near to the control as possible.

407.4.7.1.3 **Symbols**

The control button for the emergency stop, alarm, door open, door close, main entry floor, and phone, shall be identified with tactile symbols as shown in Figure 407.4.7.1.3 - p. 515.

407.4.7.1.4 **Visible Indicators**

Buttons with floor designations shall be provided with visible indicators to show that a call has been registered.

The visible indication shall extinguish when the car arrives at the designated floor.

407.4.7.2 **Keypads**

Keypads shall be identified by characters complying with Chapter 14: Signs - 703.5 - pp. 91-94 and shall be centered on the corresponding keypad button.

The number five key shall have a single raised dot.

The dot shall be 0.118 inch (3mm) to 0.120 inch (3.05 mm) base diameter and in other aspects comply with Chapter 14: Signs - Table 703.3.1 - p. 90.

407.4.8 **Car Position Indicators**

Audible and visible car position indicators shall be provided in elevator cars.

407.4.8.1 **Visible Indicators**

Visible indicators shall comply with 407.4.8.1 (below & following page).

407.4.8.1.1 **Size**

Characters shall be 1/2 inch (12.7mm) high minimum.

407.4.8.1.2 **Location**

Indicators shall be located above the car control panel or above the door.

407.4.8.1.3 **Floor Arrival**

As the car passes a floor and when a car stops at a floor served by the elevator, the corresponding character shall illuminate.

EXCEPTION:

Destination-oriented elevators shall not be required to comply with 407.4.8.1.3 - (above) provided that the visible indicators extinguish when the call has been answered.

407.4.8.1.4 **Destination Indicator**

In destination-oriented elevators, a display shall be provided in the car with visible indicators to show car destinations.

407.4.8.2 **Audible Indicators**

Audible indicators shall comply with 407.4.8.2 - (below).

407.4.8.2.1 **Signal Type**

The signal shall be an automatic verbal annunciator which announces the floor at which the car is about to stop.

EXCEPTION:

For elevators other than destination-oriented elevators that have a rated speed of 200 feet per minute (1 m/s) or less, a non-verbal audible signal with a frequency of 1500 Hz. maximum which sounds as the car passes or is about to stop at a floor served by the elevator shall be permitted.

407.4.8.2.2 **Signal Level**

The verbal annunciator shall be 10 dBA minimum above ambient, but shall not exceed 80 dBA, measured at the annunciator.

407.4.8.2.3 **Frequency**

The verbal annunciator shall have a frequency of 300 Hz. minimum to 3000 Hz. maximum.

407.4.9 **Emergency Communication**

Emergency two-way communication systems shall comply with Chapter 47: Reach Ranges - 308 - pp. 237-239.

Chapter 52: Elevators (continued)

Tactile symbols and characters shall be provided adjacent to the device and shall comply with Chapter 14: Signs - 703.2 - pp. 87-89.

Chapter 53:

LIMITED USE/LIMITED APPLICATION ELEVATORS

401 **General**
401.1 **Scope**

The provisions of this Chapter - 408, Chapters 3 - 402 - p. 46, 48-52 - 403-407 - pp. 240-272, 54 - 409 - pp. 276-278, 55 - 410 - pp. 281 & 282 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

408 **Limited-Use/Limited-Application Elevators**
408.1 **General**

Limited-use/limited-application elevators shall comply with this Chapter - 408 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Section 5: Referenced Standards - 105 - p. 7).

They shall be passenger elevators as classified by ASME A17.1.

Elevator operation shall be automatic.

408.2 **Elevator Landings**

Landings serving limited-use/limited-application elevators shall comply with 408.2 - (below).

408.2.1 **Call Buttons**

Elevator call buttons and keypads shall comply with Chapter 52: Elevators - 407.2.1 - pp. 260-262.

408.2.2 **Hall Signals**

Hall signals shall comply with Chapter 52: Elevators - 407.2.2 - pp. 262 & 263.

408.2.3 **Hoistway Signs**

Signs at elevator hoistways shall comply with Chapter 52: Elevators - 407.2.3.1 - p. 264.

408.3 **Elevator Doors**

Elevator hoistway doors shall comply with 408.3 - (following page).

Chapter 53: Limited Use/Limited Application Elevators (continued)

408.3.1 Sliding Doors

Sliding hoistway and car doors shall comply with Chapter 52: Elevators - 407.3.1-407.3.3 - pp. 264 & 265 and 408.4.1 - (below).

408.3.2 Swinging Doors

Swinging hoistway doors shall open and close automatically and shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251, Chapter 52: Elevators - 407.3.2 - p. 264 and 408.3.2 - (below).

408.3.2.1 Power Operation

Swinging doors shall be power-operated and shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Section 5: Referenced Standards - 105 - p. 6).

408.3.2.2 Duration

Power-operated swinging doors shall remain open for 20 seconds minimum when activated.

408.4 Elevator Cars

Elevator cars shall comply with 408.4 - (below & following page).

408.4.1 Car Dimensions and Doors

Elevator cars shall provide a clear width 42 inches (1067mm) minimum and a clear depth 54 inches (1372mm) minimum.

Car doors shall be positioned at the narrow ends of cars and shall provide 32 inches (813mm) minimum clear width.

See Figure 408.4.1 - p. 516.

EXCEPTIONS:

1. Cars that provide a clear width 51 inches (1295mm) minimum shall be permitted to provide a clear depth 51 inches (1295mm) minimum provided that car doors provide a clear opening 36 inches (914mm) wide minimum.
2. Existing elevator cars shall be permitted to provide a clear width 36 inches (914mm) minimum, clear depth 54 inches (1372 mm) minimum, and a net clear platform area 15 square feet (1.4 m²) minimum.

Chapter 53: Limited Use/Limited Application Elevators (continued)

408.4.2 Floor Surfaces

Floor surfaces in elevator cars shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228 and Chapter 43: Changes in Level - 303 - pp. 229 & 230.

408.4.3 Platform to Hoistway Clearance

The platform to hoistway clearance shall comply with Chapter 52: Elevators - 407.4.3 - p. 267.

408.4.4 Leveling

Elevator car leveling shall comply with Chapter 52: Elevators - 407.4.4 - p. 267.

408.4.5 Illumination

Elevator car illumination shall comply with Chapter 52: Elevators - 407.4.5 - p. 267.

408.4.6 Car Controls

Elevator car controls shall comply with Chapter 52: Elevators - 407.4.6 - pp. 268 & 269.

Control panels shall be centered on a side wall.

408.4.7 Designations and Indicators of Car Controls

Designations and indicators of car controls shall comply with Chapter 52: Elevators - 407.4.7 - pp. 269 & 270.

408.4.8 Emergency Communications

Car emergency signaling devices complying with Chapter 52: Elevators - 407.4.9 - pp. 271 & 272 shall be provided.

Chapter 54:

PRIVATE RESIDENCE ELEVATORS

401 **General**
401.1 **Scope**

The provisions of this Chapter - 409, Chapters 3 - 402 - p. 46, 48-53 - 403 - pp. 240 & 241, 404-408 - pp. 243-275, 55 - 410 - pp. 281 & 282 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

409 **Private Residence Elevators**
409.1 **General**

Private residence elevators that are provided within a residential dwelling unit required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 shall comply with this Chapter - 409 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Section 5: Referenced Standards - 105 - p. 7).

They shall be passenger elevators as classified by ASME A17.1.

Elevator operation shall be automatic.

409.2 **Call Buttons**

Call buttons shall be 3/4 inch (19.1mm) minimum in the smallest dimension and shall comply with Chapter 2: Operable Parts - 309 - p. 34.

409.3 **Elevator Doors**

Hoistway doors, car doors, and car gates shall comply with 409.3 - (below & following page) and Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

EXCEPTION:

Doors shall not be required to comply with the maneuvering clearance requirements in Chapter 49: Doors - Doorways - Gates - 404.2.4.1 - pp. 244 & 245 for approaches to the push side of swinging doors.

409.3.1 **Power Operation**

Elevator car and hoistway doors and gates shall be power operated and shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Section 5: Referenced Standards - 105 - pp. 5 & 6).

Chapter 54: Private Residence Elevators (continued)

Power operated doors and gates shall remain open for 20 seconds minimum when activated.

EXCEPTION:

In elevator cars with more than one opening, hoistway doors and gates shall be permitted to be of the manual-open, self-close type.

409.3.2 **Location**

Elevator car doors or gates shall be positioned at the narrow end of the clear floor spaces required by 409.4.1 - (below).

409.4 **Elevator Cars**

Private residence elevator cars shall comply with 409.4 - (below).

409.4.1 **Inside Dimensions of Elevator Cars**

Elevator cars shall provide a clear floor space of 36 inches (914mm) minimum by 48 inches (1219 mm) minimum and shall comply with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234.

409.4.2 **Floor Surfaces**

Floor surfaces in elevator cars shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228 and Chapter 43: Changes in Level - 303 - pp. 229 & 230.

409.4.3 **Platform to Hoistway Clearance**

The clearance between the car platform and the edge of any landing sill shall be 1-1/2 inch (38mm) maximum.

409.4.4 **Leveling**

Each car shall automatically stop at a floor landing within a tolerance of 1/2-inch (12.7mm) under rated loading to zero loading conditions.

409.4.5 **Illumination Levels**

Elevator car illumination shall comply with Chapter 52: Elevators - 407.4.5 - p. 267.

409.4.6 **Car Controls**

Elevator car control buttons shall comply with 409.4.6 - (following page), Chapter 2: Operable Parts - 309.3, 309.4 - p. 34, and shall be raised or flush.

Chapter 54: Private Residence Elevators (continued)

409.4.6.1 Size

Control buttons shall be 3/4 inch (19.1mm) minimum in their smallest dimension.

409.4.6.2 Location

Control panels shall be on a side wall, 12 inches (305mm) minimum from any adjacent wall.

See Figure 409.4.6.2 - p. 517.

409.4.7 Emergency Communications

Emergency two-way communication systems shall comply with 409.4.7 - (below).

409.4.7.1 Type

A telephone and emergency signal device shall be provided in the car.

409.4.7.2 Operable Parts

The telephone and emergency signaling device shall comply with Chapter 2: Operable Parts - 309.3 and 309.4 - p. 34.

409.4.7.3 Compartment

If the telephone or device is in a closed compartment, the compartment door hardware shall comply with Chapter 2: Operable Parts - 309 - p. 34.

409.4.7.4 Cord

The telephone cord shall be 29 inches (737mm) long minimum.

Chapter 55:

PLATFORM LIFTS

206.7 Platform Lifts

Platform lifts shall comply with this Chapter - 410.

Platform lifts shall be permitted as a component of an accessible route in new construction in accordance with this Chapter 206.7.

Platform lifts shall be permitted as a component of an accessible route in an existing building or facility.

206.7.1 Performance Areas and Speaker's Platforms

Platform lifts shall be permitted to provide accessible routes to performance areas and speaker's platforms.

206.7.2 Wheelchair Spaces

Platform lifts shall be permitted to provide an accessible route to comply with the wheelchair space dispersion and line-of-sight requirements of Chapter 19: Assembly Areas - 221 - pp. 121-127 and Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802 - pp. 319-323.

206.7.3 Incidental Spaces

Platform lifts shall be permitted to provide an accessible route to incidental spaces which are not public use spaces and which are occupied by five persons maximum.

206.7.4 Judicial Spaces

Platform lifts shall be permitted to provide an accessible route to: jury boxes and witness stands; raised courtroom stations including, judge's benches, clerk's stations, bailiff's stations, deputy clerk's stations, and court reporter's stations; and to depressed areas such as the well of a court.

206.7.5 Existing Site Constraints

Platform lifts shall be permitted where existing exterior site constraints make use of a ramp or elevator infeasible.

206.7.5 *Advisory* *Existing Site Constraints*

This exception applies where topography or other similar existing site constraints necessitate the use of a platform lift as the only feasible alternative.

Chapter 55: Platform Lifts (continued)

While the site constraint must reflect exterior conditions, the lift can be installed in the interior of a building.

For example, a new building constructed between and connected to two existing buildings may have insufficient space to coordinate floor levels and also to provide ramped entry from the public way.

In this example, an exterior or interior platform lift could be used to provide an accessible entrance or to coordinate one or more interior floor levels.

206.7.6 **Guest Rooms and Residential Dwelling Units**

Platform lifts shall be permitted to connect levels within transient lodging guest rooms required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 or residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330.

206.7.7 **Amusement Rides**

Platform lifts shall be permitted to provide accessible routes to load and unload areas serving amusement rides.

206.7.8 **Play Areas**

Platform lifts shall be permitted to provide accessible routes to play components or soft contained play structures.

206.7.9 **Team or Player Seating**

Platform lifts shall be permitted to provide accessible routes to team or player seating areas serving areas of sport activity.

Advisory

206.7.9 *Team or Player Seating*

While the use of platform lifts is allowed, ramps are recommended to provide access to player seating areas serving an area of sport activity.

206.7.10 **Recreational Boating Facilities and Fishing Piers and Platforms**

Platform lifts shall be permitted to be used instead of gangways that are part of accessible routes serving recreational boating facilities and fishing piers and platforms.

Chapter 55: Platform Lifts (continued)

401 **General**
401.1 **Scope**

The provisions of this Chapter - 410, Chapters 3 - 402 - p. 46, 48-54 - 403 - pp. 240 & 241, 404-409 - pp. 243-278 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

410 **Platform Lifts**
410.1 **General**

Platform lifts shall comply with ASME A18.1 (1999 edition or 2003 edition) (incorporated by reference, see “Referenced Standards” in Section 5: Referenced Standards - 105 - p. 7).

Platform lifts shall not be attendant-operated and shall provide unassisted entry and exit from the lift.

410.1 *Advisory*
General

Inclined stairway chairlifts and inclined and vertical platform lifts are available for short-distance vertical transportation.

Because an accessible route requires an 80-inch (2032mm) vertical clearance, care should be taken in selecting lifts as they may not be equally suitable for use by people using wheelchairs and people standing.

If a lift does not provide 80-inch (2032mm) vertical clearance, it cannot be considered part of an accessible route in new construction.

The ADA and other Federal civil rights laws require that accessible features be maintained in working order so that they are accessible to and usable by those people they are intended to benefit.

Building owners are reminded that the ASME A18 Safety Standard for Platform Lifts and Stairway Chairlifts requires routine maintenance and inspections.

Isolated or temporary interruptions in service due to maintenance or repairs may be unavoidable; however, failure to take prompt action to effect repairs could constitute a violation of Federal laws and these requirements.

410.2 **Floor Surfaces**

Floor surfaces in platform lifts shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228 and Chapter 43: Changes in Level - 303 - pp. 229 & 230.

410.3 **Clear Floor Space**

Clear floor space in platform lifts shall comply with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234.

410.4 **Platform to Runway Clearance**

The clearance between the platform sill and the edge of any runway landing shall be 1-inch (25.4mm) maximum.

410.5 **Operable Parts**

Controls for platform lifts shall comply with Chapter 2: Operable Parts - 309 - p. 34.

410.6 **Doors and Gates**

Platform lifts shall have low-energy power-operated doors or gates complying with Chapter 49: Doors - Doorways - Gates - 404.3 - pp. 249-251.

Doors shall remain open for 20 seconds minimum.

End doors and gates shall provide a clear width 32 inches (813mm) minimum.

Side doors and gates shall provide a clear width 42 inches (1067mm) minimum.

See Figure 410.6 - p. 518.

EXCEPTION:

Platform lifts serving two landings maximum and having doors or gates on opposite sides shall be permitted to have self-closing manual doors or gates.

Chapter 56:

HANDRAILS

501 **General**
501.1 **Scope**

The provisions of this Chapter - 505, and Chapters 6-8 - 502 - pp. 55-59, 503 - pp. 61 & 62, 504 - pp. 63-65 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

505 **Handrails**
505.1 **General**

Handrails provided along walking surfaces complying with Chapter 48: Walking Surfaces - 403 - pp. 240 & 241, required at ramps complying with Chapter 50: Ramps - 405 - pp. 252-256, and required at stairs complying with Chapter 8: Stairways - 504 - pp. 63-65 shall comply with this Chapter - 505.

505.1 *Advisory*
General

Handrails are required on ramp runs with a rise greater than 6 inches (152mm) (see Chapter 50: Ramps - 405.8 - p. 255) and on certain stairways (see Chapter 8: Stairways - 504 - pp. 63-35).

Handrails are not required on walking surfaces with running slopes less than 1:20.

However, handrails are required to comply with this Chapter - 505 when they are provided on walking surfaces with running slopes less than 1:20 (see Chapter 48: Walking Surfaces - 403.6 - p. 241).

505.2, 505.3 - (below & following pages), and this Chapter - 505.10 - pp. 286 & 287 do not apply to handrails provided on walking surfaces with running slopes less than 1:20 as these sections only reference requirements for ramps and stairs.

505.2 **Where Required**

Handrails shall be provided on both sides of stairs and ramps.

EXCEPTION:

In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.

505.3 **Continuity**

Handrails shall be continuous within the full length of each stair flight or ramp run.

Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs.

EXCEPTION:

In assembly areas, handrails on ramps shall not be required to be continuous in aisles serving seating.

505.4 **Height**

Top of gripping surfaces of handrails shall be 34 inches (864mm) minimum and 38 inches (965mm) maximum vertically above walking surfaces, stair nosings, and ramp surfaces.

Handrails shall be at a consistent height above walking surfaces, stair nosings, and ramp surfaces.

See Figure 505.4 - p. 522.

Advisory
Height

505.4

The requirements for stair and ramp handrails in this document are for adults.

When children are the principle users in a building or facility (e.g., elementary schools), a second set of handrails at an appropriate height can assist them and aid in preventing accidents.

A maximum height of 28 inches (711mm) measured to the top of the gripping surface from the ramp surface or stair nosing is recommended for handrails designed for children.

Sufficient vertical clearance between upper and lower handrails, 9 inches (229mm) minimum, should be provided to help prevent entrapment.

505.5 **Clearance**

Clearance between handrail gripping surfaces and adjacent surfaces shall be 1-1/2 inches (38mm) minimum.

See Figure 505.5 - p. 522.

505.6 **Gripping Surface**

Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides.

The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length.

Where provided, horizontal projections shall occur 1-1/2 inches (38 mm) minimum below the bottom of the handrail gripping surface.

See Figure 505.6 - p. 523.

EXCEPTIONS:

1. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards.
2. The distance between horizontal projections and the bottom of the gripping surface shall be permitted to be reduced by 1/8-inch (3.2mm) for each 1/2-inch (12.7mm) of additional handrail perimeter dimension that exceeds 4 inches (102mm).

Advisory
Gripping Surface

505.6

People with disabilities, older people, and others benefit from continuous gripping surfaces that permit users to reach the fingers outward or downward to grasp the handrail, particularly as the user senses a loss of equilibrium or begins to fall.

505.7 **Cross Section**

Handrail gripping surfaces shall have a cross section complying with 505.7.1 or 505.7.2 - (below & following page).

505.7.1 **Circular Cross Section**

Handrail gripping surfaces with a circular cross section shall have an outside diameter of 1-1/4 inches (32mm) minimum and 2 inches (51mm) maximum.

505.7.2 **Non-Circular Cross Sections**

Handrail gripping surfaces with a non-circular cross section shall have a perimeter dimension of 4 inches (102mm) minimum and 6-1/4 inches (159mm) maximum, and a cross-section dimension of 2-1/4 inches (57mm) maximum.

See Figure 505.7.2 - p. 524.

505.8 Surfaces

Handrail gripping surfaces and any surfaces adjacent to them shall be free of sharp or abrasive elements and shall have rounded edges.

505.9 Fittings

Handrails shall not rotate within their fittings.

505.10 Handrail Extensions

Handrail gripping surfaces shall extend beyond and in the same direction of stair flights and ramp runs in accordance with 505.10 - (below & following page).

EXCEPTIONS:

1. Extensions shall not be required for continuous handrails at the inside turn of switchback or dogleg stairs and ramps.
2. In assembly areas, extensions shall not be required for ramp handrails in aisles serving seating where the handrails are discontinuous to provide access to seating and to permit crossovers within aisles.
3. In alterations, full extensions of handrails shall not be required where such extensions would be hazardous due to plan configuration.

505.10.1 Top and Bottom Extension at Ramps

Ramp handrails shall extend horizontally above the landing for 12 inches (305mm) minimum beyond the top and bottom of ramp runs.

Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent ramp run.

See Figure 505.10.1 - p. 525.

505.10.2 Top Extension at Stairs

At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305mm) minimum beginning directly above the first riser nosing.

Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

See Figure 505.10.2 - p. 525.

505.10.3

Bottom Extension at Stairs

At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance at least equal to one tread depth beyond the last riser nosing.

Extension shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

See Figure 505.10.3 - p. 525.

Chapter 57:

TOILET AND BATHING ROOMS

601 **General**
601.1 **Scope**

The provisions of this Chapter - 603, Chapters 9 - 602 - pp. 67 & 68, 12 - 611 - pp. 78 & 79, 39 - 612 - p. 214, 58-64 - 604-610 - pp. 290-317 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - pp. 30-226 or where referenced by a requirement in this document.

603 **Toilet and Bathing Rooms**
603.1 **General**

Toilet and bathing rooms shall comply with this Chapter - 603.

603.2 **Clearances**

Clearances shall comply with 603.2 - (below & following page).

603.2.1 **Turning Space**

Turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232 shall be provided within the room.

603.2.2 **Overlap**

Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

603.2.3 **Door Swing**

Doors shall not swing into the clear floor space or clearance required for any fixture.

Doors shall be permitted to swing into the required turning space.

EXCEPTIONS:

1. Doors to a toilet room or bathing room for a single occupant accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space or clearance provided the swing of the door can be reversed to comply with 603.2.3 - (above).
2. Where the toilet room or bathing room is for individual use and a clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305.3 - p. 233 is provided within the room beyond the arc of the door swing, doors shall be permitted to swing into the clear floor space or clearance required for any fixture.

Chapter 57: Toilet and Bathing Rooms (continued)

603.2.3

*Advisory
Door Swing*

EXCEPTION 1:

At the time the door is installed, and if the door swing is reversed in the future, the door must meet all the requirements specified in Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

Additionally, the door swing cannot reduce the required width of an accessible route.

Also, avoid violating other building or life safety codes when the door swing is reversed.

603.3

Mirrors

Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1016mm) maximum above the finish floor or ground.

Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (889mm) maximum above the finish floor or ground.

603.3

*Advisory
Mirrors*

A single full-length mirror can accommodate a greater number of people, including children.

In order for mirrors to be usable by people who are ambulatory and people and people who use wheelchairs, the top edge of mirrors should be 74 inches (1880mm) minimum from the floor or ground.

603.4

Coat Hooks and Shelves

Coat hooks shall be located within one of the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239.

Shelves shall be located 40 inches (1016mm) minimum and 48 inches (1219mm) maximum above the finish floor.

Chapter 58:

WATER CLOSETS AND TOILET COMPARTMENTS

601 **General**
601.1 **Scope**

The provisions of this Chapter - 604, Chapters 9 - 602 - pp. 67 & 68, 12 - 611 - pp. 78 & 79, 39 - 612 - p. 214, 57 - 603 - pp. 288 & 289, 59-64 - 605-610 - pp. 300-317 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - pp. 30-226 or where referenced by a requirement in this document.

604 **Water Closets and Toilet Compartments**
604.1 **General**

Water closets and toilet compartments shall comply with 604.2-604.8 - (below & following pages).

EXCEPTION:

Water closets and toilet compartments for children's use shall be permitted to comply with this Chapter - 604.9 - pp. 297-299.

604.2 **Location**

The water closet shall be positioned with a wall or partition to the rear and to one side.

The centerline of the water closet shall be 16 inches (406mm) minimum to 18 inches (457mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (432mm) minimum and 19 inches (483mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in this Chapter - 604.8.2 - pp. 296 & 297.

Water closets shall be arranged for a left-hand or right-hand approach.

See Figure 604.2 - p. 527.

604.3 **Clearance**

Clearances around water closets and in toilet compartments shall comply with 604.3 - (below & following page).

604.3.1 **Size**

Clearance around a water closet shall be 60 inches (1524mm) minimum measured perpendicular from the side wall and 56 inches (1422mm) minimum measured perpendicular from the rear wall.

See Figure 604.3.1 - p. 528.

604.3.2 **Overlap**

The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space.

No other fixtures or obstructions shall be located within the required water closet clearance.

EXCEPTION:

In residential dwelling units, a lavatory complying with Chapter 60: Lavatories and Sinks - 606 - pp. 301-303 shall be permitted on the rear wall 18 inches (457mm) minimum from the water closet centerline where the clearance at the water closet is 66 inches (1676mm) minimum measured perpendicular from the rear wall.

See Figure 604.3.2 - p. 529.

*Advisory
Overlap*

604.3.2

When the door to the toilet room is placed directly in front of the water closet, the water closet cannot overlap the required maneuvering clearance for the door inside the room.

604.4 **Seats**

The seat height of a water closet above the finish floor shall be 17 inches (432mm) minimum and 19 inches (483mm) maximum measured to the top of the seat.

Seats shall not be sprung to return to a lifted position.

EXCEPTIONS:

1. A water closet in a toilet room for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 604.4 - (above).
2. In residential dwelling units, the height of water closets shall be permitted to be 15 inches (381mm) minimum and 19 inches (483mm) maximum above the finish floor measured to the top of the seat.

604.5 **Grab Bars**

Grab bars for water closets shall comply with Chapter 63: Grab Bars - 609 - pp. 314 & 315.

Grab bars shall be provided on the side wall closest to the water closet and on the rear wall.

Chapter 58: Water Closets and Toilet Compartments (continued)

EXCEPTIONS:

1. Grab bars shall not be required to be installed in a toilet room for a single occupant accessed only through a private office and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5 - (above, below & following page).
2. In residential dwelling units, grab bars shall not be required to be installed in toilet or bathrooms provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5 - (above, below & following page).
3. In detention or correction facilities, grab bars shall not be required to be installed in housing or holding cells that are specially designed without protrusions for purposes of suicide prevention.

604.5 *Advisory*
Grab Bars

EXCEPTION 2:

Reinforcement must be sufficient to permit the installation of rear and side wall grab bars that fully meet all accessibility requirements including, but not limited to, required length, installation height, and structural strength.

604.5.1 **Side Wall**

The side wall grab bar shall be 42 inches (1067mm) long minimum, located 12 inches (305mm) maximum from the rear wall and extending 54 inches (1372mm) minimum from the rear wall.

See Figure 604.5.1 - p. 530.

604.5.2 **Rear Wall**

The rear wall grab bar shall be 36 inches (914mm) long minimum and extend from the centerline of the water closet 12 inches (305mm) minimum on one side and 24 inches (610mm) minimum on the other side.

See Figure 604.5.2 - p. 530.

Chapter 58: Water Closets and Toilet Compartments (continued)

EXCEPTIONS:

1. The rear grab bar shall be permitted to be 24 inches (610mm) long minimum, centered on the water closet, where wall space does not permit a length of 36 inches (914mm) minimum due to the location of a recessed fixture adjacent to the water closet.
2. Where an administrative authority requires flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, then the rear grab bar shall be permitted to be split or shifted to the open side of the toilet area.

604.6 Flush Controls

Flush controls shall be hand operated or automatic.

Hand operated flush controls shall comply with Chapter 2: Operable Parts - 309 - p. 34.

Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with this Chapter - 604.8.2 - pp. 296 & 297.

Advisory Flush Controls

604.6

If plumbing valves are located directly behind the toilet seat, flush valves and related plumbing can cause injury or imbalance when a person leans back against them.

To prevent causing injury or imbalance, the plumbing can be located behind walls or to the side of the toilet; or if approved by the local authority having jurisdiction, provide a toilet seat lid.

604.7 Dispensers

Toilet paper dispensers shall comply with Chapter 2: Operable Parts - 309.4 - p. 34 and shall be 7 inches (178mm) minimum and 9 inches (229mm) maximum in front of the water closet measured to the centerline of the dispenser.

The outlet of the dispenser shall be 15 inches (381mm) minimum and 48 inches (1219mm) maximum above the finish floor and shall not be located behind grab bars.

Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

See Figure 604.7 - p. 531.

604.7 *Advisory*
Dispensers

If toilet paper dispensers are installed above the side wall grab bar, the outlet of the toilet paper dispenser must be 48 inches (1219mm) maximum above the finish floor and the top of the gripping surface of the grab bar must be 33 inches (838mm) minimum and 36 inches (914mm) maximum above the finish floor.

604.8 **Toilet Compartments**

Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3 - (below & following page).

Compartments containing more than one plumbing fixture shall comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

Ambulatory accessible compartments shall comply with this Chapter - 604.8.2 and 604.8.3 - pp. 296 & 297.

604.8.1 **Wheelchair Accessible Compartments**

Wheelchair accessible compartments shall comply with 604.8.1 - (below & following pages).

604.8.1.1 **Size**

Wheelchair accessible compartments shall be 60 inches (1524mm) wide minimum measured perpendicular to the side wall, and 56 inches (1422mm) deep minimum for wall hung water closets and 59 inches (1499mm) deep minimum for floor mounted water closets measured perpendicular to the rear wall.

Wheelchair accessible compartments for children's use shall be 60 inches (1524mm) wide minimum measured perpendicular to the side wall, and 59 inches (1499mm) deep minimum for wall hung and floor mounted water closets measured perpendicular to the rear wall.

See Figure 604.8.1.1 - p. 532.

604.8.1.1 *Advisory*
Size

The minimum space required in toilet compartments is provided so that a person using a wheelchair can maneuver into position at the water closet.

This space cannot be obstructed by baby changing tables or other fixtures or conveniences, except as specified at this Chapter - 604.3.2 (Overlap) - p. 291.

Chapter 58: Water Closets and Toilet Compartments (continued)

If toilet compartments are to be used to house fixtures other than those associated with the water closet, they must be designed to exceed the minimum space requirements.

Convenience fixtures such as baby changing tables must also be accessible to people with disabilities as well as to other users.

Toilet compartments that are designed to meet, and not exceed, the minimum space requirements may not provide adequate space for maneuvering into position at a baby changing table.

604.8.1.2

Doors

Toilet compartment doors, including door hardware, shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1067mm) minimum.

Doors shall be located in the front partition or in the side wall or partition farthest from the water closet.

Where located in the front partition, the door opening shall be 4 inches (102mm) maximum from the side wall or partition farthest from the water closet.

Where located in the side wall or partition, the door opening shall be 4 inches (102mm) maximum from the front partition.

The door shall be self-closing.

A door pull complying with Chapter 49: Doors - Doorways - Gates - 404.2.7 - p. 247 shall be placed on both sides of the door near the latch.

Toilet compartment doors shall not swing into the minimum required compartment area.

See Figure 604.8.1.2 - p. 533.

604.8.1.3

Approach

Compartments shall be arranged for left-hand or right-hand approach to the water closet.

604.8.1.4

Toe Clearance

The front partition and at least one side partition shall provide a toe clearance of 9 inches (229mm) minimum above the finish floor and 6 inches (152mm) deep minimum beyond the compartment-side face of the partition, exclusive of partition support members.

Chapter 58: Water Closets and Toilet Compartments (continued)

Compartments for children's use shall provide a toe clearance of 12 inches (305mm) minimum above the finish floor.

See Figure 604.8.1.4 - p. 534.

EXCEPTION:

Toe clearance at the front partition is not required in a compartment greater than 62 inches (1575mm) deep with a wall-hung water closet or 65 inches (1651mm) deep with a floor-mounted water closet.

Toe clearance at the side partition is not required in a compartment greater than 66 inches (1676mm) wide. Toe clearance at the front partition is not required in a compartment for children's use that is greater than 65 inches (1651mm) deep.

604.8.1.5 **Grab Bars**

Grab bars shall comply with Chapter 63: Grab Bars - 609 - pp. 314 & 315.

A side-wall grab bar complying with this Chapter - 604.5.1 - p. 292 shall be provided and shall be located on the wall closest to the water closet.

In addition, a rear-wall grab bar complying with this Chapter - 604.5.2 - pp. 292 & 293 shall be provided.

604.8.2 **Ambulatory Accessible Compartments**

Ambulatory accessible compartments shall comply with 604.8.2 - (below & following page).

604.8.2.1 **Size**

Ambulatory accessible compartments shall have a depth of 60 inches (1524mm) minimum and a width of 35 inches (889mm) minimum and 37 inches (940mm) maximum.

604.8.2.2 **Doors**

Toilet compartment doors, including door hardware, shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251, except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1067mm) minimum.

The door shall be self-closing.

A door pull complying with Chapter 49: Doors - Doorways - Gates - 404.2.7 - p. 247 shall be placed on both sides of the door near the latch.

Chapter 58: Water Closets and Toilet Compartments (continued)

Toilet compartment doors shall not swing into the minimum required compartment area.

604.8.2.3 **Grab Bars**

Grab bars shall comply with Chapter 63: Grab Bars - 609 - pp. 314 & 315.

A side-wall grab bar complying with this Chapter - 604.5.1 - p. 292 shall be provided on both sides of the compartment.

See Figure 604.8.2 - p. 535.

604.8.3 **Coat Hooks and Shelves**

Coat hooks shall be located within one of the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239.

Shelves shall be located 40 inches (1016mm) minimum and 48 inches (1219mm) maximum above the finish floor.

604.9 **Water Closets and Toilet Compartments for Children's Use**

Water closets and toilet compartments for children's use shall comply with 604.9 - (below & following pages).

Advisory

604.9 *Water Closets and Toilet Compartments for Children's Use*

The requirements in 604.9 - (below & following pages) are to be followed where the Exception for children's water closets in this Chapter - 604.1 - p. 290 is used.

Table 604.9 - (following page) provides additional guidance in applying the specifications for water closets for children according to the age group served and reflects the differences in the size, stature, and reach ranges of children ages 3 through 12.

The specifications chosen should correspond to the age of the primary user group.

The specifications of one age group should be applied consistently in the installation of a water closet and related elements.

Chapter 58: Water Closets and Toilet Compartments (continued)

*Table 604.9
Advisory Specifications for Water Closets Serving Children Ages 3 through 12*

	<i>Ages 3 and 4</i>	<i>Ages 5 through 8</i>	<i>Ages 9 through 12</i>
<i>Water Closet Centerline</i>	<i>12 inches (305mm)</i>	<i>12 inches to 15 inches (305mm to 381mm)</i>	<i>15 inches to 18 inches (381mm to 457mm)</i>
<i>Toilet Seat Height</i>	<i>11 inches to 12 inches (279mm to 305mm)</i>	<i>12 inches to 15 inches (305mm to 381mm)</i>	<i>15 inches to 17 inches (381mm to 432mm)</i>
<i>Grab Bar Height</i>	<i>18 inches to 20 inches (457mm to 508mm)</i>	<i>20 inches to 25 inches (508mm to 635mm)</i>	<i>25 inches to 27 inches (635mm to 686mm)</i>
<i>Dispenser Height</i>	<i>14 inches (356mm)</i>	<i>14 inches to 17 inches (356mm to 432mm)</i>	<i>17 inches to 19 inches (432mm to 483mm)</i>

604.9.1**Location**

The water closet shall be located with a wall or partition to the rear and to one side.

The centerline of the water closet shall be 12 inches (305mm) minimum and 18 inches (457mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (432mm) minimum and 19 inches (483mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in this Chapter - 604.8.2 - pp. 296 & 297.

Compartments shall be arranged for left-hand or right-hand approach to the water closet.

604.9.2**Clearance**

Clearance around a water closet shall comply with this Chapter - 604.3 - pp. 290 & 291.

604.9.3**Height**

The height of water closets shall be 11 inches (279 mm) minimum and 17 inches (432mm) maximum measured to the top of the seat.

Seats shall not be sprung to return to a lifted position.

604.9.4**Grab Bars**

Grab bars for water closets shall comply with this Chapter - 604.5 - pp. 291-293.

Chapter 58: Water Closets and Toilet Compartments (continued)

604.9.5

Flush Controls

Flush controls shall be hand operated or automatic.

Hand operated flush controls shall comply with Chapter 2: Operable Parts - 309.2 and 309.4 - p. 34 and shall be installed 36 inches (914mm) maximum above the finish floor.

Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with this Chapter - 604.8.2 - pp. 296 & 297.

604.9.6

Dispensers

Toilet paper dispensers shall comply with Chapter 2: Operable Parts - 309.4 - p. 34 and shall be 7 inches (178mm) minimum and 9 inches (229mm) maximum in front of the water closet measured to the centerline of the dispenser.

The outlet of the dispenser shall be 14 inches (356mm) minimum and 19 inches (483mm) maximum above the finish floor.

There shall be a clearance of 1-1/2 inches (38 mm) minimum below the grab bar.

Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

604.9.7

Toilet Compartments

Toilet compartments shall comply with this Chapter - 604.8 - pp. 294-297.

Chapter 59:

URINALS

601 **General**
601.1 **Scope**

The provisions of this Chapter - 605, Chapters 9 - 602 - pp. 67 & 68, 12 - 611 - pp. 78 & 79, 39 - 612 - p. 214, 57 - 603 - pp. 288 & 289, 58 - 604 - pp. 290-299, 60-64 - 606-610 - pp. 301-317 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - pp. 30-226 or where referenced by a requirement in this document.

605 **Urinals**
605.1 **General**

Urinals shall comply with this Chapter - 605.

605.1 **Advisory**
General

Stall-type urinals provide greater accessibility for a broader range of persons, including people of short stature.

605.2 **Height and Depth**

Urinals shall be the stall-type or the wall-hung type with the rim 17 inches (432mm) maximum above the finish floor or ground.

Urinals shall be 13-1/2 inches (343mm) deep minimum measured from the outer face of the urinal rim to the back of the fixture.

See Figure 605.2 - p. 536.

605.3 **Clear Floor Space**

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 positioned for forward approach shall be provided.

605.4 **Flush Controls**

Flush controls shall be hand operated or automatic.

Hand operated flush controls shall comply with Chapter 2: Operable Parts - 309 - p. 34.

Chapter 60:

LAVATORIES AND SINKS

601 **General**
601.1 **Scope**

The provisions of this Chapter - 606, and Chapters 9 - 602 - pp. 67 & 68, 12 - 611 - pp. 78 & 79, 39 - 612 - p. 214, 57-59 - 603-605 - pp. 288-300, 61-64 - 607-610 - pp. 304-317 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - pp. 30-226 or where referenced by a requirement in this document.

606 **Lavatories and Sinks**
606.1 **General**

Lavatories and sinks shall comply with this Chapter - 606.

606.1 *Advisory*
General

If soap and towel dispensers are provided, they must be located within the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239.

Locate soap and towel dispensers so that they are conveniently usable by a person at the accessible lavatory.

606.2 **Clear Floor Space**

A clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234, positioned for a forward approach, and knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236 shall be provided.

EXCEPTIONS:

1. A parallel approach complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided and to wet bars.
2. A lavatory in a toilet room or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to provide knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236.
3. In residential dwelling units, cabinetry shall be permitted under lavatories and kitchen sinks provided that all of the following conditions are met:

Chapter 60: Lavatories and Sinks (continued)

- (a) the cabinetry can be removed without removal or replacement of the fixture;
 - (b) the finish floor extends under the cabinetry;
and
 - (c) the walls behind and surrounding the cabinetry are finished.
4. A knee clearance of 24 inches (610mm) minimum above the finish floor or ground shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or counter surface is 31 inches (787mm) maximum above the finish floor or ground.
 5. A parallel approach complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be permitted to lavatories and sinks used primarily by children 5 years and younger.
 6. The dip of the overflow shall not be considered in determining knee and toe clearances.
 7. No more than one bowl of a multi-bowl sink shall be required to provide knee and toe clearance complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236.

606.3

Height

Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (864mm) maximum above the finish floor or ground.

EXCEPTIONS:

1. A lavatory in a toilet or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 606.3 - (above).
2. In residential dwelling unit kitchens, sinks that are adjustable to variable heights, 29 inches (737mm) minimum and 36 inches (914mm) maximum, shall be permitted where rough-in plumbing permits connections of supply and drain pipes for sinks mounted at the height of 29 inches (737mm).

606.4

Faucets

Controls for faucets shall comply with Chapter 2: Operable Parts - 309 - p. 34.

Hand-operated metering faucets shall remain open for 10 seconds minimum.

Chapter 60: Lavatories and Sinks (continued)

606.5

Exposed Pipes and Surfaces

Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact.

There shall be no sharp or abrasive surfaces under lavatories and sinks.

Chapter 61:

BATHTUBS

601 **General**
601.1 **Scope**

The provisions of this Chapter - 607, Chapters 9 - 602 - pp. 67 & 68, 12 - 611 - pp. 78 & 79, 39 - 612 - p. 214, 57-60 - 603-606 - pp. 288-303, 62-64 - 608-610 - pp. 308-317 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - pp. 30-226 or where referenced by a requirement in this document.

607 **Bathtubs**
607.1 **General**

Bathtubs shall comply with this Chapter - 607.

607.2 **Clearance**

Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches (762mm) wide minimum.

A lavatory complying with Chapter 60: Lavatories and Sinks - 606 - pp. 301-303 shall be permitted at the control end of the clearance.

Where a permanent seat is provided at the head end of the bathtub, the clearance shall extend 12 inches (305mm) minimum beyond the wall at the head end of the bathtub.

See Figure 607.2 - p. 537.

607.3 **Seat**

A permanent seat at the head end of the bathtub or a removable in-tub seat shall be provided.

Seats shall comply with Chapter 64: Seats - 610 - pp. 316 & 317.

607.4 **Grab Bars**

Grab bars for bathtubs shall comply with Chapter 63: Grab Bars - 609 - pp. 314 & 315 and shall be provided in accordance with 607.4.1 or 607.4.2 - (following pages).

Chapter 61: Bathtubs (continued)

EXCEPTIONS:

1. Grab bars shall not be required to be installed in a bathtub located in a bathing facility for a single occupant accessed only through a private office and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 607.4 - (above, below & following page).
2. In residential dwelling units, grab bars shall not be required to be installed in bathtubs located in bathing facilities provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 607.4 - (above, below & following page).

607.4.1 **Bathtubs With Permanent Seats**

For bathtubs with permanent seats, grab bars shall be provided in accordance with 607.4.1 - (below).

607.4.1.1 **Back Wall**

Two grab bars shall be installed on the back wall, one located in accordance with Chapter 63: Grab Bars - 609.4 - p. 315 and the other located 8 inches (203mm) minimum and 10 inches (254mm) maximum above the rim of the bathtub.

Each grab bar shall be installed 15 inches (381mm) maximum from the head end wall and 12 inches (305mm) maximum from the control end wall.

607.4.1.2 **Control End Wall**

A grab bar 24 inches (610mm) long minimum shall be installed on the control end wall at the front edge of the bathtub.

See Figure 607.4.1 - p. 538.

607.4.2 **Bathtubs Without Permanent Seats**

For bathtubs without permanent seats, grab bars shall comply with 607.4.2 - (below & following page).

607.4.2.1 **Back Wall**

Two grab bars shall be installed on the back wall, one located in accordance with Chapter 63: Grab Bars - 609.4 - p. 315 and other located 8 inches (203mm) minimum and 10 inches (254mm) maximum above the rim of the bathtub.

Chapter 61: Bathtubs (continued)

Each grab bar shall be 24 inches (610mm) long minimum and shall be installed 24 inches (610mm) maximum from the head end wall and 12 inches (305mm) maximum from the control end wall.

607.4.2.2 **Control End Wall**

A grab bar 24 inches (610mm) long minimum shall be installed on the control end wall at the front edge of the bathtub.

607.4.2.3 **Head End Wall**

A grab bar 12 inches (305mm) long minimum shall be installed on the head end wall at the front edge of the bathtub.

See Figure 607.4.2 - p. 539.

607.5 **Controls**

Controls, other than drain stoppers, shall be located on an end wall.

Controls shall be between the bathtub rim and grab bar, and between the open side of the bathtub and the centerline of the width of the bathtub.

Controls shall comply with Chapter 2: Operable Parts - 309.4 - p. 34.

See Figure 607.5 - p. 540.

607.6 **Shower Spray Unit and Water**

A shower spray unit with a hose 59 inches (1499mm) long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided.

The shower spray unit shall have an on/off control with a non-positive shut-off.

If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars.

Bathtub shower spray units shall deliver water that is 120°F (49°C) maximum.

607.6 *Advisory* *Shower Spray Unit and Water*

Ensure that hand-held shower spray units are capable of delivering water pressure substantially equivalent to fixed shower heads.

607.7

Bathtub Enclosures

Enclosures for bathtubs shall not obstruct controls, faucets, shower and spray units or obstruct transfer from wheelchairs onto bathtub seats or into bathtubs.

Enclosures on bathtubs shall not have tracks installed on the rim of the open face of the bathtub.

Chapter 62:

SHOWER COMPARTMENTS

601 **General**
601.1 **Scope**

The provisions of this Chapter - 608, Chapters 9 - 602 - pp. 67 & 68, 12 - 611 - pp. 78 & 79, 39 - 612 - p. 214, 57-61 - 603-607 - pp. 288-307, 63 - 609 - pp. 314 & 315, 64 - 610 - pp. 316 & 317 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - pp. 30-226 or where referenced by a requirement in this document.

608 **Shower Compartments**
608.1 **General**

Shower compartments shall comply with this Chapter - 608.

608.1 *Advisory*
General

Shower stalls that are 60 inches (1524mm) wide and have no curb may increase the usability of a bathroom because the shower area provides additional maneuvering space.

608.2 **Size and Clearances for Shower Compartments**

Shower compartments shall have sizes and clearances complying with 608.2 - (below & following page).

608.2.1 **Transfer Type Shower Compartments**

Transfer type shower compartments shall be 36 inches (914mm) by 36 inches (914mm) clear inside dimensions measured at the center points of opposing sides and shall have a 36-inch (914mm) wide minimum entry on the face of the shower compartment.

Clearance of 36 inches (914mm) wide minimum by 48 inches (1219mm) long minimum measured from the control wall shall be provided.

See Figure 608.2.1 - p. 541.

608.2.2 **Standard Roll-In Type Shower Compartments**

Standard roll-in type shower compartments shall be 30 inches (762mm) wide minimum by 60 inches (1524mm) deep minimum clear inside dimensions measured at center points of opposing sides and shall have a 60 inches (1524mm) wide minimum entry on the face of the shower compartment.

Chapter 62: Shower Compartments (continued)

608.2.2.1

Clearance

A 30-inch (762mm) wide minimum by 60-inch (1524mm) long minimum clearance shall be provided adjacent to the open face of the shower compartment.

See Figure 608.2.2 - p. 541.

EXCEPTION:

A lavatory complying with Chapter 60: Lavatories and Sinks - 606 - pp. 301-303 shall be permitted on one 30-inch (762mm) wide minimum side of the clearance provided that it is not on the side of the clearance adjacent to the controls or, where provided, not on the side of the clearance adjacent to the shower seat.

608.2.3

Alternate Roll-in Type Shower Compartments

Alternate roll-in type shower compartments shall be 36 inches (914mm) wide and 60 inches (1524mm) deep minimum clear inside dimensions measured at center points of opposing sides.

A 36-inch (914mm) wide minimum entry shall be provided at one end of the long side of the compartment.

See Figure 608.2.3 - p. 541.

608.3

Grab Bars

Grab bars shall comply with Chapter 63: Grab Bars - 609 - pp. 314 & 315 and shall be provided in accordance with 608.3 - (below & following page).

Where multiple grab bars are used, required horizontal grab bars shall be installed at the same height above the finish floor.

EXCEPTIONS:

1. Grab bars shall not be required to be installed in a shower located in a bathing facility for a single occupant accessed only through a private office, and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 608.3 - (above, below & following page).
2. In residential dwelling units, grab bars shall not be required to be installed in showers located in bathing facilities provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 608.3 - (above, below & following page).

608.3.1 **Transfer Type Shower Compartments**

In transfer type compartments, grab bars shall be provided across the control wall and back wall to a point 18 inches (457mm) from the control wall.

See Figure 608.3.1 - p. 541.

608.3.2 **Standard Roll-in Type Shower Compartments**

Where a seat is provided in standard roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall opposite the seat.

Grab bars shall not be provided above the seat.

Where a seat is not provided in standard roll-in type shower compartments, grab bars shall be provided on three walls.

Grab bars shall be installed 6 inches (152mm) maximum from adjacent walls.

See Figure 608.3.2 - p. 542.

608.3.3 **Alternate Roll-in Type Shower Compartments**

In alternate roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall farthest from the compartment entry.

Grab bars shall not be provided above the seat.

Grab bars shall be installed 6 inches (152mm) maximum from adjacent walls.

See Figure 608.3.3 - p. 542.

608.4 **Seats**

A folding or non-folding seat shall be provided in transfer type shower compartments.

A folding seat shall be provided in roll-in type showers required in transient lodging guest rooms with mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141.

Seats shall comply with Chapter 64: Seats - 610 - pp. 316 & 317.

EXCEPTION:

In residential dwelling units, seats shall not be required in transfer type shower compartments provided that reinforcement has been installed in walls so as to permit the installation of seats complying with 608.4 - (preceding page).

608.5 **Controls**

Controls, faucets, and shower spray units shall comply with Chapter 2: Operable Parts - 309.4 - p. 34.

608.5.1 **Transfer Type Shower Compartments**

In transfer type shower compartments, the controls, faucets, and shower spray unit shall be installed on the side wall opposite the seat 38 inches (965mm) minimum and 48 inches (1219mm) maximum above the shower floor and shall be located on the control wall 15 inches (381mm) maximum from the centerline of the seat toward the shower opening.

See Figure 608.5.1 - p. 543.

608.5.2 **Standard Roll-in Type Shower Compartments**

In standard roll-in type shower compartments, the controls, faucets, and shower spray unit shall be located above the grab bar, but no higher than 48 inches (1219mm) above the shower floor.

Where a seat is provided, the controls, faucets, and shower spray unit shall be installed on the back wall adjacent to the seat wall and shall be located 27 inches (686mm) maximum from the seat wall.

See Figure 608.5.2 - p. 543.

Advisory

608.5.2 *Standard Roll-in Type Shower Compartments*

In standard roll-in type showers without seats, the shower head and operable parts can be located on any of the three walls of the shower without adversely affecting accessibility.

608.5.3 **Alternate Roll-in Type Shower Compartments**

In alternate roll-in type shower compartments, the controls, faucets, and shower spray unit shall be located above the grab bar, but no higher than 48 inches (1219mm) above the shower floor.

Where a seat is provided, the controls, faucets, and shower spray unit shall be located on the side wall adjacent to the seat 27 inches (686mm) maximum from the side wall behind the seat or shall be located on the back wall opposite the seat 15 inches (381mm) maximum, left or right, of the centerline of the seat.

Chapter 62: Shower Compartments (continued)

Where a seat is not provided, the controls, faucets, and shower spray unit shall be installed on the side wall farthest from the compartment entry.

See Figure 608.5.3 - p. 544.

608.6 Shower Spray Unit and Water

A shower spray unit with a hose 59 inches (1499mm) long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided.

The shower spray unit shall have an on/off control with a non-positive shut-off.

If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars.

Shower spray units shall deliver water that is 120°F (49°C) maximum.

EXCEPTION:

A fixed shower head located at 48 inches (1219mm) maximum above the shower finish floor shall be permitted instead of a hand-held spray unit in facilities that are not medical care facilities, long-term care facilities, transient lodging guest rooms, or residential dwelling units.

608.6 *Advisory* Shower Spray Unit and Water

Ensure that hand-held shower spray units are capable of delivering water pressure substantially equivalent to fixed shower heads.

608.7 Thresholds

Thresholds in roll-in type shower compartments shall be 1/2-inch (12.7mm) high maximum in accordance with Chapter 43: Changes in Level - 303 - pp. 229 & 230.

In transfer type shower compartments, thresholds 1/2-inch (12.7mm) high maximum shall be beveled, rounded, or vertical.

EXCEPTION:

A threshold 2 inches (51mm) high maximum shall be permitted in transfer type shower compartments in existing facilities where provision of a 1/2-inch (12.7mm) high threshold would disturb the structural reinforcement of the floor slab.

Chapter 62: Shower Compartments (continued)

608.8

Shower Enclosures

Enclosures for shower compartments shall not obstruct controls, faucets, and shower spray units or obstruct transfer from wheelchairs onto shower seats.

Chapter 63:

GRAB BARS

601 **General**
601.1 **Scope**

The provisions of this Chapter - 609, Chapters 9 - 602 - pp. 67 & 68, 12 - 611 - pp. 78 & 79, 39 - 612 - p. 214, 57-62 - 603-608 - pp. 288-313, 64 - 610 - pp. 316 & 317 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - pp. 30-226 or where referenced by a requirement in this document.

609 **Grab Bars**
609.1 **General**

Grab bars in toilet facilities and bathing facilities shall comply with this Chapter - 609.

609.2 **Cross Section**

Grab bars shall have a cross section complying with 609.2.1 or 609.2.2 - (below).

609.2.1 **Circular Cross Section**

Grab bars with circular cross sections shall have an outside diameter of 1-1/4 inches (32mm) minimum and 2 inches (51mm) maximum.

609.2.2 **Non-Circular Cross Section**

Grab bars with non-circular cross sections shall have a cross-section dimension of 2 inches (51mm) maximum and a perimeter dimension of 4 inches (102mm) minimum and 4.8 inches (122mm) maximum.

See Figure 609.2.2 - p. 545.

609.3 **Spacing**

The space between the wall and the grab bar shall be 1-1/2 inches (38mm).

The space between the grab bar and projecting objects below and at the ends shall be 1-1/2 inches (38mm) minimum.

The space between the grab bar and projecting objects above shall be 12 inches (305mm) minimum.

See Figure 609.3 - p. 546.

EXCEPTION:

The space between the grab bars and shower controls, shower fittings, and other grab bars above shall be permitted to be 1-1/2 inches (38 mm) minimum.

609.4 Position of Grab Bars

Grab bars shall be installed in a horizontal position, 33 inches (838mm) minimum and 36 inches (914mm) maximum above the finish floor measured to the top of the gripping surface, except that at water closets for children's use complying with Chapter 58: Water Closets and Toilet Compartments - 604.9 - pp. 297-299, grab bars shall be installed in a horizontal position 18 inches (457mm) minimum and 27 inches (686mm) maximum above the finish floor measured to the top of the gripping surface.

The height of the lower grab bar on the back wall of a bathtub shall comply with Chapter 61: Bathtubs - 607.4.1.1 or 607.4.2.1 - pp. 305 & 306.

609.5 Surface Hazards

Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive elements and shall have rounded edges.

609.6 Fittings

Grab bars shall not rotate within their fittings.

609.7 Installation

Grab bars shall be installed in any manner that provides a gripping surface at the specified locations and that does not obstruct the required clear floor space.

609.8 Structural Strength

Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the grab bar, fastener, mounting device, or supporting structure.

Chapter 64:

SEATS

601 **General** 601.1 **Scope**

The provisions of this Chapter - 610, Chapters 9 - 602 - pp. 67 & 68, 12 - 611 - pp. 78 & 79, 39 - 612 - p. 214, 57-63 - 603-609 - pp. 288-315 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29 and Chapters 1-41 - pp. 30-226 or where referenced by a requirement in this document.

610 **Seats** 610.1 **General**

Seats in bathtubs and shower compartments shall comply with this Chapter - 610.

610.2 **Bathtub Seats**

The top of bathtub seats shall be 17 inches (432mm) minimum and 19 inches (483mm) maximum above the bathroom finish floor.

The depth of a removable in-tub seat shall be 15 inches (381mm) minimum and 16 inches (406mm) maximum.

The seat shall be capable of secure placement.

Permanent seats at the head end of the bathtub shall be 15 inches (381mm) deep minimum and shall extend from the back wall to or beyond the outer edge of the bathtub.

See Figure 610.2 - p. 547.

610.3 **Shower Compartment Seats**

Where a seat is provided in a standard roll-in shower compartment, it shall be a folding type, shall be installed on the side wall adjacent to the controls, and shall extend from the back wall to a point within 3 inches (76mm) of the compartment entry.

Where a seat is provided in an alternate roll-in type shower compartment, it shall be a folding type, shall be installed on the front wall opposite the back wall, and shall extend from the adjacent side wall to a point within 3 inches (76mm) of the compartment entry.

In transfer-type showers, the seat shall extend from the back wall to a point within 3 inches (76mm) of the compartment entry.

The top of the seat shall be 17 inches (432mm) minimum and 19 inches (483mm) maximum above the bathroom finish floor.

Chapter 64: Seats (continued)

Seats shall comply with 610.3.1 or 610.3.2 - (below).

See Figure 610.3 - p. 548.

610.3.1 **Rectangular Seats**

The rear edge of a rectangular seat shall be 2-1/2 inches (64mm) maximum and the front edge 15 inches (381mm) minimum and 16 inches (406mm) maximum from the seat wall.

The side edge of the seat shall be 1-1/2 inches (38mm) maximum from the adjacent wall.

See Figure 610.3.1 - p. 548.

610.3.2 **L-Shaped Seats**

The rear edge of an L-shaped seat shall be 2-1/2 inches (64mm) maximum and the front edge 15 inches (381mm) minimum and 16 inches (406mm) maximum from the seat wall.

The rear edge of the “L” portion of the seat shall be 1-1/2 inches (38mm) maximum from the wall and the front edge shall be 14 inches (356mm) minimum and 15 inches (381mm) maximum from the wall.

The end of the “L” shall be 22 inches (559mm) minimum and 23 inches maximum (584mm) from the main seat wall.

See Figure 610.3.2 - p. 549.

610.4 **Structural Strength**

Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure.

Chapter 65:

DETECTABLE WARNINGS

701 **General**
701.1 **Scope**

The provisions of this Chapter - 705, Chapters 13-15 - 702 - p. 81, 703 - pp. 87-96, 704 - pp. 100-103, 17 - 706 - pp. 112-114, 18 - 707 - pp. 115-120, 28 - 708 - pp. 153 & 154 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

705 **Detectable Warnings**
705.1 **General**

Detectable warnings shall consist of a surface of truncated domes and shall comply with this Chapter - 705.

705.1.1 **Dome Size**

Truncated domes in a detectable warning surface shall have a base diameter of 0.9 inch (22.9mm) minimum and 1.4 inches (36mm) maximum, a top diameter of 50 percent of the base diameter minimum to 65 percent of the base diameter maximum, and a height of 0.2 inch (5.8mm).

705.1.2 **Dome Spacing**

Truncated domes in a detectable warning surface shall have a center-to-center spacing of 1.6 inches (41mm) minimum and 2.4 inches (61mm) maximum, and a base-to-base spacing of 0.65 inch (17mm) minimum, measured between the most adjacent domes on a square grid.

705.1.3 **Contrast**

Detectable warning surfaces shall contrast visually with adjacent walking surfaces either light-on-dark, or dark-on-light.

See Figure 705.1 - p. 559.

705.2 **Platform Edges**

Detectable warning surfaces at platform boarding edges shall be 24 inches (610mm) wide and shall extend the full length of the public use areas of the platform.

Chapter 66:

WHEELCHAIR SPACES - COMPANION SEATS DESIGNATED AISLE SEATS

801 **General**
801.1 **Scope**

The provisions of this Chapter - 802, Chapters 10 - 804 - pp. 70-73, 16 - 810 - pp. 105-110, 20 - 803 - pp. 129 & 130, 21 - 805 - pp. 133 & 134, 22 - 806 - pp. 139-142, 23 - 811 - p. 145, 67-69 - 807-809 - pp. 324-332 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

801.1 *Advisory*
Scope

Facilities covered by these requirements are also subject to the requirements of the other sections and chapters.

For example, Chapter 22: Transient Lodging Guest Rooms - 806 - pp. 139-142 addresses guest rooms in transient lodging facilities while Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 contains the technical specifications for dining surfaces.

If a transient lodging facility contains a restaurant, the restaurant must comply with requirements in other chapters such as those applicable to certain dining surfaces.

802 **Wheelchair Spaces - Companion Seats - Designated Aisle Seats**
802.1 **Wheelchair Spaces**

Wheelchair spaces shall comply with 802.1 - (below & following page).

802.1.1 **Floor or Ground Surface**

The floor or ground surface of wheelchair spaces shall comply with Chapter 42: Floor or Ground Surfaces - 302 - pp. 227 & 228.

Changes in level are not permitted.

EXCEPTION:

Slopes not steeper than 1:48 shall be permitted.

802.1.2 **Width**

A single wheelchair space shall be 36 inches (914mm) wide minimum.

Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats (continued)

Where two adjacent wheelchair spaces are provided, each wheelchair space shall be 33 inches (838mm) wide minimum.

See Figure 802.1.2 - p. 561.

802.1.3 Depth

Where a wheelchair space can be entered from the front or rear, the wheelchair space shall be 48 inches (1219mm) deep minimum.

Where a wheelchair space can be entered only from the side, the wheelchair space shall be 60 inches (1524mm) deep minimum.

See Figure 802.1.3 - p. 561.

802.1.4 Approach

Wheelchair spaces shall adjoin accessible routes.

Accessible routes shall not overlap wheelchair spaces.

802.1.4 Advisory Approach

Because accessible routes serving wheelchair spaces are not permitted to overlap the clear floor space at wheelchair spaces, access to any wheelchair space cannot be through another wheelchair space.

802.1.5 Overlap

Wheelchair spaces shall not overlap circulation paths.

802.1.5 Advisory Overlap

The term "circulation paths" used in 802.1.5 - (above) means aisle width required by applicable building or life safety codes for the specific assembly occupancy.

Where the circulation path provided is wider than the required aisle width, the wheelchair space may intrude into that portion of the circulation path that is provided in excess of the required aisle width.

Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats (continued)

802.2 Lines of Sight

Lines of sight to the screen, performance area, or playing field for spectators in wheelchair spaces shall comply with 802.2 - (below & following page).

802.2.1 Lines of Sight Over Seated Spectators

Where spectators are expected to remain seated during events, spectators in wheelchair spaces shall be afforded lines of sight complying with 802.2.1 - (below).

802.2.1.1 Lines of Sight Over Heads

Where spectators are provided lines of sight over the heads of spectators seated in the first row in front of their seats, spectators seated in wheelchair spaces shall be afforded lines of sight over the heads of seated spectators in the first row in front of wheelchair spaces.

See Figure 802.2.1.1 - p. 562.

802.2.1.2 Lines of Sight Between Heads

Where spectators are provided lines of sight over the shoulders and between the heads of spectators seated in the first row in front of their seats, spectators seated in wheelchair spaces shall be afforded lines of sight over the shoulders and between the heads of seated spectators in the first row in front of wheelchair spaces.

See Figure 802.2.1.2 - p. 562.

802.2.2 Lines of Sight Over Standing Spectators

Where spectators are expected to stand during events, spectators in wheelchair spaces shall be afforded lines of sight complying with 802.2.2 - (below & following page).

802.2.2.1 Lines of Sight Over Heads

Where standing spectators are provided lines of sight over the heads of spectators standing in the first row in front of their seats, spectators seated in wheelchair spaces shall be afforded lines of sight over the heads of standing spectators in the first row in front of wheelchair spaces.

See Figure 802.2.2.1 - p. 563.

Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats (continued)

802.2.2.2

Lines of Sight Between Heads

Where standing spectators are provided lines of sight over the shoulders and between the heads of spectators standing in the first row in front of their seats, spectators seated in wheelchair spaces shall be afforded lines of sight over the shoulders and between the heads of standing spectators in the first row in front of wheelchair spaces.

See Figure 802.2.2.2 - p. 563.

802.3

Companion Seats

Companion seats shall comply with 802.3 - (below).

802.3.1

Alignment

In row seating, companion seats shall be located to provide shoulder alignment with adjacent wheelchair spaces.

The shoulder alignment point of the wheelchair space shall be measured 36 inches (914mm) from the front of the wheelchair space.

The floor surface of the companion seat shall be at the same elevation as the floor surface of the wheelchair space.

802.3.2

Type

Companion seats shall be equivalent in size, quality, comfort, and amenities to the seating in the immediate area.

Companion seats shall be permitted to be movable.

802.4

Designated Aisle Seats

Designated aisle seats shall comply with 802.4 - (below).

802.4.1

Armrests

Where armrests are provided on the seating in the immediate area, folding or retractable armrests shall be provided on the aisle side of the seat.

802.4.2

Identification

Each designated aisle seat shall be identified by a sign or marker.

Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats (continued)

802.4.2

*Advisory
Identification*

Seats with folding or retractable armrests are intended for use by individuals who have difficulty walking.

Consider identifying such seats with signs that contrast (light-on-dark or dark-on-light) and that are also photo luminescent.

Chapter 67:

HOLDING CELLS AND HOUSING CELLS

801 **General**
801.1 **Scope**

The provisions of this Chapter - 807, Chapters 10 - 804 - pp. 70-73, 16 - 810 - pp. 105-110, 20 - 803 - pp. 129 & 130, 21 - 805 - pp. 133 & 134, 22 - 806 - pp. 139-142, 66 - 802 - pp. 319-323, 68 - 808 - pp. 326 & 327, 69 - 809 - pp. 328-332 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

801.1 *Advisory*
Scope

Facilities covered by these requirements are also subject to the requirements of the other sections and chapters.

For example, Chapter 22: Transient Lodging Guest Rooms - 806 - pp. 139-142 addresses guest rooms in transient lodging facilities while Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 contains the technical specifications for dining surfaces.

If a transient lodging facility contains a restaurant, the restaurant must comply with requirements in other chapters such as those applicable to certain dining surfaces.

807 **Holding Cells and Housing Cells**
807.1 **General**

Holding cells and housing cells shall comply with this Chapter - 807.

807.2 **Cells with Mobility Features**

Cells required to provide mobility features shall comply with 807.2 - (below & following page).

807.2.1 **Turning Space**

Turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232 shall be provided within the cell.

807.2.2 **Benches**

Where benches are provided, at least one bench shall comply with Chapter 70: Benches - 903 - pp. 333 & 334.

Chapter 67: Holding Cells and Housing Cells (continued)

807.2.3

Beds

Where beds are provided, clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided on at least one side of the bed.

The clear floor space shall be positioned for parallel approach to the side of the bed.

807.2.4

Toilet and Bathing Facilities

Toilet facilities or bathing facilities that are provided as part of a cell shall comply with Chapter 58: Water Closets and Toilet Compartments - 603 - pp. 288 & 289.

Where provided, no fewer than one water closet, one lavatory, and one bathtub or shower shall comply with the applicable requirements of Chapters 57-64 - 603-610 - pp. 288-317.

Advisory

807.2.4

Toilet and Bathing Facilities

In holding cells, housing cells, or rooms required to be accessible, these requirements do not require a separate toilet room.

807.3

Cells with Communication Features

Cells required to provide communication features shall comply with 807.3 - (below).

807.3.1

Alarms

Where audible emergency alarm systems are provided to serve the occupants of cells, visible alarms complying with Chapter 13: Fire Alarm Systems - 702 - p. 81 shall be provided.

EXCEPTION:

Visible alarms shall not be required where inmates or detainees are not allowed independent means of egress.

807.3.2

Telephones

Telephones, where provided within cells, shall have volume controls complying with Chapter 15: Telephones - 704.3 - p. 102.

Chapter 68:

COURTROOMS

801 **General**
801.1 **Scope**

The provisions of this Chapter - 808, Chapters 10 - 804 - pp. 70-73, 16 - 810 - pp. 105-110, 20 - 803 - pp. 129 & 130, 21 - 805 - pp. 133 & 134, 22 - 806 - pp. 139-142, 66 - 802 - pp. 319-323, 67 - 807 - pp. 324 & 325, 69 - 809 - pp. 328-332 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

801.1 **Advisory**
Scope

Facilities covered by these requirements are also subject to the requirements of the other sections and chapters.

For example, Chapter 22: Transient Lodging Guest Rooms - 806 - pp. 139-142 addresses guest rooms in transient lodging facilities while Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 contains the technical specifications for dining surfaces.

If a transient lodging facility contains a restaurant, the restaurant must comply with requirements in other chapters such as those applicable to certain dining surfaces.

808 **Courtrooms**
808.1 **General**

Courtrooms shall comply with this Chapter - 808.

808.2 **Turning Space**

Where provided, areas that are raised or depressed and accessed by ramps or platform lifts with entry ramps shall provide unobstructed turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232.

808.3 **Clear Floor Space**

Each jury box and witness stand shall have, within its defined area, clear floor space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234.

EXCEPTION:

In alterations, wheelchair spaces are not required to be located within the defined area of raised jury boxes or witness stands and shall be permitted to be located outside these spaces where ramp or platform lift access poses a hazard by restricting or projecting into a means of egress required by the appropriate administrative authority.

808.4

Judge's Benches and Courtroom Stations

Judge's benches, clerk's stations, bailiff's stations, deputy clerk's stations, court reporter's stations and litigant's and counsel stations shall comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148.

Chapter 69:

RESIDENTIAL DWELLING UNITS

801 **General**
801.1 **Scope**

The provisions of this Chapter - 809, Chapters 10 - 804 - pp. 70-73, 16 - 810 - pp. 105-110, 20 - 803 - pp. 129 & 130, 21 - 805 - pp. 133 & 134, 22 - 806 - pp. 139-142, 66 - 802 - pp. 319-323, 67 - 807 - pp. 324 & 325, 68 - 808 - pp. 326 & 327 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

801.1 *Advisory*
Scope

Facilities covered by these requirements are also subject to the requirements of the other sections and chapters.

For example, Chapter 22: Transient Lodging Guest Rooms - 806 - pp. 139-142 addresses guest rooms in transient lodging facilities while Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 contains the technical specifications for dining surfaces.

If a transient lodging facility contains a restaurant, the restaurant must comply with requirements in other chapters such as those applicable to certain dining surfaces.

809 **Residential Dwelling Units**
809.1 **General**

Residential dwelling units shall comply with this Chapter - 809.

Residential dwelling units required to provide mobility features shall comply with 809.2-809.4 - (below & following pages).

Residential dwelling units required to provide communication features shall comply with this Chapter - 809.5 - pp. 330-332.

809.2 **Accessible Routes**

Accessible routes complying with Chapters 3 and 4 - pp. 35-49 shall be provided within residential dwelling units in accordance with 809.2 - (following page).

EXCEPTION:

Accessible routes shall not be required to or within unfinished attics or unfinished basements.

809.2.1 **Location**

At least one accessible route shall connect all spaces and elements which are a part of the residential dwelling unit.

Where only one accessible route is provided, it shall not pass through bathrooms, closets, or similar spaces.

809.2.2 **Turning Space**

All rooms served by an accessible route shall provide a turning space complying with Chapter 44: Turning Space - 304 - pp. 231 & 232.

EXCEPTION:

Turning space shall not be required in exterior spaces 30 inches (762mm) maximum in depth or width.

809.2.2 *Advisory*
Turning Space

It is generally acceptable to use required clearances to provide wheelchair turning space.

For example, in kitchens, Chapter 10: Kitchens - Kitchenettes - Sinks - 804.3.1 - p. 71 requires at least one work surface with clear floor space complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236 to be centered beneath.

If designers elect to provide clear floor space that is at least 36 inches (914mm) wide, as opposed to the required 30 inches (762mm) wide, that clearance can be part of a T-turn, thereby maximizing efficient use of the kitchen area.

However, the overlap of turning space must be limited to one segment of the T-turn so that back-up maneuvering is not restricted.

It would, therefore, be unacceptable to use both the clearances under the work surface and the sink as part of a T-turn.

See Chapter 44: Turning Space - 304.3.2 - p. 232 regarding T-turns.

809.3 **Kitchen**

Where a kitchen is provided, it shall comply with Chapter 10: Kitchens - Kitchenettes - Sinks - 804 - pp. 70-73.

Chapter 69: Residential Dwelling Units (continued)

809.4 Toilet Facilities and Bathing Facilities

At least one toilet facility and bathing facility shall comply with Chapters 57-64 - 603-610 - pp. 288-317.

At least one of each type of fixture provided shall comply with applicable requirements of Chapters 57-64 - 603-610 - pp. 288-317.

Toilet and bathing fixtures required to comply with Chapters 57-64 - 603-610 - pp. 288-317 shall be located in the same toilet and bathing area, such that travel between fixtures does not require travel between other parts of the residential dwelling unit.

Advisory

809.4 Toilet Facilities and Bathing Facilities

All toilet rooms and bathing rooms in accessible residential dwelling units must be accessible.

In addition, at least one of each type of fixture in accessible toilet rooms and bathing rooms must be accessible.

In an effort to promote space efficiency, vanity counter top space in accessible residential dwelling units is often omitted.

This omission does not promote equal access or equal enjoyment of the unit.

Where comparable units have vanity counter tops, accessible units should also have vanity counter tops located as close as possible to the lavatory for convenient access to toiletries.

809.5 Residential Dwelling Units with Communication Features

Residential dwelling units required to provide communication features shall comply with 809.5 - (below & following pages).

809.5.1 Building Fire Alarm System

Where a building fire alarm system is provided, the system wiring shall be extended to a point within the residential dwelling unit in the vicinity of the residential dwelling unit smoke detection system.

809.5.1.1 Alarm Appliances

Where alarm appliances are provided within a residential dwelling unit as part of the building fire alarm system, they shall comply with Chapter 13: Fire Alarm Systems - 702 - p. 81.

Chapter 69: Residential Dwelling Units (continued)

809.5.5.2

Identification

A means for visually identifying a visitor without opening the residential dwelling unit entry door shall be provided and shall allow for a minimum 180 degree range of view.

Advisory

809.5.5.2

Identification

In doors, peepholes that include prisms clarify the image and should offer a wide-angle view of the hallway or exterior for both standing persons and wheelchair users.

Such peepholes can be placed at a standard height and permit a view from several feet from the door.

809.5.6

Site, Building, or Floor Entrance

Where a system, including a closed-circuit system, permitting voice communication between a visitor and the occupant of the residential dwelling unit is provided, the system shall comply with Chapter 28: Two-Way Communication Systems - 708.4 - p. 154.

Chapter 70:

BENCHES

901 **General**
901.1 **Scope**

The provisions of this Chapter - 903, Chapters 24 - 902 - pp. 147 & 148, 71 - 904 - pp. 335-337 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

903 **Benches**
903.1 **General**

Benches shall comply with this Chapter - 903.

903.2 **Clear Floor or Ground Space**

Clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be provided and shall be positioned at the end of the bench seat and parallel to the short axis of the bench.

903.3 **Size**

Benches shall have seats that are 42 inches (1067mm) long minimum and 20 inches (508mm) deep minimum and 24 inches (610mm) deep maximum.

903.4 **Back Support**

The bench shall provide for back support or shall be affixed to a wall.

Back support shall be 42 inches (1067mm) long minimum and shall extend from a point 2 inches (51mm) maximum above the seat surface to a point 18 inches (457mm) minimum above the seat surface.

Back support shall be 2-1/2 inches (64mm) maximum from the rear edge of the seat measured horizontally.

See Figure 903.4 - p. 569.

903.4 *Advisory*
Back Support

To assist in transferring to the bench, consider providing grab bars on a wall adjacent to the bench, but not on the seat back.

Chapter 70: Benches (continued)

If provided, grab bars cannot obstruct transfer to the bench.

903.5 **Height**

The top of the bench seat surface shall be 17 inches (432mm) minimum and 19 inches (483mm) maximum above the finish floor or ground.

903.6 **Structural Strength**

Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure.

903.7 **Wet Locations**

Where installed in wet locations, the surface of the seat shall be slip resistant and shall not accumulate water.

Chapter 71:

CHECK-OUT AISLES AND SALES AND SERVICE COUNTERS

901 **General**
901.1 **Scope**

The provisions of this Chapter - 904, Chapters 24 - 902 - pp. 147 & 148, 70 - 903 - pp. 333 & 334 shall apply where required by Sections 7-9 - 201-203 - pp. 21-29, and Chapters 1-41 - 204-243 - pp. 30-226 or where referenced by a requirement in this document.

904 **Check-out Aisles and Sales and Service Counters**
904.1 **General**

Check-out aisles and sales and service counters shall comply with the applicable requirements of this Chapter - 904.

904.2 **Approach**

All portions of counters required to comply with Chapter - 904 shall be located adjacent to a walking surface complying with Chapter 48: Walking Surfaces - 403 - pp. 240 & 241.

904.2 *Advisory*
Approach

If a cash register is provided at the sales or service counter, locate the accessible counter close to the cash register so that a person using a wheelchair is visible to sales or service personnel and to minimize the reach for a person with a disability.

904.3 **Check-out Aisles**

Check-out aisles shall comply with 904.3 - (below).

904.3.1 **Aisle**

Aisles shall comply with Chapter 48: Walking Surfaces - 403 - pp. 240 & 241.

904.3.2 **Counter**

The counter surface height shall be 38 inches (965mm) maximum above the finish floor or ground.

The top of the counter edge protection shall be 2 inches (51mm) maximum above the top of the counter surface on the aisle side of the check-out counter.

Chapter 71: Check-out Aisles and Sales and Service Counters (continued)

See Figure 904.3.2 - p. 570.

904.3.3 Check Writing Surfaces

Where provided, check writing surfaces shall comply with 902.3 - (preceding page).

904.4 Sales and Service Counters

Sales counters and service counters shall comply with 904.4.1 or 904.4.2 - (below & following page).

The accessible portion of the counter top shall extend the same depth as the sales or service counter top.

EXCEPTION:

In alterations, when the provision of a counter complying with 904.4 - (above & below & following page) would result in a reduction of the number of existing counters at work stations or a reduction of the number of existing mail boxes, the counter shall be permitted to have a portion which is 24 inches (610mm) long minimum complying with 904.4.1 - (below) provided that the required clear floor or ground space is centered on the accessible length of the counter.

904.4.1 Parallel Approach

A portion of the counter surface that is 36 inches (914mm) long minimum and 36 inches (914mm) high maximum above the finish floor shall be provided.

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be positioned for a parallel approach adjacent to the 36 inch (914mm) minimum length of counter.

EXCEPTION:

Where the provided counter surface is less than 36 inches (914mm) long, the entire counter surface shall be 36 inches (914mm) high maximum above the finish floor.

904.4.2 Forward Approach

A portion of the counter surface that is 30 inches (762mm) long minimum and 36 inches (914mm) high maximum shall be provided.

Knee and toe space complying with Chapter 46: Knee and Toe Clearance - 306 - pp. 235 & 236 shall be provided under the counter.

Chapter 71: Check-out Aisles and Sales and Service Counters (continued)

A clear floor or ground space complying with Chapter 45: Clear Floor or Ground Space - 305 - pp. 233 & 234 shall be positioned for a forward approach to the counter.

See Figure 904.4 - p. 571.

904.5 **Food Service Lines**

Counters in food service lines shall comply with 904.5 - (below).

904.5.1 **Self-Service Shelves and Dispensing Devices**

Self-service shelves and dispensing devices for tableware, dishware, condiments, food and beverages shall comply with Chapter 47: Reach Ranges - 308 - pp. 237-239.

904.5.2 **Tray Slides**

The tops of tray slides shall be 28 inches (711mm) minimum and 34 inches (864mm) maximum above the finish floor or ground.

904.6 **Security Glazing**

Where counters or teller windows have security glazing to separate personnel from the public, a method to facilitate voice communication shall be provided.

Telephone handset devices, if provided, shall comply with Chapter 15: Telephones - 704.3 - p. 102.

904.6 *Advisory Security Glazing*

Assistive listening devices complying with Chapter 17: Assistive Listening Systems - 706 - pp. 112-114 can facilitate voice communication at counters or teller windows where there is security glazing which promotes distortion in audible information.

Where assistive listening devices are installed, place signs complying with Chapter 14: Signs - 703.7.2.4 - p. 96 to identify those facilities which are so equipped.

Other voice communication methods include, but are not limited to, grilles, slats, talk-through baffles, intercoms, or telephone handset devices.

Complete Text ADA / ABA (*Published in the Federal Register on July 23, 2004*)

PART II

ABA APPLICATION AND SCOPING

ABA CHAPTER 1: APPLICATION AND ADMINISTRATION

F101 Purpose

F102 Dimensions for Adults and Children

F103 Modifications and Waivers

F104 Conventions

F105 Referenced Standards

F106 Definitions

F101 Purpose

This document contains scoping and technical requirements for accessibility to sites, facilities, buildings, and elements by individuals with disabilities. The requirements are to be applied during the design, construction, addition to, alteration, and lease of sites, facilities, buildings, and elements to the extent required by regulations issued by Federal agencies under the Architectural Barriers Act of 1968 (ABA).

F102 Dimensions for Adults and Children

The technical requirements are based on adult dimensions and anthropometrics. In addition, this document includes technical requirements based on children's dimensions and anthropometrics for drinking fountains, water closets, toilet compartments, lavatories and sinks, dining surfaces, and work surfaces.

F103 Modifications and Waivers

The Architectural Barriers Act authorizes the Administrator of the General Services Administration, the Secretary of the Department of Housing and Urban Development, the Secretary of the Department of Defense, and the United States Postal Service to modify or waive the accessibility standards for buildings and facilities covered by the Architectural Barriers Act on a case-by-case basis, upon application made by the head of the department, agency, or instrumentality of the United States concerned. The General Services Administration, the Department of Housing and Urban Development, the Department of Defense, and the United States Postal Service may grant a modification or waiver only upon a determination that it is clearly necessary. Section 502(b)(1) of the Rehabilitation Act of 1973 authorizes the Access Board to ensure that modifications and waivers are based on findings of fact and are not inconsistent with the Architectural Barriers Act.

ADVISORY F103 Modifications and Waivers. The provisions for modifications and waivers differ from the requirement issued under the Americans with Disabilities Act in that "equivalent facilitation" does not apply. There is a formal procedure for Federal agencies to request a waiver or modification of applicable standards under the Architectural Barriers Act.

F104 Conventions

F104.1 Dimensions. Dimensions that are not stated as "maximum" or "minimum" are absolute.

F104.1.1 Construction and Manufacturing Tolerances. All dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points.

ADVISORY F104.1.1 Construction and Manufacturing Tolerances. Conventional industry tolerances recognized by this provision include those for field conditions and those that may be a necessary consequence of a particular manufacturing process. Recognized tolerances are not intended to apply to design work.

It is good practice when specifying dimensions to avoid specifying a tolerance where dimensions are absolute. For example, if this document requires "1 inches," avoid specifying "1 inches plus or minus X inches."

Where the requirement states a specified range, such as in Section 609.4 where grab bars must be installed between 33 inches and 36 inches above the floor, the range provides an adequate tolerance and therefore no tolerance outside of the range at either end point is permitted.

Where a requirement is a minimum or a maximum dimension that does not have two specific minimum and maximum end points, tolerances may apply. Where an element is to be installed at the minimum or maximum permitted dimension, such as "15 inches minimum" or "5 pounds maximum", it would not be good practice to specify "5 pounds (plus X pounds) or 15 inches (minus X inches)." Rather, it would be good practice to specify a dimension less than the required maximum (or more than the required minimum) by the amount of the expected field or manufacturing tolerance and not to state any tolerance in conjunction with the specified dimension.

Specifying dimensions in design in the manner described above will better ensure that facilities and elements accomplish the level of accessibility intended by these requirements. It will also more often produce an end result of strict and literal compliance with the stated requirements and eliminate enforcement difficulties and issues that might otherwise arise. Information on specific tolerances may be available from industry or trade organizations, code groups and building officials, and published references.

F104.2 Calculation of Percentages. Where the required number of elements or facilities to be provided is determined by calculations of ratios or percentages and remainders or fractions result, the next greater whole number of such elements or

facilities shall be provided. Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one half shall be permitted.

F104.3 Figures. Unless specifically stated otherwise, figures are provided for informational purposes only.

● **Figure F104 Graphic Convention for Figures**

F105 Referenced Standards

F105.1 General. The standards listed in F105.2 are incorporated by reference in this document and are part of the requirements to the prescribed extent of each such reference. The Director of the Federal Register has approved these standards for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the referenced standards may be inspected at the Architectural and Transportation Barriers Compliance Board, 1331 F Street, NW, Suite 1000, Washington, DC 20004; at the Department of Justice, Civil Rights Division, Disability Rights Section, 1425 New York Avenue, NW, Washington, DC; at the Department of Transportation, 400 Seventh Street, SW, Room 10424, Washington DC; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

F105.2 Referenced Standards. The specific edition of the standards listed below are referenced in this document. Where differences occur between this document and the referenced standards, this document applies.

F105.2.1 ANSI/BHMA. Copies of the referenced standards may be obtained from the Builders Hardware Manufacturers Association, 355 Lexington Avenue, 17th floor, New York, NY 10017 (<http://www.buildershardware.com>).

ANSI/BHMA A156.10-1999 American National Standard for Power Operated Pedestrian Doors (see 404.3).

ANSI/BHMA A156.19-1997 American National Standard for Power Assist and Low Energy Power Operated Doors (see 404.3, 408.3.2.1, and 409.3.1).

ANSI/BHMA A156.19-2002 American National Standard for Power Assist and Low Energy Power Operated Doors (see 404.3, 408.3.2.1, and 409.3.1).

ADVISORY F105.2.1 ANSI/BHMA. ANSI/BHMA A156.10-1999 applies to power operated doors for pedestrian use which open automatically when approached by pedestrians. Included are provisions intended to reduce the chance of user injury or entrapment.

ANSI/BHMA A156.19-1997 and A156.19-2002 applies to power assist doors, low energy power operated doors or low energy power open doors for pedestrian use not provided for in ANSI/BHMA A156.10 for Power Operated Pedestrian Doors. Included are provisions intended to reduce the chance of user injury or entrapment.

F105.2.2 ASME. Copies of the referenced standards may be obtained from the American Society of Mechanical Engineers, Three Park Avenue, New York, New York 10016 (<http://www.asme.org>).

ASME A17.1- 2000 Safety Code for Elevators and Escalators, including ASME A17.1a-2002 Addenda and ASME A17.1b-2003 Addenda (see 407.1, 408.1, 409.1, and 810.9).

ASME A18.1-1999 Safety Standard for Platform Lifts and Stairway Chairlifts, including ASME A18.1a-2001 Addenda and ASME A18.1b-2001 Addenda (see 410.1).

ASME A18.1-2003 Safety Standard for Platform Lifts and Stairway Chairlifts, (see 410.1).

ADVISORY F105.2.2 ASME. ASME A17.1-2000 is used by local jurisdictions throughout the United States for the design, construction, installation, operation, inspection, testing, maintenance, alteration, and repair of elevators and escalators. The majority of the requirements apply to the operational machinery not seen or used by elevator passengers. ASME A17.1 requires a two-way means of emergency communications in passenger elevators. This means of communication must connect with emergency or authorized personnel and not an automated answering system. The communication system must be push button activated. The activation button must be permanently identified with the word "HELP." A visual indication acknowledging the establishment of a communications link to authorized personnel must be provided. The visual indication must remain on until the call is terminated by authorized personnel. The building location, the elevator car number, and the need for assistance must be provided to authorized personnel answering the emergency call. The use of a handset by the communications system is prohibited. Only the authorized personnel answering the call can terminate the call. Operating instructions for the communications system must be provided in the elevator car.

The provisions for escalators require that at least two flat steps be provided at the entrance and exit of every escalator and that steps on escalators be demarcated by yellow lines 2 inches wide maximum along the back and sides of steps.

ASME A18.1-1999 and ASME A18.1-2003 address the design, construction, installation, operation, inspection, testing, maintenance and repair of lifts that are intended for transportation of persons with disabilities. Lifts are classified as: vertical platform lifts, inclined platform lifts, inclined stairway chairlifts, private residence vertical platform lifts, private residence inclined platform lifts, and private residence inclined stairway chairlifts.

This document does not permit the use of inclined stairway chairlifts which do not provide platforms because such lifts require the user to transfer to a seat.

ASME A18.1 contains requirements for runways, which are the spaces in which platforms or seats move. The standard includes additional provisions for runway enclosures, electrical equipment and wiring, structural support, headroom clearance (which is 80 inches minimum), lower level access ramps and pits. The enclosure walls not used for entry or exit are required to have a grab bar the full length of the wall on platform lifts. Access ramps are required to meet requirements similar to those for ramps in Chapter 4 of this document.

Each of the lift types addressed in ASME A18.1 must meet requirements for capacity, load, speed, travel, operating devices, and control equipment. The maximum permitted height for operable parts is consistent with Section 308 of this document. The standard also addresses attendant operation. However, Section 410.1 of this document does not permit attendant operation.

F105.2.3 ASTM. Copies of the referenced standards may be obtained from the American Society for Testing and Materials, 100 Bar Harbor Drive, West Conshohocken, Pennsylvania 19428 (<http://www.astm.org>).

ASTM F 1292-99 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment (see 1008.2.6.2).

ASTM F 1292-04 Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment (see 1008.2.6.2).

ASTM F 1487-01 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use (see F106.5).

ASTM F 1951-99 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment (see 1008.2.6.1).

ADVISORY F105.2.3 ASTM. ASTM F 1292-99 and ASTM F 1292-04 establish a uniform means to measure and compare characteristics of surfacing materials to determine whether materials provide a safe surface under and around playground equipment. These standards are referenced in the play areas requirements of this document when an accessible surface is required inside a play area use zone where a fall attenuating surface is also required. The standards cover the minimum impact attenuation requirements, when tested in accordance with Test Method F 355, for surface systems to be used under and around any piece of playground equipment from which a person may fall.

ASTM F 1487-01 establishes a nationally recognized safety standard for public playground equipment to address injuries identified by the U.S. Consumer Product Safety Commission. It defines the use zone, which is the ground area beneath and immediately adjacent to a play structure or play equipment designed for unrestricted circulation around the equipment and on whose surface it is predicted that a user would land when falling from or exiting a play structure or equipment. The play areas requirements in this document reference the ASTM F 1487 standard when defining accessible routes that overlap use zones requiring fall attenuating surfaces. If the use zone of a playground is not entirely surfaced with an accessible material, at least one accessible route within the use zone must be provided from the perimeter to all accessible play structures or components within the playground.

ASTM F 1951-99 establishes a uniform means to measure the characteristics of surface systems in order to provide performance specifications to select materials for use as an accessible surface under and around playground equipment. Surface materials that comply with this standard and are located in the use zone must also comply with ASTM F 1292. The test methods in this standard address access for children and adults who may traverse the surfacing to aid children who are playing. When a surface is tested it must have an average work per foot value for straight propulsion and for turning less than the average work per foot values for straight propulsion and for turning, respectively, on a hard, smooth surface with a grade of 7% (1:14).

F105.2.4 ICC/IBC. Copies of the referenced standard may be obtained from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041 (www.iccsafe.org).

International Building Code, 2000 Edition (see F207.1, F207.2, F216.4.2, F216.4.3, and 1005.2.1).

International Building Code, 2001 Supplement (see F207.1 and F207.2).

International Building Code, 2003 Edition (see F207.1, F207.2, F216.4.2, F216.4.3, and 1005.2.1).

ADVISORY F105.2.4 ICC/IBC. International Building Code (IBC)-2000 (including 2001 Supplement to the International Codes) and IBC-2003 are referenced for means of egress, areas of refuge, and railings provided on fishing piers and platforms. At least one accessible means of egress is required for every accessible space and at least two accessible means of egress are required where more than one means of egress is required. The technical criteria for accessible means of egress allow the use of exit stairways and evacuation elevators when provided in conjunction with horizontal exits or areas of refuge. While typical elevators are not designed to be used during an emergency evacuation, evacuation elevators are designed with standby power and other features according to the elevator safety standard and can be used for the evacuation of individuals with disabilities. The IBC also provides requirements for areas of refuge, which are fire-rated spaces on levels above or below the exit discharge levels where people unable to use stairs can go to register a call for assistance and wait for evacuation.

The recreation facilities requirements of this document references two sections in the IBC for fishing piers and platforms. An exception addresses the height of the railings, guards, or handrails where a fishing pier or platform is required to include a guard, railing, or handrail higher than 34 inches (865 mm) above the ground or deck surface.

F105.2.5 NFPA. Copies of the referenced standards may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, (<http://www.nfpa.org>).

NFPA 72 National Fire Alarm Code, 1999 Edition (see 702.1 and 809.5.2).

NFPA 72 National Fire Alarm Code, 2002 Edition (see 702.1 and 809.5.2).

ADVISORY F105.2.5 NFPA. NFPA 72-1999 and NFPA 72-2002 address the application, installation, performance, and maintenance of protective signaling systems and their components. The NFPA 72 incorporates Underwriters Laboratory (UL) 1971 by reference. The standard specifies the characteristics of audible alarms, such as placement and sound levels. However, Section 702 of these requirements limits the volume of an audible alarm to 110 dBA, rather than the maximum 120 dBA permitted by NFPA 72-1999.

NFPA 72 specifies characteristics for visible alarms, such as flash frequency, color, intensity, placement, and synchronization. However, Section 702 of this document requires that visual alarm appliances be permanently installed. UL 1971 specifies intensity dispersion requirements for visible alarms. In particular, NFPA 72 requires visible alarms to have a light source that is clear or white and has polar dispersion complying with UL 1971.

F106 Definitions

F106.1 General. For the purpose of this document, the terms defined in F106.5 have the indicated meaning.

ADVISORY F106.1 General. Terms defined in Section 106.5 are italicized in the text of this document.

F106.2 Terms Defined in Referenced Standard. Terms not defined in F106.5 or in regulations issued by the Administrator of the General Services Administration, the Secretary of Defense, the Secretary of Housing and Urban Development, or the United States Postal Service to implement the Architectural Barriers Act but specifically defined in a referenced standard, shall have the specified meaning from the referenced standard unless otherwise stated

F106.3 Undefined Terms. The meaning of terms not specifically defined in F106.5 or in regulations issued by the Administrator of the General Services Administration, the Secretary of Defense, the Secretary of Housing and Urban Development, or the United States Postal Service to implement the Architectural Barriers Act or in referenced standards shall be as defined by collegiate dictionaries in the sense that the context implies.

F106.4 Interchangeability. Words, terms and phrases used in the singular include the plural and those used in the plural include the singular.

F106.5 Defined Terms.

Accessible. A site, building, facility, or portion thereof that complies with this part.

Accessible Means of Egress. A continuous and unobstructed way of egress travel from any point in a building or facility that provides an accessible route to an area of refuge, a horizontal exit, or a public way.

Addition. An expansion, extension, or increase in the gross floor area or height of a building or facility.

Administrative Authority. A governmental agency that adopts or enforces regulations and guidelines for the design, construction, or alteration of buildings and facilities.

Alteration. A change to a building or facility that affects or could affect the usability of the building or facility or portion thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.

Amusement Attraction. Any facility, or portion of a facility, located within an amusement park or theme park which provides amusement without the use of an amusement device. Amusement attractions include, but are not limited to, fun houses, barrels, and other attractions without seats.

Amusement Ride. A system that moves persons through a fixed course within a defined area for the purpose of amusement.

Amusement Ride Seat. A seat that is built-in or mechanically fastened to an amusement ride intended to be occupied by one or more passengers.

Area of Sport Activity. That portion of a room or space where the play or practice of a sport occurs.

Assembly Area. A building or facility, or portion thereof, used for the purpose of entertainment, worship, educational or civic gatherings, or similar purposes. For the purposes of these requirements, assembly areas include, but are not limited to, classrooms, lecture halls, courtrooms, public meeting rooms, public hearing rooms, legislative chambers, motion picture houses,

auditoria, theaters, playhouses, dinner theaters, concert halls, centers for the performing arts, amphitheaters, arenas, stadiums, grandstands, or convention centers.

Assistive Listening System (ALS). An amplification system utilizing transmitters, receivers, and coupling devices to bypass the acoustical space between a sound source and a listener by means of induction loop, radio frequency, infrared, or direct-wired equipment.

Boarding Pier. A portion of a pier where a boat is temporarily secured for the purpose of embarking or disembarking.

Boat Launch Ramp. A sloped surface designed for launching and retrieving trailered boats and other water craft to and from a body of water.

Boat Slip. That portion of a pier, main pier, finger pier, or float where a boat is moored for the purpose of berthing, embarking, or disembarking.

Building. Any structure used or intended for supporting or sheltering any use or occupancy.

Catch Pool. A pool or designated section of a pool used as a terminus for water slide flumes.

Characters. Letters, numbers, punctuation marks and typographic symbols.

Children's Use. Describes spaces and elements specifically designed for use primarily by people 12 years old and younger.

Circulation Path. An exterior or interior way of passage provided for pedestrian travel, including but not limited to, walks, hallways, courtyards, elevators, platform lifts, ramps, stairways, and landings.

Closed-Circuit Telephone. A telephone with a dedicated line such as a house phone, courtesy phone or phone that must be used to gain entry to a facility.

Common Use. Interior or exterior circulation paths, rooms, spaces, or elements that are not for public use and are made available for the shared use of two or more people.

Cross Slope. The slope that is perpendicular to the direction of travel (see running slope).

Curb Ramp. A short ramp cutting through a curb or built up to it.

Detectable Warning. A standardized surface feature built in or applied to walking surfaces or other elements to warn of hazards on a circulation path.

Element. An architectural or mechanical component of a building, facility, space, or site.

Elevated Play Component. A play component that is approached above or below grade and that is part of a composite play structure consisting of two or more play components attached or functionally linked to create an integrated unit providing more than one play activity.

Employee Work Area. All or any portion of a space used only by employees and used only for work. Corridors, toilet rooms, kitchenettes and break rooms are not employee work areas.

Entrance. Any access point to a building or portion of a building or facility used for the purpose of entering. An entrance includes the approach walk, the vertical access leading to the entrance platform, the entrance platform itself, vestibule if provided, the entry door or gate, and the hardware of the entry door or gate.

Facility. All or any portion of buildings, structures, site improvements, elements, and pedestrian routes or vehicular ways located on a site.

Gangway. A variable-sloped pedestrian walkway that links a fixed structure or land with a floating structure. Gangways that connect to vessels are not addressed by this document.

Golf Car Passage. A continuous passage on which a motorized golf car can operate.

Ground Level Play Component. A play component that is approached and exited at the ground level.

Joint Use. Interior or exterior rooms, spaces, or elements that are common space available for use by all occupants of the building. Joint use does not include mechanical or custodial rooms, or areas occupied by other tenants.

Lease. Any agreement which establishes the relationship of landlord and tenant.

Mail Boxes. Receptacles for the receipt of documents, packages, or other deliverable matter. Mail boxes include, but are not limited to, post office boxes and receptacles provided by commercial mail-receiving agencies, apartment facilities, or schools.

Marked Crossing. A crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

Mezzanine. An intermediate level or levels between the floor and ceiling of any story with an aggregate floor area of not more than one-third of the area of the room or space in which the level or levels are located. Mezzanines have sufficient elevation that space for human occupancy can be provided on the floor below.

Military Installation. A base, camp, post, station, yard, center, homeport facility for any ship, or other activity or operation under the jurisdiction of the Department of Defense, including any leased facility. Military installation does not include any facility used primarily for civil works, rivers and harbors projects, or flood control projects. Multiple, contiguous, or collocated bases, camps, posts, stations, yards, centers, or home ports shall not be considered as constituting a single military installation.

- Occupant Load.** The number of persons for which the means of egress of a building or portion of a building is designed.
- Operable Part.** A component of an element used to insert or withdraw objects, or to activate, deactivate, or adjust the element.
- Pictogram.** A pictorial symbol that represents activities, facilities, or concepts.
- Play Area.** A portion of a site containing play components designed and constructed for children.
- Play Component.** An element intended to generate specific opportunities for play, socialization, or learning. Play components are manufactured or natural; and are stand-alone or part of a composite play structure.
- Public Entrance.** An entrance that is not a service entrance or a restricted entrance.
- Public Use.** Interior or exterior rooms, spaces, or elements that are made available to the public. Public use may be provided at a building or facility that is privately or publicly owned.
- Public Way.** Any street, alley or other parcel of land open to the outside air leading to a public street, which has been deeded, dedicated or otherwise permanently appropriated to the public for public use, and which has a clear width and height of not less than 10 feet (3050 mm).
- Qualified Historic Building or Facility.** A building or facility that is listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate State or local law.
- Ramp.** A walking surface that has a running slope steeper than 1:20.
- Residential Dwelling Unit.** A unit intended to be used as a residence, that is primarily long-term in nature. Residential dwelling units do not include transient lodging, inpatient medical care, licensed long-term care, and detention or correctional facilities.
- Restricted Entrance.** An entrance that is made available for common use on a controlled basis but not public use and that is not a service entrance.
- Running Slope.** The slope that is parallel to the direction of travel (see cross slope).
- Self-Service Storage.** Building or facility designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.
- Service Entrance.** An entrance intended primarily for delivery of goods or services.
- Site.** A parcel of land bounded by a property line or a designated portion of a public right-of-way.
- Soft Contained Play Structure.** A play structure made up of one or more play components where the user enters a fully enclosed play environment that utilizes pliable materials, such as plastic, netting, or fabric.
- Space.** A definable area, such as a room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.
- Story.** That portion of a building or facility designed for human occupancy included between the upper surface of a floor and upper surface of the floor or roof next above. A story containing one or more mezzanines has more than one floor level.
- Structural Frame.** The columns and the girders, beams, and trusses having direct connections to the columns and all other members that are essential to the stability of the building or facility as a whole.
- Tactile.** An object that can be perceived using the sense of touch.
- Technically Infeasible.** With respect to an alteration of a building or a facility, something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.
- Teeing Ground.** In golf, the starting place for the hole to be played.
- Transfer Device.** Equipment designed to facilitate the transfer of a person from a wheelchair or other mobility aid to and from an amusement ride seat.
- Transient Lodging.** A building or facility containing one or more guest room(s) for sleeping that provides accommodations that are primarily short-term in nature. Transient lodging does not include residential dwelling units intended to be used as a residence, inpatient medical care facilities, licensed long-term care facilities, detention or correctional facilities, or private buildings or facilities that contain not more than five rooms for rent or hire and that are actually occupied by the proprietor as the residence of such proprietor.
- Transition Plate.** A sloping pedestrian walking surface located at the end(s) of a gangway.
- TTY.** An abbreviation for teletypewriter. Machinery that employs interactive text-based communication through the transmission of coded signals across the telephone network. TTYs may include, for example, devices known as TDDs (telecommunication display devices or telecommunication devices for deaf persons) or computers with special modems. TTYs are also called text telephones.
- Use Zone.** The ground level area beneath and immediately adjacent to a play structure or play equipment that is designated by ASTM F 1487 (incorporated by reference, see "Referenced Standards" in Chapter 1) for unrestricted circulation around the play equipment and where it is predicted that a user would land when falling from or exiting the play equipment.

Vehicular Way. A route provided for vehicular traffic, such as in a street, driveway, or parking facility.

Walk. An exterior prepared surface for pedestrian use, including pedestrian areas such as plazas and courts.

Wheelchair Space. Space for a single wheelchair and its occupant.

Work Area Equipment. Any machine, instrument, engine, motor, pump, conveyor, or other apparatus used to perform work. As used in this document, this term shall apply only to equipment that is permanently installed or built-in in employee work areas subject to the Americans with Disabilities Act of 1990 (ADA). Work area equipment does not include passenger elevators and other accessible means of vertical transportation.

ABA CHAPTER 2: SCOPING REQUIREMENTS

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F201 Application

F201.1 Scope. All areas of newly designed and newly constructed buildings and facilities and altered or leased portions of existing buildings and facilities shall comply with these requirements.

ADVISORY F201.1 Scope. The requirements are to be applied to all areas of a facility unless exempted, or where scoping limits the number of multiple elements required to be accessible. For example, not all medical care patient rooms are required to be accessible; those that are not required to be accessible are not required to comply with these requirements. However, common use and public use spaces such as recovery rooms, examination rooms, and cafeterias are not exempt from these requirements and must be accessible.

F201.2 Application Based on Building or Facility Use. Where a site, building, facility, room, or space contains more than one use, each portion shall comply with the applicable requirements for that use.

F201.3 Temporary and Permanent Structures. These requirements shall apply to temporary and permanent buildings and facilities.

ADVISORY F201.3 Temporary and Permanent Structures. Temporary buildings or facilities covered by these requirements include, but are not limited to, reviewing stands, temporary classrooms, bleacher areas, stages, platforms and daises, fixed furniture systems, wall systems, and exhibit areas, temporary banking facilities, and temporary health screening facilities. Structures and equipment directly associated with the actual processes of construction are not required to be accessible as permitted in F203.3.

F202 Existing Buildings and Facilities

F202.1 General. Additions and alterations to existing buildings or facilities, including leased buildings or facilities, shall comply with F202.

F202.2 Additions. Each addition to an existing building or facility shall comply with the requirements for new construction.

F202.2.1 Accessible Route. At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to an accessible entrance serving the addition. If the only accessible entrances serving the addition are provided in the existing building or facility, the accessible route shall connect at least one existing entrance to all accessible spaces and elements within the addition. In addition, elements and spaces specified in F202.2.2 through F202.2.5 shall be on an accessible route.

F202.2.2 Entrance. Where an entrance is not provided in an addition, at least one entrance in the existing building or facility shall comply with F206.4 and shall serve the addition.

F202.2.3 Toilet and Bathing Facilities. Where toilet facilities and bathing facilities are not provided in an addition but are provided in the existing building or facility to serve the addition, the toilet facilities and bathing facilities shall comply with F202.2.3.

EXCEPTION: In alterations to areas serving additions where it is technically infeasible to comply with 603, altering existing toilet or bathing rooms is not required where a single unisex toilet room or bathing room complying with F213.2.1 is provided to serve the addition.

F202.2.3.1 Existing Toilet Facility. Where existing toilet facilities are provided in the existing building or facility, at least one toilet facility for men and at least one toilet facility for women shall comply with F213.2 and F213.3 and shall serve the addition.

EXCEPTION: Where only one toilet facility is provided in the existing building or facility, one toilet facility shall comply with F213.2 and F213.3 and shall serve the addition.

F202.2.3.2 Existing Bathing Facility. Where existing bathing facilities are provided in the existing building or facility, at least one bathing facility for men and at least one bathing facility for women shall comply with F213.2 and F213.3 and shall serve the addition.

EXCEPTION: Where only one bathing facility is provided in the existing building or facility, one bathing facility shall comply with F213.2 and F213.3 and shall serve the addition.

F202.2.4 Public Telephone. Where a public telephone is not provided in an addition but is provided in the existing building or facility to serve the addition, at least one public telephone in the existing building or facility shall comply with F217.

F202.2.5 Drinking Fountain. Where a drinking fountain is not provided in an addition but is provided in the existing building or facility to serve the addition, at least one drinking fountain in the existing building or facility shall comply with 602.1 through 602.6.

F202.3 Alterations. Where existing elements or spaces are altered, each altered element or space shall comply with the applicable requirements of Chapter 2.

EXCEPTIONS: 1. Unless required by F202.4, where elements or spaces are altered and the circulation path to the altered element or space is not altered, an accessible route shall not be required.

2. In alterations, where compliance with applicable requirements is technically infeasible, the alteration shall comply with the requirements to the maximum extent feasible.

3. Residential dwelling units not required to be accessible in compliance with a standard issued pursuant to the Architectural Barriers Act or Section 504 of the Rehabilitation Act of 1973, as amended, shall not be required to comply with F202.3.

ADVISORY F202.3 Alterations. Although covered entities are permitted to limit the scope of an alteration to individual elements, the alteration of multiple elements within a room or space may provide a cost-effective opportunity to make the entire room or space accessible. Any elements or spaces of the building or facility that are required to comply with these requirements must be made accessible within the scope of the alteration, to the maximum extent feasible. If providing accessibility in compliance with these requirements for people with one type of disability (e.g., people who use wheelchairs) is not feasible, accessibility must still be provided in compliance with the requirements for people with other types of disabilities (e.g., people who have hearing impairments or who have vision impairments) to the extent that such accessibility is feasible.

F202.3.1 Prohibited Reduction in Access. An alteration that decreases or has the effect of decreasing the accessibility of a building or facility below the requirements for new construction at the time of the alteration is prohibited.

F202.3.2 Extent of Application. An alteration of an existing element, space, or area of a building or facility shall not impose a requirement for accessibility greater than required for new construction.

F202.4 Alterations Affecting Primary Function Areas. In addition to the requirements of F202.3, an alteration that affects or could affect the usability of or access to an area containing a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area, including the rest rooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, unless such alterations are disproportionate to the overall alterations in terms of cost and scope as determined under criteria established by the Administrator of the General Services Administration, the Secretary of Defense, the Secretary of Housing and Urban Development, or the United States Postal Service.

EXCEPTION: Residential dwelling units shall not be required to comply with F202.4.

ADVISORY F202.4 Alterations Affecting Primary Function Areas. An area of a building or facility containing a major activity for which the building or facility is intended is a primary function area. There can be multiple areas containing a primary function in a single building. Primary function areas are not limited to public use areas. For example, both a bank lobby and the bank's employee areas such as the teller areas and walk-in safe are primary function areas. Also, mixed use facilities may include numerous primary function areas for each use. Areas containing a primary function do not include: mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors, or restrooms.

F202.5 Alterations to Qualified Historic Buildings and Facilities. Alterations to a qualified historic building or facility shall comply with F202.3 and F202.4.

EXCEPTION: Where the State Historic Preservation Officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the exceptions for alterations to qualified historic buildings or facilities for that element shall be permitted to apply.

ADVISORY F202.5 Alterations to Qualified Historic Buildings and Facilities Exception. Section 106 of the National Historic Preservation Act requires that a Federal agency with jurisdiction over a proposed Federal or federally assisted undertaking consider the effect of the action on buildings and facilities listed in or eligible for listing in the National Register of Historic Places prior to approving the expenditure of any Federal funds. The Advisory Council on Historic Preservation has established procedures for Federal agencies to meet this statutory responsibility. See 36 CFR Part 800. The procedures require Federal agencies to consult with the State Historic Preservation Officer, and provide for involvement by the Advisory Council on Historic Preservation in certain cases. There are exceptions for alterations to qualified historic buildings and facilities for accessible routes (F206.2.1 Exception 1 and F206.2.3 Exception 6); entrances (F206.4 Exception 2); and toilet facilities (F213.2 Exception 2). These exceptions apply only when the State Historic Preservation Officer or the Advisory Council on Historic Preservation agrees that compliance with requirements for the specific element would threaten or destroy the historic significance of the building or facility.

The AccessAbility Office at the National Endowment for the Arts (NEA) provides a variety of resources for museum operators and historic properties including: the Design for Accessibility Guide and the Disability Symbols. Contact NEA about these and other resources at (202) 682-5532 or www.arts.gov.

F202.6 Leases. Buildings or facilities for which new leases are negotiated by the Federal government after the effective date of the revised standards issued pursuant to the Architectural Barriers Act, including new leases for buildings or facilities previously occupied by the Federal government, shall comply with F202.6.

EXCEPTIONS: 1. Buildings or facilities leased for use by officials servicing disasters on a temporary, emergency basis shall not be required to comply with F202.6.

2. Buildings or facilities leased for 12 months or less shall not be required to comply with F202.6 provided that the lease may not be extended or renewed.

F202.6.1 Joint Use Areas. Joint use areas serving the leased space shall comply with F202.6.

EXCEPTION: Alterations and additions to joint use areas serving the leased space shall not be required to comply with F202.2, F202.3, and F202.5 provided that the alterations are not undertaken by or on behalf of the Federal government.

ADVISORY F202.6.1 Joint Use Areas Exception. When negotiating a lease, ensure that joint use areas are accessible. Inaccessible joint use areas may prevent access to and from leased space.

F202.6.2 Accessible Route. Primary function areas, as defined by Administrator of the General Services Administration, the Secretary of Defense, the Secretary of Housing and Urban Development, and the United States Postal Service, shall be served by at least one accessible route complying with F206. Elements and spaces required to be accessible by F202.6 shall be on an accessible route complying with F206.

EXCEPTION: Fire alarms required by F202.6.5.2 and assistive listening systems required by F202.6.5.5 shall not be required to be on an accessible route.

F202.6.3 Toilet and Bathing Facilities. Where provided, toilet facilities and bathing facilities shall comply with F202.6.3.

F202.6.3.1 Multiple Facilities. At least one toilet facility or bathing facility for each sex on each floor that has toilet facilities or bathing facilities shall comply with F213.2 and F213.3.

F202.6.3.2 Single Facilities. Where only one toilet or bathing facility is provided in a building or facility for each sex, either one unisex toilet or bathing facility, or one toilet or bathing facility for each sex, shall comply with F213.2 and F213.3.

F202.6.4 Parking. Parking shall comply with F208.

F202.6.5 Other Elements and Spaces. Where provided, the following elements and spaces shall comply with F202.6.5.

F202.6.5.1 Drinking Fountains. Drinking fountains shall comply with F211.

F202.6.5.2 Fire Alarms. Fire alarms shall comply with F215.

EXCEPTION: Fire alarms shall not be required to comply with 702 where existing power sources must be upgraded to meet the requirement.

F202.6.5.3 Public Telephones. Public telephones shall comply with F217.

F202.6.5.4 Dining Surfaces and Work Surfaces. Dining surfaces and work surfaces shall comply with F226.

F202.6.5.5 Assembly Areas. Assistive listening systems shall comply with F219 and assembly seating shall comply with F221.

F202.6.5.6 Sales and Service Counters. Sales and service counters shall comply with F227.

F202.6.5.7 Depositories, Vending Machines, Change Machines, and Mail Boxes. Depositories, vending machines, change machines, and mail boxes shall comply with F228.

F202.6.5.8 Residential Facilities. Residential dwelling units shall comply with F233.

F203 General Exceptions

F203.1 General. Sites, buildings, facilities, and elements are exempt from these requirements to the extent specified by F203.

F203.2 Existing Elements. Elements in compliance with an earlier standard issued pursuant to the Architectural Barriers Act or Section 504 of the Rehabilitation Act of 1973, as amended shall not be required to comply with these requirements unless altered.

ADVISORY F203.2 Existing Elements. The exception at F203.2 does not obviate or limit in any way a federal agency's obligation to provide reasonable accommodations pursuant to the Rehabilitation Act of 1973. Federal employees with disabilities are entitled to reasonable accommodations in the workplace. Such accommodations may include modifications to workstations or to other areas of the workplace, including the common areas such as toilet rooms, meeting rooms, or break rooms. Reasonable accommodations are always provided on a case-by-case basis and are specific to the unique needs of a person. As such, an accommodation may be consistent with, or depart from, the specific technical requirements of this, or any other, document.

In addition, the exception at F203.2 provides that compliance with an earlier standard issued under Section 504 of the Rehabilitation Act satisfies the requirements of the Architectural Barriers Act; the exception does not obviate or limit a Federal agency's authority to enforce requirements issued pursuant to Section 504 of the Rehabilitation Act, including requirements for making reasonable modifications to policies, practices, and procedures, or making structural changes to facilities in order to make a program or activity accessible to and usable by persons with disabilities.

F203.3 Construction Sites. Structures and sites directly associated with the actual processes of construction, including but not limited to, scaffolding, bridging, materials hoists, materials storage, and construction trailers shall not be required to comply with these requirements or to be on an accessible route. Portable toilet units provided for use exclusively by construction personnel on a construction site shall not be required to comply with F213 or to be on an accessible route.

F203.4 Raised Areas. Areas raised primarily for purposes of security, life safety, or fire safety, including but not limited to, observation or lookout galleries, prison guard towers, fire towers, or life guard stands shall not be required to comply with these requirements or to be on an accessible route.

F203.5 Limited Access Spaces. Spaces accessed only by ladders, catwalks, crawl spaces, or very narrow passageways shall not be required to comply with these requirements or to be on an accessible route.

F203.6 Machinery Spaces. Spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment shall not be required to comply with these requirements or to be on an accessible route. Machinery spaces include, but are not limited to, elevator pits or elevator penthouses; mechanical, electrical or communications equipment rooms; piping or equipment catwalks; water or sewage treatment pump rooms and stations; electric substations and transformer vaults; and highway and tunnel utility facilities.

F203.7 Single Occupant Structures. Single occupant structures accessed only by passageways below grade or elevated above standard curb height, including but not limited to, toll booths that are accessed only by underground tunnels, shall not be required to comply with these requirements or to be on an accessible route.

F203.8 Detention and Correctional Facilities. In detention and correctional facilities, common use areas that are used only by inmates or detainees and security personnel and that do not serve holding cells or housing cells required to comply with F232, shall not be required to comply with these requirements or to be on an accessible route.

F203.9 Residential Facilities. In residential facilities, common use areas that do not serve residential dwelling units required to provide mobility features complying with 809.2 through 809.4 shall not be required to comply with these requirements or to be on an accessible route.

F203.10 Raised Refereeing, Judging, and Scoring Areas. Raised structures used solely for refereeing, judging, or scoring a sport shall not be required to comply with these requirements or to be on an accessible route.

F203.11 Water Slides. Water slides shall not be required to comply with these requirements or to be on an accessible route.

F203.12 Animal Containment Areas. Animal containment areas that are not for public use shall not be required to comply with these requirements or to be on an accessible route.

ADVISORY F203.12 Animal Containment Areas. Public circulation routes where animals may travel, such as in petting zoos and passageways alongside animal pens in State fairs, are not eligible for the exception.

F203.13 Raised Boxing or Wrestling Rings. Raised boxing or wrestling rings shall not be required to comply with these requirements or to be on an accessible route.

F203.14 Raised Diving Boards and Diving Platforms. Raised diving boards and diving platforms shall not be required to comply with these requirements or to be on an accessible route.

F204 Protruding Objects

F204.1 General. Protruding objects on circulation paths shall comply with 307.

EXCEPTIONS: 1. Within areas of sport activity, protruding objects on circulation paths shall not be required to comply with 307.

2. Within play areas, protruding objects on circulation paths shall not be required to comply with 307 provided that ground level accessible routes provide vertical clearance in compliance with 1008.2.

F205 Operable Parts

F205.1 General. Operable parts on accessible elements, accessible routes, and in accessible rooms and spaces shall comply with 309.

EXCEPTIONS: 1. Operable parts that are intended for use only by service or maintenance personnel shall not be required to comply with 309.

2. Electrical or communication receptacles serving a dedicated use shall not be required to comply with 309.

3. Where two or more outlets are provided in a kitchen above a length of counter top that is uninterrupted by a sink or appliance, one outlet shall not be required to comply with 309.

4. Floor electrical receptacles shall not be required to comply with 309.

5. HVAC diffusers shall not be required to comply with 309.

6. Except for light switches, where redundant controls are provided for a single element, one control in each space shall not be required to comply with 309.

7. Cleats and other boat securement devices shall not be required to comply with 309.3.

8. Exercise machines and exercise equipment shall not be required to comply with 309.

ADVISORY F205.1 General. Controls covered by F205.1 include, but are not limited to, light switches, circuit breakers, duplexes and other convenience receptacles, environmental and appliance controls, plumbing fixture controls, and security and intercom systems.

F206 Accessible Routes

F206.1 General. Accessible routes shall be provided in accordance with F206 and shall comply with Chapter 4 except that the exemptions at 403.5, 405.5, and 405.8 shall not apply.

F206.2 Where Required. Accessible routes shall be provided where required by F206.2.

F206.2.1 Site Arrival Points. At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve.

EXCEPTIONS: 1. Where exceptions for alterations to qualified historic buildings or facilities are permitted by F202.5, no more than one accessible route from a site arrival point to an accessible entrance shall be required.

2. An accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing pedestrian access.

ADVISORY F206.2.1 Site Arrival Points. Each site arrival point must be connected by an accessible route to the accessible building entrance or entrances served. Where two or more similar site arrival points, such as bus stops, serve the same accessible entrance or entrances, both bus stops must be on accessible routes. In addition, the accessible routes must serve all of the accessible entrances on the site.

Advisory F206.2.1 Site Arrival Points Exception 2. Access from site arrival points may include vehicular ways. Where a vehicular way, or a portion of a vehicular way, is provided for pedestrian travel, such as within a shopping center or shopping mall parking lot, this exception does not apply.

F206.2.2 Within a Site. At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

EXCEPTION: An accessible route shall not be required between accessible buildings, accessible facilities, accessible elements and accessible spaces if the only means of access between them is a vehicular way not providing pedestrian access.

ADVISORY F206.2.2 Within a Site. An accessible route is required to connect to the boundary of each area of sport activity. Examples of areas of sport activity include: soccer fields, basketball courts, baseball fields, running tracks, skating rinks, and the area surrounding a piece of gymnastic equipment. While the size of an area of sport activity may vary from sport to sport, each includes only the space needed to play. Where multiple sports fields or courts are provided, an accessible route is required to each field or area of sport activity.

F206.2.3 Multi-Story Buildings and Facilities. At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.

EXCEPTIONS: 1. Where a two story building or facility has one story with an occupant load of five or fewer persons that does not contain public use space, that story shall not be required to be connected to the story above or below.

2. In detention and correctional facilities, an accessible route shall not be required to connect stories where cells with mobility features required to comply with 807.2, all common use areas serving cells with mobility features required to comply with 807.2, and all public use areas are on an accessible route.

3. In residential facilities, an accessible route shall not be required to connect stories where residential dwelling units with mobility features required to comply with 809.2 through 809.4, all common use areas serving residential dwelling units with mobility features required to comply with 809.2 through 809.4, and public use areas serving residential dwelling units are on an accessible route.

4. Within multi-story transient lodging guest rooms with mobility features required to comply with 806.2, an accessible route shall not be required to connect stories provided that spaces complying with 806.2 are on an accessible route and sleeping accommodations for two persons minimum are provided on a story served by an accessible route.

5. In air traffic control towers, an accessible route shall not be required to serve the cab and the floor immediately below the cab.

6. Where exceptions for alterations to qualified historic buildings or facilities are permitted by F202.5, an accessible route shall not be required to stories located above or below the accessible story.

ADVISORY F206.2.3 Multi-Story Buildings and Facilities. Spaces and elements located on a level not required to be served by an accessible route must fully comply with this document. While a mezzanine may be a change in level, it is not a story. If an accessible route is required to connect stories within a building or facility, the accessible route must serve all mezzanines.

Advisory F206.2.3 Multi-Story Buildings and Facilities Exception 3. Where common use areas are provided for the use of residents, it is presumed that all such common use areas “serve” accessible dwelling units unless use is restricted to residents occupying certain dwelling units. For example, if all residents are permitted to use all laundry rooms, then all laundry rooms “serve” accessible dwelling units. However, if the laundry room on the first floor is restricted to use by residents on the first floor, and the second floor laundry room is for use by occupants of the second floor, then first floor accessible units are “served” only by laundry rooms on the first floor. In this example, an accessible route is not required to the second floor provided that all accessible units and all common use areas serving them are on the first floor.

F206.2.3.1 Stairs and Escalators in Existing Buildings. In alterations and additions, where an escalator or stair is provided where none existed previously and major structural modifications are necessary for the installation, an accessible route shall be provided between the levels served by the escalator or stair unless exempted by F206.2.3 Exceptions 1 through 6.

F206.2.4 Spaces and Elements. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility which are otherwise connected by a circulation path unless exempted by F206.2.3 Exceptions 1 through 6.

EXCEPTIONS: 1. Raised courtroom stations, including judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations shall not be required to provide vertical access provided that the required clear floor space, maneuvering space, and, if appropriate, electrical service are installed at the time of initial construction to allow future installation of a means of vertical access complying with 405, 407, 408, or 410 without requiring substantial reconstruction of the space.

2. In assembly areas with fixed seating required to comply with F221, an accessible route shall not be required to serve fixed seating where wheelchair spaces required to be on an accessible route are not provided.

3. Accessible routes shall not be required to connect mezzanines where buildings or facilities have no more than one story. In addition, accessible routes shall not be required to connect stories or mezzanines where multi-story buildings or facilities are exempted by F206.2.3 Exceptions 1 through 6.

ADVISORY F206.2.4 Spaces and Elements. Accessible routes must connect all spaces and elements required to be accessible including, but not limited to, raised areas and speaker platforms.

Advisory F206.2.4 Spaces and Elements Exception 1. The exception does not apply to areas that are likely to be used by members of the public who are not employees of the court such as jury areas, attorney areas, or witness stands.

F206.2.5 Restaurants and Cafeterias. In restaurants and cafeterias, an accessible route shall be provided to all dining areas, including raised or sunken dining areas, and outdoor dining areas.

EXCEPTIONS: 1. In alterations, an accessible route shall not be required to existing raised or sunken dining areas, or to all parts of existing outdoor dining areas where the same services and decor are provided in an accessible space usable by the public and not restricted to use by people with disabilities.

2. In sports facilities, tiered dining areas providing seating required to comply with F221 shall be required to have accessible routes serving at least 25 percent of the dining area provided that accessible routes serve seating complying with F221 and each tier is provided with the same services.

ADVISORY F206.2.5 Restaurants and Cafeterias Exception 1. Examples of "same services" include, but are not limited to, bar service, rooms having smoking and non-smoking sections, lotto and other table games, carry-out, and buffet service. Examples of "same decor" include, but are not limited to, seating at or near windows and railings with views, areas designed with a certain theme, party and banquet rooms, and rooms where entertainment is provided.

F206.2.6 Performance Areas. Where a circulation path directly connects a performance area to an assembly seating area, an accessible route shall directly connect the assembly seating area with the performance area. An accessible route shall be provided from performance areas to ancillary areas or facilities used by performers unless exempted by F206.2.3 Exceptions 1 through 6.

F206.2.7 Press Boxes. Press boxes in assembly areas shall be on an accessible route.

EXCEPTIONS: 1. An accessible route shall not be required to press boxes in bleachers that have points of entry at only one level provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.

2. An accessible route shall not be required to free-standing press boxes that are elevated above grade 12 feet (3660 mm) minimum provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.

ADVISORY F206.2.7 Press Boxes Exception 2. Where a facility contains multiple assembly areas, the aggregate area of the press boxes in each assembly area is to be calculated separately. For example, if a university has a soccer stadium with three press boxes elevated 12 feet (3660 mm) or more above grade and each press box is 150 square feet (14 m²), then the aggregate area of the soccer stadium press boxes is less than 500 square feet (465 m²) and Exception 2 applies to the soccer stadium. If that same university also has a football stadium with two press boxes elevated 12 feet (3660 mm) or more above grade and one press box is 250 square feet (23 m²), and the second is 275 square feet (26 m²), then the aggregate area of the football stadium press boxes is more than 500 square feet (465 m²) and Exception 2 does not apply to the football stadium.

F206.2.8 Amusement Rides. Amusement rides required to comply with F234 shall provide accessible routes in accordance with F206.2.8. Accessible routes serving amusement rides shall comply with Chapter 4 except as modified by 1002.2.

F206.2.8.1 Load and Unload Areas. Load and unload areas shall be on an accessible route. Where load and unload areas have more than one loading or unloading position, at least one loading and unloading position shall be on an accessible route.

F206.2.8.2 Wheelchair Spaces, Ride Seats Designed for Transfer, and Transfer Devices. When amusement rides are in the load and unload position, wheelchair spaces complying with 1002.4, amusement ride seats designed for transfer complying with 1002.5, and transfer devices complying with 1002.6 shall be on an accessible route.

F206.2.9 Recreational Boating Facilities. Boat slips required to comply with F235.2 and boarding piers at boat launch ramps required to comply with F235.3 shall be on an accessible route. Accessible routes serving recreational boating facilities shall comply with Chapter 4 except as modified by 1003.2.

F206.2.10 Bowling Lanes. Where bowling lanes are provided, at least 5 percent, but no fewer than one of each type of bowling lane, shall be on an accessible route.

F206.2.11 Court Sports. In court sports, at least one accessible route shall directly connect both sides of the court.

F206.2.12 Exercise Machines and Equipment. Exercise machines and equipment required to comply with F236 shall be on an accessible route.

F206.2.13 Fishing Piers and Platforms. Fishing piers and platforms shall be on an accessible route. Accessible routes serving fishing piers and platforms shall comply with Chapter 4 except as modified by 1005.1.

F206.2.14 Golf Facilities. At least one accessible route shall connect accessible elements and spaces within the boundary of the golf course. In addition, accessible routes serving golf car rental areas; bag drop areas; course weather shelters complying with F238.2.3; course toilet rooms; and practice putting greens, practice teeing grounds, and teeing stations at driving ranges complying with F238.3 shall comply with Chapter 4 except as modified by 1006.2.

EXCEPTION: Golf car passages complying with 1006.3 shall be permitted to be used for all or part of accessible routes required by F206.2.14.

F206.2.15 Miniature Golf Facilities. Holes required to comply with F239.2, including the start of play, shall be on an accessible route. Accessible routes serving miniature golf facilities shall comply with Chapter 4 except as modified by 1007.2.

F206.2.16 Play Areas. Play areas shall provide accessible routes in accordance with F206.2.16. Accessible routes serving play areas shall comply with Chapter 4 except as modified by 1008.2.

F206.2.16.1 Ground Level and Elevated Play Components. At least one accessible route shall be provided within the play area. The accessible route shall connect ground level play components required to comply with F240.2.1 and elevated play components required to comply with F240.2.2, including entry and exit points of the play components.

F206.2.16.2 Soft Contained Play Structures. Where three or fewer entry points are provided for soft contained play structures, at least one entry point shall be on an accessible route. Where four or more entry points are provided for soft contained play structures, at least two entry points shall be on an accessible route.

F206.3 Location. Accessible routes shall coincide with or be located in the same area as general circulation paths. Where circulation paths are interior, required accessible routes shall also be interior.

ADVISORY F206.3 Location. The accessible route must be in the same area as the general circulation path. This means that circulation paths, such as vehicular ways designed for pedestrian traffic, walks, and unpaved paths that are designed to be routinely used by pedestrians must be accessible or have an accessible route nearby. Additionally, accessible vertical interior circulation must be in the same area as stairs and escalators, not isolated in the back of the facility.

F206.4 Entrances. Entrances shall be provided in accordance with F206.4. Entrance doors, doorways, and gates shall comply with 404 and shall be on an accessible route complying with 402.

EXCEPTIONS: 1. Where an alteration includes alterations to an entrance, and the building or facility has another entrance complying with 404 that is on an accessible route, the altered entrance shall not be required to comply with F206.4 unless required by F202.4.

2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by F202.5, no more than one public entrance shall be required to comply with F206.4. Where no public entrance can comply with F206.4 under criteria established in F202.5 Exception, then either an unlocked entrance not used by the public shall comply with F206.4; or a locked entrance complying with F206.4 with a notification system or remote monitoring shall be provided.

F206.4.1 Public Entrances. In addition to entrances required by F206.4.2 through F206.4.9, at least 60 percent of all public entrances shall comply with 404.

F206.4.2 Parking Structure Entrances. Where direct access is provided for pedestrians from a parking structure to a building or facility entrance, each direct access to the building or facility entrance shall comply with 404.

F206.4.3 Entrances from Tunnels or Elevated Walkways. Where direct access is provided for pedestrians from a pedestrian tunnel or elevated walkway to a building or facility, at least one direct entrance to the building or facility from each tunnel or walkway shall comply with 404.

F206.4.4 Transportation Facilities. In addition to the requirements of F206.4.2, F206.4.3, and F206.4.5 through F206.4.9, transportation facilities shall provide entrances in accordance with F206.4.4.

F206.4.4.1 Location. In transportation facilities, where different entrances serve different transportation fixed routes or groups of fixed routes, at least one public entrance shall comply with 404.

F206.4.4.2 Direct Connections. Direct connections to other facilities shall provide an accessible route complying with 404 from the point of connection to boarding platforms and all transportation system elements required to be accessible. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and all transportation system elements required to be accessible.

F206.4.5 Tenant Spaces. At least one accessible entrance to each tenancy in a facility shall comply with 404.

EXCEPTION: Self-service storage facilities not required to comply with F225.3 shall not be required to be on an accessible route.

F206.4.6 Residential Dwelling Unit Primary Entrance. In residential dwelling units, at least one primary entrance shall comply with 404. The primary entrance to a residential dwelling unit shall not be to a bedroom.

F206.4.7 Restricted Entrances. Where restricted entrances are provided to a building or facility, at least one restricted entrance to the building or facility shall comply with 404.

F206.4.8 Service Entrances. If a service entrance is the only entrance to a building or to a tenancy in a facility, that entrance shall comply with 404.

F206.4.9 Entrances for Inmates or Detainees. Where entrances used only by inmates or detainees and security personnel are provided at judicial facilities, detention facilities, or correctional facilities, at least one such entrance shall comply with 404.

F206.5 Doors, Doorways, and Gates. Doors, doorways, and gates providing user passage shall be provided in accordance with F206.5.

F206.5.1 Entrances. Each entrance to a building or facility required to comply with F206.4 shall have at least one door, doorway, or gate complying with 404.

F206.5.2 Rooms and Spaces. Within a building or facility, at least one door, doorway, or gate serving each room or space complying with these requirements shall comply with 404.

F206.5.3 Transient Lodging Facilities. In transient lodging facilities, entrances, doors, and doorways providing user passage into and within guest rooms that are not required to provide mobility features complying with 806.2 shall comply with 404.2.3.

EXCEPTION: Shower and sauna doors in guest rooms that are not required to provide mobility features complying with 806.2 shall not be required to comply with 404.2.3.

F206.5.4 Residential Dwelling Units. In residential dwelling units required to provide mobility features complying with 809.2 through 809.4, all doors and doorways providing user passage shall comply with 404.

F206.6 Elevators. Elevators provided for passengers shall comply with 407. Where multiple elevators are provided, each elevator shall comply with 407.

EXCEPTIONS: 1. In a building or facility permitted to use the exceptions to F206.2.3 or permitted by F206.7 to use a platform lift, elevators complying with 408 shall be permitted.

2. Elevators complying with 408 or 409 shall be permitted in multi-story residential dwelling units.

F206.6.1 Existing Elevators. Where elements of existing elevators are altered, the same element shall also be altered in all elevators that are programmed to respond to the same hall call control as the altered elevator and shall comply with the requirements of 407 for the altered element.

F206.7 Platform Lifts. Platform lifts shall comply with 410. Platform lifts shall be permitted as a component of an accessible route in new construction in accordance with F206.7. Platform lifts shall be permitted as a component of an accessible route in an existing building or facility.

F206.7.1 Performance Areas and Speakers' Platforms. Platform lifts shall be permitted to provide accessible routes to performance areas and speakers' platforms.

F206.7.2 Wheelchair Spaces. Platform lifts shall be permitted to provide an accessible route to comply with the wheelchair space dispersion and line-of-sight requirements of F221 and 802.

F206.7.3 Incidental Spaces. Platform lifts shall be permitted to provide an accessible route to incidental spaces which are not public use spaces and which are occupied by five persons maximum.

F206.7.4 Judicial Spaces. Platform lifts shall be permitted to provide an accessible route to: jury boxes and witness stands; raised courtroom stations including, judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations; and to depressed areas such as the well of a court.

F206.7.5 Existing Site Constraints. Platform lifts shall be permitted where existing exterior site constraints make use of a ramp or elevator infeasible.

ADVISORY F206.7.5 Existing Site Constraints. This exception applies where topography or other similar existing site constraints necessitate the use of a platform lift as the only feasible alternative. While the site constraint must reflect exterior conditions, the lift can be installed in the interior of a building. For example, a new building constructed between and connected to two existing buildings may have insufficient space to coordinate floor levels and also to provide ramped entry from the

public way. In this example, an exterior or interior platform lift could be used to provide an accessible entrance or to coordinate one or more interior floor levels.

F206.7.6 Guest Rooms and Residential Dwelling Units. Platform lifts shall be permitted to connect levels within transient lodging guest rooms required to provide mobility features complying with 806.2 or residential dwelling units required to provide mobility features complying with 809.2 through 809.4.

F206.7.7 Amusement Rides. Platform lifts shall be permitted to provide accessible routes to load and unload areas serving amusement rides.

F206.7.8 Play Areas. Platform lifts shall be permitted to provide accessible routes to play components or soft contained play structures.

F206.7.9 Team or Player Seating. Platform lifts shall be permitted to provide accessible routes to team or player seating areas serving areas of sport activity.

ADVISORY F206.7.9 Team or Player Seating. While the use of platform lifts is allowed, ramps are recommended to provide access to player seating areas serving an area of sport activity.

F206.7.10 Recreational Boating Facilities and Fishing Piers and Platforms. Platform lifts shall be permitted to be used instead of gangways that are part of accessible routes serving recreational boating facilities and fishing piers and platforms.

F206.8 Security Barriers. Security barriers, including but not limited to, security bollards and security check points, shall not obstruct a required accessible route or accessible means of egress.

EXCEPTION: Where security barriers incorporate elements that cannot comply with these requirements such as certain metal detectors, fluoroscopes, or other similar devices, the accessible route shall be permitted to be located adjacent to security screening devices. The accessible route shall permit persons with disabilities passing around security barriers to maintain visual contact with their personal items to the same extent provided others passing through the security barrier.

F207 Accessible Means of Egress

F207.1 General. Means of egress shall comply with section 1003.2.13 of the International Building Code (2000 edition and 2001 Supplement) or section 1007 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

EXCEPTIONS: 1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel.

2. Areas of refuge shall not be required in detention and correctional facilities.

F207.2 Platform Lifts. Standby power shall be provided for platform lifts permitted by section 1003.2.13.4 of the International Building Code (2000 edition and 2001 Supplement) or section 1007.5 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1) to serve as a part of an accessible means of egress.

F208 Parking Spaces

F208.1 General. Where parking spaces are provided, parking spaces shall be provided in accordance with F208.

EXCEPTION: Parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles, or vehicular impound shall not be required to comply with F208 provided that lots accessed by the public are provided with a passenger loading zone complying with 503.

F208.2 Minimum Number. Parking spaces complying with 502 shall be provided in accordance with Table F208.2 except as required by F208.2.1, F208.2.2, and F208.2.3. Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.

F208.2 Parking Spaces

Total Number of Parking Spaces Provided in Parking Facility	Minimum Number of Required Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

ADVISORY F208.2 Minimum Number. The term “parking facility” is used Section F208.2 instead of the term “parking lot” so that it is clear that both parking lots and parking structures are required to comply with this section. The number of parking spaces required to be accessible is to be calculated separately for each parking facility; the required number is not to be based on the total number of parking spaces provided in all of the parking facilities provided on the site.

F208.2.1 Hospital Outpatient Facilities. Ten percent of patient and visitor parking spaces provided to serve hospital outpatient facilities shall comply with 502.

ADVISORY F208.2.1 Hospital Outpatient Facilities. The term “outpatient facility” is not defined in this document but is intended to cover facilities or units that are located in hospitals and that provide regular and continuing medical treatment without an overnight stay. Doctors’ offices, independent clinics, or other facilities not located in hospitals are not considered hospital outpatient facilities for purposes of this document.

F208.2.2 Rehabilitation Facilities and Outpatient Physical Therapy Facilities. Twenty percent of patient and visitor parking spaces provided to serve rehabilitation facilities specializing in treating conditions that affect mobility and outpatient physical therapy facilities shall comply with 502.

ADVISORY F208.2.2 Rehabilitation Facilities and Outpatient Physical Therapy Facilities. Conditions that affect mobility include conditions requiring the use or assistance of a brace, cane, crutch, prosthetic device, wheelchair, or powered mobility aid; arthritic, neurological, or orthopedic conditions that severely limit one’s ability to walk; respiratory diseases and other conditions which may require the use of portable oxygen; and cardiac conditions that impose significant functional limitations.

F208.2.3 Residential Facilities. Parking spaces provided to serve residential facilities shall comply with F208.2.3.

F208.2.3.1 Parking for Residents. Where at least one parking space is provided for each residential dwelling unit, at least one parking space complying with 502 shall be provided for each residential dwelling unit required to provide mobility features complying with 809.2 through 809.4.

F208.2.3.2 Additional Parking Spaces for Residents. Where the total number of parking spaces provided for each residential dwelling unit exceeds one parking space per residential dwelling unit, 2 percent, but no fewer than one space, of all the parking spaces not covered by F208.2.3.1 shall comply with 502.

F208.2.3.3 Parking for Guests, Employees, and Other Non-Residents. Where parking spaces are provided for persons other than residents, parking shall be provided in accordance with Table F208.2.

F208.2.4 Van Parking Spaces. For every six or fraction of six parking spaces required by F208.2 to comply with 502, at least one shall be a van parking space complying with 502.

F208.3 Location. Parking facilities shall comply with F208.3

F208.3.1 General. Parking spaces complying with 502 that serve a particular building or facility shall be located on the shortest accessible route from parking to an entrance complying with F206.4. Where parking serves more than one accessible entrance, parking spaces complying with 502 shall be dispersed and located on the shortest accessible route to the accessible entrances. In parking facilities that do not serve a particular building or facility, parking spaces complying with 502 shall be located on the shortest accessible route to an accessible pedestrian entrance of the parking facility.

EXCEPTIONS: 1. All van parking spaces shall be permitted to be grouped on one level within a multi-story parking facility.

2. Parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee, and user convenience.

ADVISORY F208.3.1 General Exception 2. Factors that could affect “user convenience” include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.

F208.3.2 Residential Facilities. In residential facilities containing residential dwelling units required to provide mobility features complying with 809.2 through 809.4, parking spaces provided in accordance with F208.2.3.1 shall be located on the shortest accessible route to the residential dwelling unit entrance they serve. Spaces provided in accordance with F208.2.3.2 shall be dispersed throughout all types of parking provided for the residential dwelling units.

EXCEPTION: Parking spaces provided in accordance with F208.2.3.2 shall not be required to be dispersed throughout all types of parking if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance, parking fee, and user convenience.

ADVISORY F208.3.2 Residential Facilities Exception. Factors that could affect “user convenience” include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.

F209 Passenger Loading Zones and Bus Stops

F209.1 General. Passenger loading zones shall be provided in accordance with F209.

F209.2 Type. Where provided, passenger loading zones shall comply with F209.2.

F209.2.1 Passenger Loading Zones. Passenger loading zones, except those required to comply with F209.2.2 and F209.2.3, shall provide at least one passenger loading zone complying with 503 in every continuous 100 linear feet (30 m) of loading zone space, or fraction thereof.

F209.2.2 Bus Loading Zones. In bus loading zones restricted to use by designated or specified public transportation vehicles, each bus bay, bus stop, or other area designated for lift or ramp deployment shall comply with 810.2.

ADVISORY F209.2.2 Bus Loading Zones. The terms “designated public transportation” and “specified public transportation” are defined by the Department of Transportation at 49 CFR 37.3 in regulations implementing the Americans with Disabilities Act. These terms refer to public transportation services provided by public or private entities, respectively. For example, designated public transportation vehicles include buses and vans operated by public transit agencies, while specified public transportation vehicles include tour and charter buses, taxis and limousines, and hotel shuttles operated by private entities.

F209.2.3 On-Street Bus Stops. On-street bus stops shall comply with 810.2 to the maximum extent practicable.

F209.3 Medical Care and Long-Term Care Facilities. At least one passenger loading zone complying with 503 shall be provided at an accessible entrance to licensed medical care and licensed long-term care facilities where the period of stay exceeds twenty-four hours.

F209.4 Valet Parking. Parking facilities that provide valet parking services shall provide at least one passenger loading zone complying with 503.

F209.5 Mechanical Access Parking Garages. Mechanical access parking garages shall provide at least one passenger loading zone complying with 503 at vehicle drop-off and vehicle pick-up areas.

F210 Stairways

F210.1 General. Interior and exterior stairs that are part of a means of egress shall comply with 504.

EXCEPTIONS: 1. In detention and correctional facilities, stairs that are not located in public use areas shall not be required to comply with 504.

2. In alterations, stairs between levels that are connected by an accessible route shall not be required to comply with 504, except that handrails complying with 505 shall be provided when the stairs are altered.

3. In assembly areas, aisle stairs shall not be required to comply with 504.

4. Stairs that connect play components shall not be required to comply with 504.

ADVISORY F210.1 General. Although these requirements do not mandate handrails on stairs that are not part of a means of egress, State or local building codes may require handrails or guards.

F211 Drinking Fountains

F211.1 General. Where drinking fountains are provided on an exterior site, on a floor, and within a secured area they shall be provided in accordance with F211.

EXCEPTION: In detention or correctional facilities, drinking fountains only serving holding or housing cells not required to comply with F232 shall not be required to comply with F211.

F211.2 Minimum Number. No fewer than two drinking fountains shall be provided. One drinking fountain shall comply with 602.1 through 602.6 and one drinking fountain shall comply with 602.7.

EXCEPTION: Where a single drinking fountain complies with 602.1 through 602.6 and 602.7, it shall be permitted to be substituted for two separate drinking fountains.

F211.3 More Than Minimum Number. Where more than the minimum number of drinking fountains specified in F211.2 are provided, 50 percent of the total number of drinking fountains provided shall comply with 602.1 through 602.6, and 50 percent of the total number of drinking fountains provided shall comply with 602.7.

EXCEPTION: Where 50 percent of the drinking fountains yields a fraction, 50 percent shall be permitted to be rounded up or down provided that the total number of drinking fountains complying with F211 equals 100 percent of drinking fountains.

F212 Kitchens, Kitchenettes, and Sinks

F212.1 General. Where provided, kitchens, kitchenettes, and sinks shall comply with F212.

F212.2 Kitchens and Kitchenettes. Kitchens and kitchenettes shall comply with 804.

F212.3 Sinks. Where sinks are provided, at least 5 percent, but no fewer than one, of each type provided in each accessible room or space shall comply with 606.

EXCEPTION: Mop or service sinks shall not be required to comply with F212.3.

F213 Toilet Facilities and Bathing Facilities

F213.1 General. Where toilet facilities and bathing facilities are provided, they shall comply with F213. Where toilet facilities and bathing facilities are provided in facilities permitted by F206.2.3 Exceptions 1 and 2 not to connect stories by an accessible

route, toilet facilities and bathing facilities shall be provided on a story connected by an accessible route to an accessible entrance.

F213.2 Toilet Rooms and Bathing Rooms. Where toilet rooms are provided, each toilet room shall comply with 603. Where bathing rooms are provided, each bathing room shall comply with 603.

EXCEPTIONS: 1. In alterations where it is technically infeasible to comply with 603, altering existing toilet or bathing rooms shall not be required where a single unisex toilet room or bathing room complying with F213.2.1 is provided and located in the same area and on the same floor as existing inaccessible toilet or bathing rooms.

2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by F202.5 and toilet rooms are provided, no fewer than one toilet room for each sex complying with 603 or one unisex toilet room complying with F213.2.1 shall be provided.

3. Where multiple single user portable toilet or bathing units are clustered at a single location, no more than 5 percent of the toilet units and bathing units at each cluster shall be required to comply with 603. Portable toilet units and bathing units complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1.

4. Where multiple single user toilet rooms are clustered at a single location, no more than 50 percent of the single user toilet rooms for each use at each cluster shall be required to comply with 603.

ADVISORY F213.2 Toilet Rooms and Bathing Rooms. These requirements allow the use of unisex (or single-user) toilet rooms in alterations when technical infeasibility can be demonstrated. Unisex toilet rooms benefit people who use opposite sex personal care assistants. For this reason, it is advantageous to install unisex toilet rooms in addition to accessible single-sex toilet rooms in new facilities.

Advisory F213.2 Toilet Rooms and Bathing Rooms Exceptions 3 and 4. A “cluster” is a group of toilet rooms proximate to one another. Generally, toilet rooms in a cluster are within sight of, or adjacent to, one another.

F213.2.1 Unisex (Single-Use or Family) Toilet and Bathing Rooms. Unisex toilet rooms shall contain not more than one lavatory, and two water closets without urinals or one water closet and one urinal. Unisex bathing rooms shall contain one shower or one shower and one bathtub, one lavatory, and one water closet. Doors to unisex toilet rooms and unisex bathing rooms shall have privacy latches.

F213.3 Plumbing Fixtures and Accessories. Plumbing fixtures and accessories provided in a toilet room or bathing room required to comply with F213.2 shall comply with F213.3.

F213.3.1 Toilet Compartments. Where toilet compartments are provided, at least one toilet compartment shall comply with 604.8.1. In addition to the compartment required to comply with 604.8.1, at least one compartment shall comply with 604.8.2 where six or more toilet compartments are provided, or where the combination of urinals and water closets totals six or more fixtures.

ADVISORY F213.3.1 Toilet Compartments. A toilet compartment is a partitioned space that is located within a toilet room, and that normally contains no more than one water closet. A toilet compartment may also contain a lavatory. A lavatory is a sink provided for hand washing. Full-height partitions and door assemblies can comprise toilet compartments where the minimum required spaces are provided within the compartment.

F213.3.2 Water Closets. Where water closets are provided at least one shall comply with 604.

F213.3.3 Urinals. Where more than one urinal is provided, at least one shall comply with 605.

F213.3.4 Lavatories. Where lavatories are provided, at least one shall comply with 606 and shall not be located in a toilet compartment.

F213.3.5 Mirrors. Where mirrors are provided, at least one shall comply with 603.3.

F213.3.6 Bathing Facilities. Where bathtubs or showers are provided, at least one bathtub complying with 607 or at least one shower complying with 608 shall be provided.

F213.3.7 Coat Hooks and Shelves. Where coat hooks or shelves are provided in toilet rooms without toilet compartments, at least one of each type shall comply with 603.4. Where coat hooks or shelves are provided in toilet compartments, at least one of each type complying with 604.8.3 shall be provided in toilet compartments required to comply with F213.3.1. Where coat hooks or shelves are provided in bathing facilities, at least one of each type complying with 603.4 shall serve fixtures required to comply with F213.3.6.

F214 Washing Machines and Clothes Dryers

F214.1 General. Where provided, washing machines and clothes dryers shall comply with F214.

EXCEPTION: Washing machines and clothes dryers provided in employee work areas shall not be required to comply with F214.

ADVISORY F214.1 General Exception. Washers and dryers provided for use by employees during non-work hours are not considered to be provided in employee work areas. For example, if trainees are housed in a dormitory and provided access to

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washers and dryers, those facilities are not considered part of the employee work area. Examples of washing machines and clothes dryers provided in employee work areas include, but are not limited to, employee only laundries in hospitals, hotels, and prisons.

F214.2 Washing Machines. Where three or fewer washing machines are provided, at least one shall comply with 611. Where more than three washing machines are provided, at least two shall comply with 611.

F214.3 Clothes Dryers. Where three or fewer clothes dryers are provided, at least one shall comply with 611. Where more than three clothes dryers are provided, at least two shall comply with 611.

F215 Fire Alarm Systems

F215.1 General. Where fire alarm systems provide audible alarm coverage, alarms shall comply with F215.

EXCEPTION: In existing facilities, visible alarms shall not be required except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

ADVISORY F215.1 General. Unlike audible alarms, visible alarms must be located within the space they serve so that the signal is visible. Facility alarm systems (other than fire alarm systems) such as those used for tornado warnings and other emergencies are not required to comply with the technical criteria for alarms in Section 702. Every effort should be made to ensure that such alarms can be differentiated in their signal from fire alarms systems and that people who need to be notified of emergencies are adequately safeguarded. Consult local fire departments and prepare evacuation plans taking into consideration the needs of every building occupant, including people with disabilities.

F215.2 Public and Common Use Areas. Alarms in public use areas and common use areas shall comply with 702.

F215.3 Employee Work Areas. Where employee work areas have audible alarm coverage, the wiring system shall be designed so that visible alarms complying with 702 can be integrated into the alarm system.

F215.4 Transient Lodging. Guest rooms required to comply with F224.4 shall provide alarms complying with 702.

F215.5 Residential Facilities. Where provided in residential dwelling units required to comply with 809.5, alarms shall comply with 702.

F216 Signs

F216.1 General. Signs shall be provided in accordance with F216 and shall comply with 703.

EXCEPTIONS: 1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with F216.

2. In parking facilities, signs shall not be required to comply with F216.2, F216.3, and F216.6 through F216.12.

3. Temporary, 7 days or less, signs shall not be required to comply with F216.

4. In detention and correctional facilities, signs not located in public use areas shall not be required to comply with F216.

F216.2 Designations. Interior and exterior signs identifying permanent rooms and spaces shall comply with 703.1, 703.2, and 703.5. Where pictograms are provided as designations of permanent interior rooms and spaces, the pictograms shall comply with 703.6 and shall have text descriptors complying with 703.2 and 703.5.

EXCEPTION: Exterior signs that are not located at the door to the space they serve shall not be required to comply with 703.2.

ADVISORY F216.2 Designations. Section F216.2 applies to signs that provide designations, labels, or names for interior rooms or spaces where the sign is not likely to change over time. Examples include interior signs labeling restrooms, room and floor numbers or letters, and room names. Tactile text descriptors are required for pictograms that are provided to label or identify a permanent room or space. Pictograms that provide information about a room or space, such as "no smoking," occupant logos, and the International Symbol of Accessibility, are not required to have text descriptors.

F216.3 Directional and Informational Signs. Signs that provide direction to or information about interior spaces and facilities of the site shall comply with 703.5.

ADVISORY F216.3 Directional and Informational Signs. Information about interior spaces and facilities includes rules of conduct, occupant load, and similar signs. Signs providing direction to rooms or spaces include those that identify egress routes.

F216.4 Means of Egress. Signs for means of egress shall comply with F216.4.

F216.4.1 Exit Doors. Doors at exit passageways, exit discharge, and exit stairways shall be identified by tactile signs complying with 703.1, 703.2, and 703.5.

ADVISORY F216.4.1 Exit Doors. An exit passageway is a horizontal exit component that is separated from the interior spaces of the building by fire-resistance-rated construction and that leads to the exit discharge or public way. The exit discharge is that portion of an egress system between the termination of an exit and a public way.

F216.4.2 Areas of Refuge. Signs required by section 1003.2.13.5.4 of the International Building Code (2000 edition) or section 1007.6.4 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1) to provide instructions in areas of refuge shall comply with 703.5.

F216.4.3 Directional Signs. Signs required by section 1003.2.13.6 of the International Building Code (2000 edition) or section 1007.7 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1) to provide directions to accessible means of egress shall comply with 703.5.

F216.5 Parking. Parking spaces complying with 502 shall be identified by signs complying with 502.6.

EXCEPTIONS: 1. Where a total of four or fewer parking spaces, including accessible parking spaces, are provided on a site, identification of accessible parking spaces shall not be required.

2. In residential facilities, where parking spaces are assigned to specific residential dwelling units, identification of accessible parking spaces shall not be required.

F216.6 Entrances. Where not all entrances comply with 404, entrances complying with 404 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1. Directional signs complying with 703.5 that indicate the location of the nearest entrance complying with 404 shall be provided at entrances that do not comply with 404.

ADVISORY F216.6 Entrances. Where a directional sign is required, it should be located to minimize backtracking. In some cases, this could mean locating a sign at the beginning of a route, not just at the inaccessible entrances to a building.

F216.7 Elevators. Where existing elevators do not comply with 407, elevators complying with 407 shall be clearly identified with the International Symbol of Accessibility complying with 703.7.2.1.

F216.8 Toilet Rooms and Bathing Rooms. Where existing toilet rooms or bathing rooms do not comply with 603, directional signs indicating the location of the nearest toilet room or bathing room complying with 603 within the facility shall be provided. Signs shall comply with 703.5 and shall include the International Symbol of Accessibility complying with 703.7.2.1. Where existing toilet rooms or bathing rooms do not comply with 603, the toilet rooms or bathing rooms complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1. Where clustered single user toilet rooms or bathing facilities are permitted to use exception to F213.2, toilet rooms or bathing facilities complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1 unless all toilet rooms and bathing facilities comply with 603.

F216.9 TTYs. Identification and directional signs for public TTYs shall be provided in accordance with F216.9.

F216.9.1 Identification Signs. Public TTYs shall be identified by the International Symbol of TTY complying with 703.7.2.2.

F216.9.2 Directional Signs. Directional signs indicating the location of the nearest public TTY shall be provided at all banks of public pay telephones not containing a public TTY. In addition, where signs provide direction to public pay telephones, they shall also provide direction to public TTYs. Directional signs shall comply with 703.5 and shall include the International Symbol of TTY complying with 703.7.2.2.

F216.10 Assistive Listening Systems. Each assembly area required by F219 to provide assistive listening systems shall provide signs informing patrons of the availability of the assistive listening system. Assistive listening signs shall comply with 703.5 and shall include the International Symbol of Access for Hearing Loss complying with 703.7.2.4.

EXCEPTION: Where ticket offices or windows are provided, signs shall not be required at each assembly area provided that signs are displayed at each ticket office or window informing patrons of the availability of assistive listening systems.

F216.11 Check-Out Aisles. Where more than one check-out aisle is provided, check-out aisles complying with 904.3 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1. Where check-out aisles are identified by numbers, letters, or functions, signs identifying check-out aisles complying with 904.3 shall be located in the same location as the check-out aisle identification.

EXCEPTION: Where all check-out aisles serving a single function comply with 904.3, signs complying with 703.7.2.1 shall not be required.

F216.12 Amusement Rides. Signs identifying the type of access provided on amusement rides shall be provided at entries to queues and waiting lines. In addition, where accessible unload areas also serve as accessible load areas, signs indicating the location of the accessible load and unload areas shall be provided at entries to queues and waiting lines.

ADVISORY F216.12 Amusement Rides. Amusement rides designed primarily for children, amusement rides that are controlled or operated by the rider, and amusement rides without seats, are not required to provide wheelchair spaces, transfer seats, or transfer systems, and need not meet the sign requirements in 216.12. The load and unload areas of these rides must, however, be on an accessible route and must provide turning space.

F217 Telephones

F217.1 General. Where coin-operated public pay telephones, coinless public pay telephones, public closed-circuit telephones, public courtesy phones, or other types of public telephones are provided, public telephones shall be provided in accordance with F217 for each type of public telephone provided. For purposes of this section, a bank of telephones shall be considered to be two or more adjacent telephones.

ADVISORY F217.1 General. These requirements apply to all types of public telephones including courtesy phones at airports and rail stations that provide a free direct connection to hotels, transportation services, and tourist attractions.

F217.2 Wheelchair Accessible Telephones. Where public telephones are provided, wheelchair accessible telephones complying with 704.2 shall be provided in accordance with Table F217.2.

EXCEPTION: Drive-up only public telephones shall not be required to comply with F217.2.

F217.2 Wheelchair Accessible Telephones

Number of Telephones Provided on a Floor, Level, or Exterior Site	Minimum Number of Required Wheelchair Accessible Telephones
1 or more single units	1 per floor, level, and exterior site
1 bank	1 per floor, level, and exterior site
2 or more banks	1 per bank

F217.3 Volume Controls. All public telephones shall have volume controls complying with 704.3.

F217.4 TTYs. TTYs complying with 704.4 shall be provided in accordance with F217.4.

ADVISORY F217.4 TTYs. Separate requirements are provided based on the number of public pay telephones provided at a bank of telephones, within a floor, a building, or on a site. In some instances one TTY can be used to satisfy more than one of these requirements. For example, a TTY required for a bank can satisfy the requirements for a building. However, the requirement for at least one TTY on an exterior site cannot be met by installing a TTY in a bank inside a building. Consideration should be given to phone systems that can accommodate both digital and analog transmissions for compatibility with digital and analog TTYs.

F217.4.1 Bank Requirement. Where four or more public pay telephones are provided at a bank of telephones, at least one public TTY complying with 704.4 shall be provided at that bank.

EXCEPTION: TTYs shall not be required at banks of telephones located within 200 feet (61 m) of, and on the same floor as, a bank containing a public TTY.

F217.4.2 Floor Requirement. Where at least one public pay telephone is provided on a floor of a building, at least one public TTY shall be provided on that floor.

F217.4.3 Building Requirement. Where at least one public pay telephone is provided in a public use area of a building, at least one public TTY shall be provided in the building in a public use area.

F217.4.4 Exterior Site Requirement. Where four or more public pay telephones are provided on an exterior site, at least one public TTY shall be provided on the site.

F217.4.5 Rest Stops, Emergency Roadside Stops, and Service Plazas. Where at least one public pay telephone is provided at a public rest stop, emergency roadside stop, or service plaza, at least one public TTY shall be provided.

F217.4.6 Hospitals. Where at least one public pay telephone is provided serving a hospital emergency room, hospital recovery room, or hospital waiting room, at least one public TTY shall be provided at each location.

F217.4.7 Transportation Facilities. In transportation facilities, in addition to the requirements of F217.4.1 through F217.4.4, where at least one public pay telephone serves a particular entrance to a bus or rail facility, at least one public TTY shall be provided to serve that entrance. In airports, in addition to the requirements of F217.4.1 through F217.4.4, where four or more public pay telephones are located in a terminal outside the security areas, a concourse within the security areas, or a baggage claim area in a terminal, at least one public TTY shall be provided in each location.

F217.4.8 Detention and Correctional Facilities. In detention and correctional facilities, where at least one pay telephone is provided in a secured area used only by detainees or inmates and security personnel, at least one TTY shall be provided in at least one secured area.

F217.5 Shelves for Portable TTYs. Where a bank of telephones in the interior of a building consists of three or more public pay telephones, at least one public pay telephone at the bank shall be provided with a shelf and an electrical outlet in accordance with 704.5.

EXCEPTIONS: 1. Secured areas of detention and correctional facilities where shelves and outlets are prohibited for purposes of security or safety shall not be required to comply with F217.5.

2. The shelf and electrical outlet shall not be required at a bank of telephones with a TTY.

F218 Transportation Facilities

F218.1 General. Transportation facilities shall comply with F218.

F218.2 New and Altered Fixed Guideway Stations. New and altered stations in rapid rail, light rail, commuter rail, intercity rail, high speed rail, and other fixed guideway systems shall comply with 810.5 through 810.10.

F218.3 Bus Shelters. Where provided, bus shelters shall comply with 810.3 and 810.4.

F218.4 Other Transportation Facilities. In other transportation facilities, public address systems shall comply with 810.7 and clocks shall comply with 810.8.

F219 Assistive Listening Systems

F219.1 General. Assistive listening systems shall be provided in accordance with F219 and shall comply with 706.

F219.2 Required Systems. In each assembly area where audible communication is integral to the use of the space, an assistive listening system shall be provided.

EXCEPTION: Other than in courtrooms, assistive listening systems shall not be required where audio amplification is not provided.

F219.3 Receivers. Receivers complying with 706.2 shall be provided for assistive listening systems in each assembly area in accordance with Table F219.3. Twenty-five percent minimum of receivers provided, but no fewer than two, shall be hearing-aid compatible in accordance with 706.3.

EXCEPTIONS: 1. Where a building contains more than one assembly area and the assembly areas required to provide assistive listening systems are under one management, the total number of required receivers shall be permitted to be calculated according to the total number of seats in the assembly areas in the building provided that all receivers are usable with all systems.

2. Where all seats in an assembly area are served by an induction loop assistive listening system, the minimum number of receivers required by Table F219.3 to be hearing-aid compatible shall not be required to be provided.

F219.3 Receivers for Assistive Listening Systems (text version)

Capacity of Seating in Assembly Area	Minimum Number of Required Receivers	Minimum Number of Required Receivers Required to be Hearing-aid Compatible
50 or less	2	2
51 to 200	2, plus 1 per 25 seats over 50 seats ¹	2
201 to 500	2, plus 1 per 25 seats over 50 seats ¹	1 per 4 receivers ¹
501 to 1000	20, plus 1 per 33 seats over 500 seats ¹	1 per 4 receivers ¹
1001 to 2000	35, plus 1 per 50 seats over 1000 seats ¹	1 per 4 receivers ¹
2001 and over	55, plus 1 per 100 seats over 2000 seats ¹	1 per 4 receivers ¹

¹ Or fraction thereof.

F220 Automatic Teller Machines and Fare Machines

F220.1 General. Where automatic teller machines or self-service fare vending, collection, or adjustment machines are provided, at least one of each type provided at each location shall comply with 707. Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type shall comply with 811.

ADVISORY F220.1 General. If a bank provides both interior and exterior ATMs, each such installation is considered a separate location. Accessible ATMs, including those with speech and those that are within reach of people who use wheelchairs, must provide all the functions provided to customers at that location at all times. For example, it is unacceptable for the accessible ATM only to provide cash withdrawals while inaccessible ATMs also sell theater tickets.

F221 Assembly Areas

F221.1 General. Assembly areas shall provide wheelchair spaces, companion seats, and designated aisle seats complying with F221 and 802. In addition, lawn seating shall comply with F221.5.

F221.2 Wheelchair Spaces. Wheelchair spaces complying with F221.2 shall be provided in assembly areas with fixed seating.

F221.2.1 Number and Location. Wheelchair spaces shall be provided complying with F221.2.1.

F221.2.1.1 General Seating. Wheelchair spaces complying with 802.1 shall be provided in accordance with Table F221.2.1.1.

F221.2.1.1 Number of Wheelchair Spaces in Assembly Areas

Number of Seats	Minimum Number of Required Wheelchair Spaces
4 to 25	1
26 to 50	2
51 to 150	4
151 to 300	5
301 to 500	6
501 to 5000	6, plus 1 for each 150, or fraction thereof, between 501 through 5000
5001 and over	36, plus 1 for each 200, or fraction thereof, over 5000

F221.2.1.2 Luxury Boxes, Club Boxes, and Suites in Arenas, Stadiums, and Grandstands. In each luxury box, club box, and suite within arenas, stadiums, and grandstands, wheelchair spaces complying with 802.1 shall be provided in accordance with Table F221.2.1.1.

ADVISORY F221.2.1.2 Luxury Boxes, Club Boxes, and Suites in Arenas, Stadiums, and Grandstands. The number of wheelchair spaces required in luxury boxes, club boxes, and suites within an arena, stadium, or grandstand is to be calculated box by box and suite by suite.

F221.2.1.3 Other Boxes. In boxes other than those required to comply with F221.2.1.2, the total number of wheelchair spaces required shall be determined in accordance with Table F221.2.1.1. Wheelchair spaces shall be located in not less than 20 percent of all boxes provided. Wheelchair spaces shall comply with 802.1.

ADVISORY F221.2.1.3 Other Boxes. The provision for seating in “other boxes” includes box seating provided in facilities such as performing arts auditoria where tiered boxes are designed for spatial and acoustical purposes. The number of wheelchair spaces required in boxes covered by 221.2.1.3 is calculated based on the total number of seats provided in these other boxes. The resulting number of wheelchair spaces must be located in no fewer than 20% of the boxes covered by this section. For example, a concert hall has 20 boxes, each of which contains 10 seats, totaling 200 seats. In this example, 5 wheelchair spaces would be required, and they must be placed in at least 4 of the boxes. Additionally, because the wheelchair spaces must also meet the dispersion requirements of 221.2.3, the boxes containing these wheelchair spaces cannot all be located in one area unless an exception to the dispersion requirements applies.

F221.2.1.4 Team or Player Seating. At least one wheelchair space complying with 802.1 shall be provided in team or player seating areas serving areas of sport activity.

EXCEPTION: Wheelchair spaces shall not be required in team or player seating areas serving bowling lanes not required to comply with F206.2.10.

F221.2.2 Integration. Wheelchair spaces shall be an integral part of the seating plan.

ADVISORY F221.2.2 Integration. The requirement that wheelchair spaces be an “integral part of the seating plan” means that wheelchair spaces must be placed within the footprint of the seating area. Wheelchair spaces cannot be segregated from seating areas. For example, it would be unacceptable to place only the wheelchair spaces, or only the wheelchair spaces and their associated companion seats, outside the seating areas defined by risers in an assembly area.

F221.2.3 Lines of Sight and Dispersion. Wheelchair spaces shall provide lines of sight complying with 802.2 and shall comply with F221.2.3. In providing lines of sight, wheelchair spaces shall be dispersed. Wheelchair spaces shall provide spectators with choices of seating locations and viewing angles that are substantially equivalent to, or better than, the choices of seating locations and viewing angles available to all other spectators. When the number of wheelchair spaces required by F221.2.1 has been met, further dispersion shall not be required.

EXCEPTION: Wheelchair spaces in team or player seating areas serving areas of sport activity shall not be required to comply with F221.2.3.

ADVISORY F221.2.3 Lines of Sight and Dispersion. Consistent with the overall intent of the ADA, individuals who use wheelchairs must be provided equal access so that their experience is substantially equivalent to that of other members of the audience. Thus, while individuals who use wheelchairs need not be provided with the best seats in the house, neither may they be relegated to the worst.

F221.2.3.1 Horizontal Dispersion. Wheelchair spaces shall be dispersed horizontally.

EXCEPTIONS: 1. Horizontal dispersion shall not be required in assembly areas with 300 or fewer seats if the companion seats required by F221.3 and wheelchair spaces are located within the 2nd or 3rd quartile of the total row length. Intermediate aisles shall be included in determining the total row length. If the row length in the 2nd and 3rd quartile of a row is insufficient to accommodate the required number of companion seats and wheelchair spaces, the additional companion seats and wheelchair spaces shall be permitted to be located in the 1st and 4th quartile of the row.

2. In row seating, two wheelchair spaces shall be permitted to be located side-by-side.

ADVISORY F221.2.3.1 Horizontal Dispersion. Horizontal dispersion of wheelchair spaces is the placement of spaces in an assembly facility seating area from side-to-side or, in the case of an arena or stadium, around the field of play or performance area.

F221.2.3.2 Vertical Dispersion. Wheelchair spaces shall be dispersed vertically at varying distances from the screen, performance area, or playing field. In addition, wheelchair spaces shall be located in each balcony or mezzanine that is located on an accessible route.

EXCEPTIONS: 1. Vertical dispersion shall not be required in assembly areas with 300 or fewer seats if the wheelchair spaces provide viewing angles that are equivalent to, or better than, the average viewing angle provided in the facility.

2. In bleachers, wheelchair spaces shall not be required to be provided in rows other than rows at points of entry to bleacher seating.

ADVISORY F221.2.3.2 Vertical Dispersion. When wheelchair spaces are dispersed vertically in an assembly facility they are placed at different locations within the seating area from front-to-back so that the distance from the screen, stage, playing field, area of sports activity, or other focal point is varied among wheelchair spaces.

Advisory F221.2.3.2 Vertical Dispersion Exception 2. Points of entry to bleacher seating may include, but are not limited to, cross aisles, concourses, vomitories, and entrance ramps and stairs. Vertical, center, or side aisles adjoining bleacher seating that are stepped or tiered are not considered entry points.

F221.3 Companion Seats. At least one companion seat complying with 802.3 shall be provided for each wheelchair space required by F221.2.1.

F221.4 Designated Aisle Seats. At least 5 percent of the total number of aisle seats provided shall comply with 802.4 and shall be the aisle seats located closest to accessible routes.

EXCEPTION: Team or player seating areas serving areas of sport activity shall not be required to comply with F221.4.

ADVISORY F221.4 Designated Aisle Seats. When selecting which aisle seats will meet the requirements of 802.4, those aisle seats which are closest to, not necessarily on, accessible routes must be selected first. For example, an assembly area has two aisles (A and B) serving seating areas with an accessible route connecting to the top and bottom of Aisle A only. The aisle seats chosen to meet 802.4 must be those at the top and bottom of Aisle A, working toward the middle. Only when all seats on Aisle A would not meet the five percent minimum would seats on Aisle B be designated.

F221.5 Lawn Seating. Lawn seating areas and exterior overflow seating areas, where fixed seats are not provided, shall connect to an accessible route.

F222 Dressing, Fitting, and Locker Rooms

F222.1 General. Where dressing rooms, fitting rooms, or locker rooms are provided, at least 5 percent, but no fewer than one, of each type of use in each cluster provided shall comply with 803.

EXCEPTION: In alterations, where it is technically infeasible to provide rooms in accordance with F222.1, one room for each sex on each level shall comply with 803. Where only unisex rooms are provided, unisex rooms shall be permitted.

ADVISORY F222.1 General. A “cluster” is a group of rooms proximate to one another. Generally, rooms in a cluster are within sight of, or adjacent to, one another. Different styles of design provide users varying levels of privacy and convenience. Some designs include private changing facilities that are close to core areas of the facility, while other designs use space more economically and provide only group dressing facilities. Regardless of the type of facility, dressing, fitting, and locker rooms should provide people with disabilities rooms that are equally private and convenient to those provided others. For example, in a physician’s office, if people without disabilities must traverse the full length of the office suite in clothing other than their street clothes, it is acceptable for people with disabilities to be asked to do the same.

F222.2 Coat Hooks and Shelves. Where coat hooks or shelves are provided in dressing, fitting or locker rooms without individual compartments, at least one of each type shall comply with 803.5. Where coat hooks or shelves are provided in individual compartments at least one of each type complying with 803.5 shall be provided in individual compartments in dressing, fitting, or locker rooms required to comply with F222.1.

F223 Medical Care and Long-Term Care Facilities

F223.1 General. In licensed medical care facilities and licensed long-term care facilities where the period of stay exceeds twenty-four hours, patient or resident sleeping rooms shall be provided in accordance with F223.

EXCEPTION: Toilet rooms that are part of critical or intensive care patient sleeping rooms shall not be required to comply with 603.

ADVISORY F223.1 General. Because medical facilities frequently reconfigure spaces to reflect changes in medical specialties, Section F223.1 does not include a provision for dispersion of accessible patient or resident sleeping rooms. The lack of a design requirement does not mean that covered entities are not required to provide services to people with disabilities where accessible rooms are not dispersed in specialty areas. Locate accessible rooms near core areas that are less likely to change over time. While dispersion is not required, the flexibility it provides can be a critical factor in ensuring cost effective compliance with applicable civil rights laws, including Sections 501 and 504 of the Rehabilitation Act of 1973, as amended. Additionally, all types of features and amenities should be dispersed among accessible sleeping rooms to ensure equal access to and a variety of choices for all patients and residents.

F223.1.1 Alterations. Where sleeping rooms are altered or added, the requirements of F223 shall apply only to the sleeping rooms being altered or added until the number of sleeping rooms complies with the minimum number required for new construction.

ADVISORY F223.1.1 Alterations. In alterations and additions, the minimum required number is based on the total number of sleeping rooms altered or added instead of on the total number of sleeping rooms provided in a facility. As a facility is altered over time, every effort should be made to disperse accessible sleeping rooms among patient care areas such as pediatrics, cardiac care, maternity, and other units. In this way, people with disabilities can have access to the full-range of services provided by a medical care facility.

F223.2 Hospitals, Rehabilitation Facilities, Psychiatric Facilities and Detoxification Facilities. Hospitals, rehabilitation facilities, psychiatric facilities and detoxification facilities shall comply with F223.2.

F223.2.1 Facilities Not Specializing in Treating Conditions That Affect Mobility. In facilities not specializing in treating conditions that affect mobility, at least 10 percent, but no fewer than one, of the patient sleeping rooms shall provide mobility features complying with 805.

F223.2.2 Facilities Specializing in Treating Conditions That Affect Mobility. In facilities specializing in treating conditions that affect mobility, 100 percent of the patient sleeping rooms shall provide mobility features complying with 805.

ADVISORY F223.2.2 Facilities Specializing in Treating Conditions That Affect Mobility. Conditions that affect mobility include conditions requiring the use or assistance of a brace, cane, crutch, prosthetic device, wheelchair, or powered mobility aid; arthritic, neurological, or orthopedic conditions that severely limit one's ability to walk; respiratory diseases and other conditions which may require the use of portable oxygen; and cardiac conditions that impose significant functional limitations. Facilities that may provide treatment for, but that do not specialize in treatment of such conditions, such as general rehabilitation hospitals, are not subject to this requirement but are subject to Section F223.2.1.

F223.3 Long-Term Care Facilities. In licensed long-term care facilities, at least 50 percent, but no fewer than one, of each type of resident sleeping room shall provide mobility features complying with 805.

F224 Transient Lodging Guest Rooms

F224.1 General. Transient lodging facilities shall provide guest rooms in accordance with F224.

ADVISORY F224.1 General. Certain facilities used for transient lodging including time shares, dormitories, and town homes may be covered by both these requirements and the Fair Housing Amendments Act. The Fair Housing Amendments Act requires that certain residential structures having four or more multi-family dwelling units, regardless of whether they are privately owned or federally assisted, include certain features of accessible and adaptable design according to guidelines established by the U.S. Department of Housing and Urban Development (HUD). This law and the appropriate regulations should be consulted before proceeding with the design and construction of residential housing.

F224.1.1 Alterations. Where guest rooms are altered or added, the requirements of F224 shall apply only to the guest rooms being altered or added until the number of guest rooms complies with the minimum number required for new construction.

ADVISORY F224.1.1 Alterations. In alterations and additions, the minimum required number of accessible guest rooms is based on the total number of guest rooms altered or added instead of the total number of guest rooms provided in a facility. Typically, each alteration of a facility is limited to a particular portion of the facility. When accessible guest rooms are added as a result of subsequent alterations, compliance with 224.5 (Dispersion) is more likely to be achieved if all of the accessible guest rooms are not provided in the same area of the facility.

F224.1.2 Guest Room Doors and Doorways. Entrances, doors, and doorways providing user passage into and within guest rooms that are not required to provide mobility features complying with 806.2 shall comply with 404.2.3.

EXCEPTION: Shower and sauna doors in guest rooms that are not required to provide mobility features complying with 806.2 shall not be required to comply with 404.2.3.

ADVISORY F224.1.2 Guest Room Doors and Doorways. Because of the social interaction that often occurs in lodging facilities, an accessible clear opening width is required for doors and doorways to and within all guest rooms, including those not required to be accessible. This applies to all doors, including bathroom doors, that allow full user passage. Other requirements for doors and doorways in Section 404 do not apply to guest rooms not required to provide mobility features.

F224.2 Guest Rooms with Mobility Features. In transient lodging facilities, guest rooms with mobility features complying with 806.2 shall be provided in accordance with Table F224.2.

F224.2 Guest Rooms with Mobility Features (text version)

Total Number of Guest Rooms Provided	Minimum Number of Required Rooms Without Roll-in Showers	Minimum Number of Required Rooms With Roll-in Showers	Total Number of Required Rooms
1 to 25	1	0	1
26 to 50	2	0	2
51 to 75	3	1	4
76 to 100	4	1	5
101 to 150	5	2	7
151 to 200	6	2	8
201 to 300	7	3	10
301 to 400	8	4	12
401 to 500	9	4	13
501 to 1000	2 percent of total	1 percent of total	3 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000	10, plus 1 for each 100, or fraction thereof, over 1000	30, plus 2 for each 100, or fraction thereof, over 1000

F224.3 Beds. In guest rooms having more than 25 beds, 5 percent minimum of the beds shall have clear floor space complying with 806.2.3.

F224.4 Guest Rooms with Communication Features. In transient lodging facilities, guest rooms with communication features complying with 806.3 shall be provided in accordance with Table F224.4.

F224.4 Guest Rooms with Communication Features

Total Number of Guest Rooms Provided	Minimum Number of Required Guest Rooms With Communication Features
2 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1000	5 percent of total
1001 and over	50, plus 3 for each 100 over 1000

F224.5 Dispersion. Guest rooms required to provide mobility features complying with 806.2 and guest rooms required to provide communication features complying with 806.3 shall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. Where the minimum number of guest rooms required to comply with 806 is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds, and amenities. At least one guest room required to provide mobility features complying with 806.2 shall also provide communication features complying with 806.3. Not more than 10 percent of guest rooms required to provide mobility features complying with 806.2 shall be used to satisfy the minimum number of guest rooms required to provide communication features complying with 806.3.

ADVISORY F224.5 Dispersion. Factors to be considered in providing an equivalent range of options may include, but are not limited to, room size, bed size, cost, view, bathroom fixtures such as hot tubs and spas, smoking and nonsmoking, and the number of rooms provided.

F225 Storage

F225.1 General. Storage facilities shall comply with F225.

F225.2 Storage. Where storage is provided in accessible spaces, at least one of each type shall comply with 811.

ADVISORY F225.2 Storage. Types of storage include, but are not limited to, closets, cabinets, shelves, clothes rods, hooks, and drawers. Where provided, at least one of each type of storage must be within the reach ranges specified in 308; however, it is permissible to install additional storage outside the reach ranges.

F225.2.1 Lockers. Where lockers are provided, at least 5 percent, but no fewer than one of each type, shall comply with 811.

ADVISORY F225.2.1 Lockers. Different types of lockers may include full-size and half-size lockers, as well as those specifically designed for storage of various sports equipment.

F225.2.2 Self-Service Shelving. Self-service shelves shall be located on an accessible route complying with 402. Self-service shelving shall not be required to comply with 308.

ADVISORY F225.2.2 Self-Service Shelving. Self-service shelves include, but are not limited to, library, store, or post office shelves.

F225.3 Self-Service Storage Facilities. Self-service storage facilities shall provide individual self-service storage spaces complying with these requirements in accordance with Table F225.3.

F225.3 Self-Service Storage Facilities

Total Spaces in Facility	Minimum Number of Spaces Required to be Accessible
1 to 200	5 percent, but no fewer than 1
201 and over	10, plus 2 percent of total number of units over 200

ADVISORY F225.3 Self-Service Storage Facilities. Although there are no technical requirements that are unique to self-service storage facilities, elements and spaces provided in facilities containing self-service storage spaces required to comply with these requirements must comply with this document where applicable. For example: the number of storage spaces required

to comply with these requirements must provide Accessible Routes complying with Section F206; Accessible Means of Egress complying with Section F207; Parking Spaces complying with Section F208; and, where provided, other public use or common use elements and facilities such as toilet rooms, drinking fountains, and telephones must comply with the applicable requirements of this document.

F225.3.1 Dispersion. Individual self-service storage spaces shall be dispersed throughout the various classes of spaces provided. Where more classes of spaces are provided than the number required to be accessible, the number of spaces shall not be required to exceed that required by Table F225.3. Self-service storage spaces complying with Table F225.3 shall not be required to be dispersed among buildings in a multi-building facility.

F226 Dining Surfaces and Work Surfaces

F226.1 General. Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with 902. In addition, where work surfaces are provided, at least 5 percent shall comply with 902.

EXCEPTIONS: 1. Sales counters and service counters shall not be required to comply with 902.

2. Check writing surfaces provided at check-out aisles not required to comply with 904.3 shall not be required to comply with 902.

ADVISORY F226.1 General. In facilities covered by the ABA, this requirement applies to work surfaces used by employees. Five percent, but not less than one, of permanently installed work surfaces in each work area must be accessible. Permanently installed work surfaces include, but are not limited to, laboratory and work benches, fume hoods, reception counters, teller windows, study carrels, commercial kitchen counters, writing surfaces, and fixed conference tables. Where furnishings are not fixed, Sections 501, 503, and 504 of the Rehabilitation Act of 1973, as amended provides that Federal employees, employees of Federal contractors, and certain other employees, are entitled to “reasonable accommodations.” This means that employers may need to procure or adjust furnishings to accommodate the individual needs of employees with disabilities on an “as needed” basis. Consider work surfaces that are flexible and permit installation at variable heights and clearances.

F226.2 Dispersion. Dining surfaces and work surfaces required to comply with 902 shall be dispersed throughout the space or facility containing dining surfaces and work surfaces.

F227 Sales and Service

F227.1 General. Where provided, check-out aisles, sales counters, service counters, food service lines, queues, and waiting lines shall comply with F227 and 904.

F227.2 Check-Out Aisles. Where check-out aisles are provided, check-out aisles complying with 904.3 shall be provided in accordance with Table F227.2. Where check-out aisles serve different functions, check-out aisles complying with 904.3 shall be provided in accordance with Table F227.2 for each function. Where check-out aisles are dispersed throughout the building or facility, check-out aisles complying with 904.3 shall be dispersed.

EXCEPTION: Where the selling space is under 5000 square feet (465 m2) no more than one check-out aisle complying with 904.3 shall be required.

F227.2 Check-Out Aisles

Number of Check-Out Aisles of Each Function	Minimum Number of Check-Out Aisles of Each Function Required to Comply with 904.3
1 to 4	1
5 to 8	2
9 to 15	3
16 and over	3, plus 20 percent of additional aisles

F227.2.1 Altered Check-Out Aisles. Where check-out aisles are altered, at least one of each check-out aisle serving each function shall comply with 904.3 until the number of check-out aisles complies with F227.2.

F227.3 Counters. Where provided, at least one of each type of sales counter and service counter shall comply with 904.4. Where counters are dispersed throughout the building or facility, counters complying with 904.4 also shall be dispersed.

ADVISORY F227.3 Counters. Types of counters that provide different services in the same facility include, but are not limited to, order, pick-up, express, and returns. One continuous counter can be used to provide different types of service. For example, order and pick-up are different services. It would not be acceptable to provide access only to the part of the counter where orders are taken when orders are picked-up at a different location on the same counter. Both the order and pick-up section of the counter must be accessible.

F227.4 Food Service Lines. Food service lines shall comply with 904.5. Where self-service shelves are provided, at least 50 percent, but no fewer than one, of each type provided shall comply with 308.

F227.5 Queues and Waiting Lines. Queues and waiting lines servicing counters or check-out aisles required to comply with 904.3 or 904.4 shall comply with 403.

F228 Depositories, Vending Machines, Change Machines, Mail Boxes, and Fuel Dispensers

F228.1 General. Where provided, at least one of each type of depository, vending machine, change machine, and fuel dispenser shall comply with 309.

EXCEPTIONS: 1. Drive-up only depositories shall not be required to comply with 309.

2. Fuel dispensers provided for fueling official government vehicles shall not be required to comply with 309.

ADVISORY F228.1 General. Depositories include, but are not limited to, night receptacles in banks, post offices, video stores, and libraries.

F228.2 Mail Boxes. Where mail boxes are provided in an interior location, at least 5 percent, but no fewer than one, of each type shall comply with 309. In residential facilities, where mail boxes are provided for each residential dwelling unit, mail boxes complying with 309 shall be provided for each residential dwelling unit required to provide mobility features complying with 809.2 through 809.4.

F229 Windows

F229.1 General. Where glazed openings are provided in accessible rooms or spaces for operation by occupants, excluding employees, at least one opening shall comply with 309. In accessible rooms or spaces, each glazed opening required by an administrative authority to be operable shall comply with 309.

EXCEPTION: 1. Glazed openings in residential dwelling units required to comply with 809 shall not be required to comply with F229.

2. Glazed openings in guest rooms required to provide communication features and in guest rooms required to comply with F206.5.3 shall not be required to comply with F229.

F230 Two-Way Communication Systems

F230.1 General. Where a two-way communication system is provided to gain admittance to a building or facility or to restricted areas within a building or facility, the system shall comply with 708.

ADVISORY F230.1 General. This requirement applies to facilities such as office buildings, courthouses, and other facilities where admittance to the building or restricted spaces is dependent on two-way communication systems.

F231 Judicial Facilities

F231.1 General. Judicial facilities shall comply with F231.

F231.2 Courtrooms. Each courtroom shall comply with 808.

F231.3 Holding Cells. Where provided, central holding cells and court-floor holding cells shall comply with F231.3.

F231.3.1 Central Holding Cells. Where separate central holding cells are provided for adult male, juvenile male, adult female, or juvenile female, one of each type shall comply with 807.2. Where central holding cells are provided and are not separated by age or sex, at least one cell complying with 807.2 shall be provided.

F231.3.2 Court-Floor Holding Cells. Where separate court-floor holding cells are provided for adult male, juvenile male, adult female, or juvenile female, each courtroom shall be served by one cell of each type complying with 807.2. Where court-floor holding cells are provided and are not separated by age or sex, courtrooms shall be served by at least one cell complying with 807.2. Cells may serve more than one courtroom.

F231.4 Visiting Areas. Visiting areas shall comply with F231.4.

F231.4.1 Cubicles and Counters. At least 5 percent, but no fewer than one, of cubicles shall comply with 902 on both the visitor and detainee sides. Where counters are provided, at least one shall comply with 904.4.2 on both the visitor and detainee sides.

EXCEPTION: The detainee side of cubicles or counters at non-contact visiting areas not serving holding cells required to comply with F231 shall not be required to comply with 902 or 904.4.2.

F231.4.2 Partitions. Where solid partitions or security glazing separate visitors from detainees at least one of each type of cubicle or counter partition shall comply with 904.6.

F232 Detention Facilities and Correctional Facilities

F232.1 General. Buildings, facilities, or portions thereof, in which people are detained for penal or correction purposes, or in which the liberty of the inmates is restricted for security reasons shall comply with F232.

ADVISORY F232.1 General. Detention facilities include, but are not limited to, jails, detention centers, and holding cells in police stations. Correctional facilities include, but are not limited to, prisons, reformatories, and correctional centers.

F232.2 General Holding Cells and General Housing Cells. General holding cells and general housing cells shall be provided in accordance with F232.2.

EXCEPTION: Alterations to cells shall not be required to comply except to the extent determined by regulations issued by the appropriate Federal agency having authority under section 504 of the Rehabilitation Act of 1973.

ADVISORY F232.2 General Holding Cells and General Housing Cells. Accessible cells or rooms should be dispersed among different levels of security, housing categories, and holding classifications (e.g., male/female and adult/juvenile) to facilitate access. Many detention and correctional facilities are designed so that certain areas (e.g., “shift” areas) can be adapted to serve as different types of housing according to need. For example, a shift area serving as a medium-security housing unit might be redesignated for a period of time as a high-security housing unit to meet capacity needs. Placement of accessible cells or rooms in shift areas may allow additional flexibility in meeting requirements for dispersion of accessible cells or rooms.

Advisory F232.2 General Holding Cells and General Housing Cells Exception. Although these requirements do not specify that cells be accessible as a consequence of an alteration, Section 504 of the Rehabilitation Act of 1973, as amended requires that each service, program, or activity conducted by a Federal agency, when viewed in its entirety, be readily accessible to and usable by individuals with disabilities. This requirement must be met unless doing so would fundamentally alter the nature of a service, program, or activity or would result in undue financial and administrative burdens.

F232.2.1 Cells with Mobility Features. At least 2 percent, but no fewer than one, of the total number of cells in a facility shall provide mobility features complying with 807.2.

F232.2.1.1 Beds. In cells having more than 25 beds, at least 5 percent of the beds shall have clear floor space complying with 807.2.3.

F232.2.2 Cells with Communication Features. At least 2 percent, but no fewer than one, of the total number of general holding cells and general housing cells equipped with audible emergency alarm systems and permanently installed telephones within the cell shall provide communication features complying with 807.3.

F232.3 Special Holding Cells and Special Housing Cells. Where special holding cells or special housing cells are provided, at least one cell serving each purpose shall provide mobility features complying with 807.2. Cells subject to this requirement include, but are not limited to, those used for purposes of orientation, protective custody, administrative or disciplinary detention or segregation, detoxification, and medical isolation.

EXCEPTION: Alterations to cells shall not be required to comply except to the extent determined by regulations issued by the appropriate Federal agency having authority under section 504 of the Rehabilitation Act of 1973.

F232.4 Medical Care Facilities. Patient bedrooms or cells required to comply with F223 shall be provided in addition to any medical isolation cells required to comply with F232.3.

F232.5 Visiting Areas. Visiting areas shall comply with F232.5.

F232.5.1 Cubicles and Counters. At least 5 percent, but no fewer than one, of cubicles shall comply with 902 on both the visitor and detainee sides. Where counters are provided, at least one shall comply with 904.4.2 on both the visitor and detainee or inmate sides.

EXCEPTION: The inmate or detainee side of cubicles or counters at non-contact visiting areas not serving holding cells or housing cells required to comply with F232 shall not be required to comply with 902 or 904.4.2.

F232.5.2 Partitions. Where solid partitions or security glazing separate visitors from detainees or inmates at least one of each type of cubicle or counter partition shall comply with 904.6.

F233 Residential Facilities

F233.1 General. Facilities with residential dwelling units shall comply with F233.

ADVISORY F233.1 General. Section F233 outlines the requirements for residential facilities subject to the Architectural Barriers Act. The facilities covered by Section F233, as well as other facilities not covered by this section, may still be subject to other Federal laws such as the Fair Housing Act and Section 504 of the Rehabilitation Act of 1973, as amended. For example, the Fair Housing Act requires that certain residential structures having four or more multi-family dwelling units, regardless of whether they are privately owned or federally assisted, include certain features of accessible and adaptable design according to guidelines established by the U.S. Department of Housing and Urban Development (HUD). These laws and the appropriate regulations should be consulted before proceeding with the design and construction of residential facilities.

Residential facilities containing residential dwelling units provided by entities subject to HUD’s Section 504 regulations and residential dwelling units covered by Section F233.3 must comply with the technical and scoping requirements in Chapters 1 through 10 included in this document. Section F233 is not a stand-alone section; this section only addresses the minimum number of residential dwelling units within a facility required to comply with Chapter 8. However, residential facilities must also comply with the requirements of this document. For example: Section F206.5.4 requires all doors and doorways providing user passage in residential dwelling units providing mobility features to comply with Section 404; Section F206.7.6 permits platform lifts to be used to connect levels within residential dwelling units providing mobility features; Section F208 provides general scoping for accessible parking and Section F208.2.3.1 specifies the required number of accessible parking spaces for each residential dwelling unit providing mobility features; Section F228.2 requires mail boxes to be within reach ranges when they

serve residential dwelling units providing mobility features; play areas are addressed in Section F240; and swimming pools are addressed in Section F242. There are special provisions applicable to facilities containing residential dwelling units at: Exception 3 to F202.3; Exception to F202.4; F203.9; and Exception 3 to F206.2.3.

F233.2 Residential Dwelling Units Provided by HUD or Through Grant or Loan Programs Administered by HUD. Where facilities with residential dwelling units are provided by the Department of Housing and Urban Development (HUD), or through a grant or loan program administered by HUD, residential dwelling units with mobility features complying with 809.2 through 809.4 shall be provided in a number required by the regulations issued by HUD under Section 504 of the Rehabilitation Act of 1973, as amended. Residential dwelling units required to provide mobility features complying with 809.2 through 809.4 shall be on an accessible route as required by F206. In addition, residential dwelling units with communication features complying with 809.5 shall be provided in a number required by the applicable HUD regulations. Residential dwelling units subject to F233.2 shall not be required to comply with F233.3 or F233.4.

ADVISORY F233.2 Residential Dwelling Units Provided by HUD or Through Grant or Loan Programs Administered by HUD. Section F233.2 requires that entities subject to HUD's regulations implementing Section 504 of the Rehabilitation Act of 1973, as amended, provide residential dwelling units containing mobility features and residential dwelling units containing communication features complying with these regulations in a number specified in HUD's Section 504 regulations. Further, the residential dwelling units provided must be dispersed according to HUD's Section 504 criteria. In addition, Section F233.2 defers to HUD the specification of criteria by which the technical requirements of this document will apply to alterations of existing facilities subject to HUD's Section 504 regulations.

F233.3 Residential Dwelling Units Provided on Military Installations. Military installations with residential dwelling units shall comply with F233.3. Residential dwelling units on military installations subject to F233.3 shall not be required to comply with F233.2 or F233.4.

F233.3.1 Minimum Number: New Construction. Newly constructed facilities with residential dwelling units shall comply with F233.3.1.

F233.3.1.1 Residential Dwelling Units with Mobility Features. On military installations with residential dwelling units, at least 5 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide mobility features complying with 809.2 through 809.4 and shall be on an accessible route as required by F206.

F233.3.1.2 Residential Dwelling Units with Communication Features. On military installations with residential dwelling units, at least 2 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide communication features complying with 809.5.

F233.3.2 Additions. Where an addition to an existing building results in an increase in the number of residential dwelling units, the requirements of F233.3.1 shall apply only to the residential dwelling units that are added until the total number of residential dwelling units complies with the minimum number required by F233.3.1. Residential dwelling units required to comply with F233.3.1.1 shall be on an accessible route as required by F206.

F233.3.3 Alterations. Alterations shall comply with F233.3.3.

EXCEPTION: Where compliance with 809.2, 809.3, or 809.4 is technically infeasible, or where it is technically infeasible to provide an accessible route to a residential dwelling unit, the Department of Defense shall be permitted to alter or construct a comparable residential dwelling unit to comply with 809.2 through 809.4 provided that the minimum number of residential dwelling units required by F233.3.1.1 and F233.3.1.2, as applicable, is satisfied.

F233.3.3.1 Alterations to Vacated Buildings. Where a building is vacated for the purposes of alteration, at least 5 percent of the residential dwelling units shall comply with 809.2 through 809.4 and shall be on an accessible route as required by F206. In addition, at least 2 percent of the residential dwelling units shall comply with 809.5.

F233.3.3.2 Alterations to Individual Residential Dwelling Units. In individual residential dwelling units, where a bathroom or a kitchen is substantially altered, and at least one other room is altered, the requirements of F233.3.1 shall apply to the altered residential dwelling units until the total number of residential dwelling units complies with the minimum number required by F233.3.1.1 and F233.3.1.2. Residential dwelling units required to comply with F233.3.1.1 shall be on an accessible route as required by F206.

F233.3.4 Dispersion. Residential dwelling units required to provide mobility features complying with 809.2 through 809.4 and residential dwelling units required provide communication features complying with 809.5 shall be dispersed among the various types of residential dwelling units on the military installation, and shall provide choices of residential dwelling units comparable to, and integrated with, those available to other residents.

EXCEPTION: Where multi-story residential dwelling units are one of the types of residential dwelling units provided, one-story residential dwelling units shall be permitted as a substitute for multi-story residential dwelling units where equivalent spaces and amenities are provided in the one-story residential dwelling unit.

F233.4 Residential Dwelling Units Provided by Other Federal Agencies or Through Grant or Loan Programs Administered by Other Federal Agencies. Facilities with residential dwelling units provided by other federal agencies or through grant or loan

programs administered by other federal agencies shall comply with F233.4. Residential dwelling units subject to F233.4 shall not be required to comply with F233.2 or F233.3.

F233.4.1 Minimum Number: New Construction. Newly constructed facilities with residential dwelling units shall comply with F233.4.1.

EXCEPTION: Where facilities contain 15 or fewer residential dwelling units, the requirements of F233.4.1.1 and F233.4.1.2 shall apply to the total number of residential dwelling units that are constructed under a single contract, or are developed as a whole, whether or not located on a common site.

F233.4.1.1 Residential Dwelling Units with Mobility Features. In facilities with residential dwelling units, at least 5 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide mobility features complying with 809.2 through 809.4 and shall be on an accessible route as required by F206.

F233.4.1.2 Residential Dwelling Units with Communication Features. In facilities with residential dwelling units, at least 2 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide communication features complying with 809.5.

F233.4.2 Residential Dwelling Units for Sale. Residential dwelling units offered for sale shall provide accessible features to the extent required by regulations issued by Federal agencies under Section 504 of the Rehabilitation Act of 1973, as amended.

ADVISORY F233.4.2 Residential Dwelling Units for Sale. An agency that uses federal funds or an entity that receives federal financial assistance to build housing for purchase by individual home buyers must provide access according to the requirements of the applicable Section 504 regulations.

F233.4.3 Additions. Where an addition to an existing building results in an increase in the number of residential dwelling units, the requirements of F233.4.1 shall apply only to the residential dwelling units that are added until the total number of residential dwelling units complies with the minimum number required by F233.4.1. Residential dwelling units required to comply with F233.4.1.1 shall be on an accessible route as required by F206.

F233.4.4 Alterations. Alterations shall comply with F233.4.4.

EXCEPTION: Where compliance with 809.2, 809.3, or 809.4 is technically infeasible, or where it is technically infeasible to provide an accessible route to a residential dwelling unit, the entity shall be permitted to alter or construct a comparable residential dwelling unit to comply with 809.2 through 809.4 provided that the minimum number of residential dwelling units required by F233.4.1.1 and F233.4.1.2, as applicable, is satisfied.

ADVISORY F233.4.4 Alterations Exception. A substituted dwelling unit must be comparable to the dwelling unit that is not made accessible. Factors to be considered in comparing one dwelling unit to another should include the number of bedrooms; amenities provided within the dwelling unit; types of common spaces provided within the facility; and location with respect to community resources and services, such as public transportation and civic, recreational, and mercantile facilities.

F233.4.4.1 Alterations to Vacated Buildings. Where a building is vacated for the purposes of alteration and the altered building contains more than 15 residential dwelling units, at least 5 percent of the residential dwelling units shall comply with 809.2 through 809.4 and shall be on an accessible route as required by F206. In addition, at least 2 percent of the residential dwelling units shall comply with 809.5.

ADVISORY F233.4.4.1 Alterations to Vacated Buildings. This provision is intended to apply where a building is vacated with the intent to alter the building. Buildings that are vacated solely for pest control or asbestos removal are not subject to the requirements to provide residential dwelling units with mobility features or communication features.

F233.4.4.2 Alterations to Individual Residential Dwelling Units. In individual residential dwelling units, where a bathroom or a kitchen is substantially altered, and at least one other room is altered the requirements of F233.4.1 shall apply to the altered residential dwelling units until the total number of residential dwelling units complies with the minimum number required by F233.4.1.1 and F233.4.1.2. Residential dwelling units required to comply with F233.4.1.1 shall be on an accessible route as required by F206.

EXCEPTION: Where facilities contain 15 or fewer residential dwelling units, the requirements of F233.4.1.1 and F233.4.1.2 shall apply to the total number of residential dwelling units that are altered under a single contract, or are developed as a whole, whether or not located on a common site.

ADVISORY F233.4.4.2 Alterations to Individual Residential Dwelling Units. Section F233.4.4.2 uses the terms “substantially altered” and “altered.” A substantial alteration to a kitchen or bathroom includes, but is not limited to, alterations that are changes to or rearrangements in the plan configuration, or replacement of cabinetry. Substantial alterations do not include normal maintenance or appliance and fixture replacement, unless such maintenance or replacement requires changes to or rearrangements in the plan configuration, or replacement of cabinetry. The term “alteration” is defined in Section F106 of these requirements.

F233.4.5 Dispersion. Residential dwelling units required to provide mobility features complying with 809.2 through 809.4 and residential dwelling units required to provide communication features complying with 809.5 shall be dispersed among the

various types of residential dwelling units in the facility and shall provide choices of residential dwelling units comparable to, and integrated with, those available to other residents.

EXCEPTION: Where multi-story residential dwelling units are one of the types of residential dwelling units provided, one-story residential dwelling units shall be permitted as a substitute for multi-story residential dwelling units where equivalent spaces and amenities are provided in the one-story residential dwelling unit.

F234 Amusement Rides

F234.1 General. Amusement rides shall comply with F234.

EXCEPTION: Mobile or portable amusement rides shall not be required to comply with F234.

ADVISORY F234.1 General. These requirements apply generally to newly designed and constructed amusement rides and attractions. A custom designed and constructed ride is new upon its first use, which is the first time amusement park patrons take the ride. With respect to amusement rides purchased from other entities, new refers to the first permanent installation of the ride, whether it is used off the shelf or modified before it is installed. Where amusement rides are moved after several seasons to another area of the park or to another park, the ride would not be considered newly designed or newly constructed.

Some amusement rides and attractions that have unique designs and features are not addressed by these requirements. In those situations, these requirements are to be applied to the extent possible. An example of an amusement ride not specifically addressed by these requirements includes “virtual reality” rides where the device does not move through a fixed course within a defined area. An accessible route must be provided to these rides. Where an attraction or ride has unique features for which there are no applicable scoping provisions, then a reasonable number, but at least one, of the features must be located on an accessible route. Where there are appropriate technical provisions, they must be applied to the elements that are covered by the scoping provisions.

Advisory F234.1 General Exception. Mobile or temporary rides are those set up for short periods of time such as traveling carnivals, State and county fairs, and festivals. The amusement rides that are covered by F234.1 are ones that are not regularly assembled and disassembled.

F234.2 Load and Unload Areas. Load and unload areas serving amusement rides shall comply with 1002.3.

F234.3 Minimum Number. Amusement rides shall provide at least one wheelchair space complying with 1002.4, or at least one amusement ride seat designed for transfer complying with 1002.5, or at least one transfer device complying with 1002.6.

EXCEPTIONS: 1. Amusement rides that are controlled or operated by the rider shall not be required to comply with F234.3.

2. Amusement rides designed primarily for children, where children are assisted on and off the ride by an adult, shall not be required to comply with F234.3.

3. Amusement rides that do not provide amusement ride seats shall not be required to comply with F234.3.

ADVISORY F234.3 Minimum Number Exceptions 1 through 3. Amusement rides controlled or operated by the rider, designed for children, or rides without ride seats are not required to comply with F234.3. These rides are not exempt from the other provisions in F234 requiring an accessible route to the load and unload areas and to the ride. The exception does not apply to those rides where patrons may cause the ride to make incidental movements, but where the patron otherwise has no control over the ride.

ADVISORY F234.3 Minimum Number Exception 2. The exception is limited to those rides designed “primarily” for children, where children are assisted on and off the ride by an adult. This exception is limited to those rides designed for children and not for the occasional adult user. An accessible route to and turning space in the load and unload area will provide access for adults and family members assisting children on and off these rides.

F234.4 Existing Amusement Rides. Where existing amusement rides are altered, the alteration shall comply with F234.4.

ADVISORY F234.4 Existing Amusement Rides. Routine maintenance, painting, and changing of theme boards are examples of activities that do not constitute an alteration subject to this section.

F234.4.1 Load and Unload Areas. Where load and unload areas serving existing amusement rides are newly designed and constructed, the load and unload areas shall comply with 1002.3.

F234.4.2 Minimum Number. Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride’s performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with F234.3.

F235 Recreational Boating Facilities

F235.1 General. Recreational boating facilities shall comply with F235.

F235.2 Boat Slips. Boat slips complying with 1003.3.1 shall be provided in accordance with Table F235.2. Where the number of boat slips is not identified, each 40 feet (12 m) of boat slip edge provided along the perimeter of the pier shall be counted as one boat slip for the purpose of this section.

F235.2 Boat Slips

Total Number of Boat Slips Provided in Facility	Minimum Number of Required Accessible Boat Slips
1 to 25	1
26 to 50	2
51 to 100	3
101 to 150	4
151 to 300	5
301 to 400	6
401 to 500	7
501 to 600	8
601 to 700	9
701 to 800	10
801 to 900	11
901 to 1000	12
1001 and over	12, plus 1 for every 100, or fraction thereof, over 1000

ADVISORY F235.2 Boat Slips. The requirement for boat slips also applies to piers where boat slips are not demarcated. For example, a single pier 25 feet (7620 mm) long and 5 feet (1525 mm) wide (the minimum width specified by Section 1003.3) allows boats to moor on three sides. Because the number of boat slips is not demarcated, the total length of boat slip edge (55 feet, 17 m) must be used to determine the number of boat slips provided (two). This number is based on the specification in Section F235.2 that each 40 feet (12 m) of boat slip edge, or fraction thereof, counts as one boat slip. In this example, Table F235.2 would require one boat slip to be accessible.

F235.2.1 Dispersion. Boat slips complying with 1003.3.1 shall be dispersed throughout the various types of boat slips provided. Where the minimum number of boat slips required to comply with 1003.3.1 has been met, no further dispersion shall be required.

ADVISORY F235.2.1 Dispersion. Types of boat slips are based on the size of the boat slips; whether single berths or double berths, shallow water or deep water, transient or longer-term lease, covered or uncovered; and whether slips are equipped with features such as telephone, water, electricity or cable connections. The term “boat slip” is intended to cover any pier area other than launch ramp boarding piers where recreational boats are moored for purposes of berthing, embarking, or disembarking. For example, a fuel pier may contain boat slips, and this type of short term slip would be included in determining compliance with F235.2.

F235.3 Boarding Piers at Boat Launch Ramps. Where boarding piers are provided at boat launch ramps, at least 5 percent, but no fewer than one, of the boarding piers shall comply with 1003.3.2.

F236 Exercise Machines and Equipment

F236.1 General. At least one of each type of exercise machine and equipment shall comply with 1004.

ADVISORY F236.1 General. Most strength training equipment and machines are considered different types. Where operators provide a biceps curl machine and cable cross-over machine, both machines are required to meet the provisions in this section, even though an individual may be able to work on their biceps through both types of equipment.

Similarly, there are many types of cardiovascular exercise machines, such as stationary bicycles, rowing machines, stair climbers, and treadmills. Each machine provides a cardiovascular exercise and is considered a different type for purposes of these requirements.

F237 Fishing Piers and Platforms

F237.1 General. Fishing piers and platforms shall comply with 1005.

F238 Golf Facilities

F238.1 General. Golf facilities shall comply with F238.

F238.2 Golf Courses. Golf courses shall comply with F238.2.

F238.2.1 Teeing Grounds. Where one teeing ground is provided for a hole, the teeing ground shall be designed and constructed so that a golf car can enter and exit the teeing ground. Where two teeing grounds are provided for a hole, the forward teeing ground shall be designed and constructed so that a golf car can enter and exit the teeing ground. Where three or more teeing grounds are provided for a hole, at least two teeing grounds, including the forward teeing ground, shall be designed and constructed so that a golf car can enter and exit each teeing ground.

EXCEPTION: In existing golf courses, the forward teeing ground shall not be required to be one of the teeing grounds on a hole designed and constructed so that a golf car can enter and exit the teeing ground where compliance is not feasible due to terrain.

F238.2.2 Putting Greens. Putting greens shall be designed and constructed so that a golf car can enter and exit the putting green.

F238.2.3 Weather Shelters. Where provided, weather shelters shall be designed and constructed so that a golf car can enter and exit the weather shelter and shall comply with 1006.4.

F238.3 Practice Putting Greens, Practice Teeing Grounds, and Teeing Stations at Driving Ranges. At least 5 percent, but no fewer than one, of practice putting greens, practice teeing grounds, and teeing stations at driving ranges shall be designed and constructed so that a golf car can enter and exit the practice putting greens, practice teeing grounds, and teeing stations at driving ranges.

F239 Miniature Golf Facilities

F239.1 General. Miniature golf facilities shall comply with F239.

F239.2 Minimum Number. At least 50 percent of holes on miniature golf courses shall comply with 1007.3.

ADVISORY F239.2 Minimum Number. Where possible, providing access to all holes on a miniature golf course is recommended. If a course is designed with the minimum 50 percent accessible holes, designers or operators are encouraged to select holes which provide for an equivalent experience to the maximum extent possible.

F239.3 Miniature Golf Course Configuration. Miniature golf courses shall be configured so that the holes complying with 1007.3 are consecutive. Miniature golf courses shall provide an accessible route from the last hole complying with 1007.3 to the course entrance or exit without requiring travel through any other holes on the course.

EXCEPTION: One break in the sequence of consecutive holes shall be permitted provided that the last hole on the miniature golf course is the last hole in the sequence.

ADVISORY F239.3 Miniature Golf Course Configuration. Where only the minimum 50 percent of the holes are accessible, an accessible route from the last accessible hole to the course exit or entrance must not require travel back through other holes. In some cases, this may require an additional accessible route. Other options include increasing the number of accessible holes in a way that limits the distance needed to connect the last accessible hole with the course exit or entrance.

F240 Play Areas

F240.1 General. Play areas for children ages 2 and over shall comply with F240. Where separate play areas are provided within a site for specific age groups, each play area shall comply with F240.

EXCEPTIONS: 1. Play areas located in family child care facilities where the proprietor actually resides shall not be required to comply with F240.

2. In existing play areas, where play components are relocated for the purposes of creating safe use zones and the ground surface is not altered or extended for more than one use zone, the play area shall not be required to comply with F240.

3. Amusement attractions shall not be required to comply with F240.

4. Where play components are altered and the ground surface is not altered, the ground surface shall not be required to comply with 1008.2.6 unless required by F202.4.

ADVISORY F240.1 General. Play areas may be located on exterior sites or within a building. Where separate play areas are provided within a site for children in specified age groups (e.g., preschool (ages 2 to 5) and school age (ages 5 to 12)), each play area must comply with this section. Where play areas are provided for the same age group on a site but are geographically separated (e.g., one is located next to a picnic area and another is located next to a softball field), they are considered separate play areas and each play area must comply with this section.

F240.1.1 Additions. Where play areas are designed and constructed in phases, the requirements of F240 shall apply to each successive addition so that when the addition is completed, the entire play area complies with all the applicable requirements of F240.

ADVISORY F240.1.1 Additions. These requirements are to be applied so that when each successive addition is completed, the entire play area complies with all applicable provisions. For example, a play area is built in two phases. In the first phase, there are 10 elevated play components and 10 elevated play components are added in the second phase for a total of 20 elevated play components in the play area. When the first phase was completed, at least 5 elevated play components, including at least 3 different types, were to be provided on an accessible route. When the second phase is completed, at least 10 elevated play components must be located on an accessible route, and at least 7 ground level play components, including 4 different types, must be provided on an accessible route. At the time the second phase is complete, ramps must be used to connect at least 5 of the elevated play components and transfer systems are permitted to be used to connect the rest of the elevated play components required to be located on an accessible route.

F240.2 Play Components. Where provided, play components shall comply with F240.2.

F240.2.1 Ground Level Play Components. Ground level play components shall be provided in the number and types required by F240.2.1. Ground level play components that are provided to comply with F240.2.1.1 shall be permitted to satisfy the additional number required by F240.2.1.2 if the minimum required types of play components are satisfied. Where two or more required ground level play components are provided, they shall be dispersed throughout the play area and integrated with other play components.

ADVISORY F240.2.1 Ground Level Play Components. Examples of ground level play components may include spring rockers, swings, diggers, and stand-alone slides. When distinguishing between the different types of ground level play components, consider the general experience provided by the play component. Examples of different types of experiences include, but are not limited to, rocking, swinging, climbing, spinning, and sliding. A spiral slide may provide a slightly different experience from a straight slide, but sliding is the general experience and therefore a spiral slide is not considered a different type of play component from a straight slide.

Ground level play components accessed by children with disabilities must be integrated into the play area. Designers should consider the optimal layout of ground level play components accessed by children with disabilities to foster interaction and socialization among all children. Grouping all ground level play components accessed by children with disabilities in one location is not considered integrated.

Where a stand-alone slide is provided, an accessible route must connect the base of the stairs at the entry point to the exit point of the slide. A ramp or transfer system to the top of the slide is not required. Where a sand box is provided, an accessible route must connect to the border of the sand box. Accessibility to the sand box would be enhanced by providing a transfer system into the sand or by providing a raised sand table with knee clearance complying with 1008.4.3.

Ramps are preferred over transfer systems since not all children who use wheelchairs or other mobility devices may be able to use, or may choose not to use, transfer systems.

Where ramps connect elevated play components, the maximum rise of any ramp run is limited to 12 inches (305 mm). Where possible, designers and operators are encouraged to provide ramps with a slope less than the 1:12 maximum. Berms or sculpted dirt may be used to provide elevation and may be part of an accessible route to composite play structures.

Platform lifts are permitted as a part of an accessible route. Because lifts must be independently operable, operators should carefully consider the appropriateness of their use in unsupervised settings.

F240.2.1.1 Minimum Number and Types. Where ground level play components are provided, at least one of each type shall be on an accessible route and shall comply with 1008.4.

F240.2.1.2 Additional Number and Types. Where elevated play components are provided, ground level play components shall be provided in accordance with Table F240.2.1.2 and shall comply with 1008.4.

EXCEPTION: If at least 50 percent of the elevated play components are connected by a ramp and at least 3 of the elevated play components connected by the ramp are different types of play components, the play area shall not be required to comply with F240.2.1.2.

F240.2.1.2 Number and Types of Ground Level Play Components Required to be on Accessible Routes (text version)

Number of Elevated Play Components Provided	Minimum Number of Ground Level Play Components Required to be on an Accessible Route	Minimum Number of Different Types of Ground Level Play Components Required to be on an Accessible Route
1	Not applicable	Not applicable
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 25	8	4
26 and over	8, plus 1 for each additional 3, or fraction thereof, over 25	5

ADVISORY F240.2.1.2 Additional Number and Types. Where a large play area includes two or more composite play structures designed for the same age group, the total number of elevated play components on all the composite play structures must be added to determine the additional number and types of ground level play components that must be provided on an accessible route.

F240.2.2 Elevated Play Components. Where elevated play components are provided, at least 50 percent shall be on an accessible route and shall comply with 1008.4.

ADVISORY F240.2.2 Elevated Play Components. A double or triple slide that is part of a composite play structure is one elevated play component. For purposes of this section, ramps, transfer systems, steps, decks, and roofs are not considered elevated play components. Although socialization and pretend play can occur on these elements, they are not primarily intended for play.

Some play components that are attached to a composite play structure can be approached or exited at the ground level or above grade from a platform or deck. For example, a climber attached to a composite play structure can be approached or exited at the ground level or above grade from a platform or deck on a composite play structure. Play components that are attached to a composite play structure and can be approached from a platform or deck (e.g., climbers and overhead play components) are considered elevated play components. These play components are not considered ground level play components and do not count toward the requirements in F240.2.1.2 regarding the number of ground level play components that must be located on an accessible route.

F241 Saunas and Steam Rooms

F241.1 General. Where provided, saunas and steam rooms shall comply with 612.

EXCEPTION: Where saunas or steam rooms are clustered at a single location, no more than 5 percent of the saunas and steam rooms, but no fewer than one, of each type in each cluster shall be required to comply with 612.

F242 Swimming Pools, Wading Pools, and Spas

F242.1 General. Swimming pools, wading pools, and spas shall comply with F242.

F242.2 Swimming Pools. At least two accessible means of entry shall be provided for swimming pools. Accessible means of entry shall be swimming pool lifts complying with 1009.2; sloped entries complying with 1009.3; transfer walls complying with 1009.4; transfer systems complying with 1009.5; and pool stairs complying with 1009.6. At least one accessible means of entry provided shall comply with 1009.2 or 1009.3.

EXCEPTIONS: 1. Where a swimming pool has less than 300 linear feet (91 m) of swimming pool wall, no more than one accessible means of entry shall be required provided that the accessible means of entry is a swimming pool lift complying with 1009.2 or sloped entry complying with 1009.3.

2. Wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area shall not be required to provide more than one accessible means of entry provided that the accessible means of entry is a swimming pool lift complying with 1009.2, a sloped entry complying with 1009.3, or a transfer system complying with 1009.5.

3. Catch pools shall not be required to provide an accessible means of entry provided that the catch pool edge is on an accessible route.

ADVISORY F242.2 Swimming Pools. Where more than one means of access is provided into the water, it is recommended that the means be different. Providing different means of access will better serve the varying needs of people with disabilities in getting into and out of a swimming pool. It is also recommended that where two or more means of access are provided, they not be provided in the same location in the pool. Different locations will provide increased options for entry and exit, especially in larger pools.

Advisory F242.2 Swimming Pools Exception 1. Pool walls at diving areas and areas along pool walls where there is no pool entry because of landscaping or adjacent structures are to be counted when determining the number of accessible means of entry required.

F242.3 Wading Pools. At least one accessible means of entry shall be provided for wading pools. Accessible means of entry shall comply with sloped entries complying with 1009.3.

F242.4 Spas. At least one accessible means of entry shall be provided for spas. Accessible means of entry shall comply with swimming pool lifts complying with 1009.2; transfer walls complying with 1009.4; or transfer systems complying with 1009.5.

EXCEPTION: Where spas are provided in a cluster, no more than 5 percent, but no fewer than one, spa in each cluster shall be required to comply with F242.4.

F243 Shooting Facilities with Firing Positions

F243.1 General. Where shooting facilities with firing positions are designed and constructed at a site, at least 5 percent, but no fewer than one, of each type of firing position shall comply with 1010.

Complete Text ADA / ABA (*Published in the Federal Register on July 23, 2004*)

ADA / ABA Accessibility Guidelines for Buildings and Facilities

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PART I

ADA APPLICATION AND SCOPING

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101 Purpose

101.1 General. This document contains scoping and technical requirements for accessibility to sites, facilities, buildings, and elements by individuals with disabilities. The requirements are to be applied during the design, construction, additions to, and alteration of sites, facilities, buildings, and elements to the extent required by regulations issued by Federal agencies under the Americans with Disabilities Act of 1990 (ADA).

ADVISORY 101.1 General. In addition to these requirements, covered entities must comply with the regulations issued by the Department of Justice and the Department of Transportation under the Americans with Disabilities Act. There are issues affecting individuals with disabilities which are not addressed by these requirements, but which are covered by the Department of Justice and the Department of Transportation regulations.

101.2 Effect on Removal of Barriers in Existing Facilities. This document does not address existing facilities unless altered at the discretion of a covered entity. The Department of Justice has authority over existing facilities that are subject to the requirement for removal of barriers under title III of the ADA. Any determination that this document applies to existing facilities subject to the barrier removal requirement is solely within the discretion of the Department of Justice and is effective only to the extent required by regulations issued by the Department of Justice.

102 Dimensions for Adults and Children

The technical requirements are based on adult dimensions and anthropometrics. In addition, this document includes technical requirements based on children's dimensions and anthropometrics for drinking fountains, water closets, toilet compartments, lavatories and sinks, dining surfaces, and work surfaces.

103 Equivalent Facilitation

Nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in substantially equivalent or greater accessibility and usability.

ADVISORY 103 Equivalent Facilitation. The responsibility for demonstrating equivalent facilitation in the event of a challenge rests with the covered entity. With the exception of transit facilities, which are covered by regulations issued by the Department of Transportation, there is no process for certifying that an alternative design provides equivalent facilitation.

104 Conventions

104.1 Dimensions. Dimensions that are not stated as "maximum" or "minimum" are absolute.

104.1.1 Construction and Manufacturing Tolerances. All dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points.

ADVISORY 104.1.1 Construction and Manufacturing Tolerances. Conventional industry tolerances recognized by this provision include those for field conditions and those that may be a necessary consequence of a particular manufacturing process. Recognized tolerances are not intended to apply to design work. It is good practice when specifying dimensions to avoid specifying a tolerance where dimensions are absolute. For example, if this document requires "1 inches," avoid specifying "1 inches plus or minus X inches." Where the requirement states a specified range, such as in Section 609.4 where grab bars must be installed between 33 inches and 36 inches above the floor, the range provides an adequate tolerance and therefore no tolerance outside of the range at either end point is permitted. Where a requirement is a minimum or a maximum dimension that does not have two specific minimum and maximum end points, tolerances may apply. Where an element is to be installed at the minimum or maximum permitted dimension, such as "15 inches minimum" or "5 pounds maximum", it would not be good practice to specify "5 pounds (plus X pounds) or 15 inches (minus X inches)." Rather, it would be good practice to specify a dimension less than the required maximum (or more than the required minimum) by the amount of the expected field or manufacturing tolerance and not to state any tolerance in conjunction with the specified dimension. Specifying dimensions in design in the manner described above will better ensure that facilities and elements accomplish the level of accessibility intended by these requirements. It will also more often produce an end result of strict and literal compliance with the stated requirements and eliminate enforcement difficulties and issues that might otherwise arise. Information on specific tolerances may be available from industry or trade organizations, code groups and building officials, and published references.

104.2 Calculation of Percentages. Where the required number of elements or facilities to be provided is determined by calculations of ratios or percentages and remainders or fractions result, the next greater whole number of such elements or

facilities shall be provided. Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one half shall be permitted.

104.3 Figures. Unless specifically stated otherwise, figures are provided for informational purposes only.

● **Figure 104 Graphic Convention for Figures**

105 Referenced Standards

105.1 General. The standards listed in 105.2 are incorporated by reference in this document and are part of the requirements to the prescribed extent of each such reference. The Director of the Federal Register has approved these standards for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the referenced standards may be inspected at the Architectural and Transportation Barriers Compliance Board, 1331 F Street, NW, Suite 1000, Washington, DC 20004; at the Department of Justice, Civil Rights Division, Disability Rights Section, 1425 New York Avenue, NW, Washington, DC; at the Department of Transportation, 400 Seventh Street, SW, Room 10424, Washington DC; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

105.2 Referenced Standards. The specific edition of the standards listed below are referenced in this document. Where differences occur between this document and the referenced standards, this document applies.

105.2.1 ANSI/BHMA. Copies of the referenced standards may be obtained from the Builders Hardware Manufacturers Association, 355 Lexington Avenue, 17th floor, New York, NY 10017 (<http://www.buildershardware.com>).

ANSI/BHMA A156.10-1999 American National Standard for Power Operated Pedestrian Doors (see 404.3).

ANSI/BHMA A156.19-1997 American National Standard for Power Assist and Low Energy Power Operated Doors (see 404.3, 408.3.2.1, and 409.3.1).

ANSI/BHMA A156.19-2002 American National Standard for Power Assist and Low Energy Power Operated Doors (see 404.3, 408.3.2.1, and 409.3.1).

ADVISORY 105.2.1 ANSI/BHMA. ANSI/BHMA A156.10-1999 applies to power operated doors for pedestrian use which open automatically when approached by pedestrians. Included are provisions intended to reduce the chance of user injury or entrapment.

ANSI/BHMA A156.19-1997 and A156.19-2002 applies to power assist doors, low energy power operated doors or low energy power open doors for pedestrian use not provided for in ANSI/BHMA A156.10 for Power Operated Pedestrian Doors. Included are provisions intended to reduce the chance of user injury or entrapment.

105.2.2 ASME. Copies of the referenced standards may be obtained from the American Society of Mechanical Engineers, Three Park Avenue, New York, New York 10016 (<http://www.asme.org>).

ASME A17.1- 2000 Safety Code for Elevators and Escalators, including ASME A17.1a-2002 Addenda and ASME A17.1b-2003 Addenda (see 407.1, 408.1, 409.1, and 810.9).

ASME A18.1-1999 Safety Standard for Platform Lifts and Stairway Chairlifts, including ASME A18.1a-2001 Addenda and ASME A18.1b-2001 Addenda (see 410.1).

ASME A18.1-2003 Safety Standard for Platform Lifts and Stairway Chairlifts, (see 410.1).

ADVISORY 105.2.2 ASME. ASME A17.1-2000 is used by local jurisdictions throughout the United States for the design, construction, installation, operation, inspection, testing, maintenance, alteration, and repair of elevators and escalators. The majority of the requirements apply to the operational machinery not seen or used by elevator passengers. ASME A17.1 requires a two-way means of emergency communications in passenger elevators. This means of communication must connect with emergency or authorized personnel and not an automated answering system. The communication system must be push button activated. The activation button must be permanently identified with the word "HELP." A visual indication acknowledging the establishment of a communications link to authorized personnel must be provided. The visual indication must remain on until the call is terminated by authorized personnel. The building location, the elevator car number, and the need for assistance must be provided to authorized personnel answering the emergency call. The use of a handset by the communications system is prohibited. Only the authorized personnel answering the call can terminate the call. Operating instructions for the communications system must be provided in the elevator car.

The provisions for escalators require that at least two flat steps be provided at the entrance and exit of every escalator and that steps on escalators be demarcated by yellow lines 2 inches wide maximum along the back and sides of steps.

ASME A18.1-1999 and ASME A18.1-2003 address the design, construction, installation, operation, inspection, testing, maintenance and repair of lifts that are intended for transportation of persons with disabilities. Lifts are classified as: vertical platform lifts, inclined platform lifts, inclined stairway chairlifts, private residence vertical platform lifts, private residence inclined platform lifts, and private residence inclined stairway chairlifts.

This document does not permit the use of inclined stairway chairlifts which do not provide platforms because such lifts require the user to transfer to a seat.

ASME A18.1 contains requirements for runways, which are the spaces in which platforms or seats move. The standard includes additional provisions for runway enclosures, electrical equipment and wiring, structural support, headroom clearance (which is 80 inches minimum), lower level access ramps and pits. The enclosure walls not used for entry or exit are required to have a grab bar the full length of the wall on platform lifts. Access ramps are required to meet requirements similar to those for ramps in Chapter 4 of this document.

Each of the lift types addressed in ASME A18.1 must meet requirements for capacity, load, speed, travel, operating devices, and control equipment. The maximum permitted height for operable parts is consistent with Section 308 of this document. The standard also addresses attendant operation. However, Section 410.1 of this document does not permit attendant operation.

105.2.3 ASTM. Copies of the referenced standards may be obtained from the American Society for Testing and Materials, 100 Bar Harbor Drive, West Conshohocken, Pennsylvania 19428 (<http://www.astm.org>).

ASTM F 1292-99 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment (see 1008.2.6.2).

ASTM F 1292-04 Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment (see 1008.2.6.2).

ASTM F 1487-01 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use (see 106.5).

ASTM F 1951-99 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment (see 1008.2.6.1).

ADVISORY 105.2.3 ASTM. ASTM F 1292-99 and ASTM F 1292-04 establish a uniform means to measure and compare characteristics of surfacing materials to determine whether materials provide a safe surface under and around playground equipment. These standards are referenced in the play areas requirements of this document when an accessible surface is required inside a play area use zone where a fall attenuating surface is also required. The standards cover the minimum impact attenuation requirements, when tested in accordance with Test Method F 355, for surface systems to be used under and around any piece of playground equipment from which a person may fall.

ASTM F 1487-01 establishes a nationally recognized safety standard for public playground equipment to address injuries identified by the U.S. Consumer Product Safety Commission. It defines the use zone, which is the ground area beneath and immediately adjacent to a play structure or play equipment designed for unrestricted circulation around the equipment and on whose surface it is predicted that a user would land when falling from or exiting a play structure or equipment. The play areas requirements in this document reference the ASTM F 1487 standard when defining accessible routes that overlap use zones requiring fall attenuating surfaces. If the use zone of a playground is not entirely surfaced with an accessible material, at least one accessible route within the use zone must be provided from the perimeter to all accessible play structures or components within the playground.

ASTM F 1951-99 establishes a uniform means to measure the characteristics of surface systems in order to provide performance specifications to select materials for use as an accessible surface under and around playground equipment. Surface materials that comply with this standard and are located in the use zone must also comply with ASTM F 1292. The test methods in this standard address access for children and adults who may traverse the surfacing to aid children who are playing. When a surface is tested it must have an average work per foot value for straight propulsion and for turning less than the average work per foot values for straight propulsion and for turning, respectively, on a hard, smooth surface with a grade of 7% (1:14).

105.2.4 ICC/IBC. Copies of the referenced standard may be obtained from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041 (www.iccsafe.org).

International Building Code, 2000 Edition (see 207.1, 207.2, 216.4.2, 216.4.3, and 1005.2.1).

International Building Code, 2001 Supplement (see 207.1 and 207.2).

International Building Code, 2003 Edition (see 207.1, 207.2, 216.4.2, 216.4.3, and 1005.2.1).

ADVISORY 105.2.4 ICC/IBC. International Building Code (IBC)-2000 (including 2001 Supplement to the International Codes) and IBC-2003 are referenced for means of egress, areas of refuge, and railings provided on fishing piers and platforms. At least one accessible means of egress is required for every accessible space and at least two accessible means of egress are required where more than one means of egress is required. The technical criteria for accessible means of egress allow the use of exit stairways and evacuation elevators when provided in conjunction with horizontal exits or areas of refuge. While typical elevators are not designed to be used during an emergency evacuation, evacuation elevators are designed with standby power and other features according to the elevator safety standard and can be used for the evacuation of individuals with disabilities. The IBC also provides requirements for areas of refuge, which are fire-rated spaces on levels above or below the exit discharge levels where people unable to use stairs can go to register a call for assistance and wait for evacuation.

The recreation facilities requirements of this document references two sections in the IBC for fishing piers and platforms. An exception addresses the height of the railings, guards, or handrails where a fishing pier or platform is required to include a guard, railing, or handrail higher than 34 inches (865 mm) above the ground or deck surface.

105.2.5 NFPA. Copies of the referenced standards may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, (<http://www.nfpa.org>).

NFPA 72 National Fire Alarm Code, 1999 Edition (see 702.1 and 809.5.2).

NFPA 72 National Fire Alarm Code, 2002 Edition (see 702.1 and 809.5.2).

ADVISORY 105.2.5 NFPA. NFPA 72-1999 and NFPA 72-2002 address the application, installation, performance, and maintenance of protective signaling systems and their components. The NFPA 72 incorporates Underwriters Laboratory (UL) 1971 by reference. The standard specifies the characteristics of audible alarms, such as placement and sound levels. However, Section 702 of these requirements limits the volume of an audible alarm to 110 dBA, rather than the maximum 120 dBA permitted by NFPA 72-1999.

NFPA 72 specifies characteristics for visible alarms, such as flash frequency, color, intensity, placement, and synchronization. However, Section 702 of this document requires that visual alarm appliances be permanently installed. UL 1971 specifies intensity dispersion requirements for visible alarms. In particular, NFPA 72 requires visible alarms to have a light source that is clear or white and has polar dispersion complying with UL 1971.

106 Definitions

106.1 General. For the purpose of this document, the terms defined in 106.5 have the indicated meaning.

ADVISORY 106.1 General. Terms defined in Section 106.5 are italicized in the text of this document.

106.2 Terms Defined in Referenced Standards. Terms not defined in 106.5 or in regulations issued by the Department of Justice and the Department of Transportation to implement the Americans with Disabilities Act, but specifically defined in a referenced standard, shall have the specified meaning from the referenced standard unless otherwise stated.

106.3 Undefined Terms. The meaning of terms not specifically defined in 106.5 or in regulations issued by the Department of Justice and the Department of Transportation to implement the Americans with Disabilities Act or in referenced standards shall be as defined by collegiate dictionaries in the sense that the context implies.

106.4 Interchangeability. Words, terms and phrases used in the singular include the plural and those used in the plural include the singular.

106.5 Defined Terms.

Accessible. A site, building, facility, or portion thereof that complies with this part.

Accessible Means of Egress. A continuous and unobstructed way of egress travel from any point in a building or facility that provides an accessible route to an area of refuge, a horizontal exit, or a public way.

Addition. An expansion, extension, or increase in the gross floor area or height of a building or facility.

Administrative Authority. A governmental agency that adopts or enforces regulations and guidelines for the design, construction, or alteration of buildings and facilities.

Alteration. A change to a building or facility that affects or could affect the usability of the building or facility or portion thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.

Amusement Attraction. Any facility, or portion of a facility, located within an amusement park or theme park which provides amusement without the use of an amusement device. Amusement attractions include, but are not limited to, fun houses, barrels, and other attractions without seats.

Amusement Ride. A system that moves persons through a fixed course within a defined area for the purpose of amusement.

Amusement Ride Seat. A seat that is built-in or mechanically fastened to an amusement ride intended to be occupied by one or more passengers.

Area of Sport Activity. That portion of a room or space where the play or practice of a sport occurs.

Assembly Area. A building or facility, or portion thereof, used for the purpose of entertainment, educational or civic gatherings, or similar purposes. For the purposes of these requirements, assembly areas include, but are not limited to, classrooms, lecture halls, courtrooms, public meeting rooms, public hearing rooms, legislative chambers, motion picture houses, auditoria, theaters, playhouses, dinner theaters, concert halls, centers for the performing arts, amphitheaters, arenas, stadiums, grandstands, or convention centers.

Assistive Listening System (ALS). An amplification system utilizing transmitters, receivers, and coupling devices to bypass the acoustical space between a sound source and a listener by means of induction loop, radio frequency, infrared, or direct-wired equipment.

Boarding Pier. A portion of a pier where a boat is temporarily secured for the purpose of embarking or disembarking.

Boat Launch Ramp. A sloped surface designed for launching and retrieving trailered boats and other water craft to and from a body of water.

Boat Slip. That portion of a pier, main pier, finger pier, or float where a boat is moored for the purpose of berthing, embarking, or disembarking.

Building. Any structure used or intended for supporting or sheltering any use or occupancy.

Catch Pool. A pool or designated section of a pool used as a terminus for water slide flumes.

Characters. Letters, numbers, punctuation marks and typographic symbols.

Children's Use. Describes spaces and elements specifically designed for use primarily by people 12 years old and younger.

Circulation Path. An exterior or interior way of passage provided for pedestrian travel, including but not limited to, walks, hallways, courtyards, elevators, platform lifts, ramps, stairways, and landings.

Closed-Circuit Telephone. A telephone with a dedicated line such as a house phone, courtesy phone or phone that must be used to gain entry to a facility.

Common Use. Interior or exterior circulation paths, rooms, spaces, or elements that are not for public use and are made available for the shared use of two or more people.

Cross Slope. The slope that is perpendicular to the direction of travel (see running slope).

Curb Ramp. A short ramp cutting through a curb or built up to it.

Detectable Warning. A standardized surface feature built in or applied to walking surfaces or other elements to warn of hazards on a circulation path.

Element. An architectural or mechanical component of a building, facility, space, or site.

Elevated Play Component. A play component that is approached above or below grade and that is part of a composite play structure consisting of two or more play components attached or functionally linked to create an integrated unit providing more than one play activity.

Employee Work Area. All or any portion of a space used only by employees and used only for work. Corridors, toilet rooms, kitchenettes and break rooms are not employee work areas.

Entrance. Any access point to a building or portion of a building or facility used for the purpose of entering. An entrance includes the approach walk, the vertical access leading to the entrance platform, the entrance platform itself, vestibule if provided, the entry door or gate, and the hardware of the entry door or gate.

Facility. All or any portion of buildings, structures, site improvements, elements, and pedestrian routes or vehicular ways located on a site.

Gangway. A variable-sloped pedestrian walkway that links a fixed structure or land with a floating structure. Gangways that connect to vessels are not addressed by this document.

Golf Car Passage. A continuous passage on which a motorized golf car can operate.

Ground Level Play Component. A play component that is approached and exited at the ground level.

Key Station. Rapid and light rail stations, and commuter rail stations, as defined under criteria established by the Department of Transportation in 49 CFR 37.47 and 49 CFR 37.51, respectively.

Mail Boxes. Receptacles for the receipt of documents, packages, or other deliverable matter. Mail boxes include, but are not limited to, post office boxes and receptacles provided by commercial mail-receiving agencies, apartment facilities, or schools.

Marked Crossing. A crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

Mezzanine. An intermediate level or levels between the floor and ceiling of any story with an aggregate floor area of not more than one-third of the area of the room or space in which the level or levels are located. Mezzanines have sufficient elevation that space for human occupancy can be provided on the floor below.

Occupant Load. The number of persons for which the means of egress of a building or portion of a building is designed.

Operable Part. A component of an element used to insert or withdraw objects, or to activate, deactivate, or adjust the element.

Pictogram. A pictorial symbol that represents activities, facilities, or concepts.

Play Area. A portion of a site containing play components designed and constructed for children.

Play Component. An element intended to generate specific opportunities for play, socialization, or learning. Play components are manufactured or natural; and are stand-alone or part of a composite play structure.

Private Building or Facility. A place of public accommodation or a commercial building or facility subject to title III of the ADA and 28 CFR part 36 or a transportation building or facility subject to title III of the ADA and 49 CFR 37.45.

Public Building or Facility. A building or facility or portion of a building or facility designed, constructed, or altered by, on behalf of, or for the use of a public entity subject to title II of the ADA and 28 CFR part 35 or to title II of the ADA and 49 CFR 37.41 or 37.43.

Public Entrance. An entrance that is not a service entrance or a restricted entrance.

Public Use. Interior or exterior rooms, spaces, or elements that are made available to the public. Public use may be provided at a building or facility that is privately or publicly owned.

Public Way. Any street, alley or other parcel of land open to the outside air leading to a public street, which has been deeded, dedicated or otherwise permanently appropriated to the public for public use and which has a clear width and height of not less than 10 feet (3050 mm).

Qualified Historic Building or Facility. A building or facility that is listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate State or local law.

Ramp. A walking surface that has a running slope steeper than 1:20.

Residential Dwelling Unit. A unit intended to be used as a residence, that is primarily long-term in nature. Residential dwelling units do not include transient lodging, inpatient medical care, licensed long-term care, and detention or correctional facilities.

Restricted Entrance. An entrance that is made available for common use on a controlled basis but not public use and that is not a service entrance.

Running Slope. The slope that is parallel to the direction of travel (see cross slope).

Self-Service Storage. Building or facility designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

Service Entrance. An entrance intended primarily for delivery of goods or services.

Site. A parcel of land bounded by a property line or a designated portion of a public right-of-way.

Soft Contained Play Structure. A play structure made up of one or more play components where the user enters a fully enclosed play environment that utilizes pliable materials, such as plastic, netting, or fabric.

Space. A definable area, such as a room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.

Story. That portion of a building or facility designed for human occupancy included between the upper surface of a floor and upper surface of the floor or roof next above. A story containing one or more mezzanines has more than one floor level.

Structural Frame. The columns and the girders, beams, and trusses having direct connections to the columns and all other members that are essential to the stability of the building or facility as a whole.

Tactile. An object that can be perceived using the sense of touch.

Technically Infeasible. With respect to an alteration of a building or a facility, something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.

Teeing Ground. In golf, the starting place for the hole to be played.

Transfer Device. Equipment designed to facilitate the transfer of a person from a wheelchair or other mobility aid to and from an amusement ride seat.

Transient Lodging. A building or facility containing one or more guest room(s) for sleeping that provides accommodations that are primarily short-term in nature. Transient lodging does not include residential dwelling units intended to be used as a residence, inpatient medical care facilities, licensed long-term care facilities, detention or correctional facilities, or private buildings or facilities that contain not more than five rooms for rent or hire and that are actually occupied by the proprietor as the residence of such proprietor.

Transition Plate. A sloping pedestrian walking surface located at the end(s) of a gangway.

TTY. An abbreviation for teletypewriter. Machinery that employs interactive text-based communication through the transmission of coded signals across the telephone network. TTYs may include, for example, devices known as TDDs (telecommunication display devices or telecommunication devices for deaf persons) or computers with special modems. TTYs are also called text telephones.

Use Zone. The ground level area beneath and immediately adjacent to a play structure or play equipment that is designated by ASTM F 1487 (incorporated by reference, see "Referenced Standards" in Chapter 1) for unrestricted circulation around the play equipment and where it is predicted that a user would land when falling from or exiting the play equipment.

Vehicular Way. A route provided for vehicular traffic, such as in a street, driveway, or parking facility.

Walk. An exterior prepared surface for pedestrian use, including pedestrian areas such as plazas and courts.

Wheelchair Space. Space for a single wheelchair and its occupant.

Work Area Equipment. Any machine, instrument, engine, motor, pump, conveyor, or other apparatus used to perform work. As used in this document, this term shall apply only to equipment that is permanently installed or built-in in employee work areas.

Work area equipment does not include passenger elevators and other accessible means of vertical transportation.

ADA CHAPTER 2: SCOPING REQUIREMENTS

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201 Application

201.1 Scope. All areas of newly designed and newly constructed buildings and facilities and altered portions of existing buildings and facilities shall comply with these requirements.

ADVISORY 201.1 Scope. These requirements are to be applied to all areas of a facility unless exempted, or where scoping limits the number of multiple elements required to be accessible. For example, not all medical care patient rooms are required to be accessible; those that are not required to be accessible are not required to comply with these requirements. However, common use and public use spaces such as recovery rooms, examination rooms, and cafeterias are not exempt from these requirements and must be accessible.

201.2 Application Based on Building or Facility Use. Where a site, building, facility, room, or space contains more than one use, each portion shall comply with the applicable requirements for that use.

201.3 Temporary and Permanent Structures. These requirements shall apply to temporary and permanent buildings and facilities.

ADVISORY 201.3 Temporary and Permanent Structures. Temporary buildings or facilities covered by these requirements include, but are not limited to, reviewing stands, temporary classrooms, bleacher areas, stages, platforms and daises, fixed furniture systems, wall systems, and exhibit areas, temporary banking facilities, and temporary health screening facilities. Structures and equipment directly associated with the actual processes of construction are not required to be accessible as permitted in 203.2.

202 Existing Buildings and Facilities

202.1 General. Additions and alterations to existing buildings or facilities shall comply with 202.

202.2 Additions. Each addition to an existing building or facility shall comply with the requirements for new construction. Each addition that affects or could affect the usability of or access to an area containing a primary function shall comply with 202.4.

202.3 Alterations. Where existing elements or spaces are altered, each altered element or space shall comply with the applicable requirements of Chapter 2.

EXCEPTIONS: 1. Unless required by 202.4, where elements or spaces are altered and the circulation path to the altered element or space is not altered, an accessible route shall not be required.

2. In alterations, where compliance with applicable requirements is technically infeasible, the alteration shall comply with the requirements to the maximum extent feasible.

3. Residential dwelling units not required to be accessible in compliance with a standard issued pursuant to the Americans with Disabilities Act or Section 504 of the Rehabilitation Act of 1973, as amended, shall not be required to comply with 202.3.

ADVISORY 202.3 Alterations. Although covered entities are permitted to limit the scope of an alteration to individual elements, the alteration of multiple elements within a room or space may provide a cost-effective opportunity to make the entire room or space accessible. Any elements or spaces of the building or facility that are required to comply with these requirements must be made accessible within the scope of the alteration, to the maximum extent feasible. If providing accessibility in compliance with these requirements for people with one type of disability (e.g., people who use wheelchairs) is not feasible, accessibility must still be provided in compliance with the requirements for people with other types of disabilities (e.g., people who have hearing impairments or who have vision impairments) to the extent that such accessibility is feasible.

202.3.1 Prohibited Reduction in Access. An alteration that decreases or has the effect of decreasing the accessibility of a building or facility below the requirements for new construction at the time of the alteration is prohibited.

202.3.2 Extent of Application. An alteration of an existing element, space, or area of a building or facility shall not impose a requirement for accessibility greater than required for new construction.

202.4 Alterations Affecting Primary Function Areas. In addition to the requirements of 202.3, an alteration that affects or could affect the usability of or access to an area containing a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area, including the rest rooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, unless such alterations are disproportionate to the overall alterations in terms of cost and scope as determined under criteria established by the Attorney General. In existing transportation facilities, an area of primary function shall be as defined under regulations published by the Secretary of the Department of Transportation or the Attorney General.

EXCEPTION: Residential dwelling units shall not be required to comply with 202.4.

ADVISORY 202.4 Alterations Affecting Primary Function Areas. An area of a building or facility containing a major activity for which the building or facility is intended is a primary function area. Department of Justice ADA regulations state, "Alterations made to provide an accessible path of travel to the altered area will be deemed disproportionate to the overall alteration when the cost exceeds 20% of the cost of the alteration to the primary function area." (28 CFR 36.403 (f)(1)). See also Department of Transportation ADA regulations, which use similar concepts in the context of public sector transportation facilities (49 CFR 37.43 (e)(1)).

There can be multiple areas containing a primary function in a single building. Primary function areas are not limited to public use areas. For example, both a bank lobby and the bank's employee areas such as the teller areas and walk-in safe are primary function areas.

Also, mixed use facilities may include numerous primary function areas for each use. Areas containing a primary function do not include: mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors, or restrooms.

202.5 Alterations to Qualified Historic Buildings and Facilities. Alterations to a qualified historic building or facility shall comply with 202.3 and 202.4.

EXCEPTION: Where the State Historic Preservation Officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the exceptions for alterations to qualified historic buildings or facilities for that element shall be permitted to apply.

ADVISORY 202.5 Alterations to Qualified Historic Buildings and Facilities Exception. State Historic Preservation Officers are State appointed officials who carry out certain responsibilities under the National Historic Preservation Act. State Historic Preservation Officers consult with Federal and State agencies, local governments, and private entities on providing access and protecting significant elements of qualified historic buildings and facilities. There are exceptions for alterations to qualified historic buildings and facilities for accessible routes (206.2.1 Exception 1 and 206.2.3 Exception 7); entrances (206.4 Exception 2); and toilet facilities (213.2 Exception 2). When an entity believes that compliance with the requirements for any of these elements would threaten or destroy the historic significance of the building or facility, the entity should consult with the State Historic Preservation Officer. If the State Historic Preservation Officer agrees that compliance with the requirements for a specific element would threaten or destroy the historic significance of the building or facility, use of the exception is permitted. Public entities have an additional obligation to achieve program accessibility under the Department of Justice ADA regulations. See 28 CFR 35.150. These regulations require public entities that operate historic preservation programs to give priority to methods that provide physical access to individuals with disabilities. If alterations to a qualified historic building or facility to achieve program accessibility would threaten or destroy the historic significance of the building or facility, fundamentally alter the program, or result in undue financial or administrative burdens, the Department of Justice ADA regulations allow alternative methods to be used to achieve program accessibility. In the case of historic preservation programs, such as an historic house museum, alternative methods include using audio-visual materials to depict portions of the house that cannot otherwise be made accessible. In the case of other qualified historic properties, such as an historic government office building, alternative methods include relocating programs and services to accessible locations. The Department of Justice ADA regulations also allow public entities to use alternative methods when altering qualified historic buildings or facilities in the rare situations where the State Historic Preservation Officer determines that it is not feasible to provide physical access using the exceptions permitted in Section 202.5 without threatening or destroying the historic significance of the building or facility. See 28 CFR 35.151(d).

The AccessAbility Office at the National Endowment for the Arts (NEA) provides a variety of resources for museum operators and historic properties including: the Design for Accessibility Guide and the Disability Symbols. Contact NEA about these and other resources at (202) 682-5532 or www.arts.gov.

203 General Exceptions

203.1 General. Sites, buildings, facilities, and elements are exempt from these requirements to the extent specified by 203.

203.2 Construction Sites. Structures and sites directly associated with the actual processes of construction, including but not limited to, scaffolding, bridging, materials hoists, materials storage, and construction trailers shall not be required to comply with these requirements or to be on an accessible route. Portable toilet units provided for use exclusively by construction personnel on a construction site shall not be required to comply with 213 or to be on an accessible route.

203.3 Raised Areas. Areas raised primarily for purposes of security, life safety, or fire safety, including but not limited to, observation or lookout galleries, prison guard towers, fire towers, or life guard stands shall not be required to comply with these requirements or to be on an accessible route.

203.4 Limited Access Spaces. Spaces accessed only by ladders, catwalks, crawl spaces, or very narrow passageways shall not be required to comply with these requirements or to be on an accessible route.

203.5 Machinery Spaces. Spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment shall not be required to comply with these requirements or to be on an accessible route. Machinery spaces include, but are not limited to, elevator pits or elevator penthouses; mechanical, electrical or communications equipment rooms; piping or equipment catwalks; water or sewage treatment pump rooms and stations; electric substations and transformer vaults; and highway and tunnel utility facilities.

203.6 Single Occupant Structures. Single occupant structures accessed only by passageways below grade or elevated above standard curb height, including but not limited to, toll booths that are accessed only by underground tunnels, shall not be required to comply with these requirements or to be on an accessible route.

203.7 Detention and Correctional Facilities. In detention and correctional facilities, common use areas that are used only by inmates or detainees and security personnel and that do not serve holding cells or housing cells required to comply with 232, shall not be required to comply with these requirements or to be on an accessible route.

203.8 Residential Facilities. In residential facilities, common use areas that do not serve residential dwelling units required to provide mobility features complying with 809.2 through 809.4 shall not be required to comply with these requirements or to be on an accessible route.

203.9 Employee Work Areas. Spaces and elements within employee work areas shall only be required to comply with 206.2.8, 207.1, and 215.3 and shall be designed and constructed so that individuals with disabilities can approach, enter, and exit the employee work area. Employee work areas, or portions of employee work areas, that are less than 300 square feet (28 m²) and elevated 7 inches (180 mm) or more above the finish floor or ground where the elevation is essential to the function of the space shall not be required to comply with these requirements or to be on an accessible route.

ADVISORY 203.9 Employee Work Areas. Although areas used exclusively by employees for work are not required to be fully accessible, consider designing such areas to include non-required turning spaces, and provide accessible elements whenever possible. Under the ADA, employees with disabilities are entitled to reasonable accommodations in the workplace; accommodations can include alterations to spaces within the facility. Designing employee work areas to be more accessible at the outset will avoid more costly retrofits when current employees become temporarily or permanently disabled, or when new employees with disabilities are hired. Contact the Equal Employment Opportunity Commission (EEOC) at www.eeoc.gov for information about title I of the ADA prohibiting discrimination against people with disabilities in the workplace.

203.10 Raised Refereeing, Judging, and Scoring Areas. Raised structures used solely for refereeing, judging, or scoring a sport shall not be required to comply with these requirements or to be on an accessible route.

203.11 Water Slides. Water slides shall not be required to comply with these requirements or to be on an accessible route.

203.12 Animal Containment Areas. Animal containment areas that are not for public use shall not be required to comply with these requirements or to be on an accessible route.

ADVISORY 203.12 Animal Containment Areas. Public circulation routes where animals may travel, such as in petting zoos and passageways alongside animal pens in State fairs, are not eligible for the exception.

203.13 Raised Boxing or Wrestling Rings. Raised boxing or wrestling rings shall not be required to comply with these requirements or to be on an accessible route.

203.14 Raised Diving Boards and Diving Platforms. Raised diving boards and diving platforms shall not be required to comply with these requirements or to be on an accessible route.

204 Protruding Objects

204.1 General. Protruding objects on circulation paths shall comply with 307.

EXCEPTIONS: 1. Within areas of sport activity, protruding objects on circulation paths shall not be required to comply with 307.

2. Within play areas, protruding objects on circulation paths shall not be required to comply with 307 provided that ground level accessible routes provide vertical clearance in compliance with 1008.2.

205 Operable Parts

205.1 General. Operable parts on accessible elements, accessible routes, and in accessible rooms and spaces shall comply with 309.

EXCEPTIONS: 1. Operable parts that are intended for use only by service or maintenance personnel shall not be required to comply with 309.

2. Electrical or communication receptacles serving a dedicated use shall not be required to comply with 309.

3. Where two or more outlets are provided in a kitchen above a length of counter top that is uninterrupted by a sink or appliance, one outlet shall not be required to comply with 309.

4. Floor electrical receptacles shall not be required to comply with 309.

5. HVAC diffusers shall not be required to comply with 309.

6. Except for light switches, where redundant controls are provided for a single element, one control in each space shall not be required to comply with 309.

7. Cleats and other boat securement devices shall not be required to comply with 309.3.

8. Exercise machines and exercise equipment shall not be required to comply with 309.

ADVISORY 205.1 General. Controls covered by 205.1 include, but are not limited to, light switches, circuit breakers, duplexes and other convenience receptacles, environmental and appliance controls, plumbing fixture controls, and security and intercom systems.

206 Accessible Routes

206.1 General. Accessible routes shall be provided in accordance with 206 and shall comply with Chapter 4.

206.2 Where Required. Accessible routes shall be provided where required by 206.2.

206.2.1 Site Arrival Points. At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve.

EXCEPTIONS: 1. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no more than one accessible route from a site arrival point to an accessible entrance shall be required.

2. An accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing pedestrian access.

ADVISORY 206.2.1 Site Arrival Points. Each site arrival point must be connected by an accessible route to the accessible building entrance or entrances served. Where two or more similar site arrival points, such as bus stops, serve the same accessible entrance or entrances, both bus stops must be on accessible routes. In addition, the accessible routes must serve all of the accessible entrances on the site.

ADVISORY 206.2.1 Site Arrival Points Exception 2. Access from site arrival points may include vehicular ways. Where a vehicular way, or a portion of a vehicular way, is provided for pedestrian travel, such as within a shopping center or shopping mall parking lot, this exception does not apply.

206.2.2 Within a Site. At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

EXCEPTION: An accessible route shall not be required between accessible buildings, accessible facilities, accessible elements, and accessible spaces if the only means of access between them is a vehicular way not providing pedestrian access.

ADVISORY 206.2.2 Within a Site. An accessible route is required to connect to the boundary of each area of sport activity. Examples of areas of sport activity include: soccer fields, basketball courts, baseball fields, running tracks, skating rinks, and the area surrounding a piece of gymnastic equipment. While the size of an area of sport activity may vary from sport to sport, each includes only the space needed to play. Where multiple sports fields or courts are provided, an accessible route is required to each field or area of sport activity.

206.2.3 Multi-Story Buildings and Facilities. At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.

EXCEPTIONS: 1. In private buildings or facilities that are less than three stories or that have less than 3000 square feet (279 m²) per story, an accessible route shall not be required to connect stories provided that the building or facility is not a shopping center, a shopping mall, the professional office of a health care provider, a terminal, depot or other station used for specified public transportation, an airport passenger terminal, or another type of facility as determined by the Attorney General.

2. Where a two story public building or facility has one story with an occupant load of five or fewer persons that does not contain public use space, that story shall not be required to be connected to the story above or below.

3. In detention and correctional facilities, an accessible route shall not be required to connect stories where cells with mobility features required to comply with 807.2, all common use areas serving cells with mobility features required to comply with 807.2, and all public use areas are on an accessible route.

4. In residential facilities, an accessible route shall not be required to connect stories where residential dwelling units with mobility features required to comply with 809.2 through 809.4, all common use areas serving residential dwelling units with mobility features required to comply with 809.2 through 809.4, and public use areas serving residential dwelling units are on an accessible route.

5. Within multi-story transient lodging guest rooms with mobility features required to comply with 806.2, an accessible route shall not be required to connect stories provided that spaces complying with 806.2 are on an accessible route and sleeping accommodations for two persons minimum are provided on a story served by an accessible route.

6. In air traffic control towers, an accessible route shall not be required to serve the cab and the floor immediately below the cab.

7. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, an accessible route shall not be required to stories located above or below the accessible story.

ADVISORY 206.2.3 Multi-Story Buildings and Facilities. Spaces and elements located on a level not required to be served by an accessible route must fully comply with this document. While a mezzanine may be a change in level, it is not a story. If an accessible route is required to connect stories within a building or facility, the accessible route must serve all mezzanines.

Advisory 206.2.3 Multi-Story Buildings and Facilities Exception 4. Where common use areas are provided for the use of residents, it is presumed that all such common use areas “serve” accessible dwelling units unless use is restricted to residents occupying certain dwelling units. For example, if all residents are permitted to use all laundry rooms, then all laundry rooms “serve” accessible dwelling units. However, if the laundry room on the first floor is restricted to use by residents on the first

floor, and the second floor laundry room is for use by occupants of the second floor, then first floor accessible units are “served” only by laundry rooms on the first floor. In this example, an accessible route is not required to the second floor provided that all accessible units and all common use areas serving them are on the first floor.

206.2.3.1 Stairs and Escalators in Existing Buildings. In alterations and additions, where an escalator or stair is provided where none existed previously and major structural modifications are necessary for the installation, an accessible route shall be provided between the levels served by the escalator or stair unless exempted by 206.2.3 Exceptions 1 through 7.

206.2.4 Spaces and Elements. At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility which are otherwise connected by a circulation path unless exempted by 206.2.3 Exceptions 1 through 7.

EXCEPTIONS: 1. Raised courtroom stations, including judges’ benches, clerks’ stations, bailiffs’ stations, deputy clerks’ stations, and court reporters’ stations shall not be required to provide vertical access provided that the required clear floor space, maneuvering space, and, if appropriate, electrical service are installed at the time of initial construction to allow future installation of a means of vertical access complying with 405, 407, 408, or 410 without requiring substantial reconstruction of the space.

2. In assembly areas with fixed seating required to comply with 221, an accessible route shall not be required to serve fixed seating where wheelchair spaces required to be on an accessible route are not provided.

3. Accessible routes shall not be required to connect mezzanines where buildings or facilities have no more than one story. In addition, accessible routes shall not be required to connect stories or mezzanines where multi-story buildings or facilities are exempted by 206.2.3 Exceptions 1 through 7.

ADVISORY 206.2.4 Spaces and Elements. Accessible routes must connect all spaces and elements required to be accessible including, but not limited to, raised areas and speaker platforms.

Advisory 206.2.4 Spaces and Elements Exception 1. The exception does not apply to areas that are likely to be used by members of the public who are not employees of the court such as jury areas, attorney areas, or witness stands.

206.2.5 Restaurants and Cafeterias. In restaurants and cafeterias, an accessible route shall be provided to all dining areas, including raised or sunken dining areas, and outdoor dining areas.

EXCEPTIONS: 1. In buildings or facilities not required to provide an accessible route between stories, an accessible route shall not be required to a mezzanine dining area where the mezzanine contains less than 25 percent of the total combined area for seating and dining and where the same decor and services are provided in the accessible area.

2. In alterations, an accessible route shall not be required to existing raised or sunken dining areas, or to all parts of existing outdoor dining areas where the same services and decor are provided in an accessible space usable by the public and not restricted to use by people with disabilities.

3. In sports facilities, tiered dining areas providing seating required to comply with 221 shall be required to have accessible routes serving at least 25 percent of the dining area provided that accessible routes serve seating complying with 221 and each tier is provided with the same services.

ADVISORY 206.2.5 Restaurants and Cafeterias Exception 2. Examples of “same services” include, but are not limited to, bar service, rooms having smoking and non-smoking sections, lotto and other table games, carry-out, and buffet service. Examples of “same decor” include, but are not limited to, seating at or near windows and railings with views, areas designed with a certain theme, party and banquet rooms, and rooms where entertainment is provided.

206.2.6 Performance Areas. Where a circulation path directly connects a performance area to an assembly seating area, an accessible route shall directly connect the assembly seating area with the performance area. An accessible route shall be provided from performance areas to ancillary areas or facilities used by performers unless exempted by 206.2.3 Exceptions 1 through 7.

206.2.7 Press Boxes. Press boxes in assembly areas shall be on an accessible route.

EXCEPTIONS: 1. An accessible route shall not be required to press boxes in bleachers that have points of entry at only one level provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.

2. An accessible route shall not be required to free-standing press boxes that are elevated above grade 12 feet (3660 mm) minimum provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.

ADVISORY 206.2.7 Press Boxes Exception 2. Where a facility contains multiple assembly areas, the aggregate area of the press boxes in each assembly area is to be calculated separately. For example, if a university has a soccer stadium with three press boxes elevated 12 feet (3660 mm) or more above grade and each press box is 150 square feet (14 m²), then the aggregate area of the soccer stadium press boxes is less than 500 square feet (46 m²) and Exception 2 applies to the soccer stadium. If that same university also has a football stadium with two press boxes elevated 12 feet (3660 mm) or more above grade and one press box is 250 square feet (23 m²), and the second is 275 square feet (26 m²), then the aggregate area of the football stadium press boxes is more than 500 square feet (46 m²) and Exception 2 does not apply to the football stadium.

206.2.8 Employee Work Areas. Common use circulation paths within employee work areas shall comply with 402.

EXCEPTIONS: 1. Common use circulation paths located within employee work areas that are less than 1000 square feet (93 m²) and defined by permanently installed partitions, counters, casework, or furnishings shall not be required to comply with 402.

2. Common use circulation paths located within employee work areas that are an integral component of work area equipment shall not be required to comply with 402.

3. Common use circulation paths located within exterior employee work areas that are fully exposed to the weather shall not be required to comply with 402.

ADVISORY 206.2.8 Employee Work Areas Exception 1. Modular furniture that is not permanently installed is not directly subject to these requirements. The Department of Justice ADA regulations provide additional guidance regarding the relationship between these requirements and elements that are not part of the built environment. Additionally, the Equal Employment Opportunity Commission (EEOC) implements title I of the ADA which requires non-discrimination in the workplace. EEOC can provide guidance regarding employers' obligations to provide reasonable accommodations for employees with disabilities. Advisory 206.2.8 Employee Work Areas Exception 2. Large pieces of equipment, such as electric turbines or water pumping apparatus, may have stairs and elevated walkways used for overseeing or monitoring purposes which are physically part of the turbine or pump. However, passenger elevators used for vertical transportation between stories are not considered "work area equipment" as defined in Section 106.5.

206.2.9 Amusement Rides. Amusement rides required to comply with 234 shall provide accessible routes in accordance with 206.2.9. Accessible routes serving amusement rides shall comply with Chapter 4 except as modified by 1002.2.

206.2.9.1 Load and Unload Areas. Load and unload areas shall be on an accessible route. Where load and unload areas have more than one loading or unloading position, at least one loading and unloading position shall be on an accessible route.

206.2.9.2 Wheelchair Spaces, Ride Seats Designed for Transfer, and Transfer Devices. When amusement rides are in the load and unload position, wheelchair spaces complying with 1002.4, amusement ride seats designed for transfer complying with 1002.5, and transfer devices complying with 1002.6 shall be on an accessible route.

206.2.10 Recreational Boating Facilities. Boat slips required to comply with 235.2 and boarding piers at boat launch ramps required to comply with 235.3 shall be on an accessible route. Accessible routes serving recreational boating facilities shall comply with Chapter 4, except as modified by 1003.2.

206.2.11 Bowling Lanes. Where bowling lanes are provided, at least 5 percent, but no fewer than one of each type of bowling lane, shall be on an accessible route.

206.2.12 Court Sports. In court sports, at least one accessible route shall directly connect both sides of the court.

206.2.13 Exercise Machines and Equipment. Exercise machines and equipment required to comply with 236 shall be on an accessible route.

206.2.14 Fishing Piers and Platforms. Fishing piers and platforms shall be on an accessible route. Accessible routes serving fishing piers and platforms shall comply with Chapter 4 except as modified by 1005.1.

206.2.15 Golf Facilities. At least one accessible route shall connect accessible elements and spaces within the boundary of the golf course. In addition, accessible routes serving golf car rental areas; bag drop areas; course weather shelters complying with 238.2.3; course toilet rooms; and practice putting greens, practice teeing grounds, and teeing stations at driving ranges complying with 238.3 shall comply with Chapter 4 except as modified by 1006.2.

EXCEPTION: Golf car passages complying with 1006.3 shall be permitted to be used for all or part of accessible routes required by 206.2.15.

206.2.16 Miniature Golf Facilities. Holes required to comply with 239.2, including the start of play, shall be on an accessible route. Accessible routes serving miniature golf facilities shall comply with Chapter 4 except as modified by 1007.2.

206.2.17 Play Areas. Play areas shall provide accessible routes in accordance with 206.2.17. Accessible routes serving play areas shall comply with Chapter 4 except as modified by 1008.2.

206.2.17.1 Ground Level and Elevated Play Components. At least one accessible route shall be provided within the play area. The accessible route shall connect ground level play components required to comply with 240.2.1 and elevated play components required to comply with 240.2.2, including entry and exit points of the play components.

206.2.17.2 Soft Contained Play Structures. Where three or fewer entry points are provided for soft contained play structures, at least one entry point shall be on an accessible route. Where four or more entry points are provided for soft contained play structures, at least two entry points shall be on an accessible route.

206.3 Location. Accessible routes shall coincide with or be located in the same area as general circulation paths. Where circulation paths are interior, required accessible routes shall also be interior.

ADVISORY 206.3 Location. The accessible route must be in the same area as the general circulation path. This means that circulation paths, such as vehicular ways designed for pedestrian traffic, walks, and unpaved paths that are designed to be

routinely used by pedestrians must be accessible or have an accessible route nearby. Additionally, accessible vertical interior circulation must be in the same area as stairs and escalators, not isolated in the back of the facility.

206.4 Entrances. Entrances shall be provided in accordance with 206.4. Entrance doors, doorways, and gates shall comply with 404 and shall be on an accessible route complying with 402.

EXCEPTIONS: 1. Where an alteration includes alterations to an entrance, and the building or facility has another entrance complying with 404 that is on an accessible route, the altered entrance shall not be required to comply with 206.4 unless required by 202.4.

2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no more than one public entrance shall be required to comply with 206.4. Where no public entrance can comply with 206.4 under criteria established in 202.5 Exception, then either an unlocked entrance not used by the public shall comply with 206.4; or a locked entrance complying with 206.4 with a notification system or remote monitoring shall be provided.

206.4.1 Public Entrances. In addition to entrances required by 206.4.2 through 206.4.9, at least 60 percent of all public entrances shall comply with 404.

206.4.2 Parking Structure Entrances. Where direct access is provided for pedestrians from a parking structure to a building or facility entrance, each direct access to the building or facility entrance shall comply with 404.

206.4.3 Entrances from Tunnels or Elevated Walkways. Where direct access is provided for pedestrians from a pedestrian tunnel or elevated walkway to a building or facility, at least one direct entrance to the building or facility from each tunnel or walkway shall comply with 404.

206.4.4 Transportation Facilities. In addition to the requirements of 206.4.2, 206.4.3, and 206.4.5 through 206.4.9, transportation facilities shall provide entrances in accordance with 206.4.4.

206.4.4.1 Location. In transportation facilities, where different entrances serve different transportation fixed routes or groups of fixed routes, at least one public entrance shall comply with 404.

EXCEPTION: Entrances to key stations and existing intercity rail stations retrofitted in accordance with 49 CFR 37.49 or 49 CFR 37.51 shall not be required to comply with 206.4.4.1.

206.4.4.2 Direct Connections. Direct connections to other facilities shall provide an accessible route complying with 404 from the point of connection to boarding platforms and all transportation system elements required to be accessible. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and all transportation system elements required to be accessible.

EXCEPTION: In key stations and existing intercity rail stations, existing direct connections shall not be required to comply with 404.

206.4.4.3 Key Stations and Intercity Rail Stations. Key stations and existing intercity rail stations required by Subpart C of 49 CFR part 37 to be altered, shall have at least one entrance complying with 404.

206.4.5 Tenant Spaces. At least one accessible entrance to each tenancy in a facility shall comply with 404.

EXCEPTION: Self-service storage facilities not required to comply with 225.3 shall not be required to be on an accessible route.

206.4.6 Residential Dwelling Unit Primary Entrance. In residential dwelling units, at least one primary entrance shall comply with 404. The primary entrance to a residential dwelling unit shall not be to a bedroom.

206.4.7 Restricted Entrances. Where restricted entrances are provided to a building or facility, at least one restricted entrance to the building or facility shall comply with 404.

206.4.8 Service Entrances. If a service entrance is the only entrance to a building or to a tenancy in a facility, that entrance shall comply with 404.

206.4.9 Entrances for Inmates or Detainees. Where entrances used only by inmates or detainees and security personnel are provided at judicial facilities, detention facilities, or correctional facilities, at least one such entrance shall comply with 404.

206.5 Doors, Doorways, and Gates. Doors, doorways, and gates providing user passage shall be provided in accordance with 206.5.

206.5.1 Entrances. Each entrance to a building or facility required to comply with 206.4 shall have at least one door, doorway, or gate complying with 404.

206.5.2 Rooms and Spaces. Within a building or facility, at least one door, doorway, or gate serving each room or space complying with these requirements shall comply with 404.

206.5.3 Transient Lodging Facilities. In transient lodging facilities, entrances, doors, and doorways providing user passage into and within guest rooms that are not required to provide mobility features complying with 806.2 shall comply with 404.2.3.

EXCEPTION: Shower and sauna doors in guest rooms that are not required to provide mobility features complying with 806.2 shall not be required to comply with 404.2.3.

206.5.4 Residential Dwelling Units. In residential dwelling units required to provide mobility features complying with 809.2 through 809.4, all doors and doorways providing user passage shall comply with 404.

206.6 Elevators. Elevators provided for passengers shall comply with 407. Where multiple elevators are provided, each elevator shall comply with 407.

EXCEPTIONS: 1. In a building or facility permitted to use the exceptions to 206.2.3 or permitted by 206.7 to use a platform lift, elevators complying with 408 shall be permitted.

2. Elevators complying with 408 or 409 shall be permitted in multi-story residential dwelling units.

206.6.1 Existing Elevators. Where elements of existing elevators are altered, the same element shall also be altered in all elevators that are programmed to respond to the same hall call control as the altered elevator and shall comply with the requirements of 407 for the altered element.

206.7 Platform Lifts. Platform lifts shall comply with 410. Platform lifts shall be permitted as a component of an accessible route in new construction in accordance with 206.7. Platform lifts shall be permitted as a component of an accessible route in an existing building or facility.

206.7.1 Performance Areas and Speakers' Platforms. Platform lifts shall be permitted to provide accessible routes to performance areas and speakers' platforms.

206.7.2 Wheelchair Spaces. Platform lifts shall be permitted to provide an accessible route to comply with the wheelchair space dispersion and line-of-sight requirements of 221 and 802.

206.7.3 Incidental Spaces. Platform lifts shall be permitted to provide an accessible route to incidental spaces which are not public use spaces and which are occupied by five persons maximum.

206.7.4 Judicial Spaces. Platform lifts shall be permitted to provide an accessible route to: jury boxes and witness stands; raised courtroom stations including, judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations; and to depressed areas such as the well of a court.

206.7.5 Existing Site Constraints. Platform lifts shall be permitted where existing exterior site constraints make use of a ramp or elevator infeasible.

ADVISORY 206.7.5 Existing Site Constraints. This exception applies where topography or other similar existing site constraints necessitate the use of a platform lift as the only feasible alternative. While the site constraint must reflect exterior conditions, the lift can be installed in the interior of a building. For example, a new building constructed between and connected to two existing buildings may have insufficient space to coordinate floor levels and also to provide ramped entry from the public way. In this example, an exterior or interior platform lift could be used to provide an accessible entrance or to coordinate one or more interior floor levels.

206.7.6 Guest Rooms and Residential Dwelling Units. Platform lifts shall be permitted to connect levels within transient lodging guest rooms required to provide mobility features complying with 806.2 or residential dwelling units required to provide mobility features complying with 809.2 through 809.4.

206.7.7 Amusement Rides. Platform lifts shall be permitted to provide accessible routes to load and unload areas serving amusement rides.

206.7.8 Play Areas. Platform lifts shall be permitted to provide accessible routes to play components or soft contained play structures.

206.7.9 Team or Player Seating. Platform lifts shall be permitted to provide accessible routes to team or player seating areas serving areas of sport activity.

ADVISORY 206.7.9 Team or Player Seating. While the use of platform lifts is allowed, ramps are recommended to provide access to player seating areas serving an area of sport activity.

206.7.10 Recreational Boating Facilities and Fishing Piers and Platforms. Platform lifts shall be permitted to be used instead of gangways that are part of accessible routes serving recreational boating facilities and fishing piers and platforms.

206.8 Security Barriers. Security barriers, including but not limited to, security bollards and security check points, shall not obstruct a required accessible route or accessible means of egress.

EXCEPTION: Where security barriers incorporate elements that cannot comply with these requirements such as certain metal detectors, fluoroscopes, or other similar devices, the accessible route shall be permitted to be located adjacent to security screening devices. The accessible route shall permit persons with disabilities passing around security barriers to maintain visual contact with their personal items to the same extent provided others passing through the security barrier.

207 Accessible Means of Egress

207.1 General. Means of egress shall comply with section 1003.2.13 of the International Building Code (2000 edition and 2001 Supplement) or section 1007 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

EXCEPTIONS: 1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel.

2. Areas of refuge shall not be required in detention and correctional facilities.

207.2 Platform Lifts. Standby power shall be provided for platform lifts permitted by section 1003.2.13.4 of the International Building Code (2000 edition and 2001 Supplement) or section 1007.5 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1) to serve as a part of an accessible means of egress.

208 Parking Spaces

208.1 General. Where parking spaces are provided, parking spaces shall be provided in accordance with 208.

EXCEPTION: Parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles, or vehicular impound shall not be required to comply with 208 provided that lots accessed by the public are provided with a passenger loading zone complying with 503.

208.2 Minimum Number. Parking spaces complying with 502 shall be provided in accordance with Table 208.2 except as required by 208.2.1, 208.2.2, and 208.2.3. Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.

208.2 Parking Spaces

Total Number of Parking Spaces Provided in Parking Facility	Minimum Number of Required Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

ADVISORY 208.2 Minimum Number. The term "parking facility" is used Section 208.2 instead of the term "parking lot" so that it is clear that both parking lots and parking structures are required to comply with this section. The number of parking spaces required to be accessible is to be calculated separately for each parking facility; the required number is not to be based on the total number of parking spaces provided in all of the parking facilities provided on the site.

208.2.1 Hospital Outpatient Facilities. Ten percent of patient and visitor parking spaces provided to serve hospital outpatient facilities shall comply with 502.

ADVISORY 208.2.1 Hospital Outpatient Facilities. The term "outpatient facility" is not defined in this document but is intended to cover facilities or units that are located in hospitals and that provide regular and continuing medical treatment without an overnight stay. Doctors' offices, independent clinics, or other facilities not located in hospitals are not considered hospital outpatient facilities for purposes of this document.

208.2.2 Rehabilitation Facilities and Outpatient Physical Therapy Facilities. Twenty percent of patient and visitor parking spaces provided to serve rehabilitation facilities specializing in treating conditions that affect mobility and outpatient physical therapy facilities shall comply with 502.

ADVISORY 208.2.2 Rehabilitation Facilities and Outpatient Physical Therapy Facilities. Conditions that affect mobility include conditions requiring the use or assistance of a brace, cane, crutch, prosthetic device, wheelchair, or powered mobility aid; arthritic, neurological, or orthopedic conditions that severely limit one's ability to walk; respiratory diseases and other conditions which may require the use of portable oxygen; and cardiac conditions that impose significant functional limitations.

208.2.3 Residential Facilities. Parking spaces provided to serve residential facilities shall comply with 208.2.3.

208.2.3.1 Parking for Residents. Where at least one parking space is provided for each residential dwelling unit, at least one parking space complying with 502 shall be provided for each residential dwelling unit required to provide mobility features complying with 809.2 through 809.4.

208.2.3.2 Additional Parking Spaces for Residents. Where the total number of parking spaces provided for each residential dwelling unit exceeds one parking space per residential dwelling unit, 2 percent, but no fewer than one space, of all the parking spaces not covered by 208.2.3.1 shall comply with 502.

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208.2.3.3 Parking for Guests, Employees, and Other Non-Residents. Where parking spaces are provided for persons other than residents, parking shall be provided in accordance with Table 208.2.

208.2.4 Van Parking Spaces. For every six or fraction of six parking spaces required by 208.2 to comply with 502, at least one shall be a van parking space complying with 502.

208.3 Location. Parking facilities shall comply with 208.3

208.3.1 General. Parking spaces complying with 502 that serve a particular building or facility shall be located on the shortest accessible route from parking to an entrance complying with 206.4. Where parking serves more than one accessible entrance, parking spaces complying with 502 shall be dispersed and located on the shortest accessible route to the accessible entrances. In parking facilities that do not serve a particular building or facility, parking spaces complying with 502 shall be located on the shortest accessible route to an accessible pedestrian entrance of the parking facility.

EXCEPTIONS: 1. All van parking spaces shall be permitted to be grouped on one level within a multi-story parking facility.

2. Parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee, and user convenience.

ADVISORY 208.3.1 General Exception 2. Factors that could affect “user convenience” include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.

208.3.2 Residential Facilities. In residential facilities containing residential dwelling units required to provide mobility features complying with 809.2 through 809.4, parking spaces provided in accordance with 208.2.3.1 shall be located on the shortest accessible route to the residential dwelling unit entrance they serve. Spaces provided in accordance with 208.2.3.2 shall be dispersed throughout all types of parking provided for the residential dwelling units.

EXCEPTION: Parking spaces provided in accordance with 208.2.3.2 shall not be required to be dispersed throughout all types of parking if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance, parking fee, and user convenience.

ADVISORY 208.3.2 Residential Facilities Exception. Factors that could affect “user convenience” include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.

209 Passenger Loading Zones and Bus Stops

209.1 General. Passenger loading zones shall be provided in accordance with 209.

209.2 Type. Where provided, passenger loading zones shall comply with 209.2.

209.2.1 Passenger Loading Zones. Passenger loading zones, except those required to comply with 209.2.2 and 209.2.3, shall provide at least one passenger loading zone complying with 503 in every continuous 100 linear feet (30 m) of loading zone space, or fraction thereof.

209.2.2 Bus Loading Zones. In bus loading zones restricted to use by designated or specified public transportation vehicles, each bus bay, bus stop, or other area designated for lift or ramp deployment shall comply with 810.2.

ADVISORY 209.2.2 Bus Loading Zones. The terms “designated public transportation” and “specified public transportation” are defined by the Department of Transportation at 49 CFR 37.3 in regulations implementing the Americans with Disabilities Act. These terms refer to public transportation services provided by public or private entities, respectively. For example, designated public transportation vehicles include buses and vans operated by public transit agencies, while specified public transportation vehicles include tour and charter buses, taxis and limousines, and hotel shuttles operated by private entities.

209.2.3 On-Street Bus Stops. On-street bus stops shall comply with 810.2 to the maximum extent practicable.

209.3 Medical Care and Long-Term Care Facilities. At least one passenger loading zone complying with 503 shall be provided at an accessible entrance to licensed medical care and licensed long-term care facilities where the period of stay exceeds twenty-four hours.

209.4 Valet Parking. Parking facilities that provide valet parking services shall provide at least one passenger loading zone complying with 503.

209.5 Mechanical Access Parking Garages. Mechanical access parking garages shall provide at least one passenger loading zone complying with 503 at vehicle drop-off and vehicle pick-up areas.

210 Stairways

210.1 General. Interior and exterior stairs that are part of a means of egress shall comply with 504.

EXCEPTIONS: 1. In detention and correctional facilities, stairs that are not located in public use areas shall not be required to comply with 504.

2. In alterations, stairs between levels that are connected by an accessible route shall not be required to comply with 504, except that handrails complying with 505 shall be provided when the stairs are altered.

3. In assembly areas, aisle stairs shall not be required to comply with 504.

4. Stairs that connect play components shall not be required to comply with 504.

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ADVISORY 210.1 General. Although these requirements do not mandate handrails on stairs that are not part of a means of egress, State or local building codes may require handrails or guards.

211 Drinking Fountains

211.1 General. Where drinking fountains are provided on an exterior site, on a floor, or within a secured area they shall be provided in accordance with 211.

EXCEPTION: In detention or correctional facilities, drinking fountains only serving holding or housing cells not required to comply with 232 shall not be required to comply with 211.

211.2 Minimum Number. No fewer than two drinking fountains shall be provided. One drinking fountain shall comply with 602.1 through 602.6 and one drinking fountain shall comply with 602.7.

EXCEPTION: Where a single drinking fountain complies with 602.1 through 602.6 and 602.7, it shall be permitted to be substituted for two separate drinking fountains.

211.3 More Than Minimum Number. Where more than the minimum number of drinking fountains specified in 211.2 are provided, 50 percent of the total number of drinking fountains provided shall comply with 602.1 through 602.6, and 50 percent of the total number of drinking fountains provided shall comply with 602.7.

EXCEPTION: Where 50 percent of the drinking fountains yields a fraction, 50 percent shall be permitted to be rounded up or down provided that the total number of drinking fountains complying with 211 equals 100 percent of drinking fountains.

212 Kitchens, Kitchenettes, and Sinks

212.1 General. Where provided, kitchens, kitchenettes, and sinks shall comply with 212.

212.2 Kitchens and Kitchenettes. Kitchens and kitchenettes shall comply with 804.

212.3 Sinks. Where sinks are provided, at least 5 percent, but no fewer than one, of each type provided in each accessible room or space shall comply with 606.

EXCEPTION: Mop or service sinks shall not be required to comply with 212.3.

213 Toilet Facilities and Bathing Facilities

213.1 General. Where toilet facilities and bathing facilities are provided, they shall comply with 213. Where toilet facilities and bathing facilities are provided in facilities permitted by 206.2.3 Exceptions 1 and 2 not to connect stories by an accessible route, toilet facilities and bathing facilities shall be provided on a story connected by an accessible route to an accessible entrance.

213.2 Toilet Rooms and Bathing Rooms. Where toilet rooms are provided, each toilet room shall comply with 603. Where bathing rooms are provided, each bathing room shall comply with 603.

EXCEPTIONS: 1. In alterations where it is technically infeasible to comply with 603, altering existing toilet or bathing rooms shall not be required where a single unisex toilet room or bathing room complying with 213.2.1 is provided and located in the same area and on the same floor as existing inaccessible toilet or bathing rooms.

2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no fewer than one toilet room for each sex complying with 603 or one unisex toilet room complying with 213.2.1 shall be provided.

3. Where multiple single user portable toilet or bathing units are clustered at a single location, no more than 5 percent of the toilet units and bathing units at each cluster shall be required to comply with 603. Portable toilet units and bathing units complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1.

4. Where multiple single user toilet rooms are clustered at a single location, no more than 50 percent of the single user toilet rooms for each use at each cluster shall be required to comply with 603.

ADVISORY 213.2 Toilet Rooms and Bathing Rooms. These requirements allow the use of unisex (or single-user) toilet rooms in alterations when technical infeasibility can be demonstrated. Unisex toilet rooms benefit people who use opposite sex personal care assistants. For this reason, it is advantageous to install unisex toilet rooms in addition to accessible single-sex toilet rooms in new facilities.

Advisory 213.2 Toilet Rooms and Bathing Rooms Exceptions 3 and 4. A "cluster" is a group of toilet rooms proximate to one another. Generally, toilet rooms in a cluster are within sight of, or adjacent to, one another.

213.2.1 Unisex (Single-Use or Family) Toilet and Unisex Bathing Rooms. Unisex toilet rooms shall contain not more than one lavatory, and two water closets without urinals or one water closet and one urinal. Unisex bathing rooms shall contain one shower or one shower and one bathtub, one lavatory, and one water closet. Doors to unisex toilet rooms and unisex bathing rooms shall have privacy latches.

213.3 Plumbing Fixtures and Accessories. Plumbing fixtures and accessories provided in a toilet room or bathing room required to comply with 213.2 shall comply with 213.3.

213.3.1 Toilet Compartments. Where toilet compartments are provided, at least one toilet compartment shall comply with 604.8.1. In addition to the compartment required to comply with 604.8.1, at least one compartment shall comply with 604.8.2

where six or more toilet compartments are provided, or where the combination of urinals and water closets totals six or more fixtures.

ADVISORY 213.3.1 Toilet Compartments. A toilet compartment is a partitioned space that is located within a toilet room, and that normally contains no more than one water closet. A toilet compartment may also contain a lavatory. A lavatory is a sink provided for hand washing. Full-height partitions and door assemblies can comprise toilet compartments where the minimum required spaces are provided within the compartment.

213.3.2 Water Closets. Where water closets are provided, at least one shall comply with 604.

213.3.3 Urinals. Where more than one urinal is provided, at least one shall comply with 605.

213.3.4 Lavatories. Where lavatories are provided, at least one shall comply with 606 and shall not be located in a toilet compartment.

213.3.5 Mirrors. Where mirrors are provided, at least one shall comply with 603.3.

213.3.6 Bathing Facilities. Where bathtubs or showers are provided, at least one bathtub complying with 607 or at least one shower complying with 608 shall be provided.

213.3.7 Coat Hooks and Shelves. Where coat hooks or shelves are provided in toilet rooms without toilet compartments, at least one of each type shall comply with 603.4. Where coat hooks or shelves are provided in toilet compartments, at least one of each type complying with 604.8.3 shall be provided in toilet compartments required to comply with 213.3.1. Where coat hooks or shelves are provided in bathing facilities, at least one of each type complying with 603.4 shall serve fixtures required to comply with 213.3.6.

214 Washing Machines and Clothes Dryers

214.1 General. Where provided, washing machines and clothes dryers shall comply with 214.

214.2 Washing Machines. Where three or fewer washing machines are provided, at least one shall comply with 611. Where more than three washing machines are provided, at least two shall comply with 611.

214.3 Clothes Dryers. Where three or fewer clothes dryers are provided, at least one shall comply with 611. Where more than three clothes dryers are provided, at least two shall comply with 611.

215 Fire Alarm Systems

215.1 General. Where fire alarm systems provide audible alarm coverage, alarms shall comply with 215.

EXCEPTION: In existing facilities, visible alarms shall not be required except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

ADVISORY 215.1 General. Unlike audible alarms, visible alarms must be located within the space they serve so that the signal is visible. Facility alarm systems (other than fire alarm systems) such as those used for tornado warnings and other emergencies are not required to comply with the technical criteria for alarms in Section 702. Every effort should be made to ensure that such alarms can be differentiated in their signal from fire alarms systems and that people who need to be notified of emergencies are adequately safeguarded. Consult local fire departments and prepare evacuation plans taking into consideration the needs of every building occupant, including people with disabilities.

215.2 Public and Common Use Areas. Alarms in public use areas and common use areas shall comply with 702.

215.3 Employee Work Areas. Where employee work areas have audible alarm coverage, the wiring system shall be designed so that visible alarms complying with 702 can be integrated into the alarm system.

215.4 Transient Lodging. Guest rooms required to comply with 224.4 shall provide alarms complying with 702.

215.5 Residential Facilities. Where provided in residential dwelling units required to comply with 809.5, alarms shall comply with 702.

216 Signs

216.1 General. Signs shall be provided in accordance with 216 and shall comply with 703.

EXCEPTIONS: 1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with 216.

2. In parking facilities, signs shall not be required to comply with 216.2, 216.3, and 216.6 through 216.12.

3. Temporary, 7 days or less, signs shall not be required to comply with 216.

4. In detention and correctional facilities, signs not located in public use areas shall not be required to comply with 216.

216.2 Designations. Interior and exterior signs identifying permanent rooms and spaces shall comply with 703.1, 703.2, and 703.5. Where pictograms are provided as designations of permanent interior rooms and spaces, the pictograms shall comply with 703.6 and shall have text descriptors complying with 703.2 and 703.5.

EXCEPTION: Exterior signs that are not located at the door to the space they serve shall not be required to comply with 703.2.

ADVISORY 216.2 Designations. Section 216.2 applies to signs that provide designations, labels, or names for interior rooms or spaces where the sign is not likely to change over time. Examples include interior signs labeling restrooms, room and floor numbers or letters, and room names. Tactile text descriptors are required for pictograms that are provided to label or identify a permanent room or space. Pictograms that provide information about a room or space, such as “no smoking,” occupant logos, and the International Symbol of Accessibility, are not required to have text descriptors.

216.3 Directional and Informational Signs. Signs that provide direction to or information about interior spaces and facilities of the site shall comply with 703.5.

ADVISORY 216.3 Directional and Informational Signs. Information about interior spaces and facilities includes rules of conduct, occupant load, and similar signs. Signs providing direction to rooms or spaces include those that identify egress routes.

216.4 Means of Egress. Signs for means of egress shall comply with 216.4.

216.4.1 Exit Doors. Doors at exit passageways, exit discharge, and exit stairways shall be identified by tactile signs complying with 703.1, 703.2, and 703.5.

ADVISORY 216.4.1 Exit Doors. An exit passageway is a horizontal exit component that is separated from the interior spaces of the building by fire-resistance-rated construction and that leads to the exit discharge or public way. The exit discharge is that portion of an egress system between the termination of an exit and a public way.

216.4.2 Areas of Refuge. Signs required by section 1003.2.13.5.4 of the International Building Code (2000 edition) or section 1007.6.4 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Chapter 1) to provide instructions in areas of refuge shall comply with 703.5.

216.4.3 Directional Signs. Signs required by section 1003.2.13.6 of the International Building Code (2000 edition) or section 1007.7 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Chapter 1) to provide directions to accessible means of egress shall comply with 703.5.

216.5 Parking. Parking spaces complying with 502 shall be identified by signs complying with 502.6.

EXCEPTIONS: 1. Where a total of four or fewer parking spaces, including accessible parking spaces, are provided on a site, identification of accessible parking spaces shall not be required.

2. In residential facilities, where parking spaces are assigned to specific residential dwelling units, identification of accessible parking spaces shall not be required.

216.6 Entrances. Where not all entrances comply with 404, entrances complying with 404 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1. Directional signs complying with 703.5 that indicate the location of the nearest entrance complying with 404 shall be provided at entrances that do not comply with 404.

ADVISORY 216.6 Entrances. Where a directional sign is required, it should be located to minimize backtracking. In some cases, this could mean locating a sign at the beginning of a route, not just at the inaccessible entrances to a building.

216.7 Elevators. Where existing elevators do not comply with 407, elevators complying with 407 shall be clearly identified with the International Symbol of Accessibility complying with 703.7.2.1.

216.8 Toilet Rooms and Bathing Rooms. Where existing toilet rooms or bathing rooms do not comply with 603, directional signs indicating the location of the nearest toilet room or bathing room complying with 603 within the facility shall be provided. Signs shall comply with 703.5 and shall include the International Symbol of Accessibility complying with 703.7.2.1. Where existing toilet rooms or bathing rooms do not comply with 603, the toilet rooms or bathing rooms complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1. Where clustered single user toilet rooms or bathing facilities are permitted to use exceptions to 213.2, toilet rooms or bathing facilities complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1 unless all toilet rooms and bathing facilities comply with 603.

216.9 TTYs. Identification and directional signs for public TTYs shall be provided in accordance with 216.9.

216.9.1 Identification Signs. Public TTYs shall be identified by the International Symbol of TTY complying with 703.7.2.2.

216.9.2 Directional Signs. Directional signs indicating the location of the nearest public TTY shall be provided at all banks of public pay telephones not containing a public TTY. In addition, where signs provide direction to public pay telephones, they shall also provide direction to public TTYs. Directional signs shall comply with 703.5 and shall include the International Symbol of TTY complying with 703.7.2.2.

216.10 Assistive Listening Systems. Each assembly area required by 219 to provide assistive listening systems shall provide signs informing patrons of the availability of the assistive listening system. Assistive listening signs shall comply with 703.5 and shall include the International Symbol of Access for Hearing Loss complying with 703.7.2.4.

EXCEPTION: Where ticket offices or windows are provided, signs shall not be required at each assembly area provided that signs are displayed at each ticket office or window informing patrons of the availability of assistive listening systems.

216.11 Check-Out Aisles. Where more than one check-out aisle is provided, check-out aisles complying with 904.3 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1. Where check-out aisles are identified by

numbers, letters, or functions, signs identifying check-out aisles complying with 904.3 shall be located in the same location as the check-out aisle identification.

EXCEPTION: Where all check-out aisles serving a single function comply with 904.3, signs complying with 703.7.2.1 shall not be required.

216.12 Amusement Rides. Signs identifying the type of access provided on amusement rides shall be provided at entries to queues and waiting lines. In addition, where accessible unload areas also serve as accessible load areas, signs indicating the location of the accessible load and unload areas shall be provided at entries to queues and waiting lines.

ADVISORY 216.12 Amusement Rides. Amusement rides designed primarily for children, amusement rides that are controlled or operated by the rider, and amusement rides without seats, are not required to provide wheelchair spaces, transfer seats, or transfer systems, and need not meet the sign requirements in 216.12. The load and unload areas of these rides must, however, be on an accessible route and must provide turning space.

217 Telephones

217.1 General. Where coin-operated public pay telephones, coinless public pay telephones, public closed-circuit telephones, public courtesy phones, or other types of public telephones are provided, public telephones shall be provided in accordance with 217 for each type of public telephone provided. For purposes of this section, a bank of telephones shall be considered to be two or more adjacent telephones.

ADVISORY 217.1 General. These requirements apply to all types of public telephones including courtesy phones at airports and rail stations that provide a free direct connection to hotels, transportation services, and tourist attractions.

217.2 Wheelchair Accessible Telephones. Where public telephones are provided, wheelchair accessible telephones complying with 704.2 shall be provided in accordance with Table 217.2.

EXCEPTION: Drive-up only public telephones shall not be required to comply with 217.2.

217.2 Wheelchair Accessible Telephones

Number of Telephones Provided on a Floor, Level, or Exterior Site	Minimum Number of Required Wheelchair Accessible Telephones
1 or more single units	1 per floor, level, and exterior site
1 bank	1 per floor, level, and exterior site
2 or more banks	1 per bank

217.3 Volume Controls. All public telephones shall have volume controls complying with 704.3.

217.4 TTYs. TTYs complying with 704.4 shall be provided in accordance with 217.4.

ADVISORY 217.4 TTYs. Separate requirements are provided based on the number of public pay telephones provided at a bank of telephones, within a floor, a building, or on a site. In some instances one TTY can be used to satisfy more than one of these requirements. For example, a TTY required for a bank can satisfy the requirements for a building. However, the requirement for at least one TTY on an exterior site cannot be met by installing a TTY in a bank inside a building. Consideration should be given to phone systems that can accommodate both digital and analog transmissions for compatibility with digital and analog TTYs.

217.4.1 Bank Requirement. Where four or more public pay telephones are provided at a bank of telephones, at least one public TTY complying with 704.4 shall be provided at that bank.

EXCEPTION: TTYs shall not be required at banks of telephones located within 200 feet (61 m) of, and on the same floor as, a bank containing a public TTY.

217.4.2 Floor Requirement. TTYs in public buildings shall be provided in accordance with 217.4.2.1. TTYs in private buildings shall be provided in accordance with 217.4.2.2.

217.4.2.1 Public Buildings. Where at least one public pay telephone is provided on a floor of a public building, at least one public TTY shall be provided on that floor.

217.4.2.2 Private Buildings. Where four or more public pay telephones are provided on a floor of a private building, at least one public TTY shall be provided on that floor.

217.4.3 Building Requirement. TTYs in public buildings shall be provided in accordance with 217.4.3.1. TTYs in private buildings shall be provided in accordance with 217.4.3.2.

217.4.3.1 Public Buildings. Where at least one public pay telephone is provided in a public building, at least one public TTY shall be provided in the building. Where at least one public pay telephone is provided in a public use area of a public building, at least one public TTY shall be provided in the public building in a public use area.

217.4.3.2 Private Buildings. Where four or more public pay telephones are provided in a private building, at least one public TTY shall be provided in the building.

217.4.4 Exterior Site Requirement. Where four or more public pay telephones are provided on an exterior site, at least one public TTY shall be provided on the site.

217.4.5 Rest Stops, Emergency Roadside Stops, and Service Plazas. Where at least one public pay telephone is provided at a public rest stop, emergency roadside stop, or service plaza, at least one public TTY shall be provided.

217.4.6 Hospitals. Where at least one public pay telephone is provided serving a hospital emergency room, hospital recovery room, or hospital waiting room, at least one public TTY shall be provided at each location.

217.4.7 Transportation Facilities. In transportation facilities, in addition to the requirements of 217.4.1 through 217.4.4, where at least one public pay telephone serves a particular entrance to a bus or rail facility, at least one public TTY shall be provided to serve that entrance. In airports, in addition to the requirements of 217.4.1 through 217.4.4, where four or more public pay telephones are located in a terminal outside the security areas, a concourse within the security areas, or a baggage claim area in a terminal, at least one public TTY shall be provided in each location.

217.4.8 Detention and Correctional Facilities. In detention and correctional facilities, where at least one pay telephone is provided in a secured area used only by detainees or inmates and security personnel, at least one TTY shall be provided in at least one secured area.

217.5 Shelves for Portable TTYs. Where a bank of telephones in the interior of a building consists of three or more public pay telephones, at least one public pay telephone at the bank shall be provided with a shelf and an electrical outlet in accordance with 704.5.

EXCEPTIONS: 1. Secured areas of detention and correctional facilities where shelves and outlets are prohibited for purposes of security or safety shall not be required to comply with 217.5.

2. The shelf and electrical outlet shall not be required at a bank of telephones with a TTY.

218 Transportation Facilities

218.1 General. Transportation facilities shall comply with 218.

218.2 New and Altered Fixed Guideway Stations. New and altered stations in rapid rail, light rail, commuter rail, intercity rail, high speed rail, and other fixed guideway systems shall comply with 810.5 through 810.10.

218.3 Key Stations and Existing Intercity Rail Stations. Key stations and existing intercity rail stations shall comply with 810.5 through 810.10.

218.4 Bus Shelters. Where provided, bus shelters shall comply with 810.3.

218.5 Other Transportation Facilities. In other transportation facilities, public address systems shall comply with 810.7 and clocks shall comply with 810.8.

219 Assistive Listening Systems

219.1 General. Assistive listening systems shall be provided in accordance with 219 and shall comply with 706.

219.2 Required Systems. In each assembly area where audible communication is integral to the use of the space, an assistive listening system shall be provided.

EXCEPTION: Other than in courtrooms, assistive listening systems shall not be required where audio amplification is not provided.

219.3 Receivers. Receivers complying with 706.2 shall be provided for assistive listening systems in each assembly area in accordance with Table 219.3. Twenty-five percent minimum of receivers provided, but no fewer than two, shall be hearing-aid compatible in accordance with 706.3.

EXCEPTIONS: 1. Where a building contains more than one assembly area and the assembly areas required to provide assistive listening systems are under one management, the total number of required receivers shall be permitted to be calculated according to the total number of seats in the assembly areas in the building provided that all receivers are usable with all systems.

2. Where all seats in an assembly area are served by an induction loop assistive listening system, the minimum number of receivers required by Table 219.3 to be hearing-aid compatible shall not be required to be provided.

219.3 Receivers for Assistive Listening Systems (text version)

Capacity of Seating in Assembly Area	Minimum Number of Required Receivers	Minimum Number of Required Receivers Required to be Hearing-aid Compatible
50 or less	2	2
51 to 200	2, plus 1 per 25 seats over 50 seats ¹	2
201 to 500	2, plus 1 per 25 seats over 50 seats ¹	1 per 4 receivers ¹

501 to 1000	20, plus 1 per 33 seats over 500 seats ¹	1 per 4 receivers ¹
1001 to 2000	35, plus 1 per 50 seats over 1000 seats ¹	1 per 4 receivers ¹
2001 and over	55 plus 1 per 100 seats over 2000 seats ¹	1 per 4 receivers ¹

¹Or fraction thereof.

220 Automatic Teller Machines and Fare Machines

220.1 General. Where automatic teller machines or self-service fare vending, collection, or adjustment machines are provided, at least one of each type provided at each location shall comply with 707. Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type shall comply with 811.

ADVISORY 220.1 General. If a bank provides both interior and exterior ATMs, each such installation is considered a separate location. Accessible ATMs, including those with speech and those that are within reach of people who use wheelchairs, must provide all the functions provided to customers at that location at all times. For example, it is unacceptable for the accessible ATM only to provide cash withdrawals while inaccessible ATMs also sell theater tickets.

221 Assembly Areas

221.1 General. Assembly areas shall provide wheelchair spaces, companion seats, and designated aisle seats complying with 221 and 802. In addition, lawn seating shall comply with 221.5.

221.2 Wheelchair Spaces. Wheelchair spaces complying with 221.2 shall be provided in assembly areas with fixed seating.

221.2.1 Number and Location. Wheelchair spaces shall be provided complying with 221.2.1.

221.2.1.1 General Seating. Wheelchair spaces complying with 802.1 shall be provided in accordance with Table 221.2.1.1.

221.2.1.1 Number of Wheelchair Spaces in Assembly Areas

Number of Seats	Minimum Number of Required Wheelchair Spaces
4 to 25	1
26 to 50	2
51 to 150	4
151 to 300	5
301 to 500	6
501 to 5000	6, plus 1 for each 150, or fraction thereof, between 501 through 5000
5001 and over	36, plus 1 for each 200, or fraction thereof, over 5000

221.2.1.2 Luxury Boxes, Club Boxes, and Suites in Arenas, Stadiums, and Grandstands. In each luxury box, club box, and suite within arenas, stadiums, and grandstands, wheelchair spaces complying with 802.1 shall be provided in accordance with Table 221.2.1.1.

ADVISORY 221.2.1.2 Luxury Boxes, Club Boxes, and Suites in Arenas, Stadiums, and Grandstands. The number of wheelchair spaces required in luxury boxes, club boxes, and suites within an arena, stadium, or grandstand is to be calculated box by box and suite by suite.

221.2.1.3 Other Boxes. In boxes other than those required to comply with 221.2.1.2, the total number of wheelchair spaces required shall be determined in accordance with Table 221.2.1.1. Wheelchair spaces shall be located in not less than 20 percent of all boxes provided. Wheelchair spaces shall comply with 802.1.

ADVISORY 221.2.1.3 Other Boxes. The provision for seating in “other boxes” includes box seating provided in facilities such as performing arts auditoria where tiered boxes are designed for spatial and acoustical purposes. The number of wheelchair spaces required in boxes covered by 221.2.1.3 is calculated based on the total number of seats provided in these other boxes. The resulting number of wheelchair spaces must be located in no fewer than 20% of the boxes covered by this section. For example, a concert hall has 20 boxes, each of which contains 10 seats, totaling 200 seats. In this example, 5 wheelchair spaces would be required, and they must be placed in at least 4 of the boxes. Additionally, because the wheelchair spaces must also meet the dispersion requirements of 221.2.3, the boxes containing these wheelchair spaces cannot all be located in one area unless an exception to the dispersion requirements applies.

221.2.1.4 Team or Player Seating. At least one wheelchair space complying with 802.1 shall be provided in team or player seating areas serving areas of sport activity.

EXCEPTION: Wheelchair spaces shall not be required in team or player seating areas serving bowling lanes not required to comply with 206.2.11.

221.2.2 Integration. Wheelchair spaces shall be an integral part of the seating plan.

ADVISORY 221.2.2 Integration. The requirement that wheelchair spaces be an “integral part of the seating plan” means that wheelchair spaces must be placed within the footprint of the seating area. Wheelchair spaces cannot be segregated from seating

areas. For example, it would be unacceptable to place only the wheelchair spaces, or only the wheelchair spaces and their associated companion seats, outside the seating areas defined by risers in an assembly area.

221.2.3 Lines of Sight and Dispersion. Wheelchair spaces shall provide lines of sight complying with 802.2 and shall comply with 221.2.3. In providing lines of sight, wheelchair spaces shall be dispersed. Wheelchair spaces shall provide spectators with choices of seating locations and viewing angles that are substantially equivalent to, or better than, the choices of seating locations and viewing angles available to all other spectators. When the number of wheelchair spaces required by 221.2.1 has been met, further dispersion shall not be required.

EXCEPTION: Wheelchair spaces in team or player seating areas serving areas of sport activity shall not be required to comply with 221.2.3.

ADVISORY 221.2.3 Lines of Sight and Dispersion. Consistent with the overall intent of the ADA, individuals who use wheelchairs must be provided equal access so that their experience is substantially equivalent to that of other members of the audience. Thus, while individuals who use wheelchairs need not be provided with the best seats in the house, neither may they be relegated to the worst.

221.2.3.1 Horizontal Dispersion. Wheelchair spaces shall be dispersed horizontally.

EXCEPTIONS: 1. Horizontal dispersion shall not be required in assembly areas with 300 or fewer seats if the companion seats required by 221.3 and wheelchair spaces are located within the 2nd or 3rd quartile of the total row length. Intermediate aisles shall be included in determining the total row length. If the row length in the 2nd and 3rd quartile of a row is insufficient to accommodate the required number of companion seats and wheelchair spaces, the additional companion seats and wheelchair spaces shall be permitted to be located in the 1st and 4th quartile of the row.

2. In row seating, two wheelchair spaces shall be permitted to be located side-by-side.

ADVISORY 221.2.3.1 Horizontal Dispersion. Horizontal dispersion of wheelchair spaces is the placement of spaces in an assembly facility seating area from side-to-side or, in the case of an arena or stadium, around the field of play or performance area.

221.2.3.2 Vertical Dispersion. Wheelchair spaces shall be dispersed vertically at varying distances from the screen, performance area, or playing field. In addition, wheelchair spaces shall be located in each balcony or mezzanine that is located on an accessible route.

EXCEPTIONS: 1. Vertical dispersion shall not be required in assembly areas with 300 or fewer seats if the wheelchair spaces provide viewing angles that are equivalent to, or better than, the average viewing angle provided in the facility.

2. In bleachers, wheelchair spaces shall not be required to be provided in rows other than rows at points of entry to bleacher seating.

ADVISORY 221.2.3.2 Vertical Dispersion. When wheelchair spaces are dispersed vertically in an assembly facility they are placed at different locations within the seating area from front-to-back so that the distance from the screen, stage, playing field, area of sports activity, or other focal point is varied among wheelchair spaces.

ADVISORY 221.2.3.2 Vertical Dispersion Exception 2. Points of entry to bleacher seating may include, but are not limited to, cross aisles, concourses, vomitories, and entrance ramps and stairs. Vertical, center, or side aisles adjoining bleacher seating that are stepped or tiered are not considered entry points.

221.3 Companion Seats. At least one companion seat complying with 802.3 shall be provided for each wheelchair space required by 221.2.1.

221.4 Designated Aisle Seats. At least 5 percent of the total number of aisle seats provided shall comply with 802.4 and shall be the aisle seats located closest to accessible routes.

EXCEPTION: Team or player seating areas serving areas of sport activity shall not be required to comply with 221.4.

ADVISORY 221.4 Designated Aisle Seats. When selecting which aisle seats will meet the requirements of 802.4, those aisle seats which are closest to, not necessarily on, accessible routes must be selected first. For example, an assembly area has two aisles (A and B) serving seating areas with an accessible route connecting to the top and bottom of Aisle A only. The aisle seats chosen to meet 802.4 must be those at the top and bottom of Aisle A, working toward the middle. Only when all seats on Aisle A would not meet the five percent minimum would seats on Aisle B be designated.

221.5 Lawn Seating. Lawn seating areas and exterior overflow seating areas, where fixed seats are not provided, shall connect to an accessible route.

222 Dressing, Fitting, and Locker Rooms

222.1 General. Where dressing rooms, fitting rooms, or locker rooms are provided, at least 5 percent, but no fewer than one, of each type of use in each cluster provided shall comply with 803.

EXCEPTION: In alterations, where it is technically infeasible to provide rooms in accordance with 222.1, one room for each sex on each level shall comply with 803. Where only unisex rooms are provided, unisex rooms shall be permitted.

ADVISORY 222.1 General. A “cluster” is a group of rooms proximate to one another. Generally, rooms in a cluster are within sight of, or adjacent to, one another. Different styles of design provide users varying levels of privacy and convenience. Some designs include private changing facilities that are close to core areas of the facility, while other designs use space more economically and provide only group dressing facilities. Regardless of the type of facility, dressing, fitting, and locker rooms should provide people with disabilities rooms that are equally private and convenient to those provided others. For example, in a physician’s office, if people without disabilities must traverse the full length of the office suite in clothing other than their street clothes, it is acceptable for people with disabilities to be asked to do the same.

222.2 Coat Hooks and Shelves. Where coat hooks or shelves are provided in dressing, fitting or locker rooms without individual compartments, at least one of each type shall comply with 803.5. Where coat hooks or shelves are provided in individual compartments at least one of each type complying with 803.5 shall be provided in individual compartments in dressing, fitting, or locker rooms required to comply with 222.1.

223 Medical Care and Long-Term Care Facilities

223.1 General. In licensed medical care facilities and licensed long-term care facilities where the period of stay exceeds twenty-four hours, patient or resident sleeping rooms shall be provided in accordance with 223.

EXCEPTION: Toilet rooms that are part of critical or intensive care patient sleeping rooms shall not be required to comply with 603.

ADVISORY 223.1 General. Because medical facilities frequently reconfigure spaces to reflect changes in medical specialties, Section 223.1 does not include a provision for dispersion of accessible patient or resident sleeping rooms. The lack of a design requirement does not mean that covered entities are not required to provide services to people with disabilities where accessible rooms are not dispersed in specialty areas. Locate accessible rooms near core areas that are less likely to change over time. While dispersion is not required, the flexibility it provides can be a critical factor in ensuring cost effective compliance with applicable civil rights laws, including titles II and III of the ADA and Section 504 of the Rehabilitation Act of 1973, as amended. Additionally, all types of features and amenities should be dispersed among accessible sleeping rooms to ensure equal access to and a variety of choices for all patients and residents.

223.1.1 Alterations. Where sleeping rooms are altered or added, the requirements of 223 shall apply only to the sleeping rooms being altered or added until the number of sleeping rooms complies with the minimum number required for new construction.

ADVISORY 223.1.1 Alterations. In alterations and additions, the minimum required number is based on the total number of sleeping rooms altered or added instead of on the total number of sleeping rooms provided in a facility. As a facility is altered over time, every effort should be made to disperse accessible sleeping rooms among patient care areas such as pediatrics, cardiac care, maternity, and other units. In this way, people with disabilities can have access to the full-range of services provided by a medical care facility.

223.2 Hospitals, Rehabilitation Facilities, Psychiatric Facilities and Detoxification Facilities. Hospitals, rehabilitation facilities, psychiatric facilities and detoxification facilities shall comply with 223.2.

223.2.1 Facilities Not Specializing in Treating Conditions That Affect Mobility. In facilities not specializing in treating conditions that affect mobility, at least 10 percent, but no fewer than one, of the patient sleeping rooms shall provide mobility features complying with 805.

223.2.2 Facilities Specializing in Treating Conditions That Affect Mobility. In facilities specializing in treating conditions that affect mobility, 100 percent of the patient sleeping rooms shall provide mobility features complying with 805.

ADVISORY 223.2.2 Facilities Specializing in Treating Conditions That Affect Mobility. Conditions that affect mobility include conditions requiring the use or assistance of a brace, cane, crutch, prosthetic device, wheelchair, or powered mobility aid; arthritic, neurological, or orthopedic conditions that severely limit one’s ability to walk; respiratory diseases and other conditions which may require the use of portable oxygen; and cardiac conditions that impose significant functional limitations. Facilities that may provide treatment for, but that do not specialize in treatment of such conditions, such as general rehabilitation hospitals, are not subject to this requirement but are subject to Section 223.2.1.

223.3 Long-Term Care Facilities. In licensed long-term care facilities, at least 50 percent, but no fewer than one, of each type of resident sleeping room shall provide mobility features complying with 805.

224 Transient Lodging Guest Rooms

224.1 General. Transient lodging facilities shall provide guest rooms in accordance with 224.

ADVISORY 224.1 General. Certain facilities used for transient lodging, including time shares, dormitories, and town homes may be covered by both these requirements and the Fair Housing Amendments Act. The Fair Housing Amendments Act requires that certain residential structures having four or more multi-family dwelling units, regardless of whether they are privately owned or federally assisted, include certain features of accessible and adaptable design according to guidelines established by the U.S. Department of Housing and Urban Development (HUD). This law and the appropriate regulations should be consulted before proceeding with the design and construction of residential housing.

224.1.1 Alterations. Where guest rooms are altered or added, the requirements of 224 shall apply only to the guest rooms being altered or added until the number of guest rooms complies with the minimum number required for new construction.

ADVISORY 224.1.1 Alterations. In alterations and additions, the minimum required number of accessible guest rooms is based on the total number of guest rooms altered or added instead of the total number of guest rooms provided in a facility. Typically, each alteration of a facility is limited to a particular portion of the facility. When accessible guest rooms are added as a result of subsequent alterations, compliance with 224.5 (Dispersion) is more likely to be achieved if all of the accessible guest rooms are not provided in the same area of the facility.

224.1.2 Guest Room Doors and Doorways. Entrances, doors, and doorways providing user passage into and within guest rooms that are not required to provide mobility features complying with 806.2 shall comply with 404.2.3.

EXCEPTION: Shower and sauna doors in guest rooms that are not required to provide mobility features complying with 806.2 shall not be required to comply with 404.2.3.

ADVISORY 224.1.2 Guest Room Doors and Doorways. Because of the social interaction that often occurs in lodging facilities, an accessible clear opening width is required for doors and doorways to and within all guest rooms, including those not required to be accessible. This applies to all doors, including bathroom doors, that allow full user passage. Other requirements for doors and doorways in Section 404 do not apply to guest rooms not required to provide mobility features.

224.2 Guest Rooms with Mobility Features. In transient lodging facilities, guest rooms with mobility features complying with 806.2 shall be provided in accordance with Table 224.2.

224.2 Guest Rooms with Mobility Features (text version)

Total Number of Guest Rooms Provided	Minimum Number of Required Rooms Without Roll-in Showers	Minimum Number of Required Rooms With Roll-in Showers	Total Number of Required Rooms
1 to 25	1	0	1
26 to 50	2	0	2
51 to 75	3	1	4
76 to 100	4	1	5
101 to 150	5	2	7
151 to 200	6	2	8
201 to 300	7	3	10
301 to 400	8	4	12
401 to 500	9	4	13
501 to 1000	2 percent of total	1 percent of total	3 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000	10, plus 1 for each 100, or fraction thereof, over 1000	30, plus 2 for each 100, or fraction thereof, over 1000

224.3 Beds. In guest rooms having more than 25 beds, 5 percent minimum of the beds shall have clear floor space complying with 806.2.3.

224.4 Guest Rooms with Communication Features. In transient lodging facilities, guest rooms with communication features complying with 806.3 shall be provided in accordance with Table 224.4.

224.4 Guest Rooms with Communication Features

Total Number of Guest Rooms Provided	Minimum Number of Required Guest Rooms With Communication Features
2 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1000	5 percent of total
1001 and over	50, plus 3 for each 100 over 1000

224.5 Dispersion. Guest rooms required to provide mobility features complying with 806.2 and guest rooms required to provide communication features complying with 806.3 shall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. Where the minimum number of guest rooms required to comply with 806 is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds, and amenities. At least one guest room required to provide mobility features complying with 806.2 shall also provide communication features complying with 806.3. Not more than 10 percent of guest rooms required to provide mobility features complying with 806.2 shall be used to satisfy the minimum number of guest rooms required to provide communication features complying with 806.3.

ADVISORY 224.5 Dispersion. Factors to be considered in providing an equivalent range of options may include, but are not limited to, room size, bed size, cost, view, bathroom fixtures such as hot tubs and spas, smoking and nonsmoking, and the number of rooms provided.

225 Storage

225.1 General. Storage facilities shall comply with 225.

225.2 Storage. Where storage is provided in accessible spaces, at least one of each type shall comply with 811.

ADVISORY 225.2 Storage. Types of storage include, but are not limited to, closets, cabinets, shelves, clothes rods, hooks, and drawers. Where provided, at least one of each type of storage must be within the reach ranges specified in 308; however, it is permissible to install additional storage outside the reach ranges.

225.2.1 Lockers. Where lockers are provided, at least 5 percent, but no fewer than one of each type, shall comply with 811.

ADVISORY 225.2.1 Lockers. Different types of lockers may include full-size and half-size lockers, as well as those specifically designed for storage of various sports equipment.

225.2.2 Self-Service Shelving. Self-service shelves shall be located on an accessible route complying with 402. Self-service shelving shall not be required to comply with 308.

ADVISORY 225.2.2 Self-Service Shelving. Self-service shelves include, but are not limited to, library, store, or post office shelves.

225.3 Self-Service Storage Facilities. Self-service storage facilities shall provide individual self-service storage spaces complying with these requirements in accordance with Table 225.3.

225.3 Self-Service Storage Facilities

Total Spaces in Facility	Minimum Number of Spaces Required to be Accessible
1 to 200	5 percent, but no fewer than 1
201 and over	10, plus 2 percent of total number of units over 200

225.3 Self-Service Storage Facilities
 Total Spaces in Facility
 Minimum Number of Spaces Required to be Accessible
 1 to 200
 5 percent, but no fewer than 1
 201 and over
 10, plus 2 percent of total number of units over 200

ADVISORY 225.3 Self-Service Storage Facilities. Although there are no technical requirements that are unique to self-service storage facilities, elements and spaces provided in facilities containing self-service storage spaces required to comply with these requirements must comply with this document where applicable. For example: the number of storage spaces required to comply with these requirements must provide Accessible Routes complying with Section 206; Accessible Means of Egress complying with Section 207; Parking Spaces complying with Section 208; and, where provided, other public use or common use elements and facilities such as toilet rooms, drinking fountains, and telephones must comply with the applicable requirements of this document.

225.3.1 Dispersion. Individual self-service storage spaces shall be dispersed throughout the various classes of spaces provided. Where more classes of spaces are provided than the number required to be accessible, the number of spaces shall not be required to exceed that required by Table 225.3. Self-service storage spaces complying with Table 225.3 shall not be required to be dispersed among buildings in a multi-building facility.

226 Dining Surfaces and Work Surfaces

226.1 General. Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with 902. In addition, where work surfaces are provided for use by other than employees, at least 5 percent shall comply with 902.

EXCEPTIONS: 1. Sales counters and service counters shall not be required to comply with 902.

2. Check writing surfaces provided at check-out aisles not required to comply with 904.3 shall not be required to comply with 902.

ADVISORY 226.1 General. In facilities covered by the ADA, this requirement does not apply to work surfaces used only by employees. However, the ADA and, where applicable, Section 504 of the Rehabilitation Act of 1973, as amended, provide that employees are entitled to “reasonable accommodations.” With respect to work surfaces, this means that employers may need to procure or adjust work stations such as desks, laboratory and work benches, fume hoods, reception counters, teller windows, study carrels, commercial kitchen counters, and conference tables to accommodate the individual needs of employees with disabilities on an “as needed” basis. Consider work surfaces that are flexible and permit installation at variable heights and clearances.

226.2 Dispersion. Dining surfaces and work surfaces required to comply with 902 shall be dispersed throughout the space or facility containing dining surfaces and work surfaces.

227 Sales and Service

227.1 General. Where provided, check-out aisles, sales counters, service counters, food service lines, queues, and waiting lines shall comply with 227 and 904.

227.2 Check-Out Aisles. Where check-out aisles are provided, check-out aisles complying with 904.3 shall be provided in accordance with Table 227.2. Where check-out aisles serve different functions, check-out aisles complying with 904.3 shall be provided in accordance with Table 227.2 for each function. Where check-out aisles are dispersed throughout the building or facility, check-out aisles complying with 904.3 shall be dispersed.

EXCEPTION: Where the selling space is under 5000 square feet (465 m2) no more than one check-out aisle complying with 904.3 shall be required.

227.2 Check-Out Aisles

Number of Check-Out Aisles of Each Function	Minimum Number of Check-Out Aisles of Each Function Required to Comply with 904.3
1 to 4	1
5 to 8	2
9 to 15	3
16 and over	3, plus 20 percent of additional aisles

227.2.1 Altered Check-Out Aisles. Where check-out aisles are altered, at least one of each check-out aisle serving each function shall comply with 904.3 until the number of check-out aisles complies with 227.2.

227.3 Counters. Where provided, at least one of each type of sales counter and service counter shall comply with 904.4. Where counters are dispersed throughout the building or facility, counters complying with 904.4 also shall be dispersed.

ADVISORY 227.3 Counters. Types of counters that provide different services in the same facility include, but are not limited to, order, pick-up, express, and returns. One continuous counter can be used to provide different types of service. For example, order and pick-up are different services. It would not be acceptable to provide access only to the part of the counter where orders are taken when orders are picked-up at a different location on the same counter. Both the order and pick-up section of the counter must be accessible.

227.4 Food Service Lines. Food service lines shall comply with 904.5. Where self-service shelves are provided, at least 50 percent, but no fewer than one, of each type provided shall comply with 308.

227.5 Queues and Waiting Lines. Queues and waiting lines servicing counters or check-out aisles required to comply with 904.3 or 904.4 shall comply with 403.

228 Depositories, Vending Machines, Change Machines, Mail Boxes, and Fuel Dispensers

228.1 General. Where provided, at least one of each type of depository, vending machine, change machine, and fuel dispenser shall comply with 309.

EXCEPTION: Drive-up only depositories shall not be required to comply with 309.

ADVISORY 228.1 General. Depositories include, but are not limited to, night receptacles in banks, post offices, video stores, and libraries.

228.2 Mail Boxes. Where mail boxes are provided in an interior location, at least 5 percent, but no fewer than one, of each type shall comply with 309. In residential facilities, where mail boxes are provided for each residential dwelling unit, mail boxes complying with 309 shall be provided for each residential dwelling unit required to provide mobility features complying with 809.2 through 809.4.

229 Windows

229.1 General. Where glazed openings are provided in accessible rooms or spaces for operation by occupants, at least one opening shall comply with 309. Each glazed opening required by an administrative authority to be operable shall comply with 309.

EXCEPTION: 1. Glazed openings in residential dwelling units required to comply with 809 shall not be required to comply with 229.

2. Glazed openings in guest rooms required to provide communication features and in guest rooms required to comply with 206.5.3 shall not be required to comply with 229.

230 Two-Way Communication Systems

230.1 General. Where a two-way communication system is provided to gain admittance to a building or facility or to restricted areas within a building or facility, the system shall comply with 708.

ADVISORY 230.1 General. This requirement applies to facilities such as office buildings, courthouses, and other facilities where admittance to the building or restricted spaces is dependent on two-way communication systems.

231 Judicial Facilities

231.1 General. Judicial facilities shall comply with 231.

231.2 Courtrooms. Each courtroom shall comply with 808.

231.3 Holding Cells. Where provided, central holding cells and court-floor holding cells shall comply with 231.3.

231.3.1 Central Holding Cells. Where separate central holding cells are provided for adult male, juvenile male, adult female, or juvenile female, one of each type shall comply with 807.2. Where central holding cells are provided and are not separated by age or sex, at least one cell complying with 807.2 shall be provided.

231.3.2 Court-Floor Holding Cells. Where separate court-floor holding cells are provided for adult male, juvenile male, adult female, or juvenile female, each courtroom shall be served by one cell of each type complying with 807.2. Where court-floor holding cells are provided and are not separated by age or sex, courtrooms shall be served by at least one cell complying with 807.2. Cells may serve more than one courtroom.

231.4 Visiting Areas. Visiting areas shall comply with 231.4.

231.4.1 Cubicles and Counters. At least 5 percent, but no fewer than one, of cubicles shall comply with 902 on both the visitor and detainee sides. Where counters are provided, at least one shall comply with 904.4.2 on both the visitor and detainee sides.

EXCEPTION: The detainee side of cubicles or counters at non-contact visiting areas not serving holding cells required to comply with 231 shall not be required to comply with 902 or 904.4.2.

231.4.2 Partitions. Where solid partitions or security glazing separate visitors from detainees at least one of each type of cubicle or counter partition shall comply with 904.6.

232 Detention Facilities and Correctional Facilities

232.1 General. Buildings, facilities, or portions thereof, in which people are detained for penal or correction purposes, or in which the liberty of the inmates is restricted for security reasons shall comply with 232.

ADVISORY 232.1 General. Detention facilities include, but are not limited to, jails, detention centers, and holding cells in police stations. Correctional facilities include, but are not limited to, prisons, reformatories, and correctional centers.

232.2 General Holding Cells and General Housing Cells. General holding cells and general housing cells shall be provided in accordance with 232.2.

EXCEPTION: Alterations to cells shall not be required to comply except to the extent determined by the Attorney General.

ADVISORY 232.2 General Holding Cells and General Housing Cells. Accessible cells or rooms should be dispersed among different levels of security, housing categories, and holding classifications (e.g., male/female and adult/juvenile) to facilitate access. Many detention and correctional facilities are designed so that certain areas (e.g., "shift" areas) can be adapted to serve as different types of housing according to need. For example, a shift area serving as a medium-security housing unit might be redesignated for a period of time as a high-security housing unit to meet capacity needs. Placement of accessible cells or rooms in shift areas may allow additional flexibility in meeting requirements for dispersion of accessible cells or rooms.

ADVISORY 232.2 General Holding Cells and General Housing Cells Exception. Although these requirements do not specify that cells be accessible as a consequence of an alteration, title II of the ADA requires that each service, program, or activity conducted by a public entity, when viewed in its entirety, be readily accessible to and usable by individuals with disabilities. This requirement must be met unless doing so would fundamentally alter the nature of a service, program, or activity or would result in undue financial and administrative burdens.

232.2.1 Cells with Mobility Features. At least 2 percent, but no fewer than one, of the total number of cells in a facility shall provide mobility features complying with 807.2.

232.2.1.1 Beds. In cells having more than 25 beds, at least 5 percent of the beds shall have clear floor space complying with 807.2.3.

232.2.2 Cells with Communication Features. At least 2 percent, but no fewer than one, of the total number of general holding cells and general housing cells equipped with audible emergency alarm systems and permanently installed telephones within the cell shall provide communication features complying with 807.3.

232.3 Special Holding Cells and Special Housing Cells. Where special holding cells or special housing cells are provided, at least one cell serving each purpose shall provide mobility features complying with 807.2. Cells subject to this requirement include, but are not limited to, those used for purposes of orientation, protective custody, administrative or disciplinary detention or segregation, detoxification, and medical isolation.

EXCEPTION: Alterations to cells shall not be required to comply except to the extent determined by the Attorney General.

232.4 Medical Care Facilities. Patient bedrooms or cells required to comply with 223 shall be provided in addition to any medical isolation cells required to comply with 232.3.

232.5 Visiting Areas. Visiting areas shall comply with 232.5.

232.5.1 Cubicles and Counters. At least 5 percent, but no fewer than one, of cubicles shall comply with 902 on both the visitor and detainee sides. Where counters are provided, at least one shall comply with 904.4.2 on both the visitor and detainee or inmate sides.

EXCEPTION: The inmate or detainee side of cubicles or counters at non-contact visiting areas not serving holding cells or housing cells required to comply with 232 shall not be required to comply with 902 or 904.4.2.

232.5.2 Partitions. Where solid partitions or security glazing separate visitors from detainees or inmates at least one of each type of cubicle or counter partition shall comply with 904.6.

233 Residential Facilities

233.1 General. Facilities with residential dwelling units shall comply with 233.

ADVISORY 233.1 General. Section 233 outlines the requirements for residential facilities subject to the Americans with Disabilities Act of 1990. The facilities covered by Section 233, as well as other facilities not covered by this section, may still be subject to other Federal laws such as the Fair Housing Act and Section 504 of the Rehabilitation Act of 1973, as amended. For example, the Fair Housing Act requires that certain residential structures having four or more multi-family dwelling units, regardless of whether they are privately owned or federally assisted, include certain features of accessible and adaptable design according to guidelines established by the U.S. Department of Housing and Urban Development (HUD). These laws and the appropriate regulations should be consulted before proceeding with the design and construction of residential facilities. Residential facilities containing residential dwelling units provided by entities subject to HUD's Section 504 regulations and residential dwelling units covered by Section 233.3 must comply with the technical and scoping requirements in Chapters 1 through 10 included in this document. Section 233 is not a stand-alone section; this section only addresses the minimum number of residential dwelling units within a facility required to comply with Chapter 8. However, residential facilities must also comply with the requirements of this document. For example: Section 206.5.4 requires all doors and doorways providing user passage in residential dwelling units providing mobility features to comply with Section 404; Section 206.7.6 permits platform lifts to be used to connect levels within residential dwelling units providing mobility features; Section 208 provides general scoping for accessible parking and Section 208.2.3.1 specifies the required number of accessible parking spaces for each residential dwelling unit providing mobility features; Section 228.2 requires mail boxes to be within reach ranges when they serve residential dwelling units providing mobility features; play areas are addressed in Section 240; and swimming pools are addressed in Section 242. There are special provisions applicable to facilities containing residential dwelling units at: Exception 3 to 202.3; Exception to 202.4; 203.8; and Exception 4 to 206.2.3.

233.2 Residential Dwelling Units Provided by Entities Subject to HUD Section 504 Regulations. Where facilities with residential dwelling units are provided by entities subject to regulations issued by the Department of Housing and Urban Development (HUD) under Section 504 of the Rehabilitation Act of 1973, as amended, such entities shall provide residential dwelling units with mobility features complying with 809.2 through 809.4 in a number required by the applicable HUD regulations. Residential dwelling units required to provide mobility features complying with 809.2 through 809.4 shall be on an accessible route as required by 206. In addition, such entities shall provide residential dwelling units with communication features complying with 809.5 in a number required by the applicable HUD regulations. Entities subject to 233.2 shall not be required to comply with 233.3.

ADVISORY 233.2 Residential Dwelling Units Provided by Entities Subject to HUD Section 504 Regulations. Section 233.2 requires that entities subject to HUD's regulations implementing Section 504 of the Rehabilitation Act of 1973, as amended, provide residential dwelling units containing mobility features and residential dwelling units containing communication features complying with these regulations in a number specified in HUD's Section 504 regulations. Further, the residential dwelling units provided must be dispersed according to HUD's Section 504 criteria. In addition, Section 233.2 defers to HUD the specification of criteria by which the technical requirements of this document will apply to alterations of existing facilities subject to HUD's Section 504 regulations.

233.3 Residential Dwelling Units Provided by Entities Not Subject to HUD Section 504 Regulations. Facilities with residential dwelling units provided by entities not subject to regulations issued by the Department of Housing and Urban Development (HUD) under Section 504 of the Rehabilitation Act of 1973, as amended, shall comply with 233.3.

233.3.1 Minimum Number: New Construction. Newly constructed facilities with residential dwelling units shall comply with 233.3.1.

EXCEPTION: Where facilities contain 15 or fewer residential dwelling units, the requirements of 233.3.1.1 and 233.3.1.2 shall apply to the total number of residential dwelling units that are constructed under a single contract, or are developed as a whole, whether or not located on a common site.

233.3.1.1 Residential Dwelling Units with Mobility Features. In facilities with residential dwelling units, at least 5 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide mobility features complying with 809.2 through 809.4 and shall be on an accessible route as required by 206.

233.3.1.2 Residential Dwelling Units with Communication Features. In facilities with residential dwelling units, at least 2 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide communication features complying with 809.5.

233.3.2 Residential Dwelling Units for Sale. Residential dwelling units offered for sale shall provide accessible features to the extent required by regulations issued by Federal agencies under the Americans with Disabilities Act or Section 504 of the Rehabilitation Act of 1973, as amended.

ADVISORY 233.3.2 Residential Dwelling Units for Sale. A public entity that conducts a program to build housing for purchase by individual home buyers must provide access according to the requirements of the ADA regulations and a program receiving Federal financial assistance must comply with the applicable Section 504 regulation.

233.3.3 Additions. Where an addition to an existing building results in an increase in the number of residential dwelling units, the requirements of 233.3.1 shall apply only to the residential dwelling units that are added until the total number of residential dwelling units complies with the minimum number required by 233.3.1. Residential dwelling units required to comply with 233.3.1.1 shall be on an accessible route as required by 206.

233.3.4 Alterations. Alterations shall comply with 233.3.4.

EXCEPTION: Where compliance with 809.2, 809.3, or 809.4 is technically infeasible, or where it is technically infeasible to provide an accessible route to a residential dwelling unit, the entity shall be permitted to alter or construct a comparable residential dwelling unit to comply with 809.2 through 809.4 provided that the minimum number of residential dwelling units required by 233.3.1.1 and 233.3.1.2, as applicable, is satisfied.

ADVISORY 233.3.4 Alterations Exception. A substituted dwelling unit must be comparable to the dwelling unit that is not made accessible. Factors to be considered in comparing one dwelling unit to another should include the number of bedrooms; amenities provided within the dwelling unit; types of common spaces provided within the facility; and location with respect to community resources and services, such as public transportation and civic, recreational, and mercantile facilities.

233.3.4.1 Alterations to Vacated Buildings. Where a building is vacated for the purposes of alteration, and the altered building contains more than 15 residential dwelling units, at least 5 percent of the residential dwelling units shall comply with 809.2 through 809.4 and shall be on an accessible route as required by 206. In addition, at least 2 percent of the residential dwelling units shall comply with 809.5.

ADVISORY 233.3.4.1 Alterations to Vacated Buildings. This provision is intended to apply where a building is vacated with the intent to alter the building. Buildings that are vacated solely for pest control or asbestos removal are not subject to the requirements to provide residential dwelling units with mobility features or communication features.

233.3.4.2 Alterations to Individual Residential Dwelling Units. In individual residential dwelling units, where a bathroom or a kitchen is substantially altered, and at least one other room is altered, the requirements of 233.3.1 shall apply to the altered residential dwelling units until the total number of residential dwelling units complies with the minimum number required by 233.3.1.1 and 233.3.1.2. Residential dwelling units required to comply with 233.3.1.1 shall be on an accessible route as required by 206.

EXCEPTION: Where facilities contain 15 or fewer residential dwelling units, the requirements of 233.3.1.1 and 233.3.1.2 shall apply to the total number of residential dwelling units that are altered under a single contract, or are developed as a whole, whether or not located on a common site.

ADVISORY 233.3.4.2 Alterations to Individual Residential Dwelling Units. Section 233.3.4.2 uses the terms “substantially altered” and “altered.” A substantial alteration to a kitchen or bathroom includes, but is not limited to, alterations that are changes to or rearrangements in the plan configuration, or replacement of cabinetry. Substantial alterations do not include normal maintenance or appliance and fixture replacement, unless such maintenance or replacement requires changes to or rearrangements in the plan configuration, or replacement of cabinetry. The term “alteration” is defined both in Section 106 of these requirements and in the Department of Justice ADA regulations.

233.3.5 Dispersion. Residential dwelling units required to provide mobility features complying with 809.2 through 809.4 and residential dwelling units required to provide communication features complying with 809.5 shall be dispersed among the

various types of residential dwelling units in the facility and shall provide choices of residential dwelling units comparable to, and integrated with, those available to other residents.

EXCEPTION: Where multi-story residential dwelling units are one of the types of residential dwelling units provided, one-story residential dwelling units shall be permitted as a substitute for multi-story residential dwelling units where equivalent spaces and amenities are provided in the one-story residential dwelling unit.

234 Amusement Rides

234.1 General. Amusement rides shall comply with 234.

EXCEPTION: Mobile or portable amusement rides shall not be required to comply with 234.

ADVISORY 234.1 General. These requirements apply generally to newly designed and constructed amusement rides and attractions. A custom designed and constructed ride is new upon its first use, which is the first time amusement park patrons take the ride. With respect to amusement rides purchased from other entities, new refers to the first permanent installation of the ride, whether it is used off the shelf or modified before it is installed. Where amusement rides are moved after several seasons to another area of the park or to another park, the ride would not be considered newly designed or newly constructed.

Some amusement rides and attractions that have unique designs and features are not addressed by these requirements. In those situations, these requirements are to be applied to the extent possible. An example of an amusement ride not specifically addressed by these requirements includes “virtual reality” rides where the device does not move through a fixed course within a defined area. An accessible route must be provided to these rides. Where an attraction or ride has unique features for which there are no applicable scoping provisions, then a reasonable number, but at least one, of the features must be located on an accessible route. Where there are appropriate technical provisions, they must be applied to the elements that are covered by the scoping provisions.

ADVISORY 234.1 General Exception. Mobile or temporary rides are those set up for short periods of time such as traveling carnivals, State and county fairs, and festivals. The amusement rides that are covered by 234.1 are ones that are not regularly assembled and disassembled.

234.2 Load and Unload Areas. Load and unload areas serving amusement rides shall comply with 1002.3.

234.3 Minimum Number. Amusement rides shall provide at least one wheelchair space complying with 1002.4, or at least one amusement ride seat designed for transfer complying with 1002.5, or at least one transfer device complying with 1002.6.

EXCEPTIONS: 1. Amusement rides that are controlled or operated by the rider shall not be required to comply with 234.3.

2. Amusement rides designed primarily for children, where children are assisted on and off the ride by an adult, shall not be required to comply with 234.3.

3. Amusement rides that do not provide amusement ride seats shall not be required to comply with 234.3.

ADVISORY 234.3 Minimum Number Exceptions 1 through 3. Amusement rides controlled or operated by the rider, designed for children, or rides without ride seats are not required to comply with 234.3. These rides are not exempt from the other provisions in 234 requiring an accessible route to the load and unload areas and to the ride. The exception does not apply to those rides where patrons may cause the ride to make incidental movements, but where the patron otherwise has no control over the ride.

ADVISORY 234.3 Minimum Number Exception 2. The exception is limited to those rides designed “primarily” for children, where children are assisted on and off the ride by an adult. This exception is limited to those rides designed for children and not for the occasional adult user. An accessible route to and turning space in the load and unload area will provide access for adults and family members assisting children on and off these rides.

234.4 Existing Amusement Rides. Where existing amusement rides are altered, the alteration shall comply with 234.4.

ADVISORY 234.4 Existing Amusement Rides. Routine maintenance, painting, and changing of theme boards are examples of activities that do not constitute an alteration subject to this section.

234.4.1 Load and Unload Areas. Where load and unload areas serving existing amusement rides are newly designed and constructed, the load and unload areas shall comply with 1002.3.

234.4.2 Minimum Number. Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride’s performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with 234.3.

235 Recreational Boating Facilities

235.1 General. Recreational boating facilities shall comply with 235.

235.2 Boat Slips. Boat slips complying with 1003.3.1 shall be provided in accordance with Table 235.2. Where the number of boat slips is not identified, each 40 feet (12 m) of boat slip edge provided along the perimeter of the pier shall be counted as one boat slip for the purpose of this section.

235.2 Boat Slips

Total Number of Boat Slips Provided in Facility	Minimum Number of Required Accessible Boat Slips
1 to 25	1
26 to 50	2
51 to 100	3
101 to 150	4
151 to 300	5
301 to 400	6
401 to 500	7
501 to 600	8
601 to 700	9
701 to 800	10
801 to 900	11
901 to 1000	12
1001 and over	12, plus 1 for every 100, or fraction thereof, over 1000

ADVISORY 235.2 Boat Slips. The requirement for boat slips also applies to piers where boat slips are not demarcated. For example, a single pier 25 feet (7620 mm) long and 5 feet (1525 mm) wide (the minimum width specified by Section 1003.3) allows boats to moor on three sides. Because the number of boat slips is not demarcated, the total length of boat slip edge (55 feet, 17 m) must be used to determine the number of boat slips provided (two). This number is based on the specification in Section 235.2 that each 40 feet (12 m) of boat slip edge, or fraction thereof, counts as one boat slip. In this example, Table 235.2 would require one boat slip to be accessible.

235.2.1 Dispersion. Boat slips complying with 1003.3.1 shall be dispersed throughout the various types of boat slips provided. Where the minimum number of boat slips required to comply with 1003.3.1 has been met, no further dispersion shall be required.

ADVISORY 235.2.1 Dispersion. Types of boat slips are based on the size of the boat slips; whether single berths or double berths, shallow water or deep water, transient or longer-term lease, covered or uncovered; and whether slips are equipped with features such as telephone, water, electricity or cable connections. The term “boat slip” is intended to cover any pier area other than launch ramp boarding piers where recreational boats are moored for purposes of berthing, embarking, or disembarking. For example, a fuel pier may contain boat slips, and this type of short term slip would be included in determining compliance with 235.2.

235.3 Boarding Piers at Boat Launch Ramps. Where boarding piers are provided at boat launch ramps, at least 5 percent, but no fewer than one, of the boarding piers shall comply with 1003.3.2.

236 Exercise Machines and Equipment

236.1 General. At least one of each type of exercise machine and equipment shall comply with 1004.

ADVISORY 236.1 General. Most strength training equipment and machines are considered different types. Where operators provide a biceps curl machine and cable-cross-over machine, both machines are required to meet the provisions in this section, even though an individual may be able to work on their biceps through both types of equipment. Similarly, there are many types of cardiovascular exercise machines, such as stationary bicycles, rowing machines, stair climbers, and treadmills. Each machine provides a cardiovascular exercise and is considered a different type for purposes of these requirements.

237 Fishing Piers and Platforms

237.1 General. Fishing piers and platforms shall comply with 1005.

238 Golf Facilities

238.1 General. Golf facilities shall comply with 238.

238.2 Golf Courses. Golf courses shall comply with 238.2.

238.2.1 Teeing Grounds. Where one teeing ground is provided for a hole, the teeing ground shall be designed and constructed so that a golf car can enter and exit the teeing ground. Where two teeing grounds are provided for a hole, the forward teeing ground shall be designed and constructed so that a golf car can enter and exit the teeing ground. Where three or more teeing grounds are provided for a hole, at least two teeing grounds, including the forward teeing ground, shall be designed and constructed so that a golf car can enter and exit each teeing ground.

EXCEPTION: In existing golf courses, the forward teeing ground shall not be required to be one of the teeing grounds on a hole designed and constructed so that a golf car can enter and exit the teeing ground where compliance is not feasible due to terrain.

238.2.2 Putting Greens. Putting greens shall be designed and constructed so that a golf car can enter and exit the putting green.

238.2.3 Weather Shelters. Where provided, weather shelters shall be designed and constructed so that a golf car can enter and exit the weather shelter and shall comply with 1006.4.

238.3 Practice Putting Greens, Practice Teeing Grounds, and Teeing Stations at Driving Ranges. At least 5 percent, but no fewer than one, of practice putting greens, practice teeing grounds, and teeing stations at driving ranges shall be designed and constructed so that a golf car can enter and exit the practice putting greens, practice teeing grounds, and teeing stations at driving ranges.

239 Miniature Golf Facilities

239.1 General. Miniature golf facilities shall comply with 239.

239.2 Minimum Number. At least 50 percent of holes on miniature golf courses shall comply with 1007.3.

ADVISORY 239.2 Minimum Number. Where possible, providing access to all holes on a miniature golf course is recommended. If a course is designed with the minimum 50 percent accessible holes, designers or operators are encouraged to select holes which provide for an equivalent experience to the maximum extent possible.

239.3 Miniature Golf Course Configuration. Miniature golf courses shall be configured so that the holes complying with 1007.3 are consecutive. Miniature golf courses shall provide an accessible route from the last hole complying with 1007.3 to the course entrance or exit without requiring travel through any other holes on the course.

EXCEPTION: One break in the sequence of consecutive holes shall be permitted provided that the last hole on the miniature golf course is the last hole in the sequence.

ADVISORY 239.3 Miniature Golf Course Configuration. Where only the minimum 50 percent of the holes are accessible, an accessible route from the last accessible hole to the course exit or entrance must not require travel back through other holes. In some cases, this may require an additional accessible route. Other options include increasing the number of accessible holes in a way that limits the distance needed to connect the last accessible hole with the course exit or entrance.

240 Play Areas

240.1 General. Play areas for children ages 2 and over shall comply with 240. Where separate play areas are provided within a site for specific age groups, each play area shall comply with 240.

EXCEPTIONS: 1. Play areas located in family child care facilities where the proprietor actually resides shall not be required to comply with 240.

2. In existing play areas, where play components are relocated for the purposes of creating safe use zones and the ground surface is not altered or extended for more than one use zone, the play area shall not be required to comply with 240.

3. Amusement attractions shall not be required to comply with 240.

4. Where play components are altered and the ground surface is not altered, the ground surface shall not be required to comply with 1008.2.6 unless required by 202.4.

ADVISORY 240.1 General. Play areas may be located on exterior sites or within a building. Where separate play areas are provided within a site for children in specified age groups (e.g., preschool (ages 2 to 5) and school age (ages 5 to 12)), each play area must comply with this section. Where play areas are provided for the same age group on a site but are geographically separated (e.g., one is located next to a picnic area and another is located next to a softball field), they are considered separate play areas and each play area must comply with this section.

240.1.1 Additions. Where play areas are designed and constructed in phases, the requirements of 240 shall apply to each successive addition so that when the addition is completed, the entire play area complies with all the applicable requirements of 240.

ADVISORY 240.1.1 Additions. These requirements are to be applied so that when each successive addition is completed, the entire play area complies with all applicable provisions. For example, a play area is built in two phases. In the first phase, there are 10 elevated play components and 10 elevated play components are added in the second phase for a total of 20 elevated play components in the play area. When the first phase was completed, at least 5 elevated play components, including at least 3 different types, were to be provided on an accessible route. When the second phase is completed, at least 10 elevated play components must be located on an accessible route, and at least 7 ground level play components, including 4 different types, must be provided on an accessible route. At the time the second phase is complete, ramps must be used to connect at least 5 of the elevated play components and transfer systems are permitted to be used to connect the rest of the elevated play components required to be located on an accessible route.

240.2 Play Components. Where provided, play components shall comply with 240.2.

240.2.1 Ground Level Play Components. Ground level play components shall be provided in the number and types required by 240.2.1.

240.2.1.1 Ground level play components that are provided to comply with 240.2.1.1 shall be permitted to satisfy the additional number required by 240.2.1.2 if the minimum required types of play components are satisfied. Where two or more required

ground level play components are provided, they shall be dispersed throughout the play area and integrated with other play components.

ADVISORY 240.2.1 Ground Level Play Components. Examples of ground level play components may include spring rockers, swings, diggers, and stand-alone slides. When distinguishing between the different types of ground level play components, consider the general experience provided by the play component. Examples of different types of experiences include, but are not limited to, rocking, swinging, climbing, spinning, and sliding. A spiral slide may provide a slightly different experience from a straight slide, but sliding is the general experience and therefore a spiral slide is not considered a different type of play component from a straight slide.

Ground level play components accessed by children with disabilities must be integrated into the play area. Designers should consider the optimal layout of ground level play components accessed by children with disabilities to foster interaction and socialization among all children. Grouping all ground level play components accessed by children with disabilities in one location is not considered integrated.

Where a stand-alone slide is provided, an accessible route must connect the base of the stairs at the entry point to the exit point of the slide. A ramp or transfer system to the top of the slide is not required. Where a sand box is provided, an accessible route must connect to the border of the sand box. Accessibility to the sand box would be enhanced by providing a transfer system into the sand or by providing a raised sand table with knee clearance complying with 1008.4.3.

Ramps are preferred over transfer systems since not all children who use wheelchairs or other mobility devices may be able to use, or may choose not to use, transfer systems. Where ramps connect elevated play components, the maximum rise of any ramp run is limited to 12 inches (305 mm). Where possible, designers and operators are encouraged to provide ramps with a slope less than the 1:12 maximum. Berms or sculpted dirt may be used to provide elevation and may be part of an accessible route to composite play structures.

Platform lifts are permitted as a part of an accessible route. Because lifts must be independently operable, operators should carefully consider the appropriateness of their use in unsupervised settings.

240.2.1.1 Minimum Number and Types. Where ground level play components are provided, at least one of each type shall be on an accessible route and shall comply with 1008.4.

240.2.1.2 Additional Number and Types. Where elevated play components are provided, ground level play components shall be provided in accordance with Table 240.2.1.2 and shall comply with 1008.4.

EXCEPTION: If at least 50 percent of the elevated play components are connected by a ramp and at least 3 of the elevated play components connected by the ramp are different types of play components, the play area shall not be required to comply with 240.2.1.2.

240.2.1.2 Number and Types of Ground Level Play Components Required to be on Accessible Routes (text version)

Number of Elevated Play Components Provided	Minimum Number of Ground Level Play Components Required to be on an Accessible Route	Minimum Number of Different Types of Ground Level Play Components Required to be on an Accessible Route
1	Not applicable	Not applicable
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 25	8	4
26 and over	8, plus 1 for each additional 3, or fraction thereof, over 25	5

ADVISORY 240.2.1.2 Additional Number and Types. Where a large play area includes two or more composite play structures designed for the same age group, the total number of elevated play components on all the composite play structures must be added to determine the additional number and types of ground level play components that must be provided on an accessible route.

240.2.2 Elevated Play Components. Where elevated play components are provided, at least 50 percent shall be on an accessible route and shall comply with 1008.4.

ADVISORY 240.2.2 Elevated Play Components. A double or triple slide that is part of a composite play structure is one elevated play component. For purposes of this section, ramps, transfer systems, steps, decks, and roofs are not considered elevated play components. Although socialization and pretend play can occur on these elements, they are not primarily intended for play.

Some play components that are attached to a composite play structure can be approached or exited at the ground level or above grade from a platform or deck. For example, a climber attached to a composite play structure can be approached or exited at the ground level or above grade from a platform or deck on a composite play structure. Play components that are attached to a composite play structure and can be approached from a platform or deck (e.g., climbers and overhead play components) are considered elevated play components. These play components are not considered ground level play components and do not count toward the requirements in 240.2.1.2 regarding the number of ground level play components that must be located on an accessible route.

241 Saunas and Steam Rooms

241 General. Where provided, saunas and steam rooms shall comply with 612.

EXCEPTION: Where saunas or steam rooms are clustered at a single location, no more than 5 percent of the saunas and steam rooms, but no fewer than one, of each type in each cluster shall be required to comply with 612.

242 Swimming Pools, Wading Pools, and Spas

242.1 General. Swimming pools, wading pools, and spas shall comply with 242.

242.2 Swimming Pools. At least two accessible means of entry shall be provided for swimming pools. Accessible means of entry shall be swimming pool lifts complying with 1009.2; sloped entries complying with 1009.3; transfer walls complying with 1009.4; transfer systems complying with 1009.5; and pool stairs complying with 1009.6. At least one accessible means of entry provided shall comply with 1009.2 or 1009.3.

EXCEPTIONS: 1. Where a swimming pool has less than 300 linear feet (91 m) of swimming pool wall, no more than one accessible means of entry shall be required provided that the accessible means of entry is a swimming pool lift complying with 1009.2 or sloped entry complying with 1009.3.

2. Wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area shall not be required to provide more than one accessible means of entry provided that the accessible means of entry is a swimming pool lift complying with 1009.2, a sloped entry complying with 1009.3, or a transfer system complying with 1009.5.

3. Catch pools shall not be required to provide an accessible means of entry provided that the catch pool edge is on an accessible route.

ADVISORY 242.2 Swimming Pools. Where more than one means of access is provided into the water, it is recommended that the means be different. Providing different means of access will better serve the varying needs of people with disabilities in getting into and out of a swimming pool. It is also recommended that where two or more means of access are provided, they not be provided in the same location in the pool. Different locations will provide increased options for entry and exit, especially in larger pools.

Advisory 242.2 Swimming Pools Exception 1. Pool walls at diving areas and areas along pool walls where there is no pool entry because of landscaping or adjacent structures are to be counted when determining the number of accessible means of entry required.

242.3 Wading Pools. At least one accessible means of entry shall be provided for wading pools. Accessible means of entry shall comply with sloped entries complying with 1009.3.

242.4 Spas. At least one accessible means of entry shall be provided for spas. Accessible means of entry shall comply with swimming pool lifts complying with 1009.2; transfer walls complying with 1009.4; or transfer systems complying with 1009.5.

EXCEPTION: Where spas are provided in a cluster, no more than 5 percent, but no fewer than one, spa in each cluster shall be required to comply with 242.4.

243 Shooting Facilities with Firing Positions

243.1 General. Where shooting facilities with firing positions are designed and constructed at a site, at least 5 percent, but no fewer than one, of each type of firing position shall comply with 1010.

Chapter F1:

PROTRUDING OBJECTS

F204

Protruding Objects

F204.1

General

Protruding objects on circulation paths shall comply with Chapter 1: Protruding Objects - 307 - pp. 30-32.

EXCEPTIONS:

1. Within areas of sport activity, protruding objects on circulation paths shall not be required to comply with Chapter 1: Protruding Objects - 307 - pp. 30-32.
2. Within play areas, protruding objects on circulation paths shall not be required to comply with Chapter 1: Protruding Objects - 307 - pp. 30-32 provided that ground level accessible routes provide vertical clearance in compliance with Chapter 38: Play Areas - 1008.2 - pp. 206-209.

Chapter F2:

OPERABLE PARTS

F205
F205.1

Operable Parts
General

Operable parts on accessible elements, accessible routes, and in accessible rooms and spaces shall comply with Chapter 2: Operable Parts - 309 - p. 34.

EXCEPTIONS:

1. Operable parts that are intended for use only by service or maintenance personnel shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.
2. Electrical or communication receptacles serving a dedicated use shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.
3. Where two or more outlets are provided in a kitchen above a length of counter top that is uninterrupted by a sink or appliance, one outlet shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.
4. Floor electrical receptacles shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.
5. HVAC diffusers shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.
6. Except for light switches, where redundant controls are provided for a single element, one control in each space shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.
7. Cleats and other boat securement devices shall not be required to comply with Chapter 2: Operable Parts - 309.3 - p. 34.
8. Exercise machines and exercise equipment shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.

F205.1

Advisory
General

Controls covered by F205.1 - (above) include, but are not limited to, light switches, circuit breakers, duplexes and other convenience receptacles, environmental and appliance controls, plumbing fixture controls, and security and intercom systems.

Chapter F3:

ACCESSIBLE ROUTES

F206 **Accessible Routes**
F206.1 **General**

Accessible routes shall be provided in accordance with this Chapter - F206 and shall comply with Chapters 3 and 4 - pp. 35-49 except that the exemptions at Chapter 48: Walking Surfaces - 403.5 - pp. 240 & 241, Chapter 50: Ramps - 405.5 - p. 253 and 405.8 - p. 255 shall not apply.

F206.2 **Where Required**

Accessible routes shall be provided where required by F206.2 - (below & following pages).

F206.2.1 **Site Arrival Points**

At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve.

EXCEPTIONS:

1. Where exceptions for alterations to qualified historic buildings or facilities are permitted by Section F8: Existing Buildings and Facilities - F202.5 - pp. 363 & 364, no more than one accessible route from a site arrival point to an accessible entrance shall be required.
2. An accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing pedestrian access.

F206.2.1 *Advisory*
Site Arrival Points

Each site arrival point must be connected by an accessible route to the accessible building entrance or entrances served.

Where two or more similar site arrival points, such as bus stops, serve the same accessible entrance or entrances, both bus stops must be on accessible routes.

In addition, the accessible routes must serve all of the accessible entrances on the site.

Chapter F3: Accessible Routes (continued)

F206.2.1 *Advisory*
Site Arrival Points

EXCEPTION 2:

Access from site arrival points may include vehicular ways.

Where a vehicular way, or a portion of a vehicular way, is provided for pedestrian travel, such as within a shopping center or shopping mall parking lot, this exception does not apply.

F206.2.2 **Within a Site**

At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

EXCEPTION:

An accessible route shall not be required between accessible buildings, accessible facilities, accessible elements and accessible spaces if the only means of access between them is a vehicular way not providing pedestrian access.

F206.2.2 *Advisory*
Within a Site

An accessible route is required to connect to the boundary of each area of sport activity.

Examples of areas of sport activity include: soccer fields, basketball courts, baseball fields, running tracks, skating rinks, and the area surrounding a piece of gymnastic equipment.

While the size of an area of sport activity may vary from sport to sport, each includes only the space needed to play.

Where multiple sports fields or courts are provided, an accessible route is required to each field or area of sport activity.

F206.2.3 **Multi-Story Buildings and Facilities**

At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.

Chapter F3: Accessible Routes (continued)

EXCEPTIONS:

1. Where a two story building or facility has one story with an occupant load of five or fewer persons that does not contain public use space, that story shall not be required to be connected to the story above or below.
2. In detention and correctional facilities, an accessible route shall not be required to connect stories where cells with mobility features required to comply with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325, all common use areas serving cells with mobility features required to comply with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325, and all public use areas are on an accessible route.
3. In residential facilities, an accessible route shall not be required to connect stories where residential dwelling units with mobility features required to comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330, all common use areas serving residential dwelling units with mobility features required to comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330, and public use areas serving residential dwelling units are on an accessible route.
4. Within multi-story transient lodging guest rooms with mobility features required to comply with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141, an accessible route shall not be required to connect stories provided that spaces complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 are on an accessible route and sleeping accommodations for two persons minimum are provided on a story served by an accessible route.
5. In air traffic control towers, an accessible route shall not be required to serve the cab and the floor immediately below the cab.
6. Where exceptions for alterations to qualified historic buildings or facilities are permitted by Section F8: Existing Buildings and Facilities - F202.5 - pp. 363 & 364, an accessible route shall not be required to stories located above or below the accessible story.

Advisory

F206.2.3

Multi-Story Buildings and Facilities

Spaces and elements located on a level not required to be served by an accessible route must fully comply with this document.

While a mezzanine may be a change in level, it is not a story.

If an accessible route is required to connect stories within a building or facility, the accessible route must serve all mezzanines.

Chapter F3: Accessible Routes (continued)

Advisory

F206.2.3

Multi-Story Buildings and Facilities

EXCEPTION 3:

Where common use areas are provided for the use of residents, it is presumed that all such common use areas “serve” accessible dwelling units unless use is restricted to residents occupying certain dwelling units.

For example, if all residents are permitted to use all laundry rooms, then all laundry rooms “serve” accessible dwelling units.

However, if the laundry room on the first floor is restricted to use by residents on the first floor, and the second floor laundry room is for use by occupants of the second floor, then first floor accessible units are “served” only by laundry rooms on the first floor.

In this example, an accessible route is not required to the second floor provided that all accessible units and all common use areas serving them are on the first floor.

F206.2.3.1

Stairs and Escalators in Existing Buildings

In alterations and additions, where an escalator or stair is provided where none existed previously and major structural modifications are necessary for the installation, an accessible route shall be provided between the levels served by the escalator or stair unless exempted by F206.2.3 Exceptions 1-6 - (preceding page).

F206.2.4

Spaces and Elements

At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility which are otherwise connected by a circulation path unless exempted by F206.2.3 Exceptions 1-6 - (preceding page).

EXCEPTIONS:

1. Raised courtroom stations, including judge’s benches, clerk’s stations, bailiff’s stations, deputy clerk’s stations, and court reporter’s stations shall not be required to provide vertical access provided that the required clear floor space, maneuvering space, and, if appropriate, electrical service are installed at the time of initial construction to allow future installation of a means of vertical access complying with Chapter 50: Ramps - 405 - pp. 252-256, Chapter 52: Elevators - 407 - pp. 259-272, Chapter 53: Limited Use/Limited Application Elevators - 408 - pp. 273-275, or Chapter 55: Platform Lifts - 410 - pp. 278-282 without requiring substantial reconstruction of the space.

Chapter F3: Accessible Routes (continued)

2. In assembly areas with fixed seating required to comply with Chapter F19: Assembly Areas - F221 - pp. 421-427, an accessible route shall not be required to serve fixed seating where wheelchair spaces required to be on an accessible route are not provided.
3. Accessible routes shall not be required to connect mezzanines where buildings or facilities have no more than one story.

In addition, accessible routes shall not be required to connect stories or mezzanines where multi-story buildings or facilities are exempted by this Chapter - F206.2.3 Exceptions 1-6 - p. 375.

Advisory
F206.2.4 *Spaces and Elements*

Accessible routes must connect all spaces and elements required to be accessible including, but not limited to, raised areas and speaker platforms.

Advisory
F206.2.4 *Spaces and Elements*

EXCEPTION 1:

The exception does not apply to areas that are likely to be used by members of the public who are not employees of the court such as jury areas, attorney areas, or witness stands.

F206.2.5 **Restaurants and Cafeterias**

In restaurants and cafeterias, an accessible route shall be provided to all dining areas, including raised or sunken dining areas, and outdoor dining areas.

EXCEPTIONS:

1. In alterations, an accessible route shall not be required to existing raised or sunken dining areas, or to all parts of existing outdoor dining areas where the same services and decor are provided in an accessible space usable by the public and not restricted to use by people with disabilities.
2. In sports facilities, tiered dining areas providing seating required to comply with Chapter F19: Assembly Areas - F221 - pp. 421-427 shall be required to have accessible routes serving at least 25 percent of the dining area provided that accessible routes serve seating complying with Chapter F19: Assembly Areas - F221 - pp. 421-427 and each tier is provided with the same services.

Chapter F3: Accessible Routes (continued)

F206.2.5 *Advisory*
Restaurants and Cafeterias

EXCEPTION 1:

Examples of “same services” include, but are not limited to, bar service, rooms having smoking and non-smoking sections, lotto and other table games, carry-out, and buffet service.

Examples of “same decor” include, but are not limited to, seating at or near windows and railings with views, areas designed with a certain theme, party and banquet rooms, and rooms where entertainment is provided.

F206.2.6 **Performance Areas**

Where a circulation path directly connects a performance area to an assembly seating area, an accessible route shall directly connect the assembly seating area with the performance area.

An accessible route shall be provided from performance areas to ancillary areas or facilities used by performers unless exempted by this Chapter - F206.2.3 Exceptions 1-6 - p. 375.

F206.2.7 **Press Boxes**

Press boxes in assembly areas shall be on an accessible route.

EXCEPTIONS:

1. An accessible route shall not be required to press boxes in bleachers that have points of entry at only one level provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.
2. An accessible route shall not be required to free-standing press boxes that are elevated above grade 12 feet (3658mm) minimum provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.

F206.2.7 *Advisory*
Press Boxes

EXCEPTION 2:

Where a facility contains multiple assembly areas, the aggregate area of the press boxes in each assembly area is to be calculated separately.

Chapter F3: Accessible Routes (continued)

For example, if a university has a soccer stadium with three press boxes elevated 12 feet (3658mm) or more above grade and each press box is 150 square feet (14 m²), then the aggregate area of the soccer stadium press boxes is less than 500 square feet (465 m²) and Exception 2 applies to the soccer stadium.

If that same university also has a football stadium with two press boxes elevated 12 feet (3658mm) or more above grade and one press box is 250 square feet (23 m²), and the second is 275 square feet (26 m²), then the aggregate area of the football stadium press boxes is more than 500 square feet (465 m²) and Exception 2 does not apply to the football stadium.

F206.2.8 **Amusement Rides**

See Chapter F32: Amusement Rides - F206.2.8, F206.2.8.1, F206.2.8.2 - p. 460.

F206.2.9 **Recreational Boating Facilities**

See Chapter F33: Recreational Boating Facilities - F206.2.9 - p. 464.

F206.2.10 **Bowling Lanes**

Where bowling lanes are provided, at least 5 percent, but no fewer than one of each type of bowling lane, shall be on an accessible route.

F206.2.11 **Court Sports**

In court sports, at least one accessible route shall directly connect both sides of the court.

F206.2.12 **Exercise Machines and Equipment**

See Chapter F34: Exercise Machines and Equipment - F206.2.12 - p. 467.

F206.2.13 **Fishing Piers and Platforms**

See Chapter F35: Fishing Piers and Platforms - F206.2.13 - p. 468.

F206.2.14 **Golf Facilities**

See Chapter F36: Golf Facilities - F206.2.14 - p. 469.

F206.2.15 **Miniature Golf Facilities**

See Chapter F37: Miniature Golf Facilities - F206.2.15 - p. 471.

Chapter F3: Accessible Routes (continued)

F206.2.16 **Play Areas**

See Chapter F38: Play Areas - F206.2.16, F206.2.16.1 and F206.2.16.2 - p. 473.

F206.3 **Location**

Accessible routes shall coincide with or be located in the same area as general circulation paths.

Where circulation paths are interior, required accessible routes shall also be interior.

F206.3 *Advisory* *Location*

The accessible route must be in the same area as the general circulation path.

This means that circulation paths, such as vehicular ways designed for pedestrian traffic, walks, and unpaved paths that are designed to be routinely used by pedestrians must be accessible or have an accessible route nearby.

Additionally, accessible vertical interior circulation must be in the same area as stairs and escalators, not isolated in the back of the facility.

F206.4 **Entrances**

See Chapter F4: Entrances - F206.4 - pp. 386-388.

F206.4.1 **Public Entrances**

See Chapter F4: Entrances - F206.4.1 - p. 386.

F206.4.2 **Parking Structure Entrances**

See Chapter F4: Entrances - F206.4.2 - p. 386.

F206.4.3 **Entrances from Tunnels or Elevated Walkways**

See Chapter F4: Entrances - F206.4.3 - p. 387.

F206.4.4 **Transportation Facilities**

See Chapter F4: Entrances - F206.4.4 - p. 387.

F206.4.4.1 **Location**

See Chapter F4: Entrances - F206.4.4.1 - p. 387.

Chapter F3: Accessible Routes (continued)

F206.4.4.2 **Direct Connections**

See Chapter F4: Entrances - F206.4.4.2 - p. 387.

F206.4.5 **Tenant Spaces**

See Chapter F4: Entrances - F206.4.5 - p. 387.

F206.4.6 **Residential Dwelling Unit Primary Entrance**

See Chapter F4: Entrances - F206.4.6 - p. 387.

F206.4.7 **Restricted Entrances**

See Chapter F4: Entrances - F206.4.7 - p. 388.

F206.4.8 **Service Entrances**

See Chapter F4: Entrances - F206.4.8 - p. 388.

F206.4.9 **Entrances for Inmates or Detainees**

See Chapter F4: Entrances - F206.4.9 - p. 388.

F206.5 **Doors - Doorways - Gates**

Doors, doorways, and gates providing user passage shall be provided in accordance with F206.5 - (following page).

F206.5.1 **Entrances**

Each entrance to a building or facility required to comply with F206.4 - (preceding pages & above) shall have at least one door, doorway, or gate complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

F206.5.2 **Rooms and Spaces**

Within a building or facility, at least one door, doorway, or gate serving each room or space complying with these requirements shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

Chapter F3: Accessible Routes (continued)

F206.5.3

Transient Lodging Facilities

In transient lodging facilities, entrances, doors, and doorways providing user passage into and within guest rooms that are not required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 shall comply with Chapter 49: Doors - Doorways - Gates - 404.2.3 - pp. 243 & 244.

EXCEPTION:

Shower and sauna doors in guest rooms that are not required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 shall not be required to comply with Chapter 49: Doors - Doorways - Gates - 404.2.3 - pp. 243 & 244.

F206.5.4

Residential Dwelling Units

In residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330, all doors and doorways providing user passage shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

F206.6

Elevators

Elevators provided for passengers shall comply with Chapter 52: Elevators - 407 - pp. 259-272.

Where multiple elevators are provided, each elevator shall comply with Chapter 52: Elevators - 407 - pp. 259-272.

EXCEPTIONS:

1. In a building or facility permitted to use the exceptions to this Chapter - F206.2.3 - pp. 374-376 or permitted by F206.7 - (following pages) to use a platform lift, elevators complying with Chapter 53: Limited Use/Limited Application Elevators - 408 - pp. 273-275 shall be permitted.
2. Elevators complying with Chapter 53: Limited Use/Limited Application Elevators - 408 - pp. 273-275 or Chapter 54: Private Residence Elevators - 409 - pp. 276-278 shall be permitted in multi-story residential dwelling units.

F206.6.1

Existing Elevators

Where elements of existing elevators are altered, the same element shall also be altered in all elevators that are programmed to respond to the same hall call control as the altered elevator and shall comply with the requirements of Chapter 52: Elevators - 407 - pp. 259-272 for the altered element.

Chapter F3: Accessible Routes (continued)

F206.7 Platform Lifts

Platform lifts shall comply with Chapter 55: Platform Lifts - 410 - pp. 281 & 282.

Platform lifts shall be permitted as a component of an accessible route in new construction in accordance with F206.7 - (below & following pages).

Platform lifts shall be permitted as a component of an accessible route in an existing building or facility.

F206.7.1 Performance Areas and Speaker's Platforms

Platform lifts shall be permitted to provide accessible routes to performance areas and speaker's platforms.

F206.7.2 Wheelchair Spaces

Platform lifts shall be permitted to provide an accessible route to comply with the wheelchair space dispersion and line-of-sight requirements of Chapter F19: Assembly Areas - F221 - pp. 421-427 and Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802 - pp. 319-323.

F206.7.3 Incidental Spaces

Platform lifts shall be permitted to provide an accessible route to incidental spaces which are not public use spaces and which are occupied by five persons maximum.

F206.7.4 Judicial Spaces

Platform lifts shall be permitted to provide an accessible route to: jury boxes and witness stands; raised courtroom stations including, judge's benches, clerk's stations, bailiff's stations, deputy clerk's stations, and court reporter's stations; and to depressed areas such as the well of a court.

F206.7.5 Existing Site Constraints

Platform lifts shall be permitted where existing exterior site constraints make use of a ramp or elevator infeasible.

F206.7.5 *Advisory* *Existing Site Constraints*

This exception applies where topography or other similar existing site constraints necessitate the use of a platform lift as the only feasible alternative.

While the site constraint must reflect exterior conditions, the lift can be installed in the interior of a building.

Chapter F3: Accessible Routes (continued)

For example, a new building constructed between and connected to two existing buildings may have insufficient space to coordinate floor levels and also to provide ramped entry from the public way.

In this example, an exterior or interior platform lift could be used to provide an accessible entrance or to coordinate one or more interior floor levels.

F206.7.6 **Guest Rooms and Residential Dwelling Units**

Platform lifts shall be permitted to connect levels within transient lodging guest rooms required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 or residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330.

F206.7.7 **Amusement Rides**

Platform lifts shall be permitted to provide accessible routes to load and unload areas serving amusement rides.

F206.7.8 **Play Areas**

Platform lifts shall be permitted to provide accessible routes to play components or soft contained play structures.

F206.7.9 **Team or Player Seating**

Platform lifts shall be permitted to provide accessible routes to team or player seating areas serving areas of sport activity.

Advisory

F206.7.9 Team or Player Seating

While the use of platform lifts is allowed, ramps are recommended to provide access to player seating areas serving an area of sport activity.

F206.7.10 **Recreational Boating Facilities - Fishing Piers - Platforms**

Platform lifts shall be permitted to be used instead of gangways that are part of accessible routes serving recreational boating facilities and fishing piers and platforms.

F206.8 **Security Barriers**

Security barriers, including but not limited to, security bollards and security check points, shall not obstruct a required accessible route or accessible means of egress.

Chapter F3: Accessible Routes (continued)

EXCEPTION:

Where security barriers incorporate elements that cannot comply with these requirements such as certain metal detectors, fluoroscopes, or other similar devices, the accessible route shall be permitted to be located adjacent to security screening devices.

The accessible route shall permit persons with disabilities passing around security barriers to maintain visual contact with their personal items to the same extent provided others passing through the security barrier.

Chapter F4:

ENTRANCES

F206.4

Entrances

Entrances shall be provided in accordance with this Chapter - F206.4.

Entrance doors, doorways, and gates shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 and shall be on an accessible route complying with Chapter 3: Accessible Routes - 402 - p. 46.

EXCEPTIONS:

1. Where an alteration includes alterations to an entrance, and the building or facility has another entrance complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 that is on an accessible route, the altered entrance shall not be required to comply with this Chapter - F206.4 unless required by Section F8: Existing Buildings and Facilities - F202.4 - p. 363.
2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by Section F8: Existing Buildings and Facilities - F202.5 - pp. 363 & 364, no more than one public entrance shall be required to comply with this Chapter - F206.4.

Where no public entrance can comply with this Chapter - F206.4 under criteria established in Section F8: Existing Buildings and Facilities - F202.5 - Exception - p. 364, then either an unlocked entrance not used by the public shall comply with this Chapter - F206.4; or a locked entrance complying with this Chapter - F206.4 with a notification system or remote monitoring shall be provided.

F206.4.1

Public Entrances

In addition to entrances required by F206.4.2-F206.4.9 - (below & following pages), at least 60 percent of all public entrances shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

F206.4.2

Parking Structure Entrances

Where direct access is provided for pedestrians from a parking structure to a building or facility entrance, each direct access to the building or facility entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

Chapter F4: Entrances (continued)

F206.4.3 **Entrances from Tunnels or Elevated Walkways**

Where direct access is provided for pedestrians from a pedestrian tunnel or elevated walkway to a building or facility, at least one direct entrance to the building or facility from each tunnel or walkway shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

F206.4.4 **Transportation Facilities**

In addition to the requirements of F206.4.2, F206.4.3, and F206.4.5-F206.4.9 - (preceding page, above, below & following page), transportation facilities shall provide entrances in accordance with F206.4.4 - (below).

F206.4.4.1 **Location**

In transportation facilities, where different entrances serve different transportation fixed routes or groups of fixed routes, at least one public entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

F206.4.4.2 **Direct Connections**

Direct connections to other facilities shall provide an accessible route complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 from the point of connection to boarding platforms and all transportation system elements required to be accessible.

Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and all transportation system elements required to be accessible.

F206.4.5 **Tenant Spaces**

At least one accessible entrance to each tenancy in a facility shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

EXCEPTION:

Self-service storage facilities not required to comply with Chapter F23: Storage - F225.3 - p. 439 shall not be required to be on an accessible route.

F206.4.6 **Residential Dwelling Unit Primary Entrance**

In residential dwelling units, at least one primary entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

The primary entrance to a residential dwelling unit shall not be to a bedroom.

Chapter F4: Entrances (continued)

F206.4.7

Restricted Entrances

Where restricted entrances are provided to a building or facility, at least one restricted entrance to the building or facility shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

F206.4.8

Service Entrances

If a service entrance is the only entrance to a building or to a tenancy in a facility, that entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

F206.4.9

Entrances for Inmates or Detainees

Where entrances used only by inmates or detainees and security personnel are provided at judicial facilities, detention facilities, or correctional facilities, at least one such entrance shall comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

Chapter F5:

ACCESSIBLE MEANS OF EGRESS

F207

Accessible Means of Egress

F207.1

General

Means of egress shall comply with section 1003.2.13 of the International Building Code (2000 edition and 2001 Supplement) or section 1007 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Section F5: Referenced Standards - F105 - pp. 348 & 349).

EXCEPTIONS:

1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel.
2. Areas of refuge shall not be required in detention and correctional facilities.

F207.2

Platform Lifts

Standby power shall be provided for platform lifts permitted by section 1003.2.13.4 of the International Building Code (2000 edition and 2001 Supplement) or section 1007.5 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Section F5: Referenced Standards - F105 - pp. 348 & 349) to serve as a part of an accessible means of egress.

Chapter F6:

PARKING SPACES

F208

Parking Spaces

F208.1

General

Where parking spaces are provided, parking spaces shall be provided in accordance with this Chapter - F208.

EXCEPTION:

Parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles, or vehicular impound shall not be required to comply with this Chapter - F208 provided that lots accessed by the public are provided with a passenger loading zone complying with Chapter 7: Passenger Loading Zones and Bus Stops - 503 - pp. 61 & 62.

F208.2

Minimum Number

Parking spaces complying with Chapter 6: Parking Spaces - 502 - pp. 55-59 shall be provided in accordance with Table F208.2 - (following page) except as required by F208.2.1, F208.2.2, and F208.2.3 - (following pages).

Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.

Chapter F6: Parking Spaces (continued)

*Table F208.2
Parking Spaces*

<i>Total Number of Parking Spaces Provided in Parking Facility</i>	<i>Minimum Number of Required Accessible Parking Spaces</i>
<i>1 to 25</i>	<i>1</i>
<i>26 to 50</i>	<i>2</i>
<i>51 to 75</i>	<i>3</i>
<i>76 to 100</i>	<i>4</i>
<i>101 to 150</i>	<i>5</i>
<i>151 to 200</i>	<i>6</i>
<i>201 to 300</i>	<i>7</i>
<i>301 to 400</i>	<i>8</i>
<i>401 to 500</i>	<i>9</i>
<i>501 to 1000</i>	<i>2 percent of total</i>
<i>1001 and over</i>	<i>20, plus 1 for each 100, or fraction thereof, over 1000</i>

*Advisory
Minimum Number*

F208.2

The term "parking facility" is used F208.2 - (preceding page) instead of the term "parking lot" so that it is clear that both parking lots and parking structures are required to comply with this chapter.

The number of parking spaces required to be accessible is to be calculated separately for each parking facility; the required number is not to be based on the total number of parking spaces provided in all of the parking facilities provided on the site.

F208.2.1 Hospital Outpatient Facilities

Ten percent of patient and visitor parking spaces provided to serve hospital outpatient facilities shall comply with Chapter 6: Parking Spaces - 502 - pp. 55-59.

Chapter F6: Parking Spaces (continued)

Advisory

F208.2.1 *Hospital Outpatient Facilities*

The term “outpatient facility” is not defined in this document but is intended to cover facilities or units that are located in hospitals and that provide regular and continuing medical treatment without an overnight stay.

Doctor’s offices, independent clinics, or other facilities not located in hospitals are not considered hospital outpatient facilities for purposes of this document.

F208.2.2 **Rehabilitation Facilities and Outpatient Physical Therapy Facilities**

Twenty percent of patient and visitor parking spaces provided to serve rehabilitation facilities specializing in treating conditions that affect mobility and outpatient physical therapy facilities shall comply with Chapter 6: Parking Spaces - 502 - pp. 55-59.

Advisory

F208.2.2 *Rehabilitation Facilities and Outpatient Physical Therapy Facilities*

Conditions that affect mobility include conditions requiring the use or assistance of a brace, cane, crutch, prosthetic device, wheelchair, or powered mobility aid; arthritic, neurological, or orthopedic conditions that severely limit one's ability to walk; respiratory diseases and other conditions which may require the use of portable oxygen; and cardiac conditions that impose significant functional limitations.

F208.2.3 **Residential Facilities**

Parking spaces provided to serve residential facilities shall comply with F208.2.3 - (below & following page).

F208.2.3.1 **Parking for Residents**

Where at least one parking space is provided for each residential dwelling unit, at least one parking space complying with Chapter 6: Parking Spaces - 502 - pp. 55-59 shall be provided for each residential dwelling unit required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330.

F208.2.3.2 **Additional Parking Spaces for Residents**

Where the total number of parking spaces provided for each residential dwelling unit exceeds one parking space per residential dwelling unit, 2 percent, but no fewer than one space, of all the parking spaces not covered by F208.2.3.1 - (above) shall comply with Chapter 6: Parking Spaces - 502 - pp. 55-59.

F208.2.3.3 Parking for Guests, Employees, and Other Non-Residents

Where parking spaces are provided for persons other than residents, parking shall be provided in accordance with this Chapter - Table F208.2 - p. 391.

F208.2.4 Van Parking Spaces

For every six or fraction of six parking spaces required by F208.2 - (preceding pages & above) to comply with Chapter 6: Parking Spaces - 502 - pp. 55-59, at least one shall be a van parking space complying with Chapter 6: Parking Spaces - 502 - pp. 55-59.

F208.3 Location

Parking facilities shall comply with F208.3 - (below & following page).

F208.3.1 General

Parking spaces complying with Chapter 6: Parking Spaces - 502 - pp. 55-59 that serve a particular building or facility shall be located on the shortest accessible route from parking to an entrance complying with Chapter F4: Entrances - F206.4 - pp. 386-388.

Where parking serves more than one accessible entrance, parking spaces complying with Chapter 6: Parking Spaces - 502 - pp. 55-59 shall be dispersed and located on the shortest accessible route to the accessible entrances.

In parking facilities that do not serve a particular building or facility, parking spaces complying with Chapter 6: Parking Spaces - 502 - pp. 55-59 shall be located on the shortest accessible route to an accessible pedestrian entrance of the parking facility.

EXCEPTIONS:

1. All van parking spaces shall be permitted to be grouped on one level within a multi-story parking facility.
2. Parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee, and user convenience.

Chapter F6: Parking Spaces (continued)

F208.3.1

*Advisory
General*

EXCEPTION 2:

Factors that could affect “user convenience” include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.

F208.3.2

Residential Facilities

In residential facilities containing residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330, parking spaces provided in accordance with this Chapter - F208.2.3.1 - p. 392 shall be located on the shortest accessible route to the residential dwelling unit entrance they serve.

Spaces provided in accordance with this Chapter - F208.2.3.2 - p. 392 shall be dispersed throughout all types of parking provided for the residential dwelling units.

EXCEPTION:

Parking spaces provided in accordance with this Chapter - F208.2.3.2 - p. 392 shall not be required to be dispersed throughout all types of parking if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance, parking fee, and user convenience.

F208.3.2

*Advisory
Residential Facilities*

EXCEPTION:

Factors that could affect “user convenience” include, but are not limited to, protection from the weather, security, lighting, and comparative maintenance of the alternative parking site.

Chapter F7:

PASSENGER LOADING ZONES AND BUS STOPS

F209 **Passenger Loading Zones and Bus Stops**
F209.1 **General**

Passenger loading zones shall be provided in accordance with this Chapter - F209.

F209.2 **Type**

Where provided, passenger loading zones shall comply with F209.2 - (below).

F209.2.1 **Passenger Loading Zones**

Passenger loading zones, except those required to comply with F209.2.2 and F209.2.3 - (below), shall provide at least one passenger loading zone complying with Chapter 7: Passenger Loading Zones and Bus Stops - 503 - pp. 61 & 62 in every continuous 100 linear feet (30 480mm) of loading zone space, or fraction thereof.

F209.2.2 **Bus Loading Zones**

In bus loading zones restricted to use by designated or specified public transportation vehicles, each bus bay, bus stop, or other area designated for lift or ramp deployment shall comply with Chapter 16: Transportation Facilities - 810.2 - pp. 105 & 106.

F209.2.2 *Advisory*
Bus Loading Zones

The terms “designated public transportation” and “specified public transportation” are defined by the Department of Transportation at 49 CFR 37.3 in regulations implementing the Americans with Disabilities Act.

These terms refer to public transportation services provided by public or private entities, respectively.

For example, designated public transportation vehicles include buses and vans operated by public transit agencies, while specified public transportation vehicles include tour and charter buses, taxis and limousines, and hotel shuttles operated by private entities.

F209.2.3 **On-Street Bus Stops**

On-street bus stops shall comply with Chapter 16: Transportation Facilities - 810.2 - pp. 105 & 106 to the maximum extent practicable.

Chapter F7: Passenger Loading Zones and Bus Stops (continued)

F209.3 Medical Care and Long-Term Care Facilities

At least one passenger loading zone complying with Chapter 7: Passenger Loading Zones and Bus Stops - 503 - pp. 61 & 62 shall be provided at an accessible entrance to licensed medical care and licensed long-term care facilities where the period of stay exceeds twenty-four hours.

F209.4 Valet Parking

Parking facilities that provide valet parking services shall provide at least one passenger loading zone complying with Chapter 7: Passenger Loading Zones and Bus Stops - 503 - pp. 61 & 62.

F209.5 Mechanical Access Parking Garages

Mechanical access parking garages shall provide at least one passenger loading zone complying with Chapter 7: Passenger Loading Zones and Bus Stops - 503 - pp. 61 & 62 at vehicle drop-off and vehicle pick-up areas.

Chapter F8:

STAIRWAYS

F210
F210.1

Stairways General

Interior and exterior stairs that are part of a means of egress shall comply with Chapter 8: Stairways - 504 - pp. 63-65.

EXCEPTIONS:

1. In detention and correctional facilities, stairs that are not located in public use areas shall not be required to comply with Chapter 8: Stairways - 504 - pp. 63-65.
2. In alterations, stairs between levels that are connected by an accessible route shall not be required to comply with Chapter 8: Stairways - 504 - pp. 63-65, except that handrails complying with Chapter 56: Handrails - 505 - pp. 283-287 shall be provided when the stairs are altered.
3. In assembly areas, aisle stairs shall not be required to comply with Chapter 8: Stairways - 504 - pp. 63-65.
4. Stairs that connect play components shall not be required to comply with Chapter 8: Stairways - 504 - pp. 63-65.

F210.1

Advisory General

Although these requirements do not mandate handrails on stairs that are not part of a means of egress, State or local building codes may require handrails or guards.

Chapter F9:

DRINKING FOUNTAINS

F211 **Drinking Fountains**
F211.1 **General**

Where drinking fountains are provided on an exterior site, on a floor, and within a secured area they shall be provided in accordance with this Chapter - F211.

EXCEPTION:

In detention or correctional facilities, drinking fountains only serving holding or housing cells not required to comply with Chapter F30: Detention Facilities and Correctional Facilities - F232 - pp. 449-451 shall not be required to comply with this Chapter - F211.

F211.2 **Minimum Number**

No fewer than two drinking fountains shall be provided.

One drinking fountain shall comply with Chapter 9: Drinking Fountains - 602.1-602.6 - pp. 67 & 68 and one drinking fountain shall comply with Chapter 9: Drinking Fountains - 602.7 - p. 68.

EXCEPTION:

Where a single drinking fountain complies with Chapter 9: Drinking Fountains - 602.1-602.6 and 602.7 - pp. 67 & 68, it shall be permitted to be substituted for two separate drinking fountains.

F211.3 **More Than Minimum Number**

Where more than the minimum number of drinking fountains specified in F211.2 - (above) are provided, 50 percent of the total number of drinking fountains provided shall comply with Chapter 9: Drinking Fountains - 602.1-602.6 - pp. 67 & 68, and 50 percent of the total number of drinking fountains provided shall comply with Chapter 9: Drinking Fountains - 602.7 - p. 68.

EXCEPTION:

Where 50 percent of the drinking fountains yields a fraction, 50 percent shall be permitted to be rounded up or down provided that the total number of drinking fountains complying with this Chapter - F211 equals 100 percent of drinking fountains.

Chapter F10:

KITCHENS - KITCHENETTES - SINKS

F212 **Kitchens - Kitchenettes - Sinks**
F212.1 **General**

Where provided, kitchens, kitchenettes, and sinks shall comply with this Chapter - F212.

F212.2 **Kitchens and Kitchenettes**

Kitchens and kitchenettes shall comply with Chapter 10: Kitchens - Kitchenettes - Sinks - 804 - pp. 70-73.

F212.3 **Sinks**

Where sinks are provided, at least 5 percent, but no fewer than one, of each type provided in each accessible room or space shall comply with Chapter 60: Lavatories and Sinks - 606 - pp. 301-303.

EXCEPTION:

Mop or service sinks shall not be required to comply with F212.3 - (above).

Chapter F11:

TOILET FACILITIES AND BATHING FACILITIES

F213 **Toilet Facilities and Bathing Facilities**
F213.1 **General**

Where toilet facilities and bathing facilities are provided, they shall comply with this Chapter - F213.

Where toilet facilities and bathing facilities are provided in facilities permitted by Chapter F3: Accessible Routes - F206.2.3 - Exceptions 1 and 2 - p. 375 not to connect stories by an accessible route, toilet facilities and bathing facilities shall be provided on a story connected by an accessible route to an accessible entrance.

F213.2 **Toilet Rooms and Bathing Rooms**

Where toilet rooms are provided, each toilet room shall comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

Where bathing rooms are provided, each bathing room shall comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

EXCEPTIONS:

1. In alterations where it is technically infeasible to comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289, altering existing toilet or bathing rooms shall not be required where a single unisex toilet room or bathing room complying with F213.2.1 - (following page) is provided and located in the same area and on the same floor as existing inaccessible toilet or bathing rooms.
2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by Section F8: Existing Buildings and Facilities - F202.5 - pp. 363 & 364 and toilet rooms are provided, no fewer than one toilet room for each sex complying with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289 or one unisex toilet room complying with F213.2.1 - (following page) shall be provided.
3. Where multiple single user portable toilet or bathing units are clustered at a single location, no more than 5 percent of the toilet units and bathing units at each cluster shall be required to comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

Portable toilet units and bathing units complying with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289 shall be identified by the International Symbol of Accessibility complying with Chapter 14: Signs - 703.7.2.1 - p. 95.

Chapter F11: Toilet Facilities and Bathing Facilities (continued)

4. Where multiple single user toilet rooms are clustered at a single location, no more than 50 percent of the single user toilet rooms for each use at each cluster shall be required to comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

Advisory

F213.2 *Toilet Rooms and Bathing Rooms*

These requirements allow the use of unisex (or single-user) toilet rooms in alterations when technical infeasibility can be demonstrated.

Unisex toilet rooms benefit people who use opposite sex personal care assistants.

For this reason, it is advantageous to install unisex toilet rooms in addition to accessible single-sex toilet rooms in new facilities.

Advisory

F213.2 *Toilet Rooms and Bathing Rooms Exceptions 3 and 4*

A "cluster" is a group of toilet rooms proximate to one another.

Generally, toilet rooms in a cluster are within sight of, or adjacent to, one another.

F213.2.1 **Unisex (Single-Use or Family) Toilet and Bathing Rooms**

Unisex toilet rooms shall contain not more than one lavatory, and two water closets without urinals or one water closet and one urinal.

Unisex bathing rooms shall contain one shower or one shower and one bathtub, one lavatory, and one water closet.

Doors to unisex toilet rooms and unisex bathing rooms shall have privacy latches.

F213.3 **Plumbing Fixtures and Accessories**

Plumbing fixtures and accessories provided in a toilet room or bathing room required to comply with F213.2 - (preceding page & above) shall comply with F213.3 - (below & following pages).

F213.3.1 **Toilet Compartments**

Where toilet compartments are provided, at least one toilet compartment shall comply with Chapter 58: Water Closets and Toilet Compartments - 604.8.1 - pp. 294-296.

Chapter F11: Toilet Facilities and Bathing Facilities (continued)

In addition to the compartment required to comply with Chapter 58: Water Closets and Toilet Compartments - 604.8.1 - pp. 294-296, at least one compartment shall comply with Chapter 58: Water Closets and Toilet Compartments - 604.8.2 - pp. 296 & 297 where six or more toilet compartments are provided, or where the combination of urinals and water closets totals six or more fixtures.

Advisory
F213.3.1 *Toilet Compartments*

A toilet compartment is a partitioned space that is located within a toilet room, and that normally contains no more than one water closet.

A toilet compartment may also contain a lavatory.

A lavatory is a sink provided for hand washing.

Full-height partitions and door assemblies can comprise toilet compartments where the minimum required spaces are provided within the compartment.

F213.3.2 **Water Closets**

Where water closets are provided at least one shall comply with Chapter 58: Water Closets and Toilet Compartments - 604 - pp. 290-299.

F213.3.3 **Urinals**

Where more than one urinal is provided, at least one shall comply with Chapter 59: Urinals - 605 - p. 300.

F213.3.4 **Lavatories**

Where lavatories are provided, at least one shall comply with Chapter 60: Lavatories and Sinks - 606 - pp. 301-303 and shall not be located in a toilet compartment.

F213.3.5 **Mirrors**

Where mirrors are provided, at least one shall comply with Chapter 57: Toilet and Bathing Rooms - 603.3 - p. 289.

F213.3.6 **Bathing Facilities**

Where bathtubs or showers are provided, at least one bathtub complying with Chapter 61: Bathtubs - 607 - pp. 304-307 or at least one shower complying with Chapter 62: Shower Compartments - 608 - pp. 308-313 shall be provided.

Chapter F11: Toilet Facilities and Bathing Facilities (continued)

F213.3.7

Coat Hooks and Shelves

Where coat hooks or shelves are provided in toilet rooms without toilet compartments, at least one of each type shall comply with Chapter 57: Toilet and Bathing Rooms - 603.4 - p. 289.

Where coat hooks or shelves are provided in toilet compartments, at least one of each type complying with Chapter 58: Water Closets and Toilet Compartments - 604.8.3 - p. 297 shall be provided in toilet compartments required to comply with F213.3.1 - (preceding pages).

Where coat hooks or shelves are provided in bathing facilities, at least one of each type complying with Chapter 57: Toilet and Bathing Rooms - 603.4 - p. 289 shall serve fixtures required to comply with F213.3.6 - (preceding page).

Chapter F13:

FIRE ALARM SYSTEMS

F215 **Fire Alarm Systems** F215.1 **General**

Where fire alarm systems provide audible alarm coverage, alarms shall comply with this Chapter - F215.

EXCEPTION:

In existing facilities, visible alarms shall not be required except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

F215.1 *Advisory* *General*

Unlike audible alarms, visible alarms must be located within the space they serve so that the signal is visible.

Facility alarm systems (other than fire alarm systems) such as those used for tornado warnings and other emergencies are not required to comply with the technical criteria for alarms in Chapter 13: Fire Alarm Systems - 702 - p. 81.

Every effort should be made to ensure that such alarms can be differentiated in their signal from fire alarms systems and that people who need to be notified of emergencies are adequately safeguarded.

Consult local fire departments and prepare evacuation plans taking into consideration the needs of every building occupant, including people with disabilities.

F215.2 **Public and Common Use Areas**

Alarms in public use areas and common use areas shall comply with Chapter 13: Fire Alarm Systems - 702 - p. 81.

F215.3 **Employee Work Areas**

Where employee work areas have audible alarm coverage, the wiring system shall be designed so that visible alarms complying with Chapter 13: Fire Alarm Systems - 702 - p. 81 can be integrated into the alarm system.

F215.4 **Transient Lodging**

Guest rooms required to comply with Chapter F22: Transient Lodging Guest Rooms - F224.4 - pp. 435 & 436 shall provide alarms complying with Chapter 13: Fire Alarm Systems - 702 - p. 81.

Chapter F13: Fire Alarm Systems (continued)

F215.5

Residential Facilities

Where provided in residential dwelling units required to comply with Chapter 69: Residential Dwelling Units - 809.5 - pp. 300-332, alarms shall comply with Chapter 13: Fire Alarm Systems - 702 - p. 81.

Chapter F14:

SIGNS

F216
F216.1

Signs
General

Signs shall be provided in accordance with this Chapter - F216 and shall comply with Chapter 14: Signs - 703 - pp. 87-96.

EXCEPTIONS:

1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with this Chapter - F216.
2. In parking facilities, signs shall not be required to comply with F216.2, F216.3 - (below & following page, and this Chapter - F216.6-F216.12 - pp. 409-412.
3. Temporary, 7 days or less, signs shall not be required to comply with this Chapter - F216.
4. In detention and correctional facilities, signs not located in public use areas shall not be required to comply with this Chapter - F216.

F216.2

Designations

Interior and exterior signs identifying permanent rooms and spaces shall comply with Chapter 14: Signs - 703.1, 703.2, - pp. 87-89 and 703.5 - pp. 91-94.

Where pictograms are provided as designations of permanent interior rooms and spaces, the pictograms shall comply with Chapter 14: Signs - 703.6 - pp. 94 & 95 and shall have text descriptors complying with Chapter 14: Signs - 703.2 - pp. 87-89 and 703.5 - pp. 91-94.

EXCEPTION:

Exterior signs that are not located at the door to the space they serve shall not be required to comply with Chapter 14: Signs - 703.2 - pp. 87-89.

F216.2

Advisory
Designations

F216.2 - (above) applies to signs that provide designations, labels, or names for interior rooms or spaces where the sign is not likely to change over time.

Chapter F14: Signs (continued)

Examples include interior signs labeling restrooms, room and floor numbers or letters, and room names.

Tactile text descriptors are required for pictograms that are provided to label or identify a permanent room or space.

Pictograms that provide information about a room or space, such as “no smoking,” occupant logos, and the International Symbol of Accessibility, are not required to have text descriptors.

F216.3 **Directional and Informational Signs**

Signs that provide direction to or information about interior spaces and facilities of the site shall comply with Chapter 14: Signs - 703.5 - pp. 91-94.

Advisory

F216.3 *Directional and Informational Signs*

Information about interior spaces and facilities includes rules of conduct, occupant load, and similar signs.

Signs providing direction to rooms or spaces include those that identify egress routes.

F216.4 **Means of Egress**

Signs for means of egress shall comply with F216.4 - (below & following page).

F216.4.1 **Exit Doors**

Doors at exit passageways, exit discharge, and exit stairways shall be identified by tactile signs complying with Chapter 14: Signs - 703.1, 703.2, - pp. 87-89 and 703.5 - pp. 91-94.

Advisory

F216.4.1 *Exit Doors*

An exit passageway is a horizontal exit component that is separated from the interior spaces of the building by fire-resistance-rated construction and that leads to the exit discharge or public way.

The exit discharge is that portion of an egress system between the termination of an exit and a public way.

F216.4.2

Areas of Refuge

Signs required by section 1003.2.13.5.4 of the International Building Code (2000 edition) or section 1007.6.4 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Section F5: Referenced Standards - F105 - pp. 348 & 349) to provide instructions in areas of refuge shall comply with Chapter 14: Signs - 703.5 - pp. 91-94.

F216.4.3

Directional Signs

Signs required by section 1003.2.13.6 of the International Building Code (2000 edition) or section 1007.7 of the International Building Code (2003 edition) (incorporated by reference, see “Referenced Standards” in Section F5: Referenced Standards - F105 - pp. 348 & 349) to provide directions to accessible means of egress shall comply with Chapter 14: Signs - 703.5 - pp. 91-94.

F216.5

Parking

Parking spaces complying with Chapter 6: Parking Spaces - 502 - pp. 55-59 shall be identified by signs complying with Chapter 6: Parking Spaces - 502.6 - p. 58.

EXCEPTIONS:

1. Where a total of four or fewer parking spaces, including accessible parking spaces, are provided on a site, identification of accessible parking spaces shall not be required.
2. In residential facilities, where parking spaces are assigned to specific residential dwelling units, identification of accessible parking spaces shall not be required.

F216.6

Entrances

Where not all entrances comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251, entrances complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 shall be identified by the International Symbol of Accessibility complying with Chapter 14: Signs - 703.7.2.1 - p. 95.

Directional signs complying with Chapter 14: Signs - 703.5 - pp. 91-94 that indicate the location of the nearest entrance complying with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 shall be provided at entrances that do not comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251.

F216.6

*Advisory
Entrances*

Where a directional sign is required, it should be located to minimize backtracking.

Chapter F14: Signs (continued)

In some cases, this could mean locating a sign at the beginning of a route, not just at the inaccessible entrances to a building.

F216.7 **Elevators**

Where existing elevators do not comply with Chapter 52: Elevators - 407 - pp. 259-272, elevators complying with Chapter 52: Elevators - 407 - pp. 259-272 shall be clearly identified with the International Symbol of Accessibility complying with Chapter 14: Signs - 703.7.2.1 - p. 95.

F216.8 **Toilet Rooms and Bathing Rooms**

Where existing toilet rooms or bathing rooms do not comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289, directional signs indicating the location of the nearest toilet room or bathing room complying with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289 within the facility shall be provided.

Signs shall comply with Chapter 14: Signs - 703.5 - pp. 91-94 and shall include the International Symbol of Accessibility complying with Chapter 14: Signs - 703.7.2.1 - p. 95.

Where existing toilet rooms or bathing rooms do not comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289, the toilet rooms or bathing rooms complying with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289 shall be identified by the International Symbol of Accessibility complying with Chapter 14: Signs - 703.7.2.1 - p. 95.

Where clustered single user toilet rooms or bathing facilities are permitted to use exception to Chapter F11: Toilet Facilities and Bathing Facilities - F213.2 - pp. 400 & 401, toilet rooms or bathing facilities complying with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289 shall be identified by the International Symbol of Accessibility complying with Chapter 14: Signs - 703.7.2.1 - p. 95 unless all toilet rooms and bathing facilities comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

F216.9 **TTYs**

Identification and directional signs for public TTYs shall be provided in accordance with F216.9 - (below & following page).

F216.9.1 **Identification Signs**

Public TTYs shall be identified by the International Symbol of TTY complying with Chapter 14: Signs - 703.7.2.2 - p. 95.

F216.9.2 **Directional Signs**

Directional signs indicating the location of the nearest public TTY shall be provided at all banks of public pay telephones not containing a public TTY.

Chapter F14: Signs (continued)

In addition, where signs provide direction to public pay telephones, they shall also provide direction to public TTYs.

Directional signs shall comply with Chapter 14: Signs - 703.5 - pp. 91-94 and shall include the International Symbol of TTY complying with Chapter 14: Signs - 703.7.2.2 - p. 95.

F216.10 **Assistive Listening Systems**

Each assembly area required by Chapter F17: Assistive Listening Systems - F219 - pp. 418 & 419 to provide assistive listening systems shall provide signs informing patrons of the availability of the assistive listening system.

Assistive listening signs shall comply with Chapter 14: Signs - 703.5 - pp. 91-94 and shall include the International Symbol of Access for Hearing Loss complying with Chapter 14: Signs - 703.7.2.4 - p. 96.

EXCEPTION:

Where ticket offices or windows are provided, signs shall not be required at each assembly area provided that signs are displayed at each ticket office or window informing patrons of the availability of assistive listening systems.

F216.11 **Check-Out Aisles**

Where more than one check-out aisle is provided, check-out aisles complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be identified by the International Symbol of Accessibility complying with Chapter 14: Signs - 703.7.2.1 - p. 95.

Where check-out aisles are identified by numbers, letters, or functions, signs identifying check-out aisles complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be located in the same location as the check-out aisle identification.

EXCEPTION:

Where all check-out aisles serving a single function comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336, signs complying with Chapter 14: Signs - 703.7.2.1 - p. 95 shall not be required.

F216.12 **Amusement Rides**

Signs identifying the type of access provided on amusement rides shall be provided at entries to queues and waiting lines.

Chapter F14: Signs (continued)

In addition, where accessible unload areas also serve as accessible load areas, signs indicating the location of the accessible load and unload areas shall be provided at entries to queues and waiting lines.

Advisory

F216.12

Amusement Rides

Amusement rides designed primarily for children, amusement rides that are controlled or operated by the rider, and amusement rides without seats, are not required to provide wheelchair spaces, transfer seats, or transfer systems, and need not meet the sign requirements in 216.12 - (preceding page & above).

The load and unload areas of these rides must, however, be on an accessible route and must provide turning space.

Chapter F15:

TELEPHONES

F217 **Telephones**
 F217.1 **General**

Where coin-operated public pay telephones, coinless public pay telephones, public closed-circuit telephones, public courtesy phones, or other types of public telephones are provided, public telephones shall be provided in accordance with this Chapter - F217 for each type of public telephone provided.

For purposes of this chapter, a bank of telephones shall be considered to be two or more adjacent telephones.

Advisory
General

F217.1

These requirements apply to all types of public telephones including courtesy phones at airports and rail stations that provide a free direct connection to hotels, transportation services, and tourist attractions.

F217.2 **Wheelchair Accessible Telephones**

Where public telephones are provided, wheelchair accessible telephones complying with Chapter 15: Telephones - 704.2 - pp. 100 & 101 shall be provided in accordance with Table F217.2 - (below).

EXCEPTION:

Drive-up only public telephones shall not be required to comply with F217.2 - (above & below).

Table F217.2
Wheelchair Accessible Telephones

<i>Number of Telephones Provided on a Floor, Level, or Exterior Site</i>	<i>Minimum Number of Required Wheelchair Accessible Telephones</i>
<i>1 or more single units</i>	<i>1 per floor, level, and exterior site</i>
<i>1 bank</i>	<i>1 per floor, level, and exterior site</i>
<i>2 or more banks</i>	<i>1 per bank</i>

Chapter F15: Telephones (continued)

F217.3 **Volume Controls**

All public telephones shall have volume controls complying with Chapter 15: Telephones - 704.3 - p. 102.

F217.4 **TTYs**

TTYs complying with Chapter 15: Telephones - 704.4 - pp. 102 & 103 shall be provided in accordance with F217.4 - (below & following page).

F217.4 *Advisory* *TTYs*

Separate requirements are provided based on the number of public pay telephones provided at a bank of telephones, within a floor, a building, or on a site.

In some instances one TTY can be used to satisfy more than one of these requirements.

For example, a TTY required for a bank can satisfy the requirements for a building.

However, the requirement for at least one TTY on an exterior site cannot be met by installing a TTY in a bank inside a building.

Consideration should be given to phone systems that can accommodate both digital and analog transmissions for compatibility with digital and analog TTYs.

F217.4.1 **Bank Requirement**

Where four or more public pay telephones are provided at a bank of telephones, at least one public TTY complying with Chapter 15: Telephones - 704.4 - pp. 102 & 103 shall be provided at that bank.

EXCEPTION:

TTYs shall not be required at banks of telephones located within 200 feet (60 960mm) of, and on the same floor as, a bank containing a public TTY.

F217.4.2 **Floor Requirement**

Where at least one public pay telephone is provided on a floor of a building, at least one public TTY shall be provided on that floor.

F217.4.3 **Building Requirement**

Where at least one public pay telephone is provided in a public use area of a building, at least one public TTY shall be provided in the building in a public use area.

Chapter F15: Telephones (continued)

F217.4.4 **Exterior Site Requirement**

Where four or more public pay telephones are provided on an exterior site, at least one public TTY shall be provided on the site.

F217.4.5 **Rest Stops - Emergency Roadside Stops - Service Plazas**

Where at least one public pay telephone is provided at a public rest stop, emergency roadside stop, or service plaza, at least one public TTY shall be provided.

F217.4.6 **Hospitals**

Where at least one public pay telephone is provided serving a hospital emergency room, hospital recovery room, or hospital waiting room, at least one public TTY shall be provided at each location.

F217.4.7 **Transportation Facilities**

In transportation facilities, in addition to the requirements of F217.4.1-F217.4.4 - (preceding page & above), where at least one public pay telephone serves a particular entrance to a bus or rail facility, at least one public TTY shall be provided to serve that entrance.

In airports, in addition to the requirements of F217.4.1-F217.4.4 - (preceding page & above), where four or more public pay telephones are located in a terminal outside the security areas, a concourse within the security areas, or a baggage claim area in a terminal, at least one public TTY shall be provided in each location.

F217.4.8 **Detention and Correctional Facilities**

In detention and correctional facilities, where at least one pay telephone is provided in a secured area used only by detainees or inmates and security personnel, at least one TTY shall be provided in at least one secured area.

F217.5 **Shelves for Portable TTYs**

Where a bank of telephones in the interior of a building consists of three or more public pay telephones, at least one public pay telephone at the bank shall be provided with a shelf and an electrical outlet in accordance with Chapter 15: Telephones - 704.5 - p. 103.

EXCEPTIONS:

1. Secured areas of detention and correctional facilities where shelves and outlets are prohibited for purposes of security or safety shall not be required to comply with F217.5 - (preceding page).

Chapter F15: Telephones (continued)

2. The shelf and electrical outlet shall not be required at a bank of telephones with a TTY.

Chapter F16:

TRANSPORTATION FACILITIES

F218 **Transportation Facilities**

F218.1 **General**

Transportation facilities shall comply with this Chapter - F218.

F218.2 **New and Altered Fixed Guideway Stations**

New and altered stations in rapid rail, light rail, commuter rail, intercity rail, high speed rail, and other fixed guideway systems shall comply with Chapter 16: Transportation Facilities - 810.5-810.10 - pp. 106-110.

F218.3 **Bus Shelters**

Where provided, bus shelters shall comply with Chapter 16: Transportation Facilities - 810.3 and 810.4 - p. 106.

F218.4 **Other Transportation Facilities**

In other transportation facilities, public address systems shall comply with Chapter 16: Transportation Facilities - 810.7 - p. 109 and clocks shall comply with Chapter 16: Transportation Facilities - 810.8 - p. 109.

Chapter F17:

ASSISTIVE LISTENING SYSTEMS

F219 **Assistive Listening Systems**
F219.1 **General**

Assistive listening systems shall be provided in accordance with this Chapter - F219 and shall comply with Chapter 17: Assistive Listening Systems - 706 - pp. 112-114.

F219.2 **Required Systems**

In each assembly area where audible communication is integral to the use of the space, an assistive listening system shall be provided.

EXCEPTION:

Other than in courtrooms, assistive listening systems shall not be required where audio amplification is not provided.

F219.3 **Receivers**

Receivers complying with Chapter 17: Assistive Listening Systems - 706.2 - p. 113 shall be provided for assistive listening systems in each assembly area in accordance with Table F219.3 - (following page).

Twenty-five percent minimum of receivers provided, but no fewer than two, shall be hearing-aid compatible in accordance with Chapter 17: Assistive Listening Systems - 706.3 - p. 113.

EXCEPTIONS:

1. Where a building contains more than one assembly area and the assembly areas required to provide assistive listening systems are under one management, the total number of required receivers shall be permitted to be calculated according to the total number of seats in the assembly areas in the building provided that all receivers are usable with all systems.
2. Where all seats in an assembly area are served by an induction loop assistive listening system, the minimum number of receivers required by Table F219.3 - (following page) to be hearing-aid compatible shall not be required to be provided.

Chapter F17: Assistive Listening Systems (continued)

*Table F219.3
Receivers for Assistive Listening Systems*

<i>Capacity of Seating in Assembly Area</i>	<i>Minimum Number of Required Receivers</i>	<i>Minimum Number of Required Receivers Required to be Hearing-Aid Compatible</i>
<i>50 or less</i>	<i>2</i>	<i>2</i>
<i>51 to 200</i>	<i>2, plus 1 per 25 seats over 50 seats¹</i>	<i>2</i>
<i>201 to 500</i>	<i>2, plus 1 per 25 seats over 50 seats¹</i>	<i>1 per 4 receivers¹</i>
<i>501 to 1000</i>	<i>20, plus 1 per 33 seats over 500 seats¹</i>	<i>1 per 4 receivers¹</i>
<i>1001 to 2000</i>	<i>35, plus 1 per 50 seats over 1000 seats¹</i>	<i>1 per 4 receivers¹</i>
<i>2001 and over</i>	<i>55, plus 1 per 100 seats over 2000 seats¹</i>	<i>1 per 4 receivers¹</i>

¹Or fraction thereof.

Chapter F18:

AUTOMATIC TELLER MACHINES AND FARE MACHINES

F220 **Automatic Teller Machines and Fare Machines**
F220.1 **General**

Where automatic teller machines or self-service fare vending, collection, or adjustment machines are provided, at least one of each type provided at each location shall comply with Chapter 18: Automatic Teller Machines and Fare Machines - 707 - pp. 115-120.

Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type shall comply with Chapter 23: Storage - 811 - p. 145.

F220.1 *Advisory*
 General

If a bank provides both interior and exterior ATMs, each such installation is considered a separate location.

Accessible ATMs, including those with speech and those that are within reach of people who use wheelchairs, must provide all the functions provided to customers at that location at all times.

For example, it is unacceptable for the accessible ATM only to provide cash withdrawals while inaccessible ATMs also sell theater tickets.

Chapter F19:

ASSEMBLY AREAS

F221 **Assembly Areas**
F221.1 **General**

Assembly areas shall provide wheelchair spaces, companion seats, and designated aisle seats complying with this Chapter - F221 and Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802 - pp. 319-323.

In addition, lawn seating shall comply with this Chapter - F221.5 - p. 427.

F221.2 **Wheelchair Spaces**

Wheelchair spaces complying with F221.2 - (below & following pages) shall be provided in assembly areas with fixed seating.

F221.2.1 **Number and Location**

Wheelchair spaces shall be provided complying with F221.2.1 - (below & following pages).

F221.2.1.1 **General Seating**

Wheelchair spaces complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.1 - pp. 319 & 320 shall be provided in accordance with Table F221.2.1.1 - (following page).

Chapter F19: Assembly Areas (continued)

*Table F221.2.1.1
Number of Wheelchair Spaces in Assembly Areas*

<i>Number of Seats</i>	<i>Minimum Number of Required Wheelchair Spaces</i>
<i>4 to 25</i>	<i>1</i>
<i>26 to 50</i>	<i>2</i>
<i>51 to 150</i>	<i>4</i>
<i>151 to 300</i>	<i>5</i>
<i>301 to 500</i>	<i>6</i>
<i>501 to 5000</i>	<i>6, plus 1 for each 150, or fraction thereof, between 501 through 5000</i>
<i>5001 and over</i>	<i>36, plus 1 for each 200, or fraction thereof, over 5000</i>

**F221.2.1.2 Luxury Boxes - Club Boxes - Suites in Arenas - Stadiums
Grandstands**

In each luxury box, club box, and suite within arenas, stadiums, and grandstands, wheelchair spaces complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.1 - pp. 319 & 320 shall be provided in accordance with Table F221.2.1.1 - (above).

Advisory

*F221.2.1.2 Luxury Boxes - Club Boxes - Suites in Arenas - Stadiums
Grandstands*

The number of wheelchair spaces required in luxury boxes, club boxes, and suites within an arena, stadium, or grandstand is to be calculated box by box and suite by suite.

F221.2.1.3 Other Boxes

In boxes other than those required to comply with F221.2.1.2 - (above), the total number of wheelchair spaces required shall be determined in accordance with Table F221.2.1.1 - (above).

Wheelchair spaces shall be located in not less than 20 percent of all boxes provided.

Wheelchair spaces shall comply with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.1 - pp. 319 & 320.

Chapter F19: Assembly Areas (continued)

F221.2.1.3

Advisory
Other Boxes

The provision for seating in “other boxes” includes box seating provided in facilities such as performing arts auditoria where tiered boxes are designed for spatial and acoustical purposes.

The number of wheelchair spaces required in boxes covered by 221.2.1.3 - (preceding page) is calculated based on the total number of seats provided in these other boxes.

The resulting number of wheelchair spaces must be located in no fewer than 20% of the boxes covered by this chapter.

For example, a concert hall has 20 boxes, each of which contains 10 seats, totaling 200 seats.

In this example, 5 wheelchair spaces would be required, and they must be placed in at least 4 of the boxes.

Additionally, because the wheelchair spaces must also meet the dispersion requirements of 221.2.3 - (above), the boxes containing these wheelchair spaces cannot all be located in one area unless an exception to the dispersion requirements applies.

F221.2.1.4

Team or Player Seating

At least one wheelchair space complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.1 - pp. 319 & 320 shall be provided in team or player seating areas serving areas of sport activity.

EXCEPTION:

Wheelchair spaces shall not be required in team or player seating areas serving bowling lanes not required to comply with Chapter F3: Accessible Routes - F206.2.10 - p. 379.

F221.2.2

Integration

Wheelchair spaces shall be an integral part of the seating plan.

F221.2.2

Advisory
Integration

The requirement that wheelchair spaces be an “integral part of the seating plan” means that wheelchair spaces must be placed within the footprint of the seating area.

Wheelchair spaces cannot be segregated from seating areas.

For example, it would be unacceptable to place only the wheelchair spaces, or only the wheelchair spaces and their associated companion seats, outside the seating areas defined by risers in an assembly area.

F221.2.3

Lines of Sight and Dispersion

Wheelchair spaces shall provide lines of sight complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.2 - pp. 321 & 322 and shall comply with F221.2.3 - (below & following pages).

In providing lines of sight, wheelchair spaces shall be dispersed.

Wheelchair spaces shall provide spectators with choices of seating locations and viewing angles that are substantially equivalent to, or better than, the choices of seating locations and viewing angles available to all other spectators.

When the number of wheelchair spaces required by F221.2.1 - (preceding pages) has been met, further dispersion shall not be required.

EXCEPTION:

Wheelchair spaces in team or player seating areas serving areas of sport activity shall not be required to comply with F221.2.3 - (above, below & following pages).

Advisory

F221.2.3

Lines of Sight and Dispersion

Consistent with the overall intent of the ADA, individuals who use wheelchairs must be provided equal access so that their experience is substantially equivalent to that of other members of the audience.

Thus, while individuals who use wheelchairs need not be provided with the best seats in the house, neither may they be relegated to the worst.

F221.2.3.1

Horizontal Dispersion

Wheelchair spaces shall be dispersed horizontally.

EXCEPTIONS:

1. Horizontal dispersion shall not be required in assembly areas with 300 or fewer seats if the companion seats required by this Chapter - F221.3 - p. 426 and wheelchair spaces are located within the 2nd or 3rd quartile of the total row length.

Intermediate aisles shall be included in determining the total row length.

Chapter F19: Assembly Areas (continued)

If the row length in the 2nd and 3rd quartile of a row is insufficient to accommodate the required number of companion seats and wheelchair spaces, the additional companion seats and wheelchair spaces shall be permitted to be located in the 1st and 4th quartile of the row.

2. In row seating, two wheelchair spaces shall be permitted to be located side-by-side.

Advisory

F221.2.3.1

Horizontal Dispersion

Horizontal dispersion of wheelchair spaces is the placement of spaces in an assembly facility seating area from side-to-side or, in the case of an arena or stadium, around the field of play or performance area.

F221.2.3.2

Vertical Dispersion

Wheelchair spaces shall be dispersed vertically at varying distances from the screen, performance area, or playing field.

In addition, wheelchair spaces shall be located in each balcony or mezzanine that is located on an accessible route.

EXCEPTIONS:

1. Vertical dispersion shall not be required in assembly areas with 300 or fewer seats if the wheelchair spaces provide viewing angles that are equivalent to, or better than, the average viewing angle provided in the facility.
2. In bleachers, wheelchair spaces shall not be required to be provided in rows other than rows at points of entry to bleacher seating.

Advisory

F221.2.3.2

Vertical Dispersion

When wheelchair spaces are dispersed vertically in an assembly facility they are placed at different locations within the seating area from front-to-back so that the distance from the screen, stage, playing field, area of sports activity, or other focal point is varied among wheelchair spaces.

Chapter F19: Assembly Areas (continued)

F221.2.3.2 *Advisory*
Vertical Dispersion

EXCEPTION 2:

Points of entry to bleacher seating may include, but are not limited to, cross aisles, concourses, vomitories, and entrance ramps and stairs.

Vertical, center, or side aisles adjoining bleacher seating that are stepped or tiered are not considered entry points.

F221.3 **Companion Seats**

At least one companion seat complying with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.3 - p. 322 shall be provided for each wheelchair space required by this Chapter - F221.2.1 - pp. 421-423.

F221.4 **Designated Aisle Seats**

At least 5 percent of the total number of aisle seats provided shall comply with Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.4 - pp. 322 & 323 and shall be the aisle seats located closest to accessible routes.

EXCEPTION:

Team or player seating areas serving areas of sport activity shall not be required to comply with F221.4 - (above).

F221.4 *Advisory*
Designated Aisle Seats

When selecting which aisle seats will meet the requirements of Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.4 - pp. 322 & 323, those aisle seats which are closest to, not necessarily on, accessible routes must be selected first.

For example, an assembly area has two aisles (A and B) serving seating areas with an accessible route connecting to the top and bottom of Aisle A only.

The aisle seats chosen to meet Chapter 66: Wheelchair Spaces - Companion Seats - Designated Aisle Seats - 802.4 - pp. 322 & 323 must be those at the top and bottom of Aisle A, working toward the middle.

Only when all seats on Aisle A would not meet the five percent minimum would seats on Aisle B be designated.

F221.5

Lawn Seating

Lawn seating areas and exterior overflow seating areas, where fixed seats are not provided, shall connect to an accessible route.

Chapter F20: Dressing - Fitting - Locker Rooms

Where coat hooks or shelves are provided in individual compartments at least one of each type complying with Chapter 20: Dressing - Fitting - Locker Rooms - 803.5 - p. 130 shall be provided in individual compartments in dressing, fitting, or locker rooms required to comply with F222.1 - (preceding page).

Chapter F21:

MEDICAL CARE AND LONG-TERM CARE FACILITIES

F223 Medical Care and Long-Term Care Facilities F223.1 General

In licensed medical care facilities and licensed long-term care facilities where the period of stay exceeds twenty-four hours, patient or resident sleeping rooms shall be provided in accordance with this Chapter - F223.

EXCEPTION:

Toilet rooms that are part of critical or intensive care patient sleeping rooms shall not be required to comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289.

F223.1 *Advisory* *General*

Because medical facilities frequently reconfigure spaces to reflect changes in medical specialties, F223.1 - (above & below) does not include a provision for dispersion of accessible patient or resident sleeping rooms.

The lack of a design requirement does not mean that covered entities are not required to provide services to people with disabilities where accessible rooms are not dispersed in specialty areas.

Locate accessible rooms near core areas that are less likely to change over time.

While dispersion is not required, the flexibility it provides can be a critical factor in ensuring cost effective compliance with applicable civil rights laws, including Sections 501 and 504 of the Rehabilitation Act of 1973, as amended.

Additionally, all types of features and amenities should be dispersed among accessible sleeping rooms to ensure equal access to and a variety of choices for all patients and residents.

F223.1.1 Alterations

Where sleeping rooms are altered or added, the requirements of this Chapter - F223 shall apply only to the sleeping rooms being altered or added until the number of sleeping rooms complies with the minimum number required for new construction.

Chapter F21: Medical Care and Long-Term Care Facilities (continued)

F223.3

Long-Term Care Facilities

In licensed long-term care facilities, at least 50 percent, but no fewer than one, of each type of resident sleeping room shall provide mobility features complying with Chapter 21: Medical Care and Long-Term Care Facilities - 805 - pp. 133 & 134.

Chapter F22: Transient Lodging Guest Rooms (continued)

F224.1.2

Guest Room Doors and Doorways

Entrances, doors, and doorways providing user passage into and within guest rooms that are not required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 shall comply with Chapter 49: Doors - Doorways - Gates - 404.2.3 - pp. 243 & 244.

EXCEPTION:

Shower and sauna doors in guest rooms that are not required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 shall not be required to comply with Chapter 49: Doors - Doorways - Gates - 404.2.3 - pp. 243 & 244.

Advisory

F224.1.2

Guest Room Doors and Doorways

Because of the social interaction that often occurs in lodging facilities, an accessible clear opening width is required for doors and doorways to and within all guest rooms, including those not required to be accessible.

This applies to all doors, including bathroom doors, that allow full user passage.

Other requirements for doors and doorways in Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251 do not apply to guest rooms not required to provide mobility features.

F224.2

Guest Rooms with Mobility Features

In transient lodging facilities, guest rooms with mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 shall be provided in accordance with Table F224.2 - (following page).

Chapter F22: Transient Lodging Guest Rooms (continued)

*Table F224.2
Guest Rooms with Mobility Features*

<i>Total Number of Guest Rooms Provided</i>	<i>Minimum Number of Required Rooms Without Roll-in Showers</i>	<i>Minimum Number of Required Rooms With Roll-in Showers</i>	<i>Total Number of Required Rooms</i>
<i>1 to 25</i>	<i>1</i>	<i>0</i>	<i>1</i>
<i>26 to 50</i>	<i>2</i>	<i>0</i>	<i>2</i>
<i>51 to 75</i>	<i>3</i>	<i>1</i>	<i>4</i>
<i>76 to 100</i>	<i>4</i>	<i>1</i>	<i>5</i>
<i>101 to 150</i>	<i>5</i>	<i>2</i>	<i>7</i>
<i>151 to 200</i>	<i>6</i>	<i>2</i>	<i>8</i>
<i>201 to 300</i>	<i>7</i>	<i>3</i>	<i>10</i>
<i>301 to 400</i>	<i>8</i>	<i>4</i>	<i>12</i>
<i>401 to 500</i>	<i>9</i>	<i>4</i>	<i>13</i>
<i>501 to 1000</i>	<i>2 percent of total</i>	<i>1 percent of total</i>	<i>3 percent of total</i>
<i>1001 and over</i>	<i>20, plus 1 for each 100, or fraction thereof, over 1000</i>	<i>10, plus 1 for each 100, or fraction thereof, over 1000</i>	<i>30, plus 2 for each 100, or fraction thereof, over 1000</i>

F224.3

Beds

In guest rooms having more than 25 beds, 5 percent minimum of the beds shall have clear floor space complying with Chapter 22: Transient Lodging Guest Rooms - 806.2.3 - p. 140.

F224.4

Guest Rooms with Communication Features

In transient lodging facilities, guest rooms with communication features complying with Chapter 22: Transient Lodging Guest Rooms - 806.3 - pp. 141 & 142 shall be provided in accordance with Table F224.4 - (following page).

Chapter F22: Transient Lodging Guest Rooms (continued)

*Table F224.4
Guest Rooms with Communication Features*

<i>Total Number of Guest Rooms Provided</i>	<i>Minimum Number of Required Guest Rooms With Communication Features</i>
<i>2 to 25</i>	<i>2</i>
<i>26 to 50</i>	<i>4</i>
<i>51 to 75</i>	<i>7</i>
<i>76 to 100</i>	<i>9</i>
<i>101 to 150</i>	<i>12</i>
<i>151 to 200</i>	<i>14</i>
<i>201 to 300</i>	<i>17</i>
<i>301 to 400</i>	<i>20</i>
<i>401 to 500</i>	<i>22</i>
<i>501 to 1000</i>	<i>5 percent of total</i>
<i>1001 and over</i>	<i>50, plus 3 for each 100 over 1000</i>

F224.5

Dispersion

Guest rooms required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 and guest rooms required to provide communication features complying with Chapter 22: Transient Lodging Guest Rooms - 806.3 - pp. 141 & 142 shall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests.

Where the minimum number of guest rooms required to comply with Chapter 22: Transient Lodging Guest Rooms - 806.3 - pp. 141 & 142 is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds, and amenities.

At least one guest room required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 shall also provide communication features complying with Chapter 22: Transient Lodging Guest Rooms - 806.3 - pp. 141 & 142.

Not more than 10 percent of guest rooms required to provide mobility features complying with Chapter 22: Transient Lodging Guest Rooms - 806.2 - pp. 139-141 shall be used to satisfy the minimum number of guest rooms required to provide communication features complying with Chapter 22: Transient Lodging Guest Rooms - 806.3 - pp. 141 & 142.

Chapter F22: Transient Lodging Guest Rooms (continued)

F224.5

*Advisory
Dispersion*

Factors to be considered in providing an equivalent range of options may include, but are not limited to, room size, bed size, cost, view, bathroom fixtures such as hot tubs and spas, smoking and nonsmoking, and the number of rooms provided.

Chapter F23:

STORAGE

F225 **Storage**
F225.1 **General**

Storage facilities shall comply with this Chapter - F225.

F225.2 **Storage**

Where storage is provided in accessible spaces, at least one of each type shall comply with Chapter 23: Storage - 811 - p. 145.

F225.2 *Advisory*
Storage

Types of storage include, but are not limited to, closets, cabinets, shelves, clothes rods, hooks, and drawers.

Where provided, at least one of each type of storage must be within the reach ranges specified in Chapter 47: Reach Ranges - 308 - pp. 237-239; however, it is permissible to install additional storage outside the reach ranges.

F225.2.1 **Lockers**

Where lockers are provided, at least 5 percent, but no fewer than one of each type, shall comply with Chapter 23: Storage - 811 - p. 145.

F225.2.1 *Advisory*
Lockers

Different types of lockers may include full-size and half-size lockers, as well as those specifically designed for storage of various sports equipment.

F225.2.2 **Self-Service Shelving**

Self-service shelves shall be located on an accessible route complying with Chapter 3: Accessible Routes - 402 - p. 46.

Self-service shelving shall not be required to comply with Chapter 47: Reach Ranges - 308 - pp. 237-239.

Chapter F23: Storage (continued)

F225.2.2 *Advisory*
Self-Service Shelving

Self-service shelves include, but are not limited to, library, store, or post office shelves.

F225.3 Self-Service Storage Facilities

Self-service storage facilities shall provide individual self-service storage spaces complying with these requirements in accordance with *Table F225.3 - (below)*.

Table F225.3
Self-Service Storage Facilities

<i>Total Spaces in Facilities</i>	<i>Minimum Number of Spaces Required to be Accessible</i>
<i>1 to 200</i>	<i>5 percent, but no fewer than 1</i>
<i>201 and over</i>	<i>10, plus 2 percent of total number of units over 200</i>

F225.3 *Advisory*
Self-Service Storage Facilities

Although there are no technical requirements that are unique to self-service storage facilities, elements and spaces provided in facilities containing self-service storage spaces required to comply with these requirements must comply with this document where applicable.

For example: the number of storage spaces required to comply with these requirements must provide accessible routes complying with Chapter F3 and F4 - F206 and F206.4 - pp. 373-388; accessible means of egress complying with Chapter F5: Accessible Means of Egress - F207 - p. 389; parking spaces complying with Chapter F6: Parking Spaces - F208 - pp. 390-394; and, where provided, other public use or common use elements and facilities such as toilet rooms, drinking fountains, and telephones must comply with the applicable requirements of this document.

F225.3.1 Dispersion

Individual self-service storage spaces shall be dispersed throughout the various classes of spaces provided.

Where more classes of spaces are provided than the number required to be accessible, the number of spaces shall not be required to exceed that required by Table F225.3 - (above).

Self-service storage spaces complying with Table F225.3 - (above) shall not be required to be dispersed among buildings in a multi-building facility.

Chapter F24:

DINING SURFACES AND WORK SURFACES

F226 **Dining Surfaces and Work Surfaces**
F226.1 **General**

Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148.

In addition, where work surfaces are provided, at least 5 percent shall comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148.

EXCEPTIONS:

1. Sales counters and service counters shall not be required to comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148.
2. Check writing surfaces provided at check-out aisles not required to comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall not be required to comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148.

F226.1 *Advisory*
General

In facilities covered by the ABA, this requirement applies to work surfaces used by employees.

Five percent, but not less than one, of permanently installed work surfaces in each work area must be accessible.

Permanently installed work surfaces include, but are not limited to, laboratory and work benches, fume hoods, reception counters, teller windows, study carrels, commercial kitchen counters, writing surfaces, and fixed conference tables.

Where furnishings are not fixed, Sections 501, 503, and 504 of the Rehabilitation Act of 1973, as amended provides that Federal employees, employees of Federal contractors, and certain other employees, are entitled to "reasonable accommodations."

This means that employers may need to procure or adjust furnishings to accommodate the individual needs of employees with disabilities on an "as needed" basis.

Consider work surfaces that are flexible and permit installation at variable heights and clearances.

F226.2

Dispersion

Dining surfaces and work surfaces required to comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 shall be dispersed throughout the space or facility containing dining surfaces and work surfaces.

Chapter F25:

SALES AND SERVICE

F227 Sales and Service
F227.1 General

Where provided, check-out aisles, sales counters, service counters, food service lines, queues, and waiting lines shall comply with this Chapter - F227 and Chapter 71: Check-out Aisles and Sales and Service Counters - 904 - pp. 335-337.

F227.2 Check-Out Aisles

Where check-out aisles are provided, check-out aisles complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be provided in accordance with Table F227.2 - (below).

Where check-out aisles serve different functions, check-out aisles complying with 904.3 shall be provided in accordance with Table F227.2 - (below) for each function.

Where check-out aisles are dispersed throughout the building or facility, check-out aisles complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be dispersed.

EXCEPTION:

Where the selling space is under 5000 square feet (465 m²) no more than one check-out aisle complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 shall be required.

*Table F227.2
 Check-out Aisles*

<i>Number of Check-Out Aisles of Each Function</i>	<i>Minimum Number of Check-Out Aisles of Each Function Required to Comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336</i>
<i>1 to 4</i>	<i>1</i>
<i>5 to 8</i>	<i>2</i>
<i>9 to 15</i>	<i>3</i>
<i>16 and over</i>	<i>3, plus 20 percent of additional aisles</i>

Chapter F25: Sales and Service (continued)

F227.2.1

Altered Check-out Aisles

Where check-out aisles are altered, at least one of each check-out aisle serving each function shall comply with 5000 square feet (465 m²) no more than one check-out aisle complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 - pp. 335 & 336 until the number of check-out aisles complies with F227.2 - (preceding page & above).

F227.3

Counters

Where provided, at least one of each type of sales counter and service counter shall comply with 5000 square feet (465 m²) no more than one check-out aisle complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4 - pp. 336 & 337.

Where counters are dispersed throughout the building or facility, counters complying with 5000 square feet (465 m²) no more than one check-out aisle complying with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4 - pp. 336 & 337 also shall be dispersed.

Advisory

F227.3

Counters

Types of counters that provide different services in the same facility include, but are not limited to, order, pick-up, express, and returns.

One continuous counter can be used to provide different types of service.

For example, order and pick-up are different services.

It would not be acceptable to provide access only to the part of the counter where orders are taken when orders are picked-up at a different location on the same counter.

Both the order and pick-up section of the counter must be accessible.

F227.4

Food Service Lines

Food service lines shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.5 - p. 337.

Where self-service shelves are provided, at least 50 percent, but no fewer than one, of each type provided shall comply with Chapter 47: Reach Ranges - 308 - pp. 237-239.

F227.5

Queues and Waiting Lines

Queues and waiting lines servicing counters or check-out aisles required to comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.3 or 904.4 - pp. 335-337 shall comply with Chapter 48: Walking Surfaces - 403 - pp. 240 & 241.

Chapter F26:

DEPOSITORIES - VENDING MACHINES CHANGE MACHINES - MAIL BOXES FUEL DISPENSERS

F228 **Depositories - Vending Machines - Change Machines - Mail Boxes**

Fuel Dispensers

F228.1 **General**

Where provided, at least one of each type of depository, vending machine, change machine, and fuel dispenser shall comply with Chapter 2: Operable Parts - 309 - p. 34.

EXCEPTIONS:

1. Drive-up only depositories shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.
2. Fuel dispensers provided for fueling official government vehicles shall not be required to comply with Chapter 2: Operable Parts - 309 - p. 34.

Advisory

F228.1 *General*

Depositories include, but are not limited to, night receptacles in banks, post offices, video stores, and libraries.

F228.2 **Mail Boxes**

Where mail boxes are provided in an interior location, at least 5 percent, but no fewer than one, of each type shall comply with Chapter 2: Operable Parts - 309 - p. 34.

In residential facilities, where mail boxes are provided for each residential dwelling unit, mail boxes complying with Chapter 2: Operable Parts - 309 - p. 34 shall be provided for each residential dwelling unit required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330.

Chapter F27:

WINDOWS

F229
F229.1

Windows
General

Where glazed openings are provided in accessible rooms or spaces for operation by occupants, excluding employees, at least one opening shall comply with Chapter 2: Operable Parts - 309 - p. 34.

In accessible rooms or spaces, each glazed opening required by an administrative authority to be operable shall comply with Chapter 2: Operable Parts - 309 - p. 34.

EXCEPTION:

1. Glazed openings in residential dwelling units required to comply with Chapter 69: Residential Dwelling Units - 809 - pp. 328-332 shall not be required to comply with this Chapter - F229.
2. Glazed openings in guest rooms required to provide communication features and in guest rooms required to comply with Chapter F3: Accessible Routes - F206.5.3 - p. 382 shall not be required to comply with this Chapter - F229.

Chapter F28:

TWO-WAY COMMUNICATION SYSTEMS

F230

Two-Way Communication Systems

F230.1

General

Where a two-way communication system is provided to gain admittance to a building or facility or to restricted areas within a building or facility, the system shall comply with Chapter 28: Two-Way Communication Systems - 708 - pp. 153 & 154.

Advisory

F230.1

General

This requirement applies to facilities such as office buildings, courthouses, and other facilities where admittance to the building or restricted spaces is dependent on two-way communication systems.

Chapter F29:

JUDICIAL FACILITIES

F231 **Judicial Facilities** F231.1 **General**

Judicial facilities shall comply with this Chapter - F231.

F231.2 **Courtrooms**

Each courtroom shall comply with Chapter 68: Courtrooms - 808 - pp. 326 & 327.

F231.3 **Holding Cells**

Where provided, central holding cells and court-floor holding cells shall comply with F231.3 - (below).

F231.3.1 **Central Holding Cells**

Where separate central holding cells are provided for adult male, juvenile male, adult female, or juvenile female, one of each type shall comply with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

Where central holding cells are provided and are not separated by age or sex, at least one cell complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325 shall be provided.

F231.3.2 **Court-Floor Holding Cells**

Where separate court-floor holding cells are provided for adult male, juvenile male, adult female, or juvenile female, each courtroom shall be served by one cell of each type complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

Where court-floor holding cells are provided and are not separated by age or sex, courtrooms shall be served by at least one cell complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

Cells may serve more than one courtroom.

F231.4 **Visiting Areas**

Visiting areas shall comply with F231.4 - (following page).

Chapter F29: Judicial Facilities (continued)

F231.4.1

Cubicles and Counters

At least 5 percent, but no fewer than one, of cubicles shall comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 on both the visitor and detainee sides.

Where counters are provided, at least one shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4.2 - p. 148 on both the visitor and detainee sides.

EXCEPTION:

The detainee side of cubicles or counters at non-contact visiting areas not serving holding cells required to comply with this Chapter - F231 shall not be required to comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 or Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4.2 - pp. 336 & 337.

F231.4.2

Partitions

Where solid partitions or security glazing separate visitors from detainees at least one of each type of cubicle or counter partition shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.6 - p. 337.

Chapter F30: Detention Facilities and Correctional Facilities (continued)

Placement of accessible cells or rooms in shift areas may allow additional flexibility in meeting requirements for dispersion of accessible cells or rooms.

Advisory

F232.2 *General Holding Cells and General Housing Cells*

EXCEPTION:

Although these requirements do not specify that cells be accessible as a consequence of an alteration, Section 504 of the Rehabilitation Act of 1973, as amended requires that each service, program, or activity conducted by a Federal agency, when viewed in its entirety, be readily accessible to and usable by individuals with disabilities.

This requirement must be met unless doing so would fundamentally alter the nature of a service, program, or activity or would result in undue financial and administrative burdens.

F232.2.1 **Cells with Mobility Features**

At least 2 percent, but no fewer than one, of the total number of cells in a facility shall provide mobility features complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

F232.2.1.1 **Beds**

In cells having more than 25 beds, at least 5 percent of the beds shall have clear floor space complying with Chapter 67: Holding Cells and Housing Cells - 807.2.3 - p. 325.

F232.2.2 **Cells with Communication Features**

At least 2 percent, but no fewer than one, of the total number of general holding cells and general housing cells equipped with audible emergency alarm systems and permanently installed telephones within the cell shall provide communication features complying with Chapter 67: Holding Cells and Housing Cells - 807.3 - p. 325.

F232.3 **Special Holding Cells and Special Housing Cells**

Where special holding cells or special housing cells are provided, at least one cell serving each purpose shall provide mobility features complying with Chapter 67: Holding Cells and Housing Cells - 807.2 - pp. 324 & 325.

Cells subject to this requirement include, but are not limited to, those used for purposes of orientation, protective custody, administrative or disciplinary detention or segregation, detoxification, and medical isolation.

Chapter F30: Detention Facilities and Correctional Facilities (continued)

EXCEPTION:

Alterations to cells shall not be required to comply except to the extent determined by regulations issued by the appropriate Federal agency having authority under section 504 of the Rehabilitation Act of 1973.

F232.4 Medical Care Facilities

Patient bedrooms or cells required to comply with Chapter F21: Medical Care and Long-Term Care Facilities - F223 - pp. 430-432 shall be provided in addition to any medical isolation cells required to comply with F232.3 - (preceding page & above).

F232.5 Visiting Areas

Visiting areas shall comply with F232.5 - (below).

F232.5.1 Cubicles and Counters

At least 5 percent, but no fewer than one, of cubicles shall comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 on both the visitor and detainee sides.

Where counters are provided, at least one shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4.2 - pp. 336 & 337 on both the visitor and detainee or inmate sides.

EXCEPTION:

The inmate or detainee side of cubicles or counters at non-contact visiting areas not serving holding cells or housing cells required to comply with this Chapter - F232 shall not be required to comply with Chapter 24: Dining Surfaces and Work Surfaces - 902 - pp. 147 & 148 or Chapter 71: Check-out Aisles and Sales and Service Counters - 904.4.2 - pp. 336 & 337.

F232.5.2 Partitions

Where solid partitions or security glazing separate visitors from detainees or inmates at least one of each type of cubicle or counter partition shall comply with Chapter 71: Check-out Aisles and Sales and Service Counters - 904.6 - p. 337.

Chapter F31:

RESIDENTIAL FACILITIES

F233

Residential Facilities

F233.1

General

Facilities with residential dwelling units shall comply with this Chapter - F233.

Advisory

F233.1

General

This Chapter - F233, outlines the requirements for residential facilities subject to the Architectural Barriers Act.

The facilities covered by this Chapter - F233, as well as other facilities not covered by this section, may still be subject to other Federal laws such as the Fair Housing Act and Section 504 of the Rehabilitation Act of 1973, as amended.

For example, the Fair Housing Act requires that certain residential structures having four or more multi-family dwelling units, regardless of whether they are privately owned or federally assisted, include certain features of accessible and adaptable design according to guidelines established by the U.S. Department of Housing and Urban Development (HUD).

These laws and the appropriate regulations should be consulted before proceeding with the design and construction of residential facilities.

Residential facilities containing residential dwelling units provided by entities subject to HUD's Section 504 regulations and residential dwelling units covered by this Chapter - F233.3 - pp. 454-456 must comply with the technical and scoping requirements in Sections 1-9 - pp. 1-29 and Chapters 1-71 - pp. 30-337 included this document.

This Chapter - F233 is not a stand-alone section; this section only addresses the minimum number of residential dwelling units within a facility required to comply with Chapters 10 - 804 - pp. 70-73, 16 - 810 - pp. 105-110, 20-23 - 803 - pp. 129 & 130, 805 - pp. 133 & 134, 806 - pp 139-142, 811 - p. 145, and 66-69 - 802 - pp. 319-323, 807 - pp. 324 & 325, 808 - pp. 326 & 327, 809 - pp. 328-332.

However, residential facilities must also comply with the requirements of this document.

Chapter F31: Residential Facilities (continued)

For example: Chapter F3: Accessible Routes - F206.5.4 - p. 382 requires all doors and doorways providing user passage in residential dwelling units providing mobility features to comply with Chapter 49: Doors - Doorways - Gates - 404 - pp. 243-251; Chapter F3: Accessible Routes - F206.7.6 - p. 384 permits platform lifts to be used to connect levels within residential dwelling units providing mobility features; Chapter F6: Parking Spaces - F208 - pp. 390-394 provides general scoping for accessible parking and Chapter F6: Parking Spaces - F208.2.3.1 - p. 393 specifies the required number of accessible parking spaces for each residential dwelling unit providing mobility features; Chapter F26: Depositories - Vending Machines - Change Machines - Mail Boxes - Fuel Dispensers - F228.2 - p. 444 requires mail boxes to be within reach ranges when they serve residential dwelling units providing mobility features; play areas are addressed in Chapter F38: Play Areas - F240 - pp. 473-478; and swimming pools are addressed in Chapter F40: Swimming Pools - Wading Pools - Spas - F242 - pp. 480 & 481.

There are special provisions applicable to facilities containing residential dwelling units at: Exception 3 to Section F8: Existing Buildings and Facilities - F202.3 - pp. 362 & 363; Exception to Section F8: Existing Buildings and Facilities - F202.4 - p. 363; Exception to Section F9: General Exceptions - F203.9 - p. 370; and Exception 3 to Chapter F3: Accessible Routes - F206.2.3 - p. 375.

F233.2 Residential Dwelling Units Provided by HUD or through Grant or Loan Programs Administered by HUD

Where facilities with residential dwelling units are provided by the Department of Housing and Urban Development (HUD), or through a grant or loan program administered by HUD, residential dwelling units with mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 shall be provided in a number required by the regulations issued by HUD under Section 504 of the Rehabilitation Act of 1973, as amended.

Residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 shall be on an accessible route as required by Chapters F3 and F4 - F206 and F206.4 - pp. 373-388.

In addition, residential dwelling units with communication features complying with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332 shall be provided in a number required by the applicable HUD regulations.

Residential dwelling units subject to F233.2 - (above) shall not be required to comply with F233.3 or F233.4 - (following pages).

Chapter F31: Residential Facilities (continued)

Advisory

F233.2 *Residential Dwelling Units Provided by HUD or through Grant or Loan Programs Administered by HUD*

F233.2 - (preceding page) requires that entities subject to HUD's regulations implementing Section 504 of the Rehabilitation Act of 1973, as amended, provide residential dwelling units containing mobility features and residential dwelling units containing communication features complying with these regulations in a number specified in HUD's Section 504 regulations.

Further, the residential dwelling units provided must be dispersed according to HUD's Section 504 criteria.

In addition, F233.2 - (preceding page) defers to HUD the specification of criteria by which the technical requirements of this document will apply to alterations of existing facilities subject to HUD's Section 504 regulations.

F233.3 **Residential Dwelling Units Provided on Military Installations**

Military installations with residential dwelling units shall comply with F233.3 - (below & following pages).

Residential dwelling units on military installations subject to F233.3 - (below & following pages) shall not be required to comply with F233.2 - (preceding page) or this Chapter - F233.4 - pp. 456-459.

F233.3.1 **Minimum Number - New Construction**

Newly constructed facilities with residential dwelling units shall comply with F233.3.1 - (below).

F233.3.1.1 **Residential Dwelling Units with Mobility Features**

On military installations with residential dwelling units, at least 5 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 and shall be on an accessible route as required by Chapters F3 and F4 - F206 and F206.4 - pp. 373-388.

F233.3.1.2 **Residential Dwelling Units with Communication Features**

On military installations with residential dwelling units, at least 2 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide communication features complying with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332.

Chapter F31: Residential Facilities (continued)

F233.3.2

Additions

Where an addition to an existing building results in an increase in the number of residential dwelling units, the requirements of F233.3.1 - (preceding page) shall apply only to the residential dwelling units that are added until the total number of residential dwelling units complies with the minimum number required by F233.3.1 - (preceding page).

Residential dwelling units required to comply with F233.3.1.1 - (preceding page) shall be on an accessible route as required by Chapters F3 and F4 - F206 and F206.4 - pp. 373-388.

F233.3.3

Alterations

Alterations shall comply with F233.3.3 - (below).

EXCEPTION:

Where compliance with Chapter 69: Residential Dwelling Units - 809.2, 809.3, or 809.4 - pp. 328-330 is technically infeasible, or where it is technically infeasible to provide an accessible route to a residential dwelling unit, the Department of Defense shall be permitted to alter or construct a comparable residential dwelling unit to comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 provided that the minimum number of residential dwelling units required by F233.3.1.1 and F233.3.1.2 - (preceding page), as applicable, is satisfied.

F233.3.3.1

Alterations to Vacated Buildings

Where a building is vacated for the purposes of alteration, at least 5 percent of the residential dwelling units shall comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 and shall be on an accessible route as required by Chapters F3 and F4 - F206 and F206.4 - pp. 373-388.

In addition, at least 2 percent of the residential dwelling units shall comply with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332.

F233.3.3.2

Alterations to Individual Residential Dwelling Units

In individual residential dwelling units, where a bathroom or a kitchen is substantially altered, and at least one other room is altered, the requirements of F233.3.1 - (preceding page) shall apply to the altered residential dwelling units until the total number of residential dwelling units complies with the minimum number required by F233.3.1.1 and F233.3.1.2 - (preceding page).

Residential dwelling units required to comply with F233.3.1.1 - (preceding page) shall be on an accessible route as required by Chapters F3 and F4 - F206 and F206.4 - pp. 373-388.

Chapter F31: Residential Facilities (continued)

F233.3.4

Dispersion

Residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 and residential dwelling units required provide communication features complying with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332 shall be dispersed among the various types of residential dwelling units on the military installation, and shall provide choices of residential dwelling units comparable to, and integrated with, those available to other residents.

EXCEPTION:

Where multi-story residential dwelling units are one of the types of residential dwelling units provided, one-story residential dwelling units shall be permitted as a substitute for multi-story residential dwelling units where equivalent spaces and amenities are provided in the one-story residential dwelling unit.

F233.4

Residential Dwelling Units Provided by Other Federal Agencies or through Grant or Loan Programs Administered by Other Federal Agencies

Facilities with residential dwelling units provided by other federal agencies or through grant or loan programs administered by other federal agencies shall comply with F233.4 - (above, below & following pages).

Residential dwelling units subject to F233.4 - (above, below & following pages) shall not be required to comply with F233.2 or F233.3 - (preceding pages & above).

F233.4.1

Minimum Number - New Construction

Newly constructed facilities with residential dwelling units shall comply with F233.4.1 - (below & following page).

EXCEPTION:

Where facilities contain 15 or fewer residential dwelling units, the requirements of F233.4.1.1 and F233.4.1.2 - (below & following page) shall apply to the total number of residential dwelling units that are constructed under a single contract, or are developed as a whole, whether or not located on a common site.

F233.4.1.1

Residential Dwelling Units with Mobility Features

In facilities with residential dwelling units, at least 5 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 and shall be on an accessible route as required by Chapters F3 and F4 - F206 and F206.4 - pp. 373-388.

Chapter F31: Residential Facilities (continued)

F233.4.1.2 **Residential Dwelling Units with Communication Features**

In facilities with residential dwelling units, at least 2 percent, but no fewer than one unit, of the total number of residential dwelling units shall provide communication features complying with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332.

F233.4.2 **Residential Dwelling Units for Sale**

Residential dwelling units offered for sale shall provide accessible features to the extent required by regulations issued by Federal agencies under Section 504 of the Rehabilitation Act of 1973, as amended.

Advisory

F233.4.2 *Residential Dwelling Units for Sale*

An agency that uses federal funds or an entity that receives federal financial assistance to build housing for purchase by individual home buyers must provide access according to the requirements of the applicable Section 504 regulations.

F233.4.3 **Additions**

Where an addition to an existing building results in an increase in the number of residential dwelling units, the requirements of F233.4.1 - (preceding page & above) shall apply only to the residential dwelling units that are added until the total number of residential dwelling units complies with the minimum number required by F233.4.1 - (preceding page & above).

Residential dwelling units required to comply with F233.4.1.1 - (preceding page) shall be on an accessible route as required by Chapters F3 and F4 - F206 and F206.4 - pp. 373-388.

F233.4.4 **Alterations**

Alterations shall comply with F233.4.4 - (below).

EXCEPTION:

Where compliance with Chapter 69: Residential Dwelling Units - 809.2, 809.3, or 809.4 - pp. 328 & 329 is technically infeasible, or where it is technically infeasible to provide an accessible route to a residential dwelling unit, the entity shall be permitted to alter or construct a comparable residential dwelling unit to comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 provided that the minimum number of residential dwelling units required by F233.4.1.1 and F233.4.1.2 - (preceding page & above), as applicable, is satisfied.

Chapter F31: Residential Facilities (continued)

F233.4.4

*Advisory
Alterations*

EXCEPTION:

A substituted dwelling unit must be comparable to the dwelling unit that is not made accessible.

Factors to be considered in comparing one dwelling unit to another should include the number of bedrooms; amenities provided within the dwelling unit; types of common spaces provided within the facility; and location with respect to community resources and services, such as public transportation and civic, recreational, and mercantile facilities.

F233.4.4.1

Alterations to Vacated Buildings

Where a building is vacated for the purposes of alteration and the altered building contains more than 15 residential dwelling units, at least 5 percent of the residential dwelling units shall comply with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 and shall be on an accessible route as required by Chapters F3 and F4 - F206 and F206.4 - pp. 373-388.

In addition, at least 2 percent of the residential dwelling units shall comply with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332.

F233.4.4.1

*Advisory
Alterations to Vacated Buildings*

This provision is intended to apply where a building is vacated with the intent to alter the building.

Buildings that are vacated solely for pest control or asbestos removal are not subject to the requirements to provide residential dwelling units with mobility features or communication features.

F233.4.4.2

Alterations to Individual Residential Dwelling Units

In individual residential dwelling units, where a bathroom or a kitchen is substantially altered, and at least one other room is altered the requirements of F233.4.1 - (preceding pages) shall apply to the altered residential dwelling units until the total number of residential dwelling units complies with the minimum number required by F233.4.1.1 and F233.4.1.2 - (preceding pages).

Residential dwelling units required to comply with this Chapter - F233.4.1.1 - p. 456 shall be on an accessible route as required by Chapters F3 and F4 - F206 and F206.4 - pp. 373-388.

Chapter F31: Residential Facilities (continued)

EXCEPTION:

Where facilities contain 15 or fewer residential dwelling units, the requirements of this Chapter - F233.4.1.1 and F233.4.1.2 - pp. 456 & 457 shall apply to the total number of residential dwelling units that are altered under a single contract, or are developed as a whole, whether or not located on a common site.

Advisory

F233.4.4.2 Alterations to Individual Residential Dwelling Units

F233.4.4.2 - (preceding page & above) uses the terms "substantially altered" and "altered."

A substantial alteration to a kitchen or bathroom includes, but is not limited to, alterations that are changes to or rearrangements in the plan configuration, or replacement of cabinetry.

Substantial alterations do not include normal maintenance or appliance and fixture replacement, unless such maintenance or replacement requires changes to or rearrangements in the plan configuration, or replacement of cabinetry.

The term "alteration" is defined in Section F6: Definitions - F106 - p. 352 of these requirements.

F233.4.5

Dispersion

Residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 and residential dwelling units required to provide communication features complying with Chapter 69: Residential Dwelling Units - 809.5 - pp. 330-332 shall be dispersed among the various types of residential dwelling units in the facility and shall provide choices of residential dwelling units comparable to, and integrated with, those available to other residents.

EXCEPTION:

Where multi-story residential dwelling units are one of the types of residential dwelling units provided, one-story residential dwelling units shall be permitted as a substitute for multi-story residential dwelling units where equivalent spaces and amenities are provided in the one-story residential dwelling unit.

Chapter F32:

AMUSEMENT RIDES

F206.2.8 Amusement Rides

Amusement rides required to comply with this Chapter - F234 shall provide accessible routes in accordance with F206.2.8 - (below).

Accessible routes serving amusement rides shall comply with Chapters 3 and 4 - 206 and 206.4 - pp. 35-49 except as modified by Chapter 32: Amusement Rides - 1002.2 - p. 170.

F206.2.8.1 Load and Unload Areas

Load and unload areas shall be on an accessible route.

Where load and unload areas have more than one loading or unloading position, at least one loading and unloading position shall be on an accessible route.

F206.2.8.2 Wheelchair Spaces - Ride Seats Designed for Transfer Transfer Devices

When amusement rides are in the load and unload position, wheelchair spaces complying with Chapter 32: Amusement Rides - 1002.4 - pp. 171-173, amusement ride seats designed for transfer complying with Chapter 32: Amusement Rides - 1002.5 - pp. 173 & 174, and transfer devices complying with Chapter 32: Amusement Rides - 1002.6 - pp. 174-176 shall be on an accessible route.

F234 Amusement Rides F234.1 General

Amusement rides shall comply with this Chapter - F234.

EXCEPTION:

Mobile or portable amusement rides shall not be required to comply with this Chapter - F234.

F234.1 *Advisory* *General*

These requirements apply generally to newly designed and constructed amusement rides and attractions.

A custom designed and constructed ride is new upon its first use, which is the first time amusement park patrons take the ride.

Chapter F32: Amusement Rides (continued)

With respect to amusement rides purchased from other entities, new refers to the first permanent installation of the ride, whether it is used off the shelf or modified before it is installed.

Where amusement rides are moved after several seasons to another area of the park or to another park, the ride would not be considered newly designed or newly constructed.

Some amusement rides and attractions that have unique designs and features are not addressed by these requirements.

In those situations, these requirements are to be applied to the extent possible.

An example of an amusement ride not specifically addressed by these requirements includes “virtual reality” rides where the device does not move through a fixed course within a defined area.

An accessible route must be provided to these rides.

Where an attraction or ride has unique features for which there are no applicable scoping provisions, then a reasonable number, but at least one, of the features must be located on an accessible route.

Where there are appropriate technical provisions, they must be applied to the elements that are covered by the scoping provisions.

F234.1 *Advisory
General*

EXCEPTION:

Mobile or temporary rides are those set up for short periods of time such as traveling carnivals, State and county fairs, and festivals.

The amusement rides that are covered by F234.1 - (preceding page) are ones that are not regularly assembled and disassembled.

F234.2 **Load and Unload Areas**

Load and unload areas serving amusement rides shall comply with Chapter 32: Amusement Rides - 1002.3 - p. 170.

F234.3 **Minimum Number**

Amusement rides shall provide at least one wheelchair space complying with Chapter 32: Amusement Rides - 1002.4 - pp. 171-173, or at least one amusement ride seat designed for transfer complying with Chapter 32: Amusement Rides - 1002.5 - pp. 173 & 174, or at least one transfer device complying with Chapter 32: Amusement Rides - 1002.6 - pp. 174-176.

Chapter F32: Amusement Rides (continued)

EXCEPTIONS:

1. Amusement rides that are controlled or operated by the rider shall not be required to comply with F234.3 - (above).
2. Amusement rides designed primarily for children, where children are assisted on and off the ride by an adult, shall not be required to comply with F234.3 - (above).
3. Amusement rides that do not provide amusement ride seats shall not be required to comply with F234.3 - (above).

Advisory

F234.3 Minimum Number - Exceptions 1-3

Amusement rides controlled or operated by the rider, designed for children, or rides without ride seats are not required to comply with F234.3 - (above).

These rides are not exempt from the other provisions in F234 - (above) requiring an accessible route to the load and unload areas and to the ride.

The exception does not apply to those rides where patrons may cause the ride to make incidental movements, but where the patron otherwise has no control over the ride.

Advisory

F234.3 Minimum Number - Exception 2

The exception is limited to those rides designed "primarily" for children, where children are assisted on and off the ride by an adult.

This exception is limited to those rides designed for children and not for the occasional adult user.

An accessible route to and turning space in the load and unload area will provide access for adults and family members assisting children on and off these rides.

F234.4 Existing Amusement Rides

Where existing amusement rides are altered, the alteration shall comply with F234.4 - (following page).

Advisory

F234.4 Existing Amusement Rides

Routine maintenance, painting, and changing of theme boards are examples of activities that do not constitute an alteration subject to this chapter.

Chapter F32: Amusement Rides (continued)

F234.4.1

Load and Unload Areas

Where load and unload areas serving existing amusement rides are newly designed and constructed, the load and unload areas shall comply with Chapter 32: Amusement Rides - 1002.3 - p. 170.

F234.4.2

Minimum Number

Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with F234.3 - (preceding page).

Chapter F33:

RECREATIONAL BOATING FACILITIES

F206.2.9

Recreational Boating Facilities

Boat slips required to comply with F235.2 - (below & following pages) and boarding piers at boat launch ramps required to comply with this Chapter - F235.3 - p. 466 shall be on an accessible route.

Accessible routes serving recreational boating facilities shall comply with Chapters 3 and 4 - 206 and 206.4 - pp. 35-49 except as modified by Chapter 33: Recreational Boating Facilities - 1003.2 - pp. 180 & 181.

F235

Recreational Boating Facilities

F235.1

General

Recreational boating facilities shall comply with this Chapter - F235.

F235.2

Boat Slips

Boat slips complying with Chapter 33: Recreational Boating Facilities - 1003.3.1 - pp. 182 & 183 shall be provided in accordance with Table F235.2 - (following page).

Where the number of boat slips is not identified, each 40 feet (12 192mm) of boat slip edge provided along the perimeter of the pier shall be counted as one boat slip for the purpose of this chapter.

Chapter F33: Recreational Boating Facilities (continued)

F235.2.1

Dispersion

Boat slips complying with Chapter 33: Recreational Boating Facilities - 1003.3.1 - pp. 182 & 183 shall be dispersed throughout the various types of boat slips provided.

Where the minimum number of boat slips required to comply with Chapter 33: Recreational Boating Facilities - 1003.3.1 - pp. 182 & 183 has been met, no further dispersion shall be required.

Advisory

F235.2.1

Dispersion

Types of boat slips are based on the size of the boat slips; whether single berths or double berths, shallow water or deep water, transient or longer-term lease, covered or uncovered; and whether slips are equipped with features such as telephone, water, electricity or cable connections.

The term "boat slip" is intended to cover any pier area other than launch ramp boarding piers where recreational boats are moored for purposes of berthing, embarking, or disembarking.

For example, a fuel pier may contain boat slips, and this type of short term slip would be included in determining compliance with F235.2 - (preceding pages & above).

F235.3

Boarding Piers at Boat Launch Ramps

Where boarding piers are provided at boat launch ramps, at least 5 percent, but no fewer than one, of the boarding piers shall comply with Chapter 33: Recreational Boating Facilities - 1003.3.2 - p. 184.

Chapter F35:

FISHING PIERS AND PLATFORMS

F206.2.13

Fishing Piers and Platforms

Fishing piers and platforms shall be on an accessible route.

Accessible routes serving fishing piers and platforms shall comply with Chapters 3 and 4 - 206 and 206.4 - pp. 35-49 except as modified by Chapter 35: Fishing Piers and Platforms - 1005.1 - pp. 188 & 189.

F237

Fishing Piers and Platforms

F237.1

General

Fishing piers and platforms shall comply with Chapter 35: Fishing Piers and Platforms - 1005 - pp. 188-191.

Chapter F36:

GOLF FACILITIES

F206.2.14 **Golf Facilities**

At least one accessible route shall connect accessible elements and spaces within the boundary of the golf course.

In addition, accessible routes serving golf cart rental areas; bag drop areas; course weather shelters complying with F238.2.3 - (following page); course toilet rooms; and practice putting greens, practice teeing grounds, and teeing stations at driving ranges complying with F238.3 - (following page) shall comply with Chapters 3 and 4 - 204 and 204.6 - pp. 35-49 except as modified by Chapter 36: Golf Facilities - 1006.2 - p. 194.

EXCEPTION:

Golf cart passages complying with Chapter 36: Golf Facilities - 1006.3 - p. 195 shall be permitted to be used for all or part of accessible routes required by F206.2.14 - (above).

F238 **Golf Facilities** F238.1 **General**

Golf facilities shall comply with this Chapter - F238.

F238.2 **Golf Courses**

Golf courses shall comply with F238.2 - (below & following page).

F238.2.1 **Teeing Grounds**

Where one teeing ground is provided for a hole, the teeing ground shall be designed and constructed so that a golf cart can enter and exit the teeing ground.

Where two teeing grounds are provided for a hole, the forward teeing ground shall be designed and constructed so that a golf cart can enter and exit the teeing ground.

Where three or more teeing grounds are provided for a hole, at least two teeing grounds, including the forward teeing ground, shall be designed and constructed so that a golf cart can enter and exit each teeing ground.

EXCEPTION:

In existing golf courses, the forward teeing ground shall not be required to be one of the teeing grounds on a hole designed and constructed so that a golf cart can enter and exit the teeing ground where compliance is not feasible due to terrain.

F238.2.2 **Putting Greens**

Putting greens shall be designed and constructed so that a golf cart can enter and exit the putting green.

F238.2.3 **Weather Shelters**

Where provided, weather shelters shall be designed and constructed so that a golf cart can enter and exit the weather shelter and shall comply with Chapter 36: Golf Facilities - 1006.4 - p. 195.

F238.3 **Practice Putting Greens - Practice Teeing Grounds
Teeing Stations at Driving Ranges**

At least 5 percent, but no fewer than one, of practice putting greens, practice teeing grounds, and teeing stations at driving ranges shall be designed and constructed so that a golf cart can enter and exit the practice putting greens, practice teeing grounds, and teeing stations at driving ranges.

Chapter F37:

MINIATURE GOLF FACILITIES

F206.2.15

Miniature Golf Facilities

Holes required to comply with F239.2 - (below), including the start of play, shall be on an accessible route.

Accessible routes serving miniature golf facilities shall comply with Chapters 3 and 4 - 206 and 206.4 - pp. 35-49 except as modified by Chapter 37: Miniature Golf Facilities - 1007.2 - pp. 197 & 198.

F239

Miniature Golf Facilities

F239.1

General

Miniature golf facilities shall comply with this Chapter - F239.

F239.2

Minimum Number

At least 50 percent of holes on miniature golf courses shall comply with Chapter 37: Miniature Golf Facilities - 1007.3 - pp. 198 & 199.

Advisory

F239.2

Minimum Number

Where possible, providing access to all holes on a miniature golf course is recommended.

If a course is designed with the minimum 50 percent accessible holes, designers or operators are encouraged to select holes which provide for an equivalent experience to the maximum extent possible.

F239.3

Miniature Golf Course Configuration

Miniature golf courses shall be configured so that the holes complying with Chapter 37: Miniature Golf Facilities - 1007.3 - pp. 198 & 199 are consecutive.

Miniature golf courses shall provide an accessible route from the last hole complying with Chapter 37: Miniature Golf Facilities - 1007.3 - pp. 198 & 199 to the course entrance or exit without requiring travel through any other holes on the course.

EXCEPTION:

One break in the sequence of consecutive holes shall be permitted provided that the last hole on the miniature golf course is the last hole in the sequence.

Chapter F37: Miniature Golf Facilities (continued)

Advisory

F239.3

Miniature Golf Course Configuration

Where only the minimum 50 percent of the holes are accessible, an accessible route from the last accessible hole to the course exit or entrance must not require travel back through other holes.

In some cases, this may require an additional accessible route.

Other options include increasing the number of accessible holes in a way that limits the distance needed to connect the last accessible hole with the course exit or entrance.

Chapter F38:

PLAY AREAS

F206.2.16

Play Areas

Play areas shall provide accessible routes in accordance with F206.2.16 - (below).

Accessible routes serving play areas shall comply with Chapters 3 and 4 - 206 and 206.4 - pp. 35-49 except as modified by Chapter 38: Play Areas - 1008.2 - pp. 206-209.

F206.2.16.1

Ground Level and Elevated Play Components

At least one accessible route shall be provided within the play area.

The accessible route shall connect ground level play components required to comply with this Chapter - F240.2.1 - pp. 475-477 and elevated play components required to comply with this Chapter - F240.2.2 - p. 477, including entry and exit points of the play components.

F206.2.16.2

Soft Contained Play Structures

Where three or fewer entry points are provided for soft contained play structures, at least one entry point shall be on an accessible route.

Where four or more entry points are provided for soft contained play structures, at least two entry points shall be on an accessible route.

F240

Play Areas

F240.1

General

Play areas for children ages 2 and over shall comply with this Chapter - F240.

Where separate play areas are provided within a site for specific age groups, each play area shall comply with this Chapter - F240.

EXCEPTIONS:

1. Play areas located in family child care facilities where the proprietor actually resides shall not be required to comply with this Chapter - F240.
2. In existing play areas, where play components are relocated for the purposes of creating safe use zones and the ground surface is not altered or extended for more than one use zone, the play area shall not be required to comply with this Chapter - F240.

Chapter F38: Play Areas (continued)

3. Amusement attractions shall not be required to comply with this Chapter - F240.
4. Where play components are altered and the ground surface is not altered, the ground surface shall not be required to comply with Chapter 38: Play Areas - 1008.2.6 - p. 209 unless required by Section F8: Existing Buildings and Facilities - F202.4 - p. 363.

F240.1 *Advisory*
General

Play areas may be located on exterior sites or within a building.

Where separate play areas are provided within a site for children in specified age groups (e.g., preschool (ages 2 to 5) and school age (ages 5 to 12)), each play area must comply with this chapter.

Where play areas are provided for the same age group on a site but are geographically separated (e.g., one is located next to a picnic area and another is located next to a softball field), they are considered separate play areas and each play area must comply with this chapter.

F240.1.1 **Additions**

Where play areas are designed and constructed in phases, the requirements of this Chapter - F240 shall apply to each successive addition so that when the addition is completed, the entire play area complies with all the applicable requirements of this Chapter - F240.

F240.1.1 *Advisory*
Additions

These requirements are to be applied so that when each successive addition is completed, the entire play area complies with all applicable provisions.

For example, a play area is built in two phases.

In the first phase, there are 10 elevated play components and 10 elevated play components are added in the second phase for a total of 20 elevated play components in the play area.

When the first phase was completed, at least 5 elevated play components, including at least 3 different types, were to be provided on an accessible route.

When the second phase is completed, at least 10 elevated play components must be located on an accessible route, and at least 7 ground level play components, including 4 different types, must be provided on an accessible route.

Chapter F38: Play Areas (continued)

At the time the second phase is complete, ramps must be used to connect at least 5 of the elevated play components and transfer systems are permitted to be used to connect the rest of the elevated play components required to be located on an accessible route.

F240.2 **Play Components**

Where provided, play components shall comply with F240.2 - (below & following pages).

F240.2.1 **Ground Level Play Components**

Ground level play components shall be provided in the number and types required by F240.2.1 - (below & following pages).

Ground level play components that are provided to comply with F240.2.1.1 - (following page) shall be permitted to satisfy the additional number required by F240.2.1.2 - (following pages) if the minimum required types of play components are satisfied.

Where two or more required ground level play components are provided, they shall be dispersed throughout the play area and integrated with other play components.

Advisory

F240.2.1 *Ground Level Play Components*

Examples of ground level play components may include spring rockers, swings, diggers, and stand-alone slides.

When distinguishing between the different types of ground level play components, consider the general experience provided by the play component.

Examples of different types of experiences include, but are not limited to, rocking, swinging, climbing, spinning, and sliding.

A spiral slide may provide a slightly different experience from a straight slide, but sliding is the general experience and therefore a spiral slide is not considered a different type of play component from a straight slide.

Ground level play components accessed by children with disabilities must be integrated into the play area.

Designers should consider the optimal layout of ground level play components accessed by children with disabilities to foster interaction and socialization among all children.

Grouping all ground level play components accessed by children with disabilities in one location is not considered integrated.

Chapter F38: Play Areas (continued)

Where a stand-alone slide is provided, an accessible route must connect the base of the stairs at the entry point to the exit point of the slide.

A ramp or transfer system to the top of the slide is not required.

Where a sand box is provided, an accessible route must connect to the border of the sand box.

Accessibility to the sand box would be enhanced by providing a transfer system into the sand or by providing a raised sand table with knee clearance complying with Chapter 38: Play Areas - 1008.4.3 - p. 213.

Ramps are preferred over transfer systems since not all children who use wheelchairs or other mobility devices may be able to use, or may choose not to use, transfer systems.

Where ramps connect elevated play components, the maximum rise of any ramp run is limited to 12 inches (305mm).

Where possible, designers and operators are encouraged to provide ramps with a slope less than the 1:12 maximum.

Berms or sculpted dirt may be used to provide elevation and may be part of an accessible route to composite play structures.

Platform lifts are permitted as a part of an accessible route.

Because lifts must be independently operable, operators should carefully consider the appropriateness of their use in unsupervised settings.

F240.2.1.1 **Minimum Number and Types**

Where ground level play components are provided, at least one of each type shall be on an accessible route and shall comply with Chapter 38: Play Areas - 1008.4 - pp. 211-213.

F240.2.1.2 **Additional Number and Types**

Where elevated play components are provided, ground level play components shall be provided in accordance with Table F240.2.1.2 - (following page) and shall comply with Chapter 38: Play Areas - 1008.4 - pp. 211-213.

EXCEPTION:

If at least 50 percent of the elevated play components are connected by a ramp and at least 3 of the elevated play components connected by the ramp are different types of play components, the play area shall not be required to comply with F240.2.1.2 - (above).

Chapter F38: Play Areas (continued)

*Table F240.2.1.2
Number and Types of Ground Level Play Components
Required to be on Accessible Routes*

<i>Number of Elevated Play Components</i>	<i>Minimum Number of Ground Level Play Components Required to be on an Accessible Route</i>	<i>Minimum Number of Different Types of Ground Level Play Components Required to be on an Accessible Route</i>
<i>1</i>	<i>Not applicable</i>	<i>Not applicable</i>
<i>2 to 4</i>	<i>1</i>	<i>1</i>
<i>5 to 7</i>	<i>2</i>	<i>2</i>
<i>8 to 10</i>	<i>3</i>	<i>3</i>
<i>11 to 13</i>	<i>4</i>	<i>3</i>
<i>14 to 16</i>	<i>5</i>	<i>3</i>
<i>17 to 19</i>	<i>6</i>	<i>3</i>
<i>20 to 22</i>	<i>7</i>	<i>4</i>
<i>23 to 25</i>	<i>8</i>	<i>4</i>
<i>26 and over</i>	<i>8, plus 1 for each additional 3, or fraction thereof, over 25</i>	<i>5</i>

F240.2.1.2 *Advisory*
Additional Number and Types

Where a large play area includes two or more composite play structures designed for the same age group, the total number of elevated play components on all the composite play structures must be added to determine the additional number and types of ground level play components that must be provided on an accessible route.

F240.2.2 **Elevated Play Components**

Where elevated play components are provided, at least 50 percent shall be on an accessible route and shall comply with Chapter 38: Play Areas - 1008.4 - pp. 211-213.

F240.2.2 *Advisory*
Elevated Play Components

A double or triple slide that is part of a composite play structure is one elevated play component.

Chapter F38: Play Areas (continued)

For purposes of this chapter, ramps, transfer systems, steps, decks, and roofs are not considered elevated play components.

Although socialization and pretend play can occur on these elements, they are not primarily intended for play.

Some play components that are attached to a composite play structure can be approached or exited at the ground level or above grade from a platform or deck.

For example, a climber attached to a composite play structure can be approached or exited at the ground level or above grade from a platform or deck on a composite play structure.

Play components that are attached to a composite play structure and can be approached from a platform or deck (e.g., climbers and overhead play components) are considered elevated play components.

These play components are not considered ground level play components and do not count toward the requirements in F240.2.1.2 - (preceding pages) regarding the number of ground level play components that must be located on an accessible route.

Chapter F39:

SAUNAS AND STEAM ROOMS

F241

Saunas and Steam Rooms

F241.1

General

Where provided, saunas and steam rooms shall comply with Chapter 39: Saunas and Steam Rooms - 612 - p. 214.

EXCEPTION:

Where saunas or steam rooms are clustered at a single location, no more than 5 percent of the saunas and steam rooms, but no fewer than one, of each type in each cluster shall be required to comply with Chapter 39: Saunas and Steam Rooms - 612 - p. 214.

Chapter F40:

SWIMMING POOLS - WADING POOLS - SPAS

F242 Swimming Pools - Wading Pools - Spas F242.1 General

Swimming pools, wading pools, and spas shall comply with this Chapter - F242.

F242.2 Swimming Pools

At least two accessible means of entry shall be provided for swimming pools.

Accessible means of entry shall be swimming pool lifts complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.2 - pp. 217-220; sloped entries complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.3 - pp. 220 & 221; transfer walls complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.4 - pp. 221 & 222; transfer systems complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.5 - pp. 223 & 224; and pool stairs complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.6 - pp. 224 & 225.

At least one accessible means of entry provided shall comply with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.2 or 1009.3 - pp. 217-221.

EXCEPTIONS:

1. Where a swimming pool has less than 300 linear feet (91 m) of swimming pool wall, no more than one accessible means of entry shall be required provided that the accessible means of entry is a swimming pool lift complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.2 - pp. 217-220 or sloped entry complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.3 - pp. 220 & 221.
2. Wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area shall not be required to provide more than one accessible means of entry provided that the accessible means of entry is a swimming pool lift complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.2 - pp. 217-220, a sloped entry complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.3 - pp. 220 & 221, or a transfer system complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.5 - pp. 223 & 224.
3. Catch pools shall not be required to provide an accessible means of entry provided that the catch pool edge is on an accessible route.

Chapter F40: Swimming Pools - Wading Pools - Spas (continued)

Advisory
Swimming Pools

F242.2

Where more than one means of access is provided into the water, it is recommended that the means be different.

Providing different means of access will better serve the varying needs of people with disabilities in getting into and out of a swimming pool.

It is also recommended that where two or more means of access are provided, they not be provided in the same location in the pool.

Different locations will provide increased options for entry and exit, especially in larger pools.

Advisory
Swimming Pools

F242.2

EXCEPTION 1:

Pool walls at diving areas and areas along pool walls where there is no pool entry because of landscaping or adjacent structures are to be counted when determining the number of accessible means of entry required.

F242.3

Wading Pools

At least one accessible means of entry shall be provided for wading pools. Accessible means of entry shall comply with sloped entries complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.3 - pp. 220 & 221.

F242.4

Spas

At least one accessible means of entry shall be provided for spas.

Accessible means of entry shall comply with swimming pool lifts complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.2 - pp. 217-220; transfer walls complying with 1009.4; or transfer systems complying with Chapter 40: Swimming Pools - Wading Pools - Spas - 1009.5 - pp. 223 & 224.

EXCEPTION:

Where spas are provided in a cluster, no more than 5 percent, but no fewer than one, spa in each cluster shall be required to comply with F242.4 - (above).

Chapter F41:

SHOOTING FACILITIES WITH FIRING POSITIONS

F243

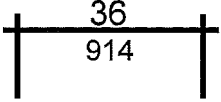
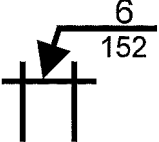
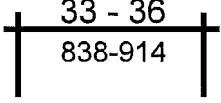

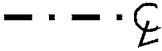




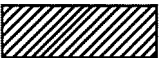
Shooting Facilities with Firing Positions

F243.1

General

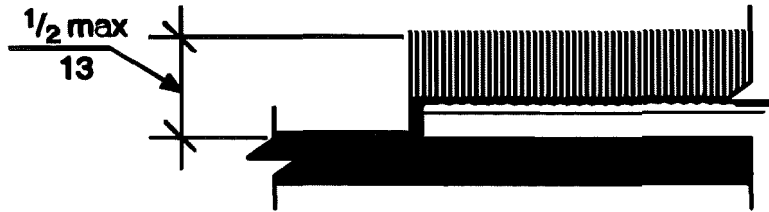
Where shooting facilities with firing positions are designed and constructed at a site, at least 5 percent, but no fewer than one, of each type of firing position shall comply with Chapter 41: Shooting Facilities with Firing Positions - 1010 - p. 226.

Figures 104 and F104

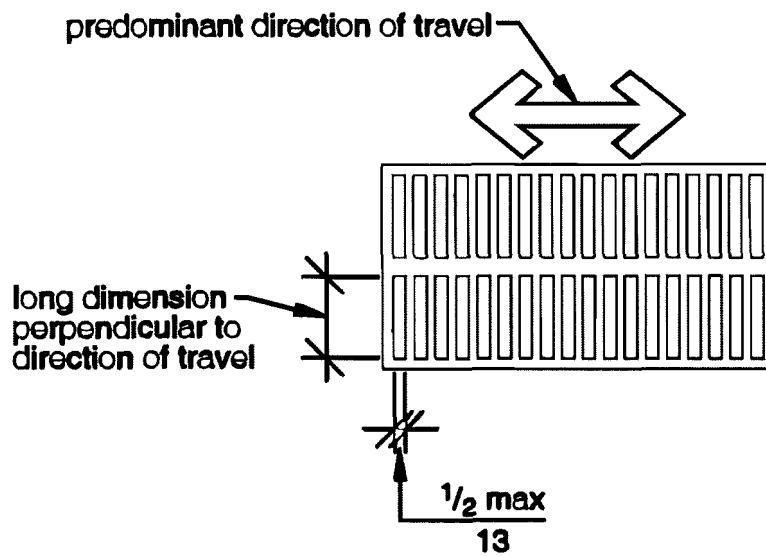
Convention	Description
	dimension showing English units (in inches unless otherwise specified) above the line and SI units (in millimeters unless otherwise specified) below the line
	dimensions for small measurements
	Dimensions showing a range with minimum - maximum
Min	Minimum
Max	Maximum
>	greater than
≥	greater than or equal to
<	less than
≤	less than or equal to
	Boundary of clear floor space or maneuvering clearance
	Centerline
	A permitted element or its extension
	Direction of travel or approach
	A wall, floor, ceiling or other element cut in section or plan
	A highlighted element in elevation or plan
	Location zone of element, control or feature

Graphic Convention for Figures

Figures 302.2 and 302.3



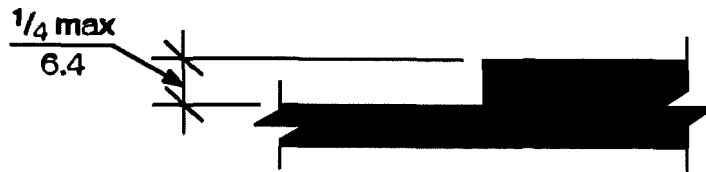
Carpet on Floor or Ground Surfaces



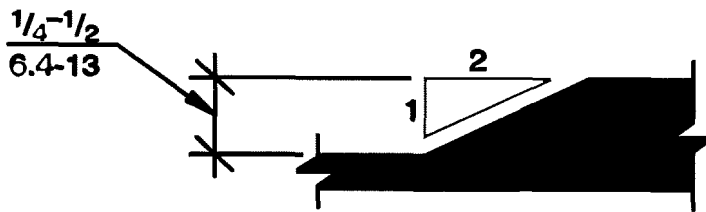
Openings in Floor or Ground Surfaces

Carpet and Openings on Floor or Ground Surfaces

Figures 303.2 and 303.3



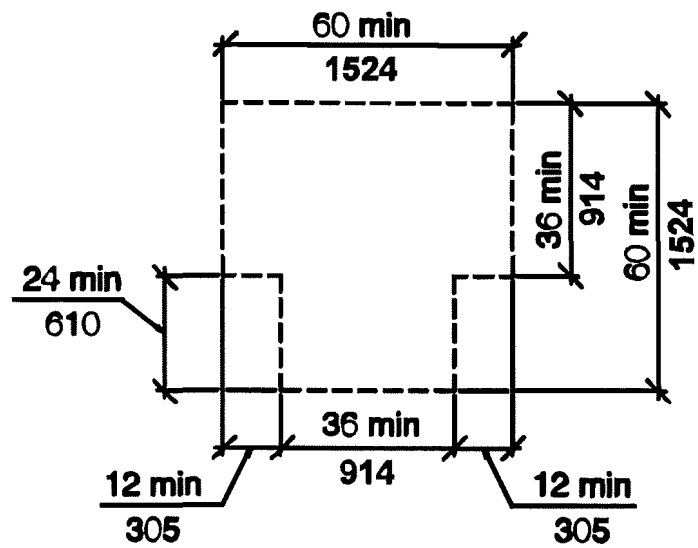
Vertical Changes in Level



Beveled Changes in Level

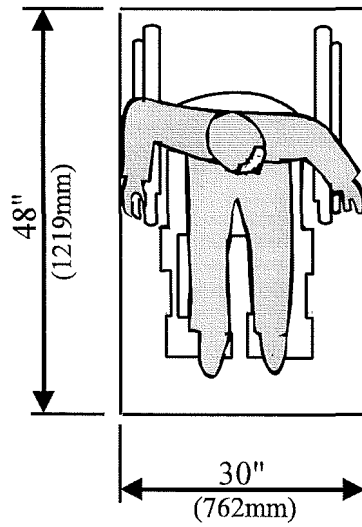
Changes in Level

Figure 304.3.2



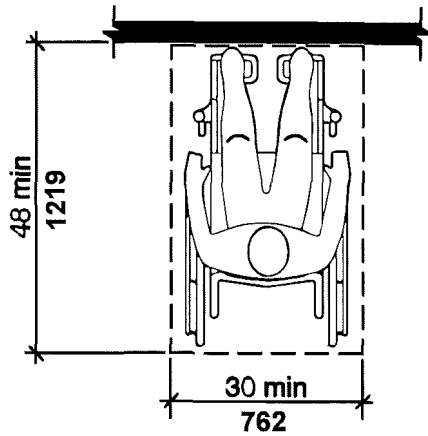
T-Shaped Turning Space

Figure 305.3

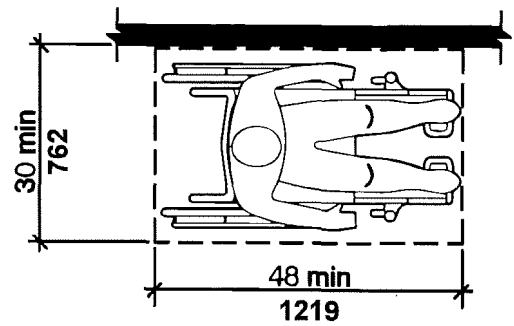


Clear Floor or Ground Space

Figure 305.5



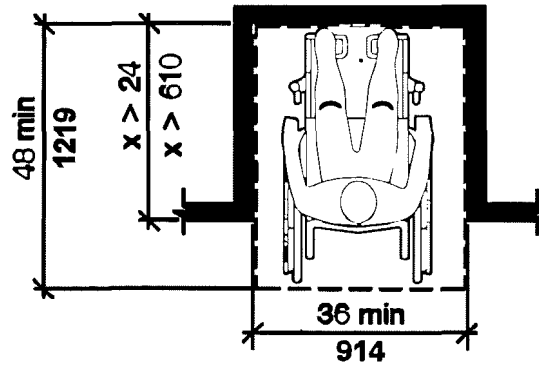
(a) Forward



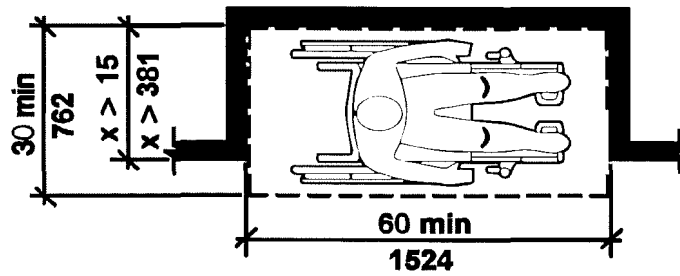
(b) Parallel

Position of Clear Floor or Ground Space

Figures 305.7.1 and 305.7.2



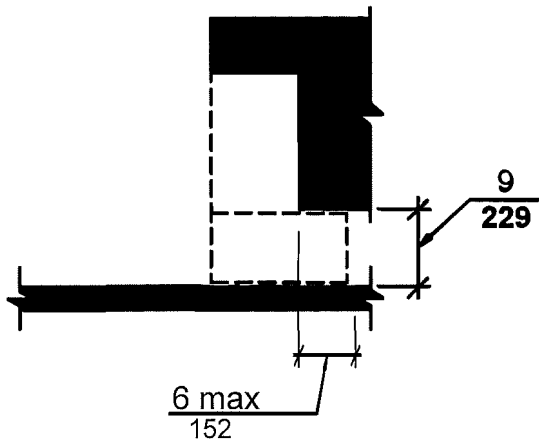
Forward Approach



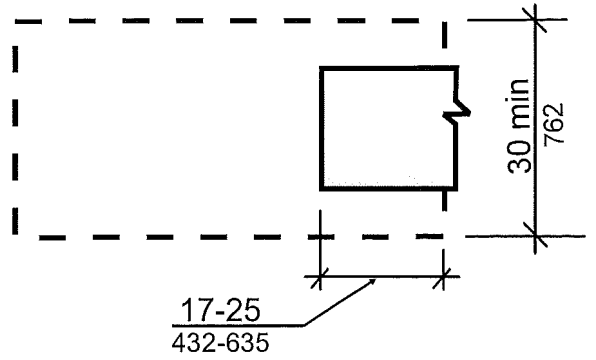
Parallel Approach

Maneuvering Clearances in Alcoves - Forward and Parallel Approach

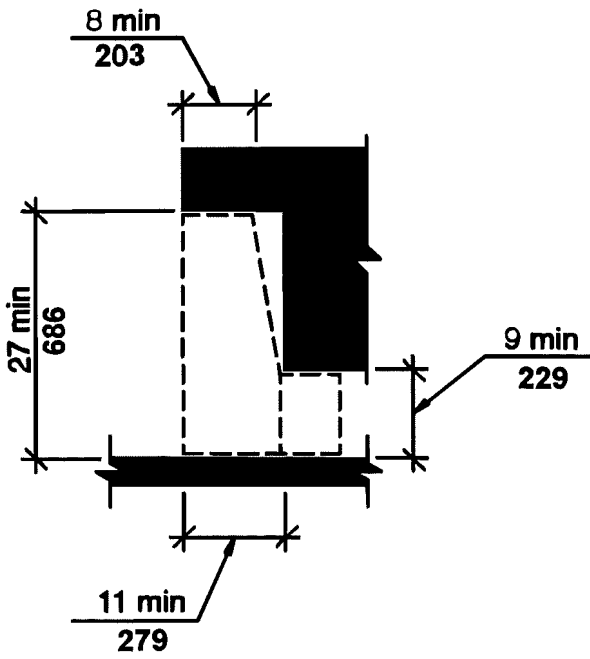
Figures 306.2 and 306.3



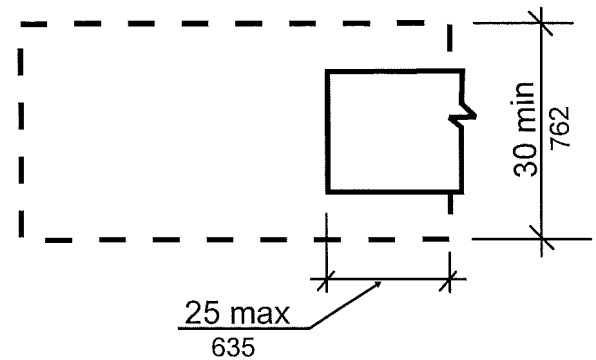
(a) elevation



(b) plan



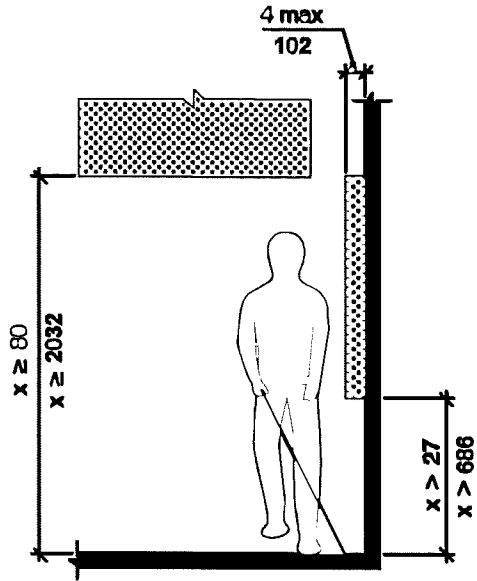
(a) elevation



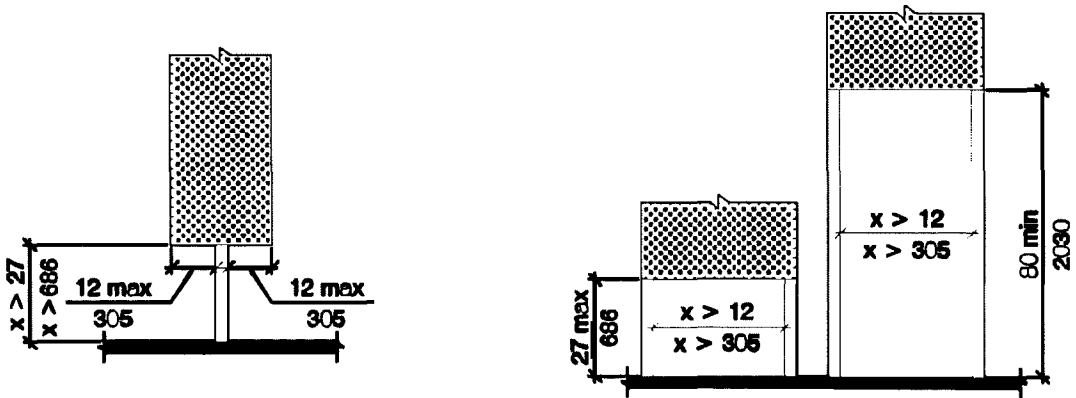
(b) plan

Toe and Knee Clearances

Figures 307.2 and 307.3



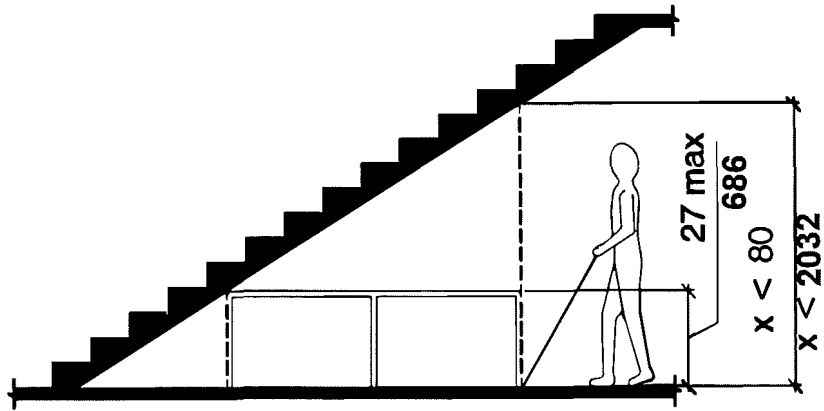
Limits of Protruding Objects



Post-Mounted Protruding Objects

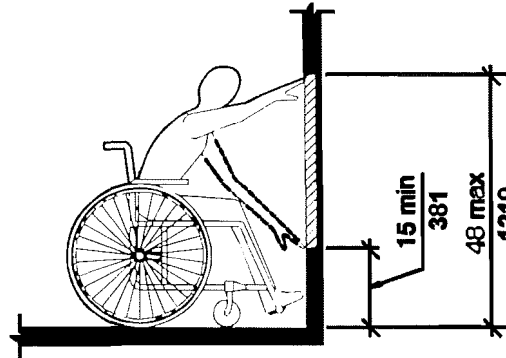
Protruding Objects

Figure 307.4

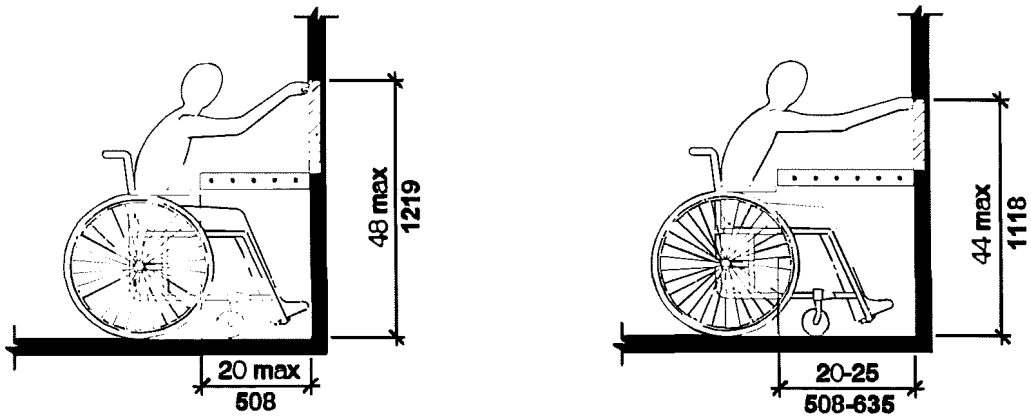


Vertical Clearance

Figures 308.2.1 and 308.2.2



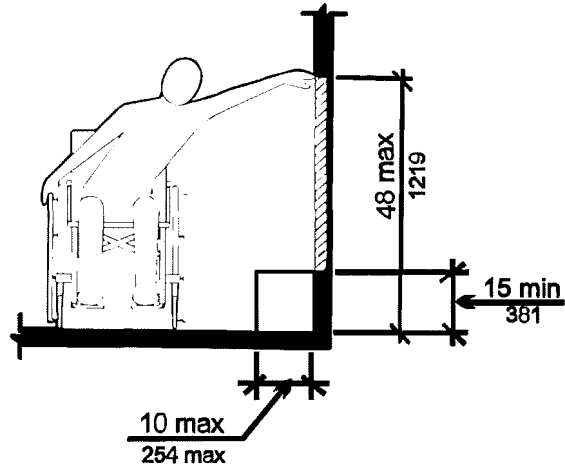
Unobstructed Forward Reach



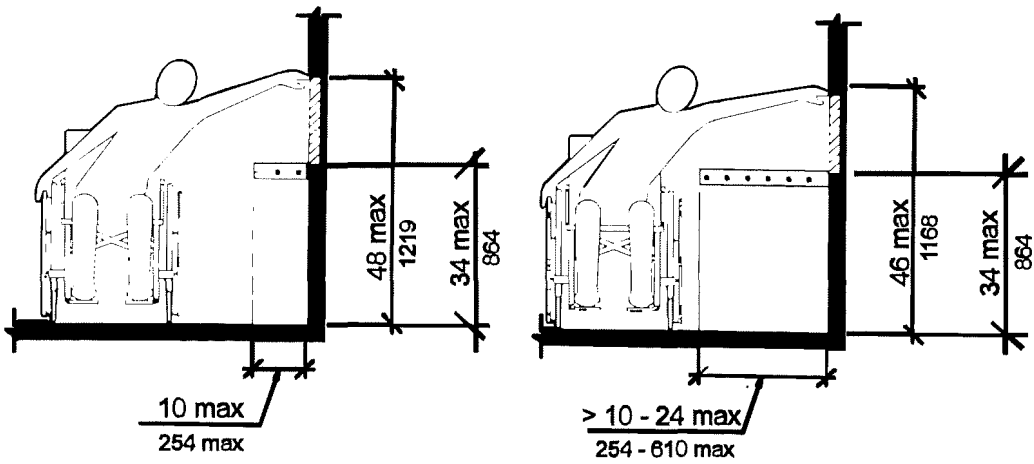
Obstructed High Forward Reach

Forward Reach

Figures 308.3.1 and 308.3.2



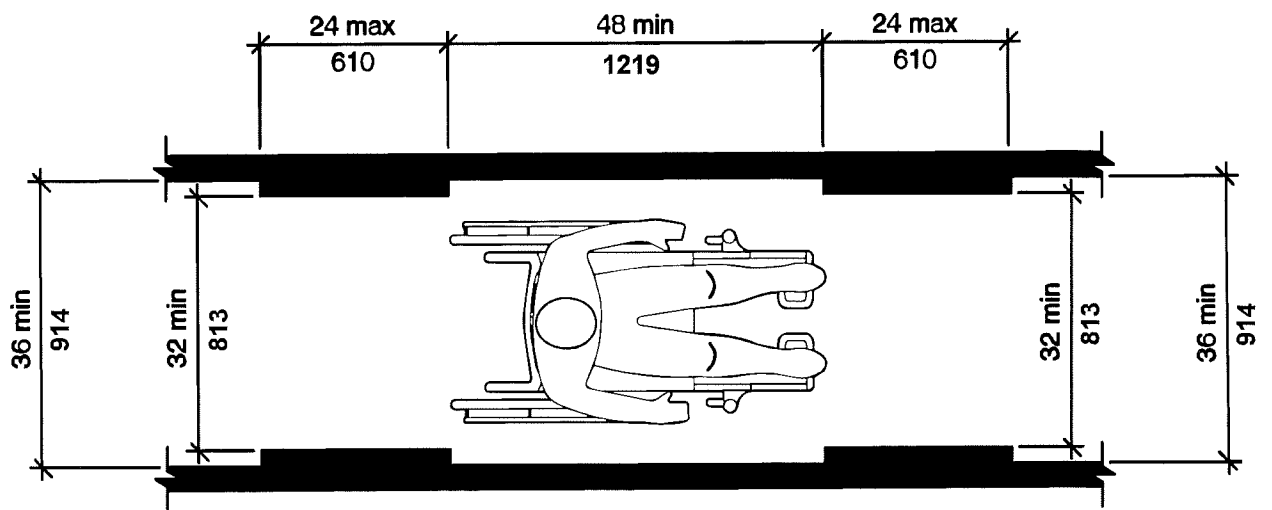
Unobstructed Side Reach



Obstructed High Side Reach

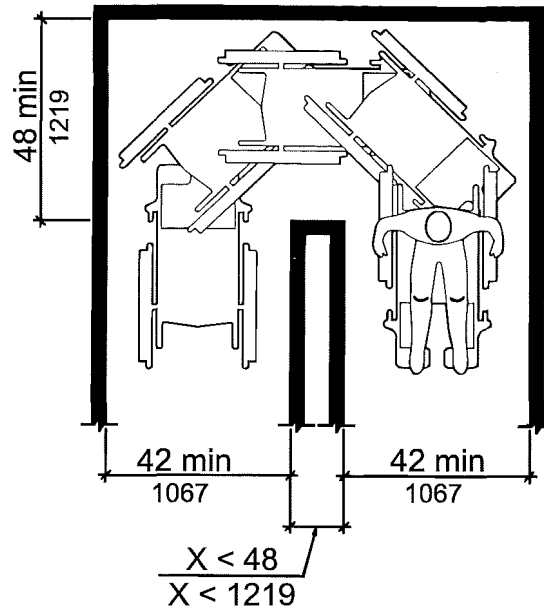
Side Reach

Figure 403.5.1

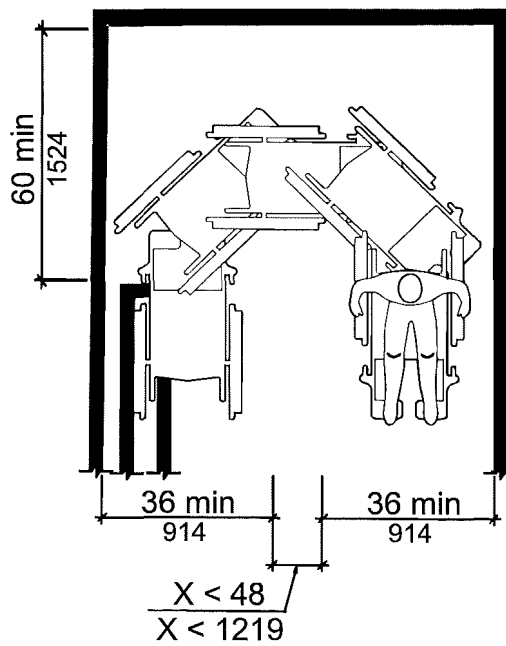


Clear Width of an Accessible Route

Figure 403.5.2



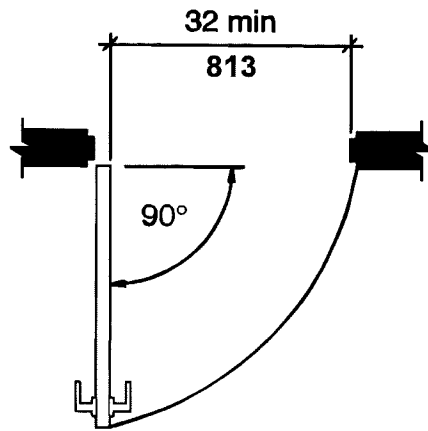
(a) 180 degree turn



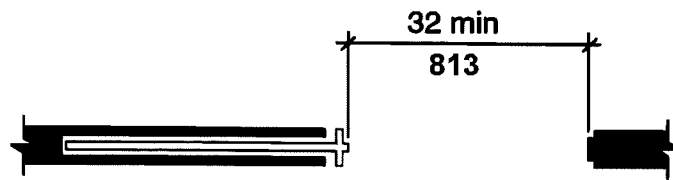
(b) 180 degree turn
(Exception)

Clear Width at Turn

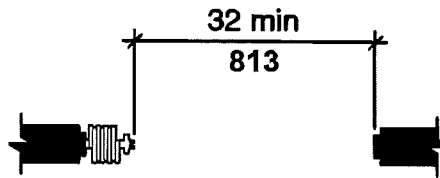
Figure 404.2.3



(a) Hinged Door



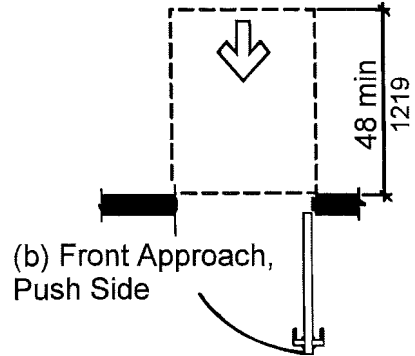
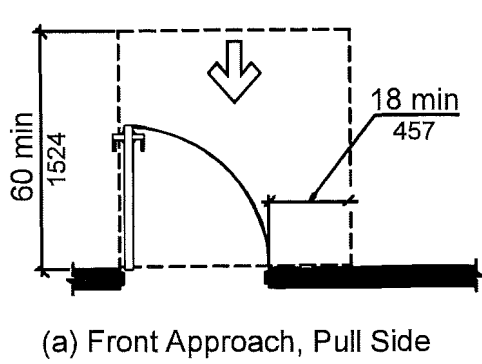
(b) Sliding Door



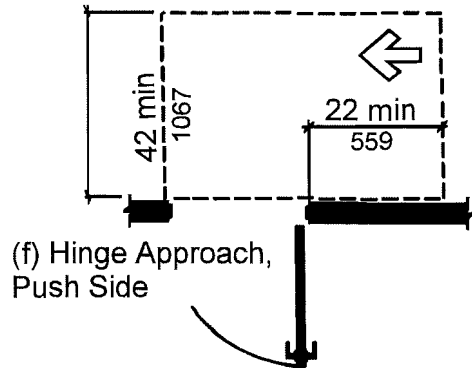
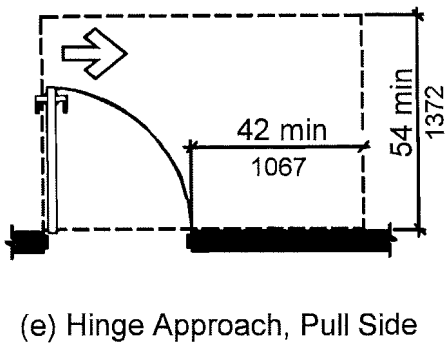
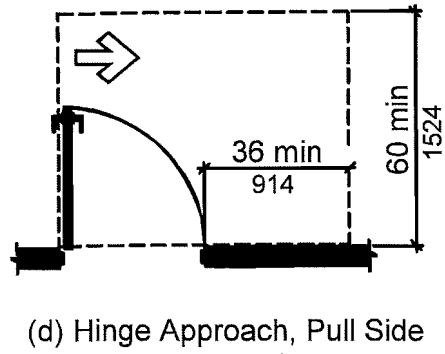
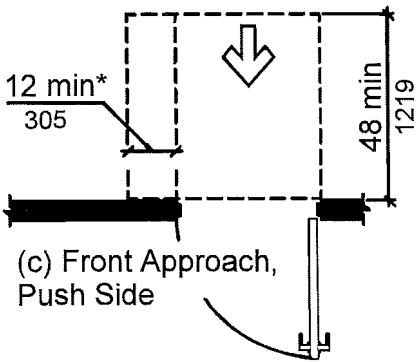
(c) Folding Door

Clear Width of Doorways

Figure 404.2.4.1

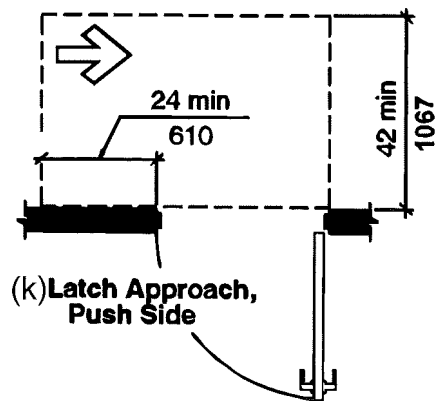
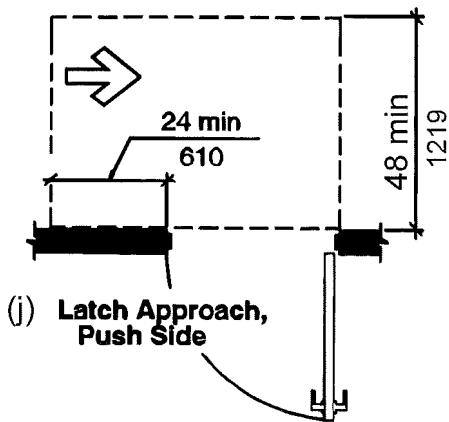
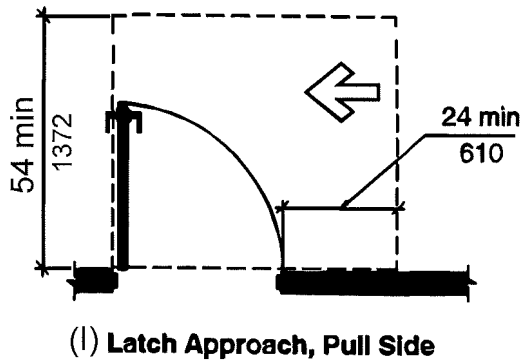
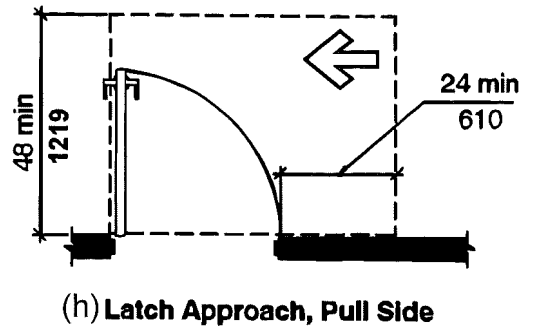
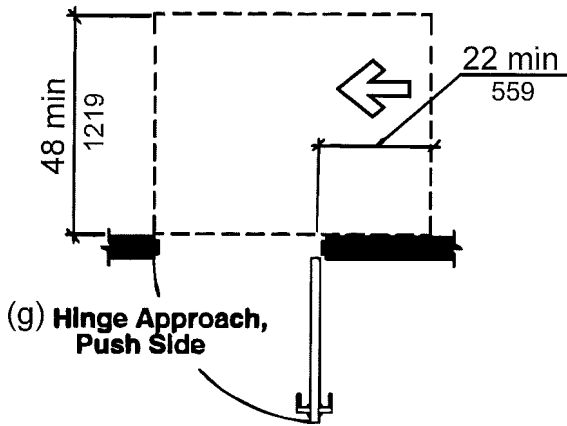


*Where **both** closer and latch are provided



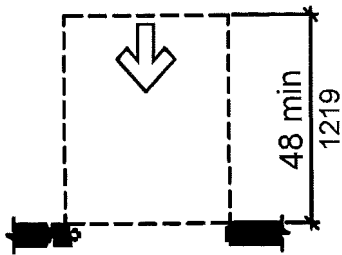
Maneuvering Clearances at Manual Swinging Doors and Gates

Figure 404.2.4.1

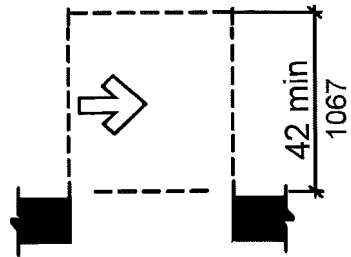


Maneuvering Clearances at Manual Swinging Doors and Gates

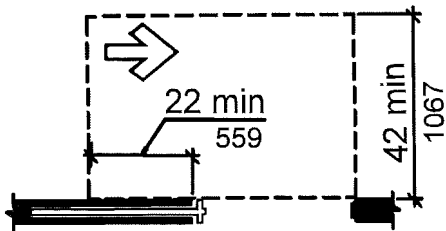
Figure 404.2.4.2



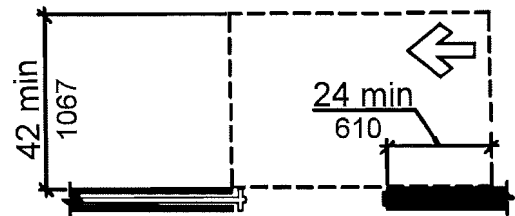
(a) Front Approach



(b) Side Approach



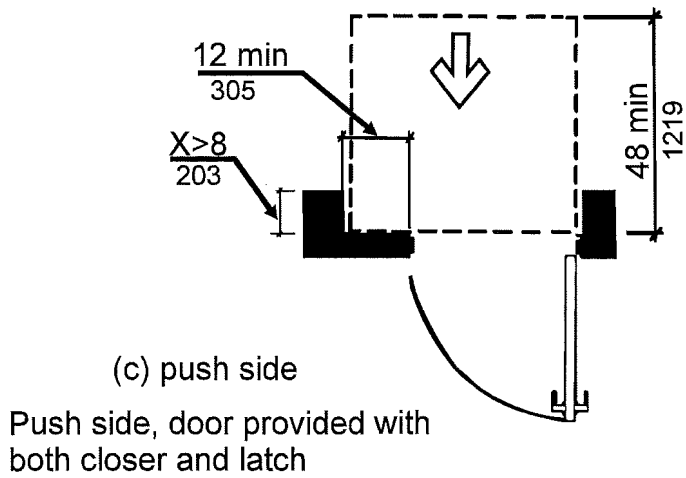
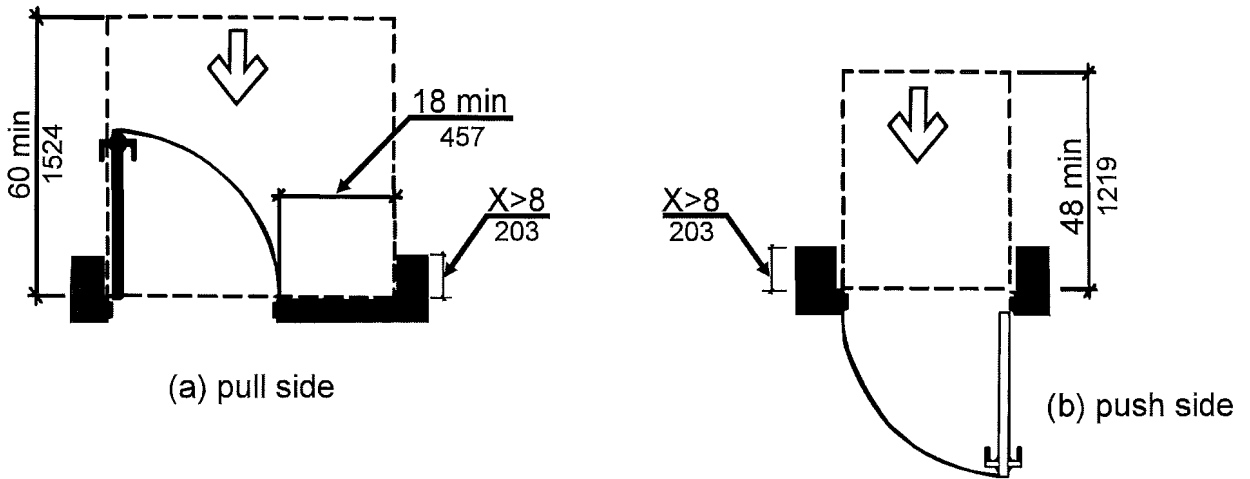
(c) Pocket or Hinge Approach



(d) Stop or Latch Approach

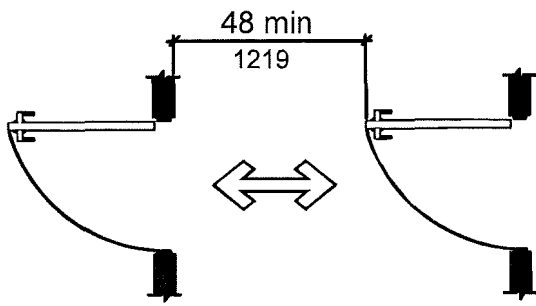
**Maneuvering Clearances at Doorways without Doors
Sliding Doors - Gates - Folding Doors**

Figure 404.2.4.3

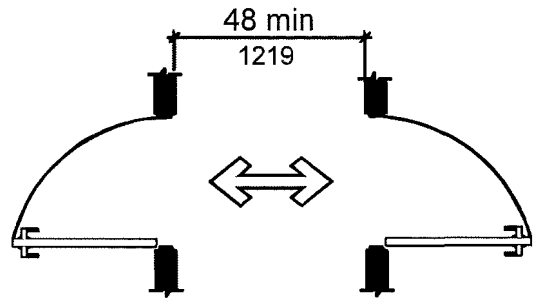


Maneuvering Clearances at Recessed Doors and Gates

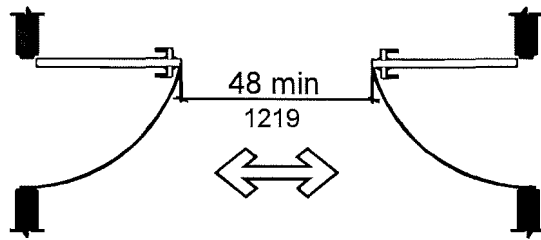
Figure 404.2.6



(a)



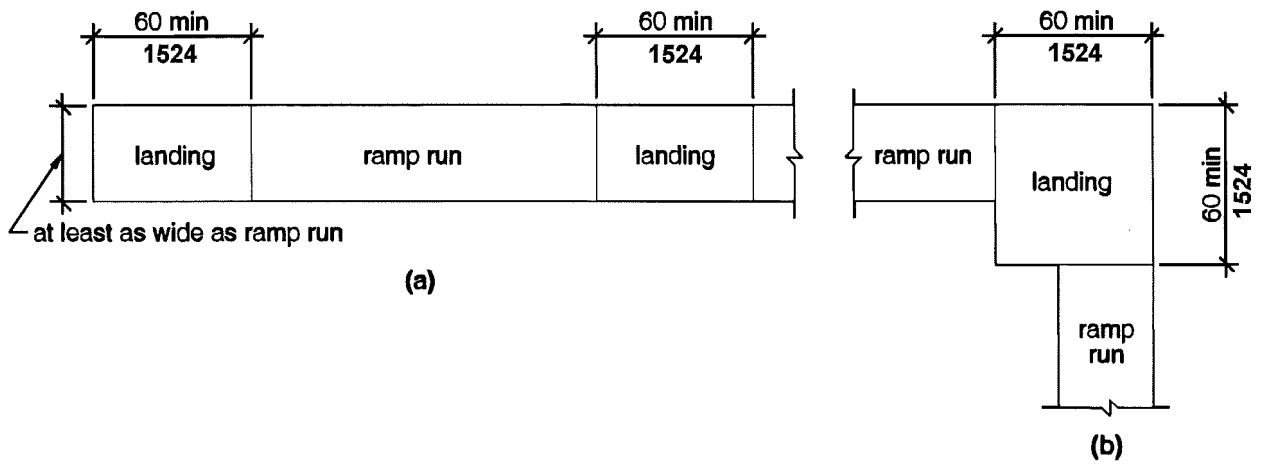
(b)



(c)

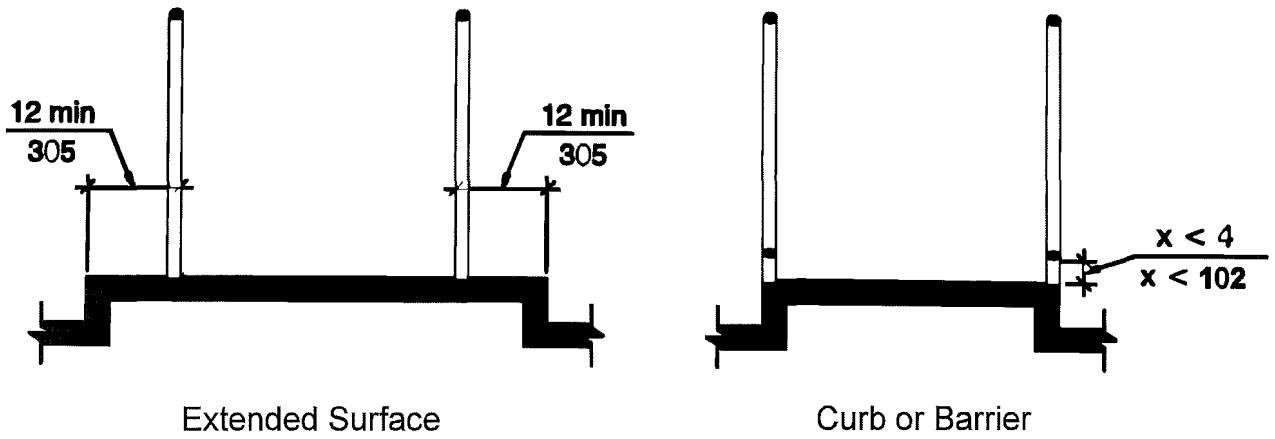
Doors in Series and Gates in Series

Figure 405.7



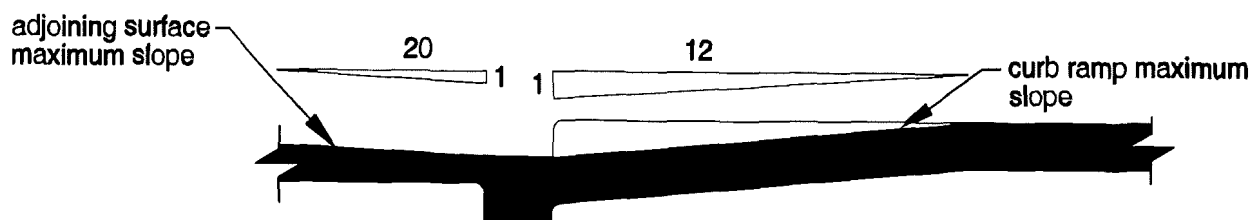
Ramp Landings

Figures 405.9.1 and 405.9.2



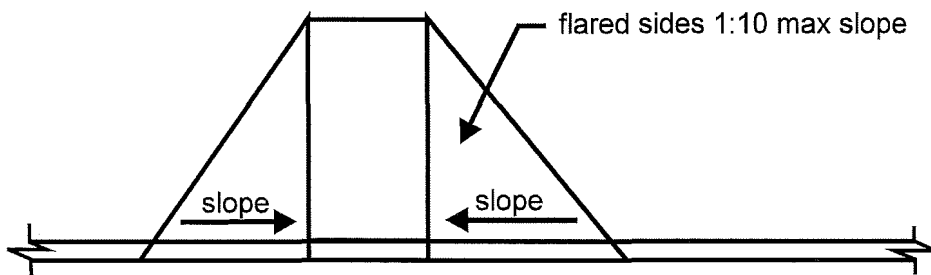
**Extended Floor or Ground Surface Edge Protection
and Curb or Barrier Edge Protection**

Figure 406.2



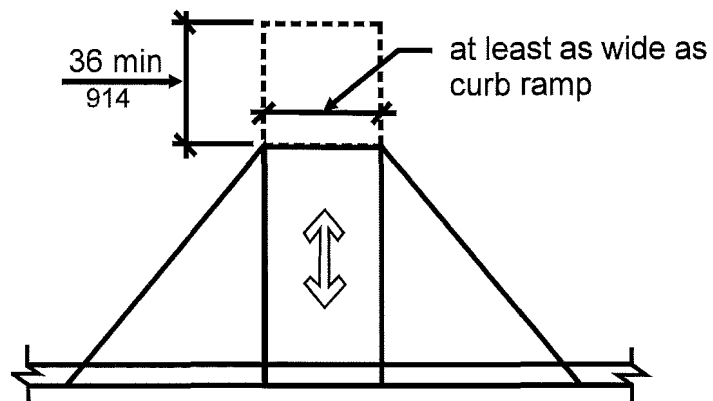
Counter Slope of Surfaces Adjacent to Curb Ramps

Figure 406.3



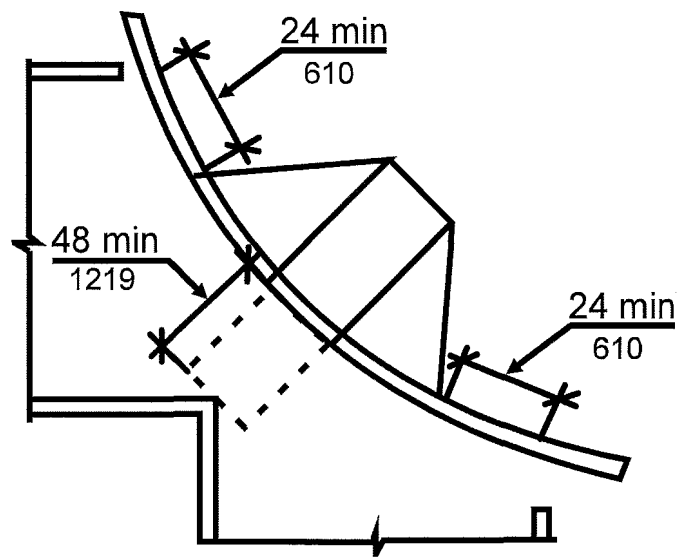
Sides of Curb Ramps

Figure 406.4



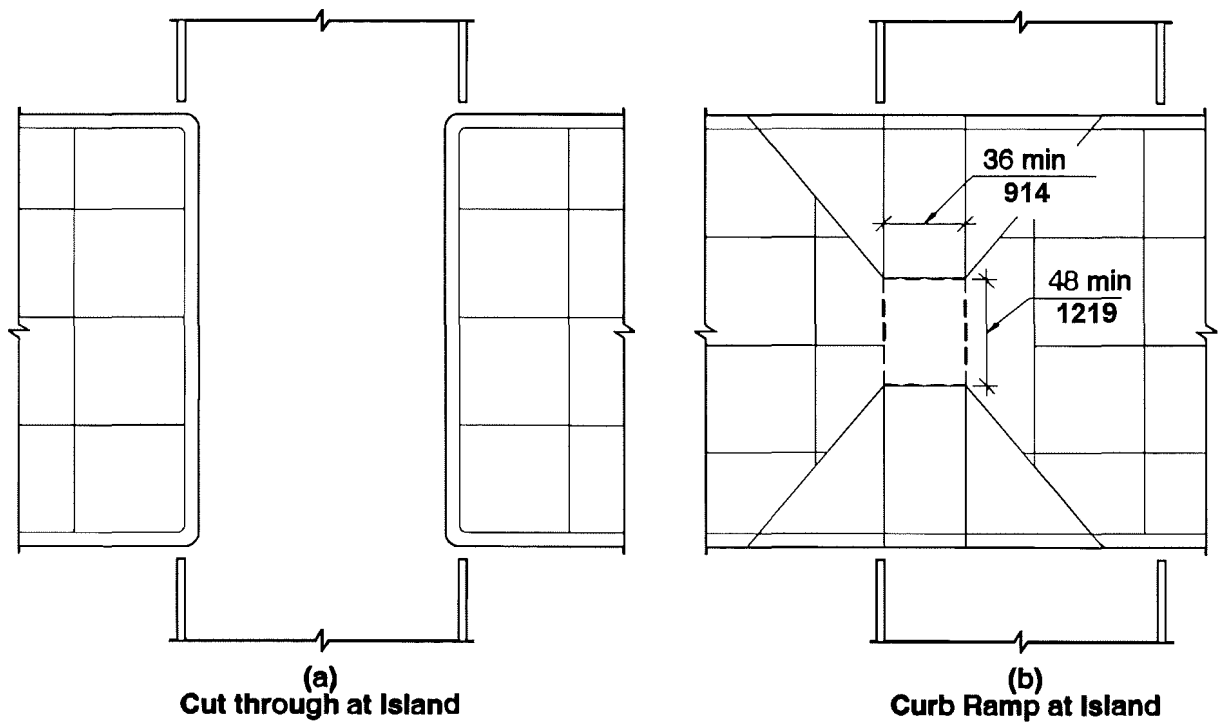
Landings at the Top of Curb Ramps

Figure 406.6



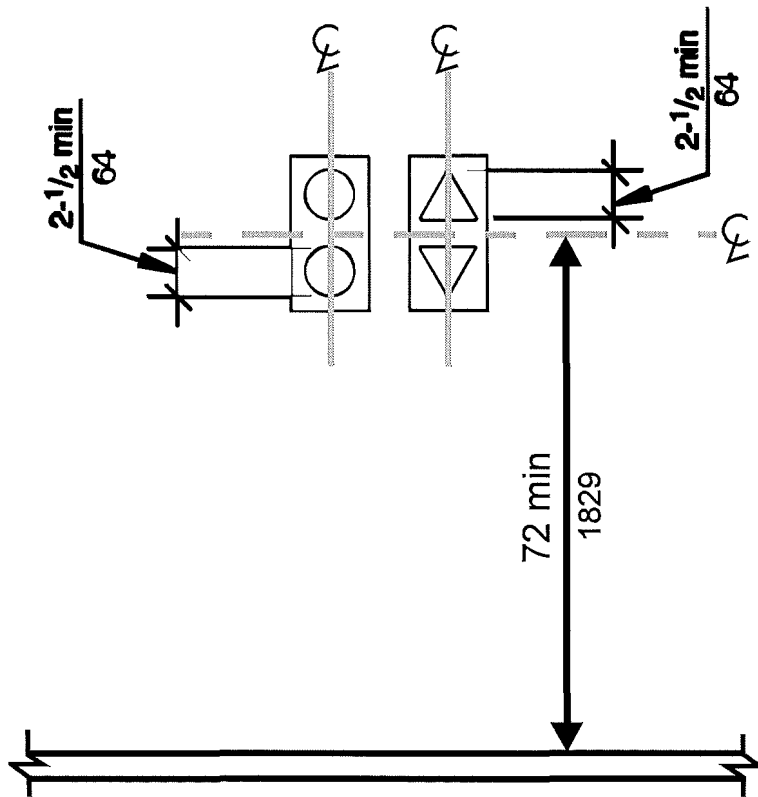
Diagonal or Corner Type Curb Ramps

Figure 406.7



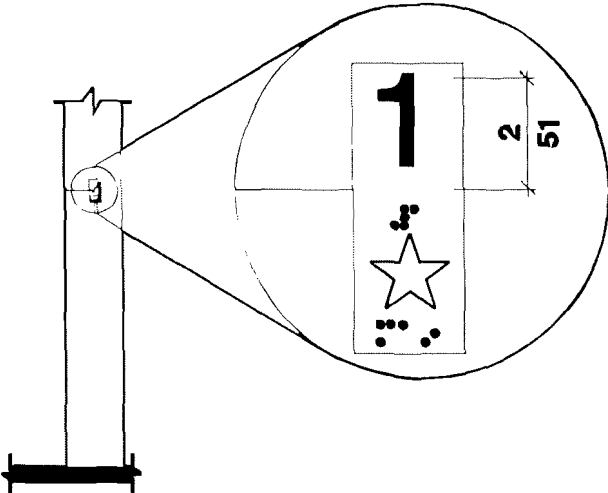
Islands in Crossings

Figure 407.2.2.2



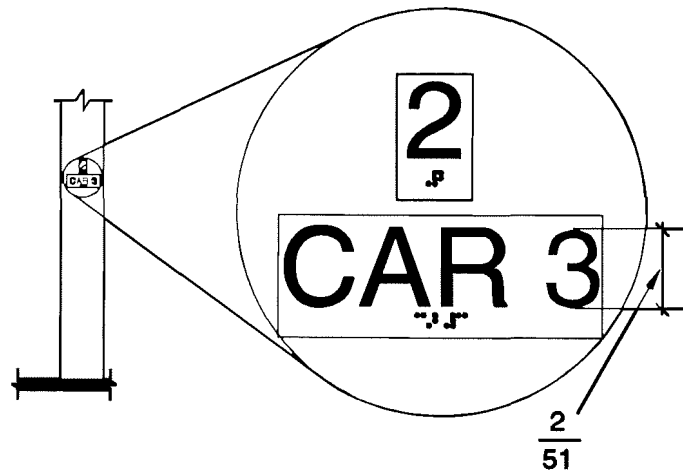
Visible Hall Signals

Figure 407.2.3.1



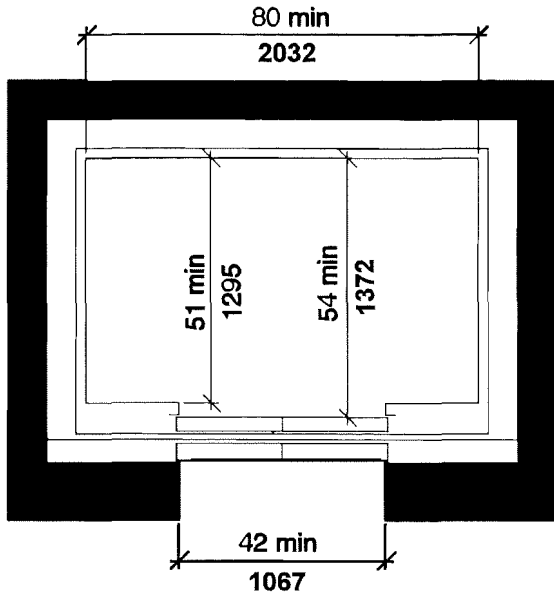
Floor Designations on Jambs of Elevator Hoistway Entrances

Figure 407.2.3.2

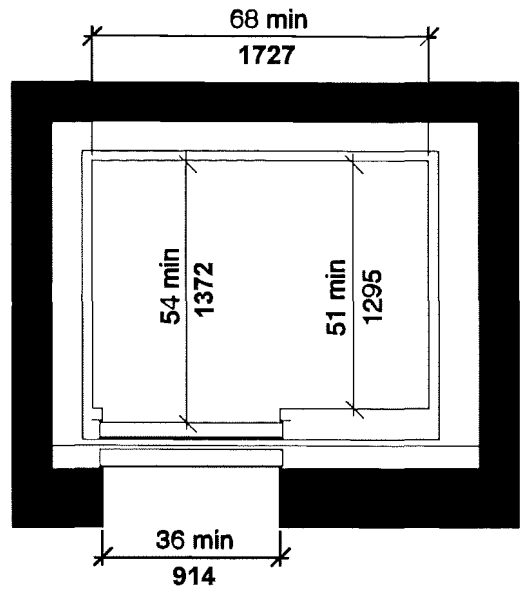


**Car Designations on Jambs of Destination-Oriented Elevator
Hoistway Entrances**

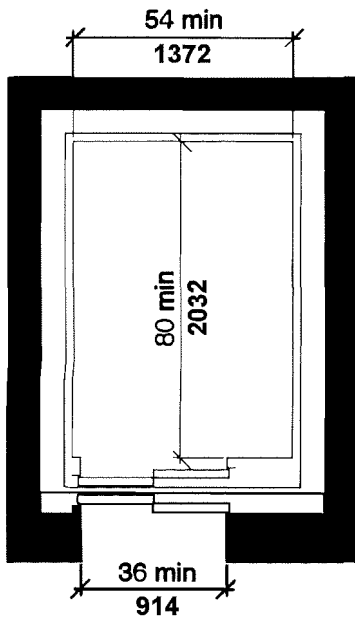
Figure 407.4.1



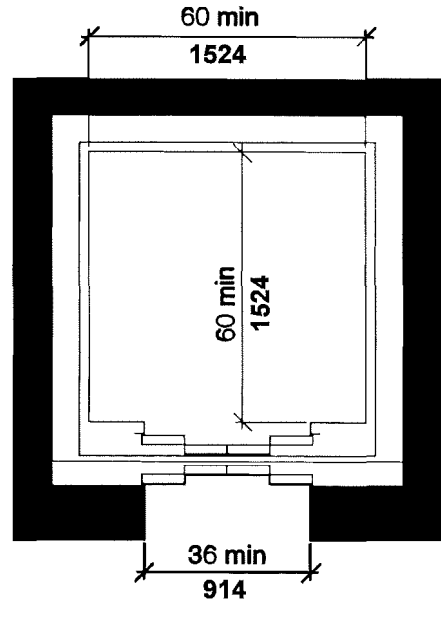
(a) Centered Door Location



(b) Off-Centered Door Location



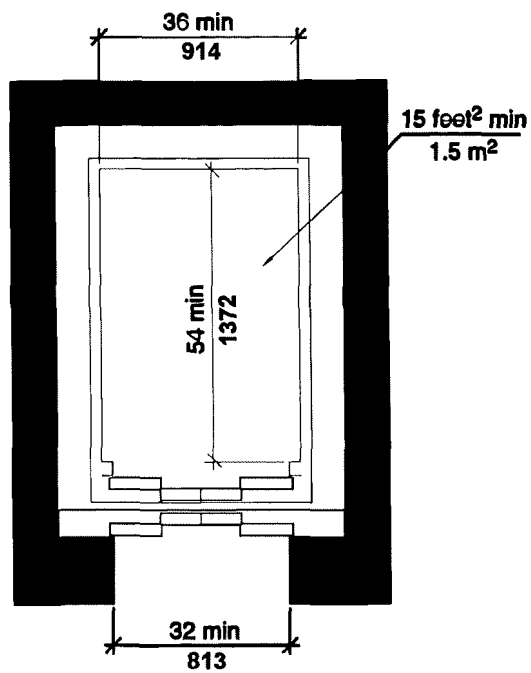
(c) Any Door Location



(d) Any Door Location













Elevator Car Dimensions

Figure 407.4.1



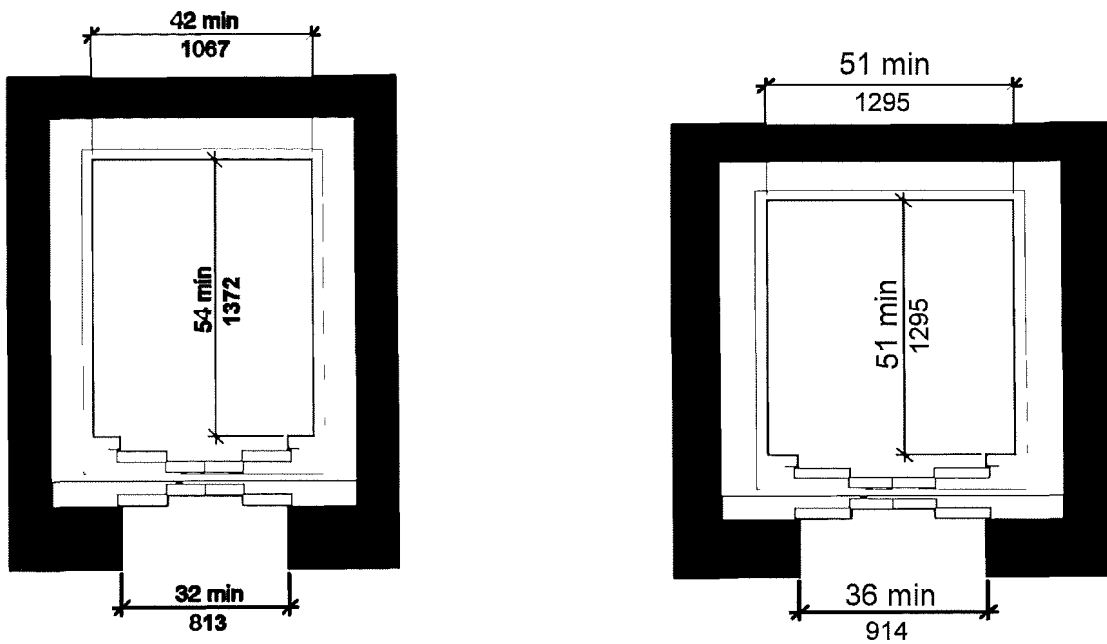
Exception - Existing Elevator Car Configuration

Figure 407.4.7.1.3

Control Button	Tactile Symbol	Braille Message
Emergency Stop		 "ST"OP" Three cells
Alarm		 AL"AR"M Four cells
Door Open		 OP"EN" Three cells
Door Close		 CLOSE Five cells
Main Entry Floor		 MA"IN" Three cells
Phone		 PH"ONE" Four cells

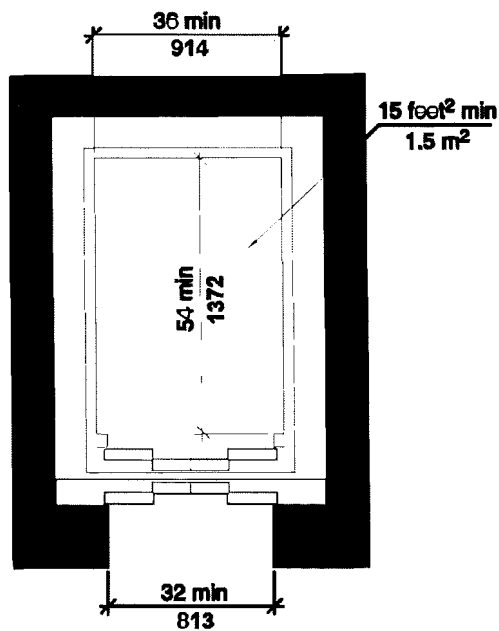
Control Button Identification

Figure 408.4.1



(a) new construction

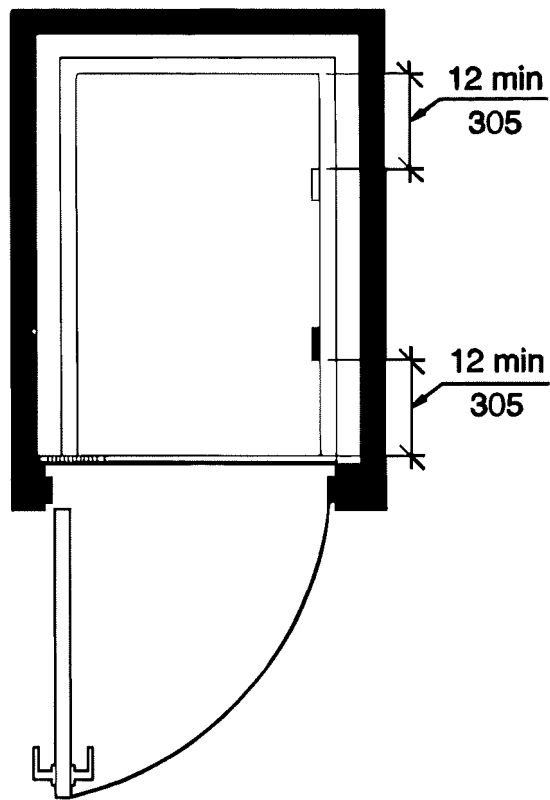
(b) Exception 1



(c) Exception 2

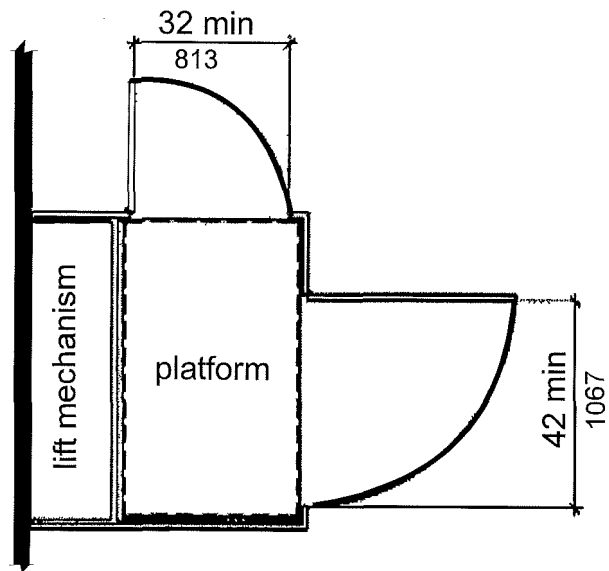
Limited-Use/Limited-Application (LULA) Elevator Car Dimensions

Figure 409.4.6.2



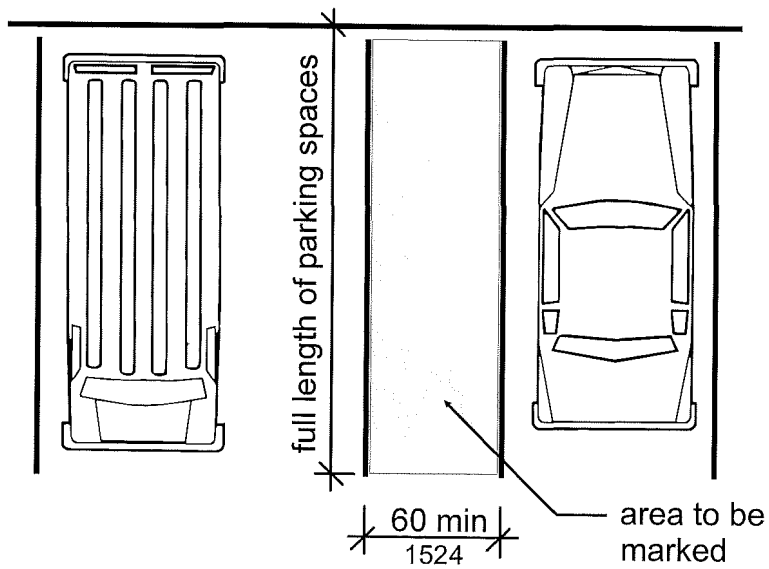
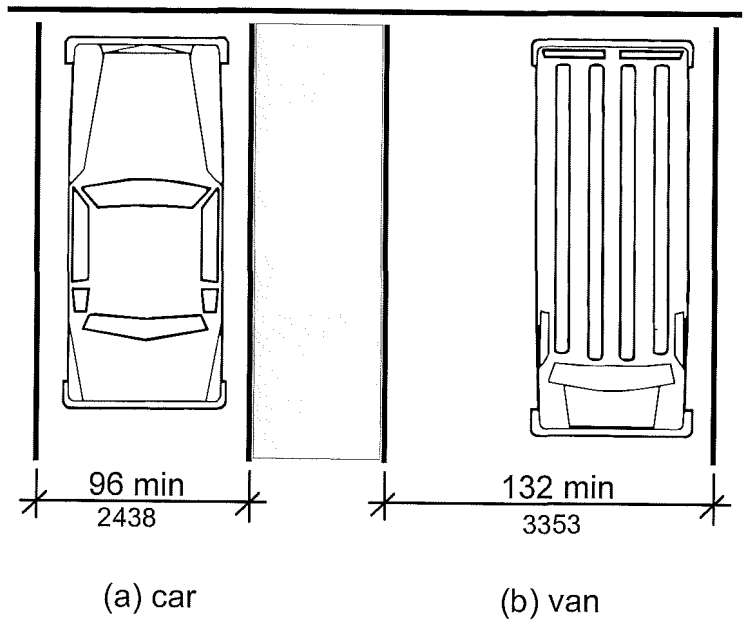
Location of Private Residence Elevator Control Panel

Figure 410.6



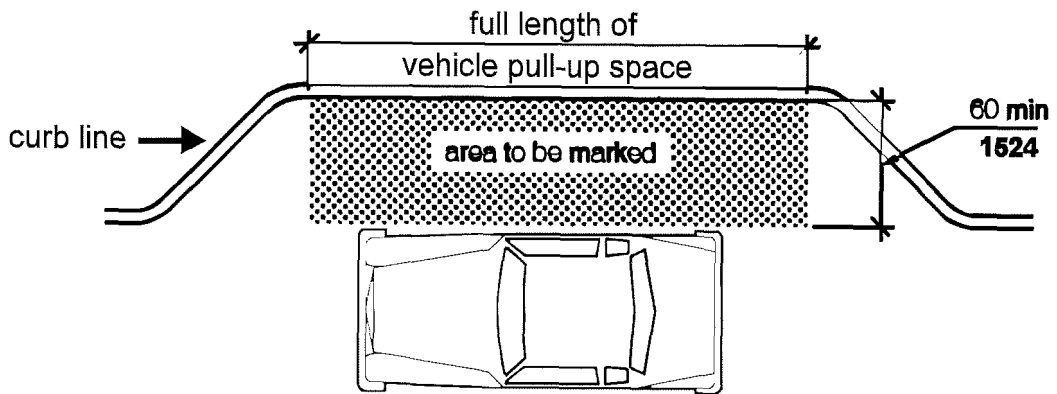
Platform Lift Doors and Gates

Figures 502.2 and 502.3



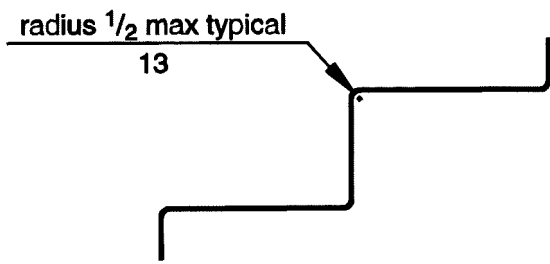
Vehicle Parking Spaces and Parking Space Access Aisle

Figure 503.3

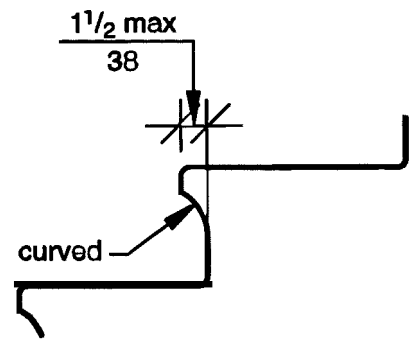


Passenger Loading Zone Access Aisle

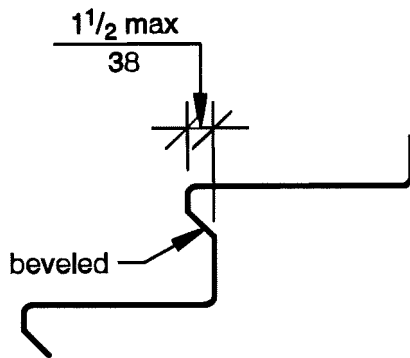
Figure 504.5



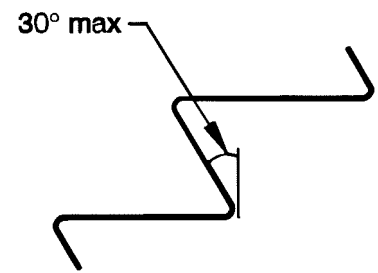
(a) Vertical Riser



(b) Curved Nosing



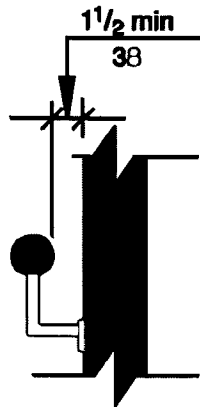
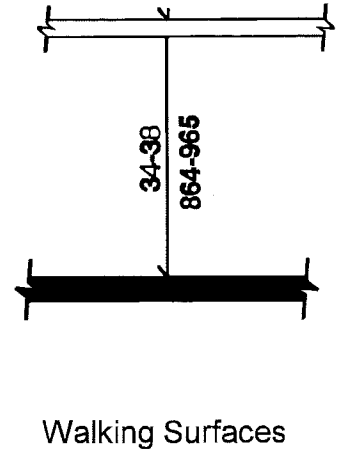
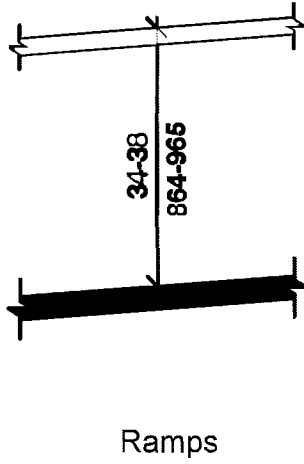
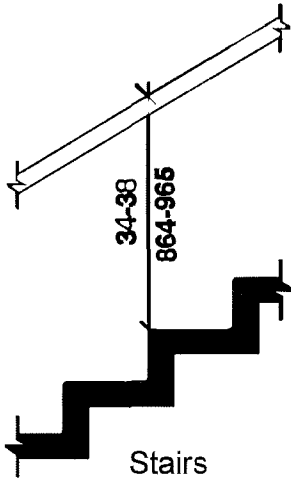
(c) Beveled Nosing



(d) Angled Riser

Stair Nosings

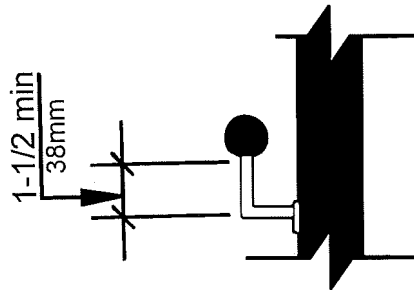
Figures 505.4 and 505.5



Handrail Clearance

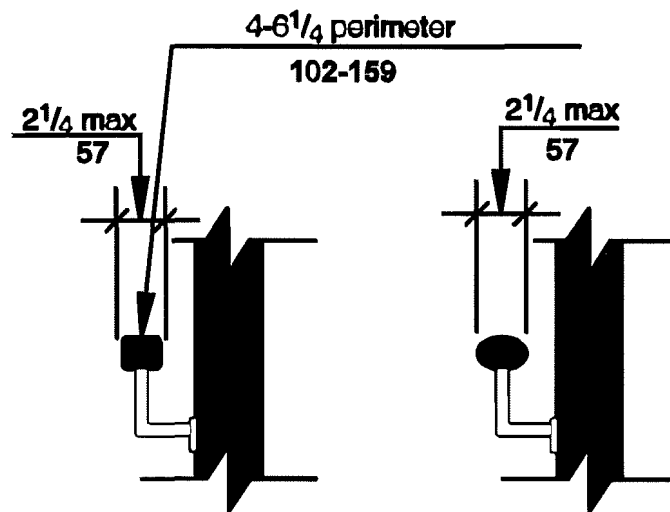
Handrail Heights and Handrail Clearance

Figure 505.6



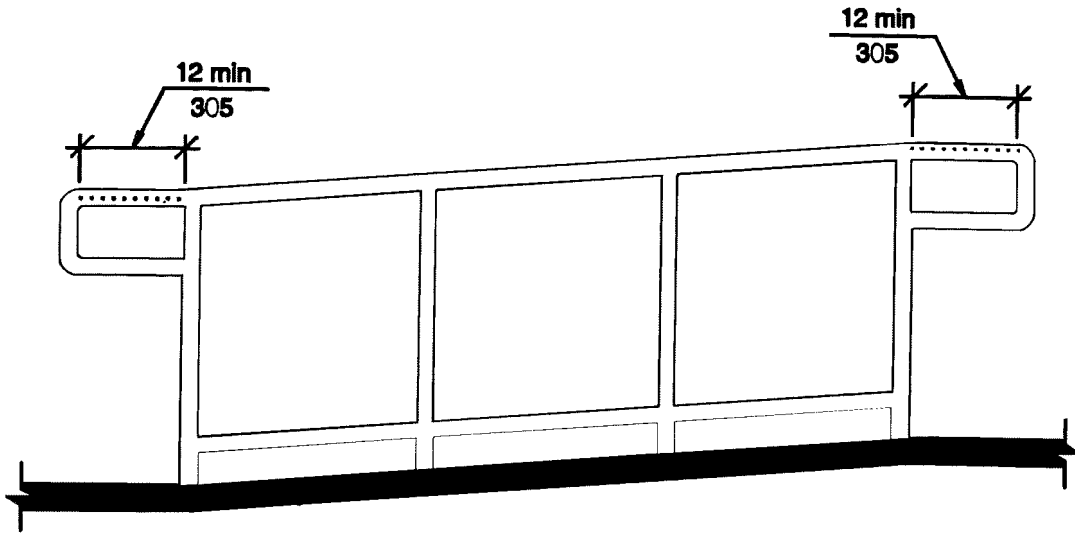
Horizontal Projections Below Gripping Surface

Figure 505.7.2

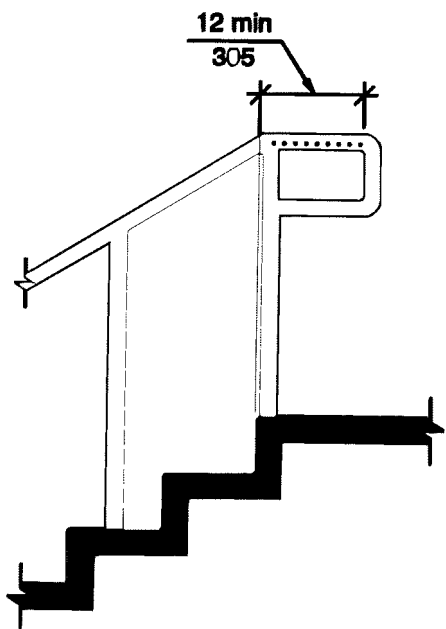


Handrail Non-Circular Cross Section

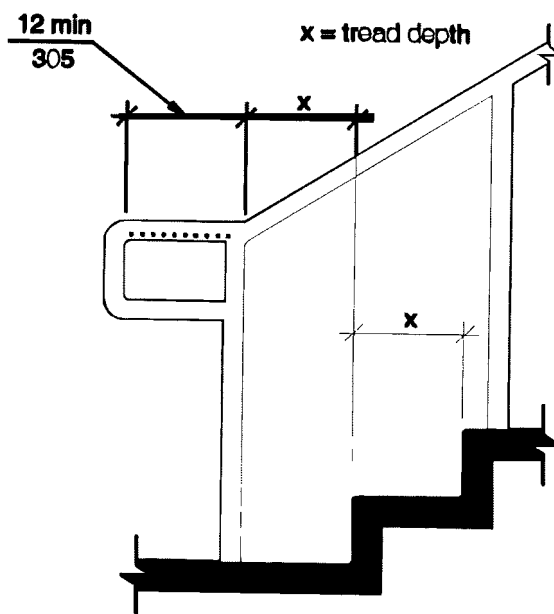
Figures 505.10.1, 505.10.2 and 505.10.3



Top and Bottom Handrail Extensions at Ramps



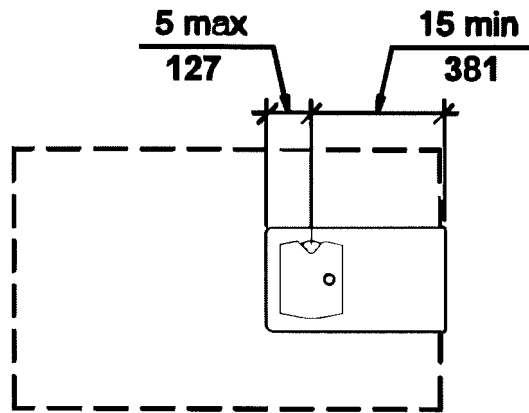
Top Handrail Extensions at Stairs



Bottom Handrail Extensions at Stairs

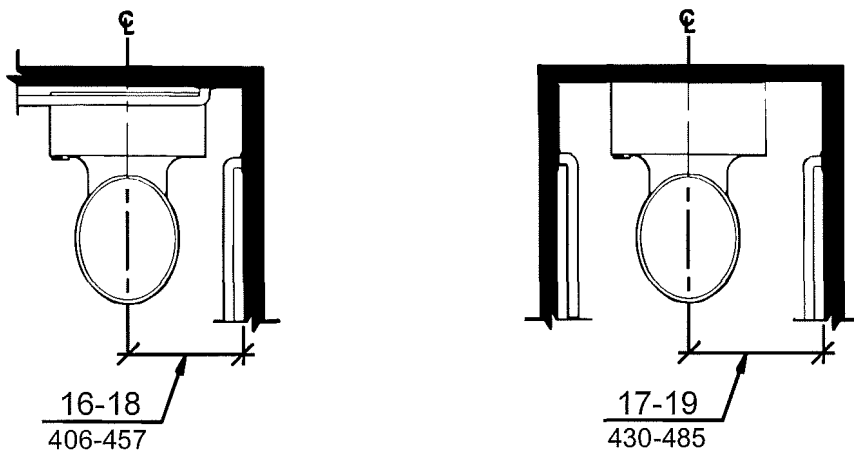
Handrail Extensions at Ramps at Stairs

Figure 602.5



Drinking Fountain Spout Location

Figure 604.2

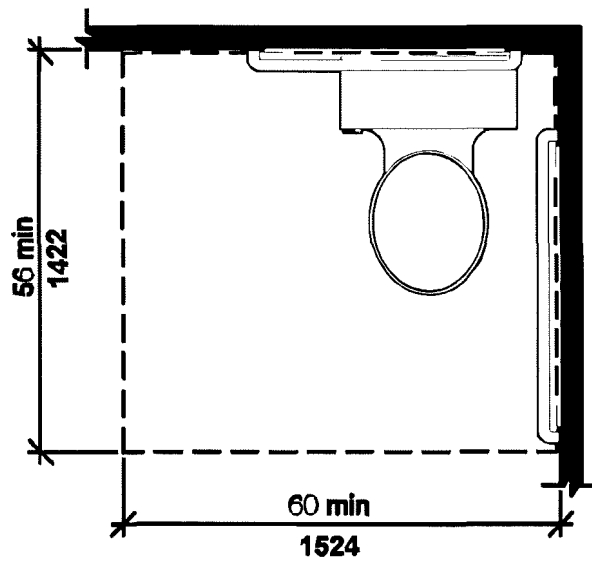


(a) wheelchair accessible
water closets

(b) ambulatory accessible
water closets

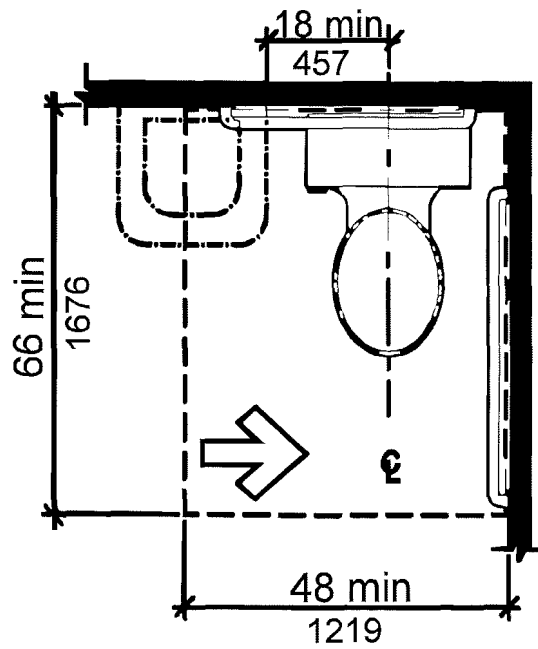
Water Closet Location

Figure 604.3.1



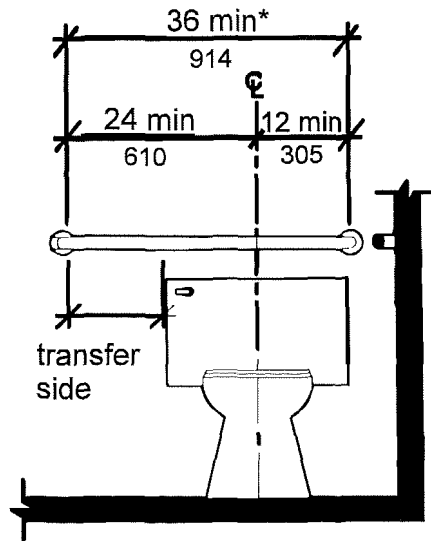
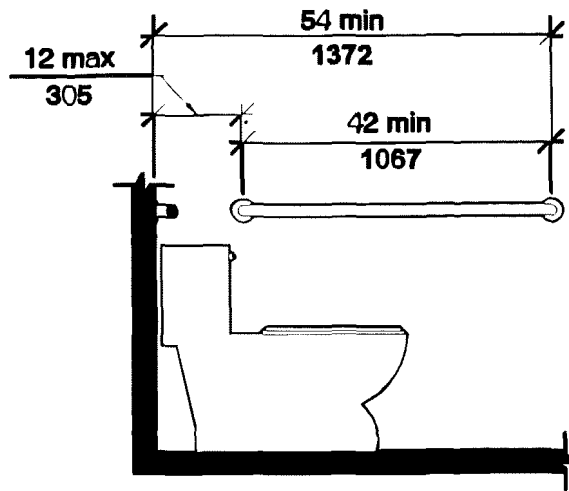
Size of Clearance at Water Closets

Figure 604.3.2



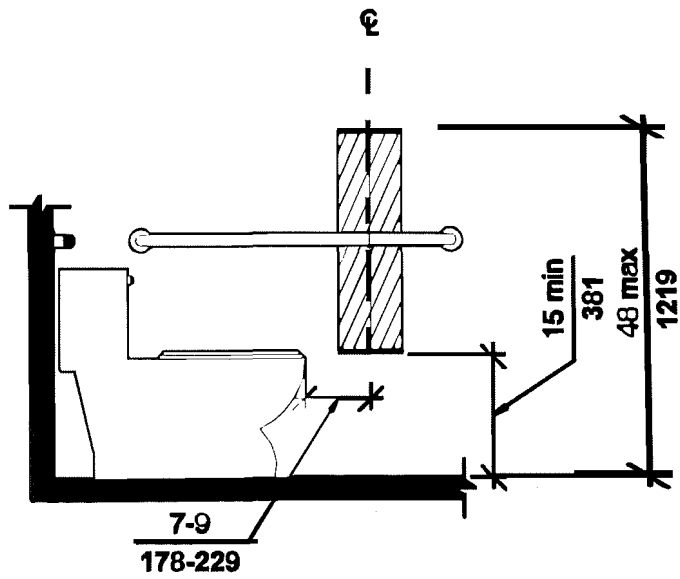
**Exception - Overlap of Water Closet Clearance
in Residential Dwelling Units**

Figures 604.5.1 and 604.5.2



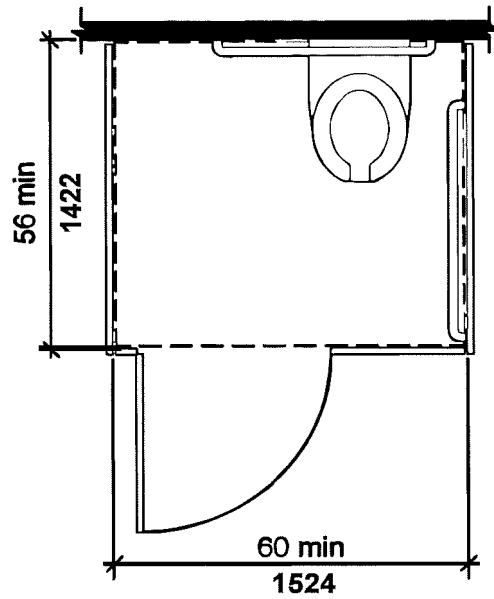
Grab Bars at Water Closets

Figure 604.7

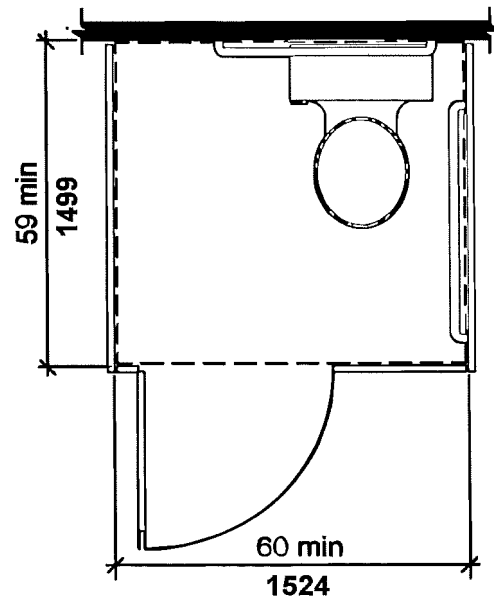


Dispenser Outlet Location

Figure 604.8.1.1



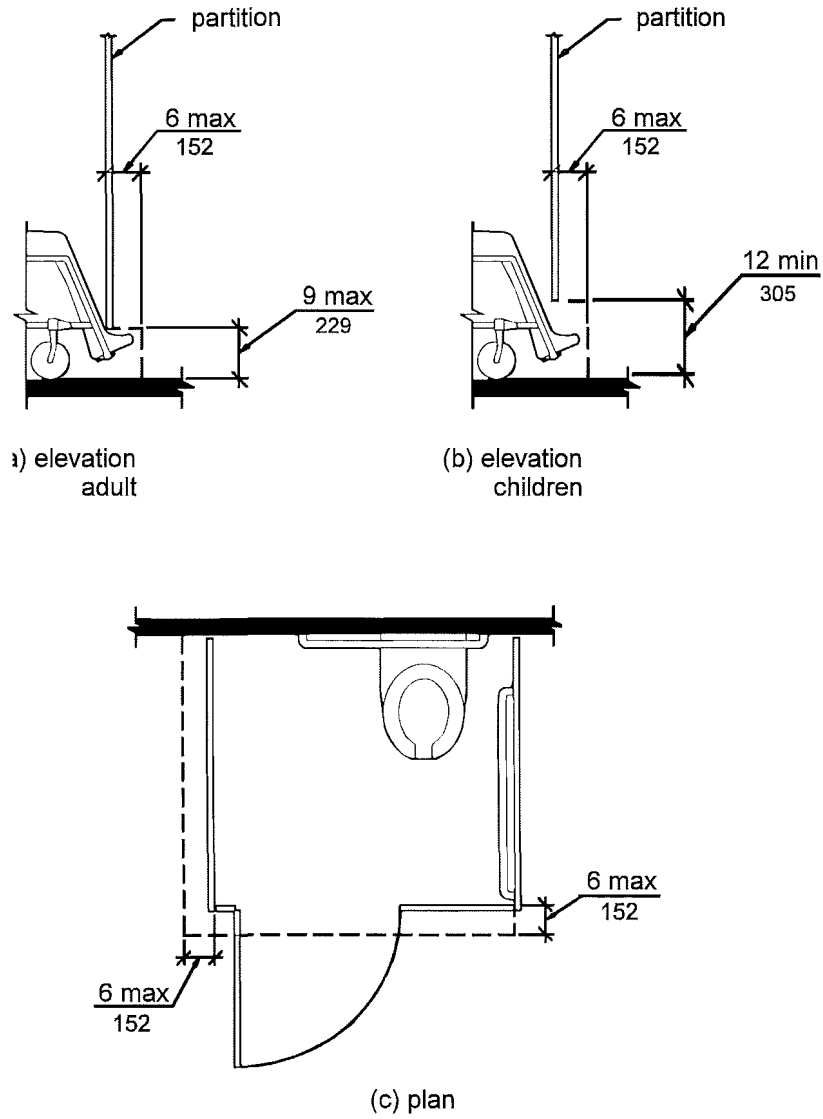
Wall-Hung Water Closet



Floor-Mounted Water Closet

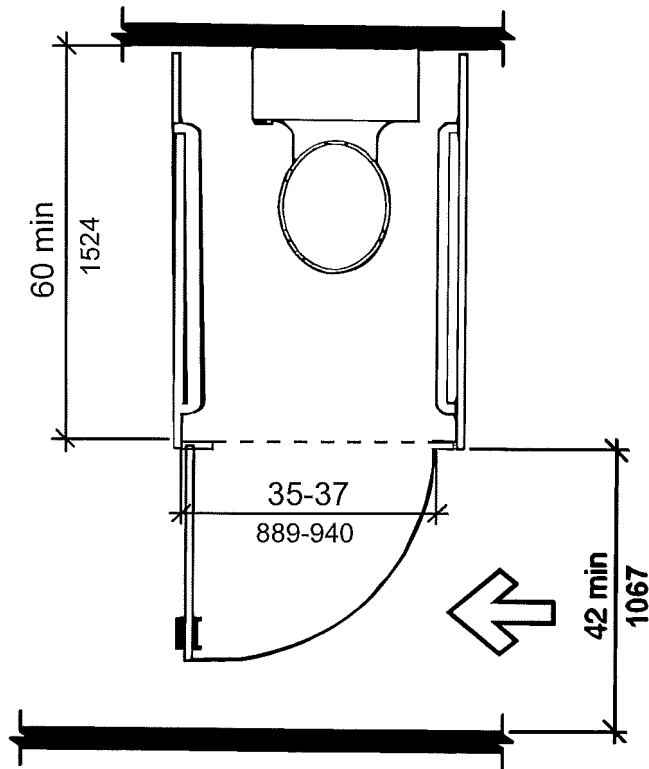
Size of Wheelchair Accessible Toilet Compartment

Figure 604.8.1.4



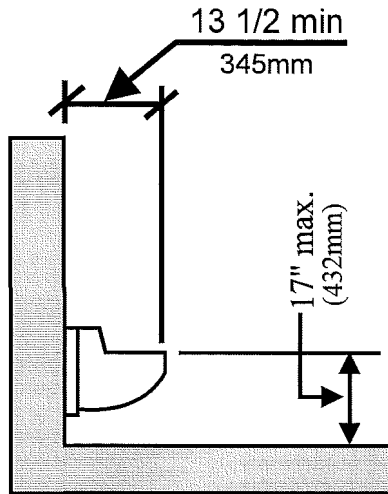
Wheelchair Accessible Toilet Compartment Toe Clearance

Figure 604.8.2

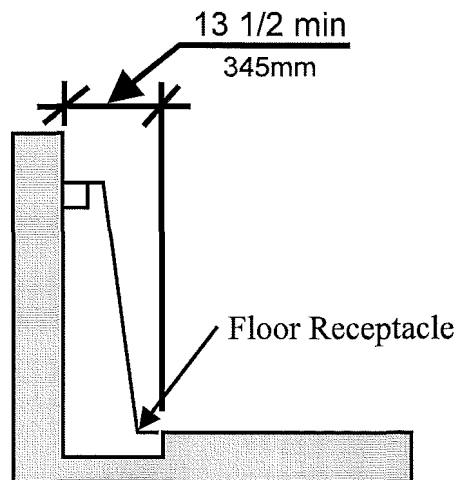


Ambulatory Accessible Toilet Compartment

Figure 605.2



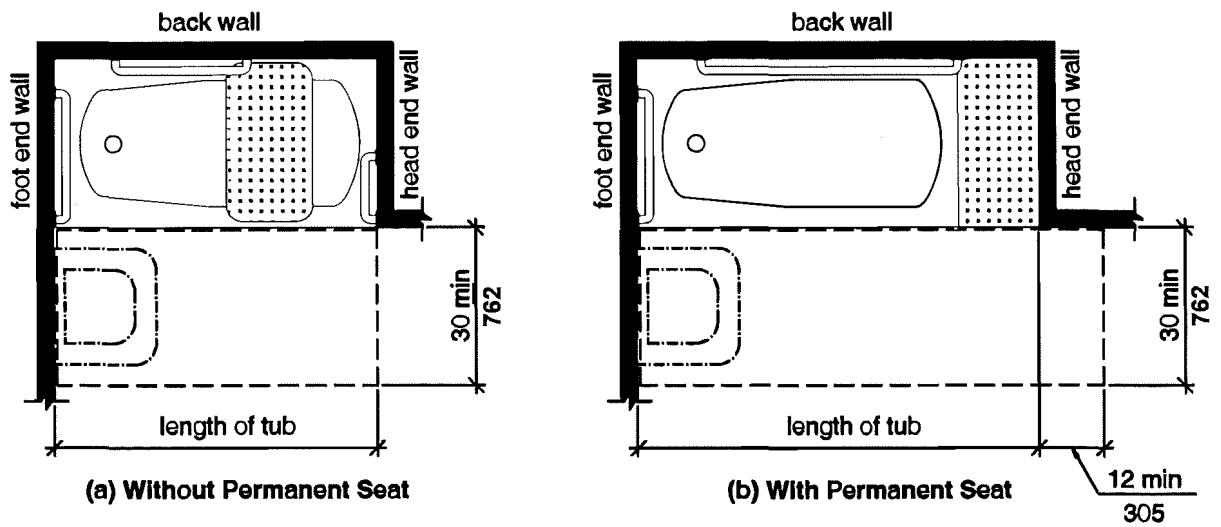
(a) wall hung type



(b) Stall Type

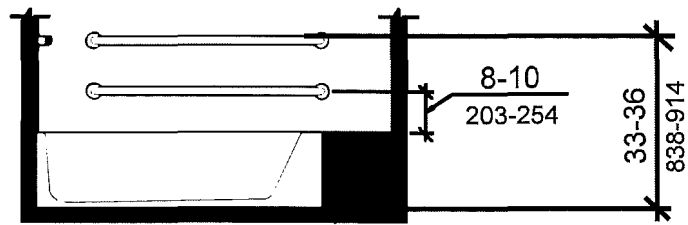
Height and Depth of Urinals

Figure 607.2

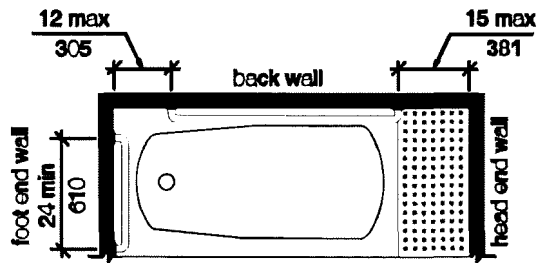


Clearance for Bathtubs

Figure 607.4.1



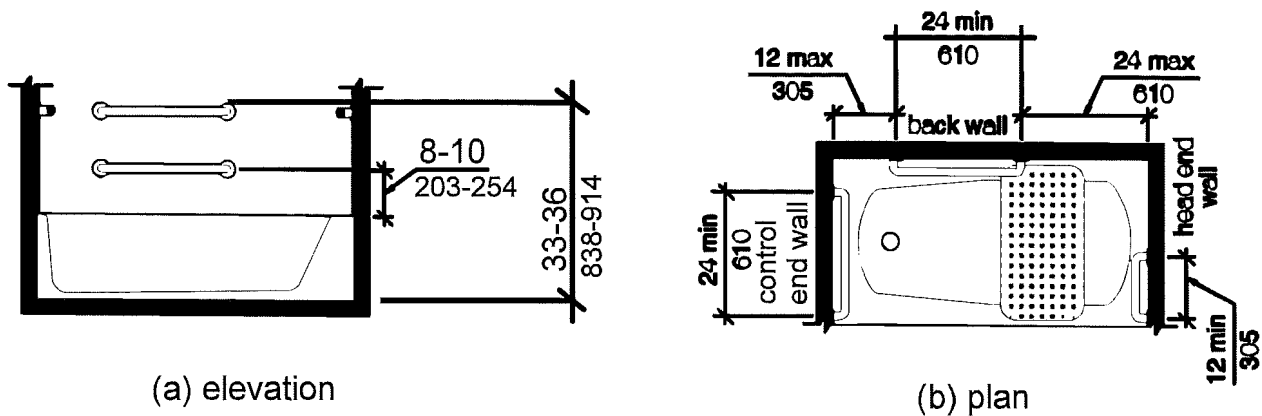
(a) elevation



(b) plan

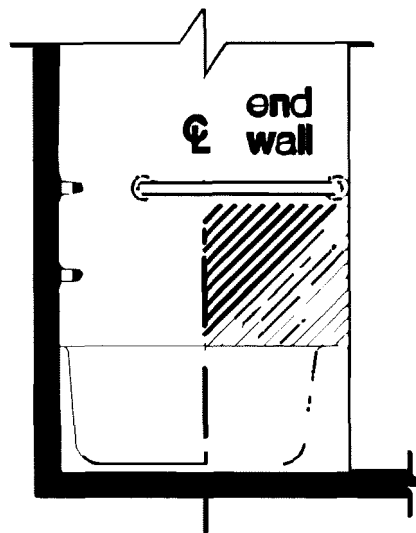
Grab Bars for Bathtubs with Permanent Seats

Figure 607.4.2



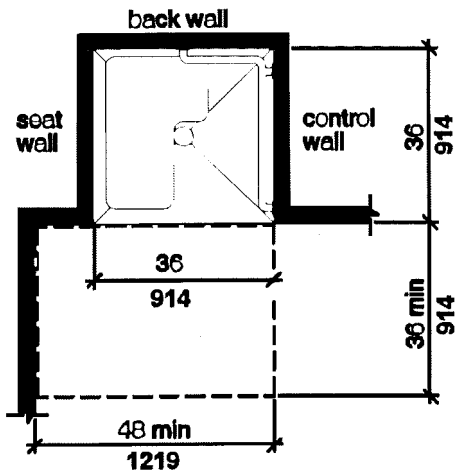
Grab Bars for Bathtubs with Removable In-Tub Seats

Figure 607.5

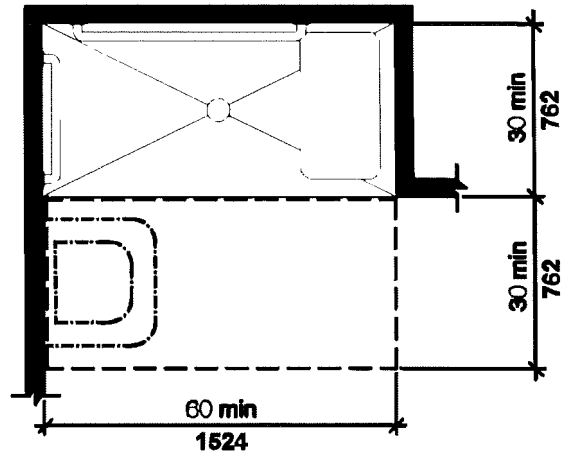


Bathtub Control Location

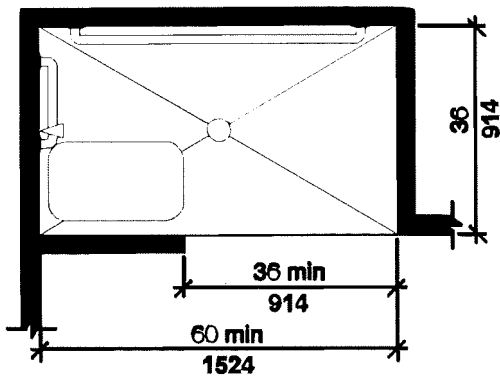
Figures 608.2.1, 608.2.2, 608.2.3 and 608.3.1



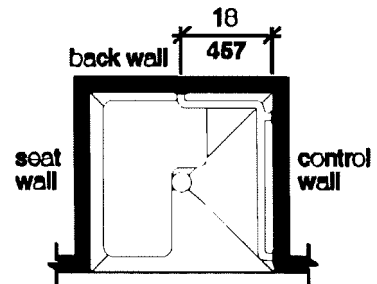
Transfer-Type Shower Compartment



Transfer-Type Shower Compartment



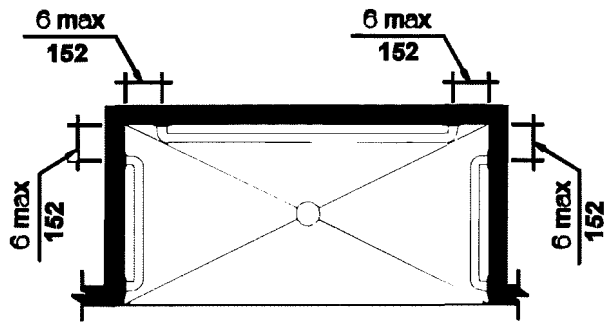
Alternate Roll-in-Type Shower Compartment



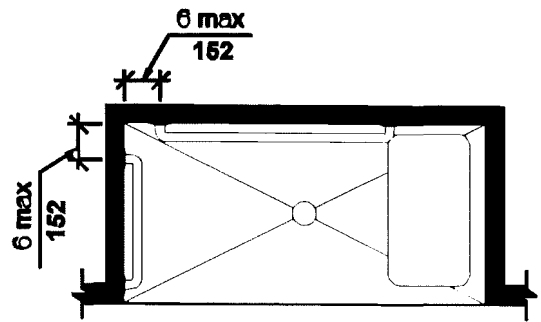
Grab Bars in Transfer-Type Showers

Transfer-Type and Roll-In Type Shower Compartments

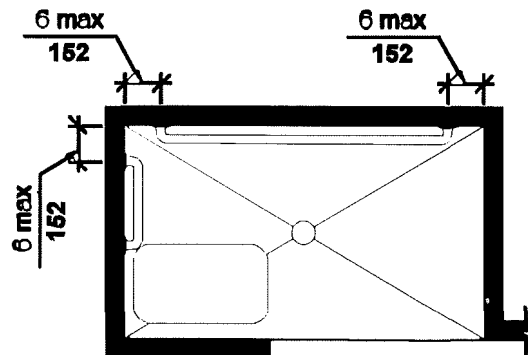
Figures 608.3.2 and 608.3.3



Standard Roll-in-Type Shower



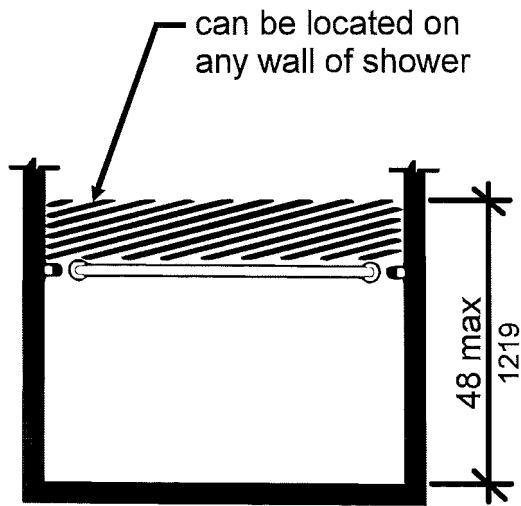
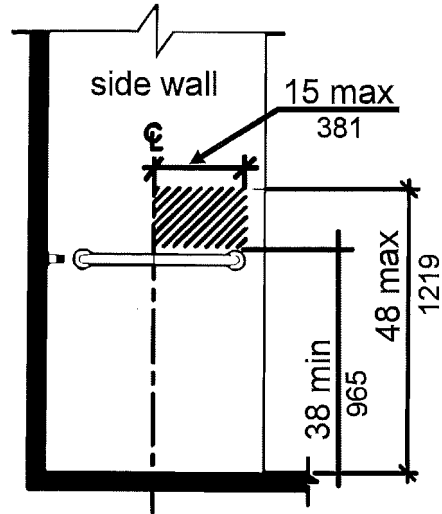
Roll-in-Type Shower with Seat



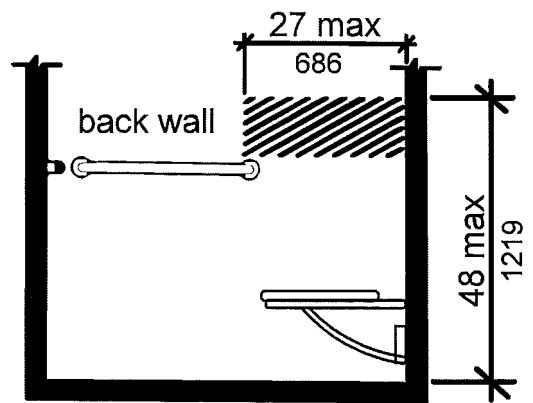
Alternate Roll-in-Type Shower

Grab Bars for Standard and Alternate Roll-In Type Showers

Figures 608.5.1 and 608.5.2



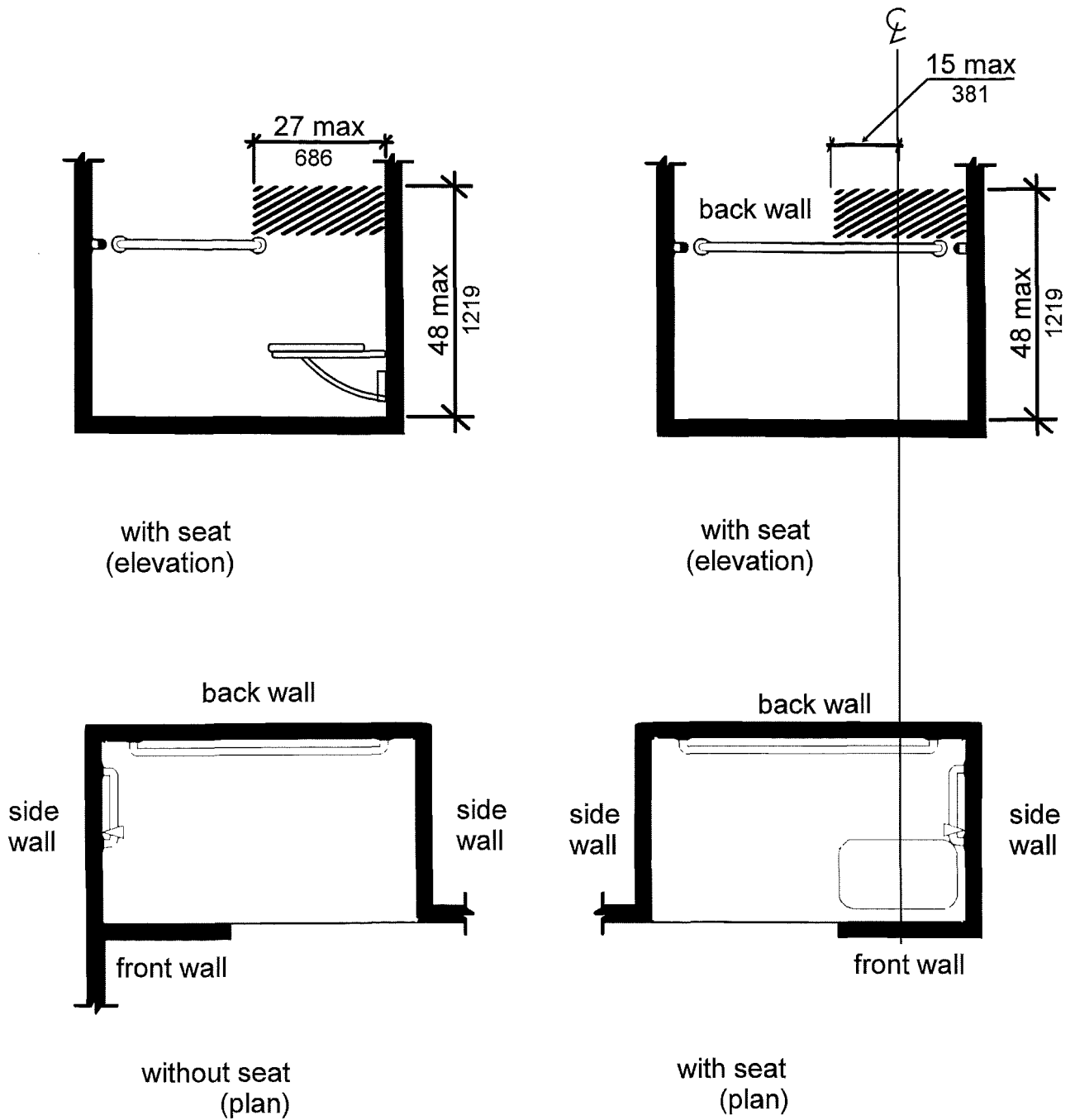
(a) without seat



(b) with seat

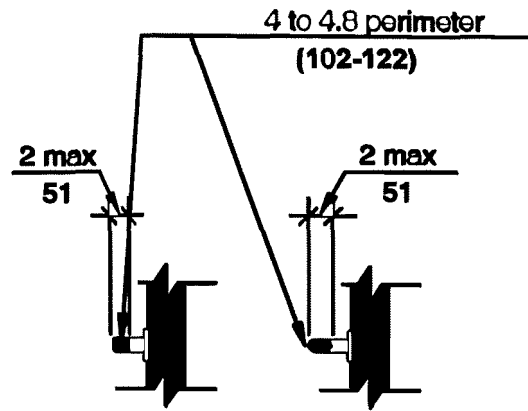
Transfer-Type and Roll-In Shower Compartment Control Locations

Figure 608.5.3



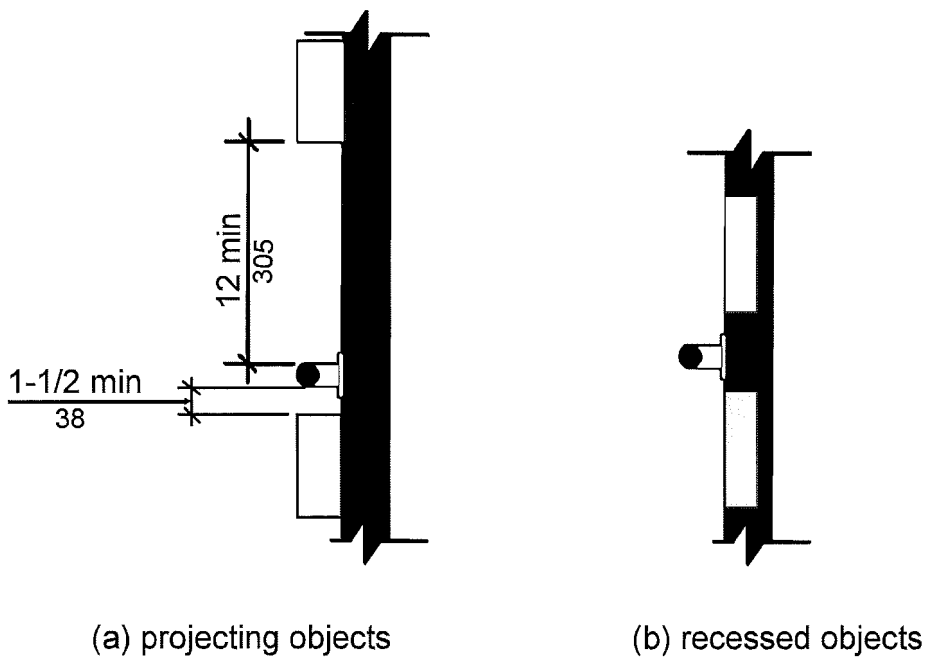
Alternate Roll-In Type Shower Compartment Control Location

Figure 609.2.2



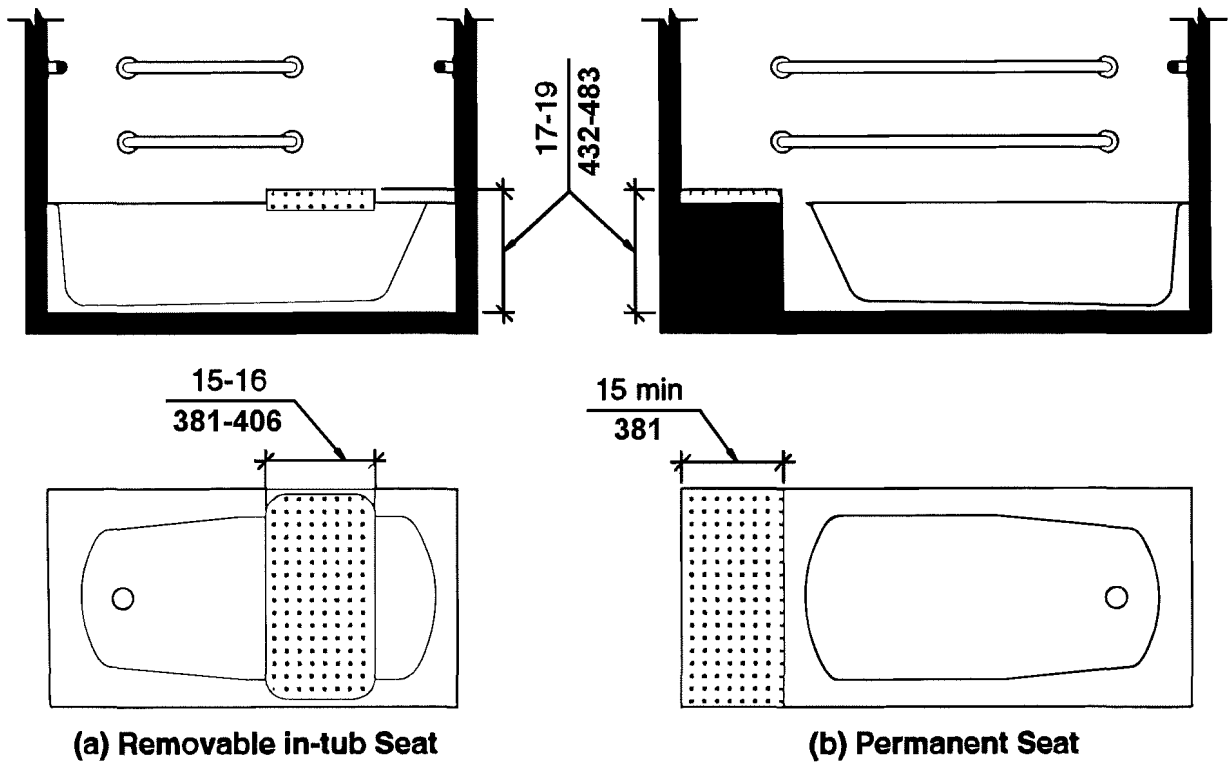
Grab Bar Non-Circular Cross Section

Figure 609.3



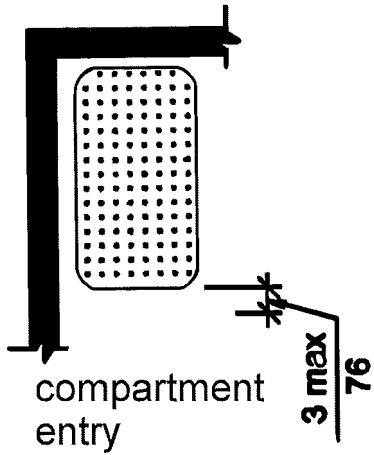
Spacing of Grab Bars

Figure 610.2

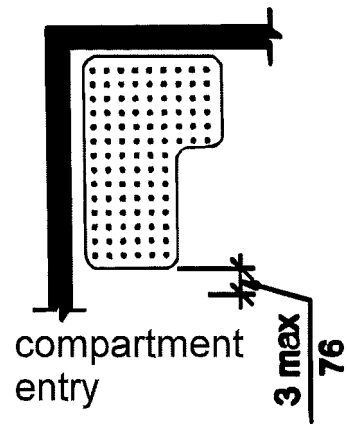


Bathtub Seats

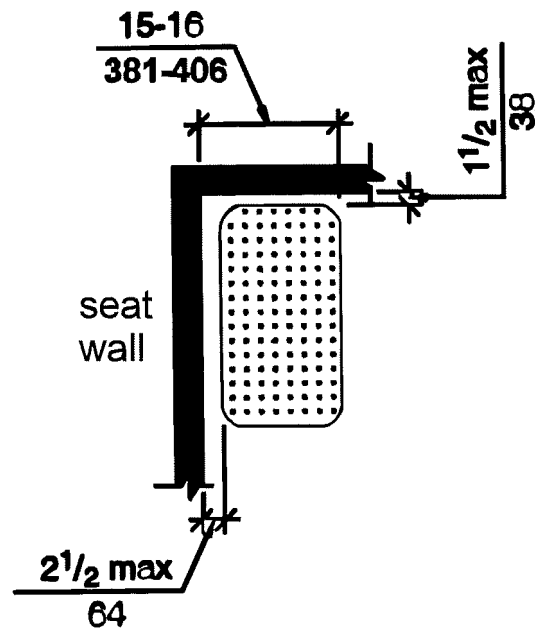
Figures 610.3 and 610.3.1



(a) rectangular

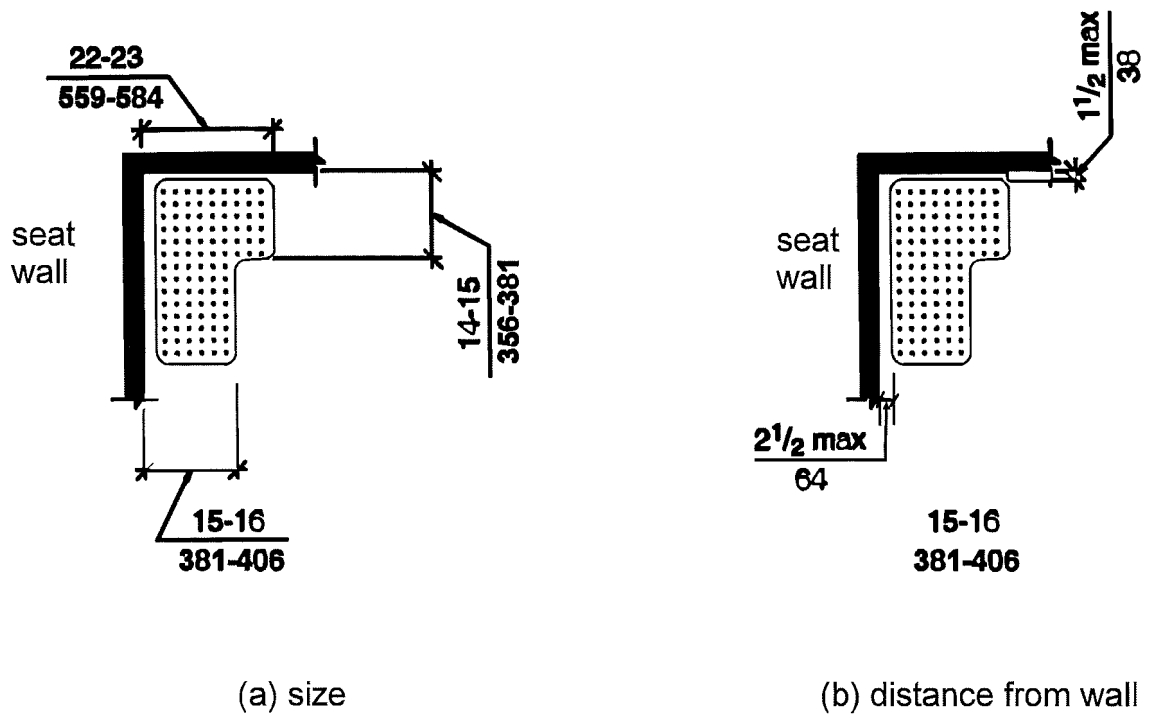


(b) L-shaped



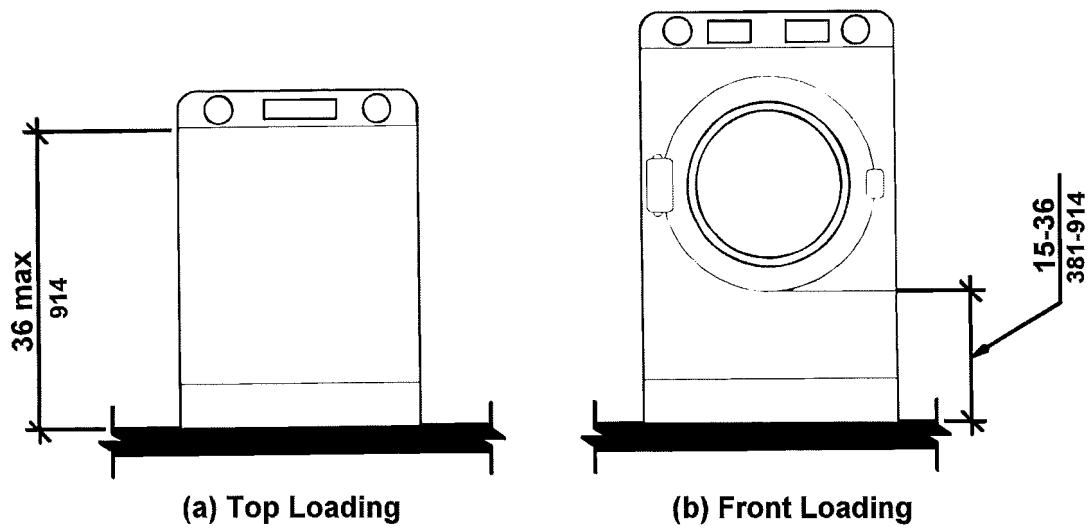
Shower Seats

Figure 610.3.2



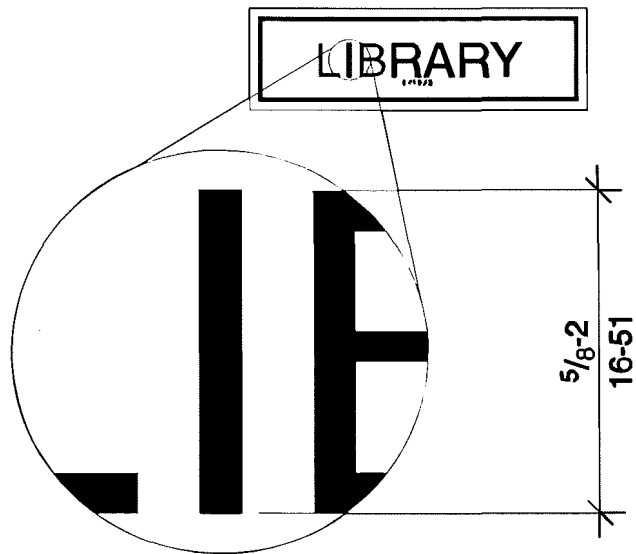
L-Shaped Shower Seat

Figure 611.4



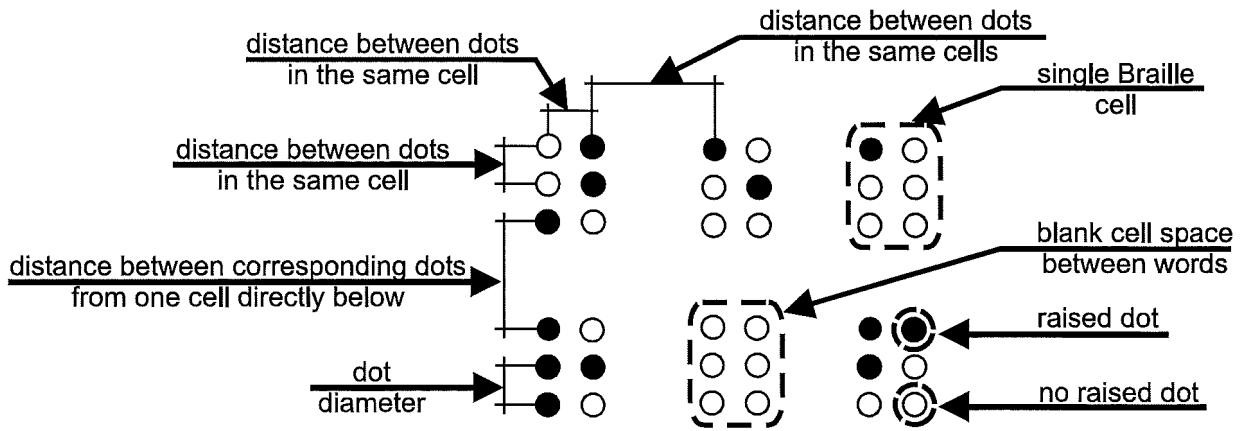
Height of Laundry Compartment Opening

Figure 703.2.5



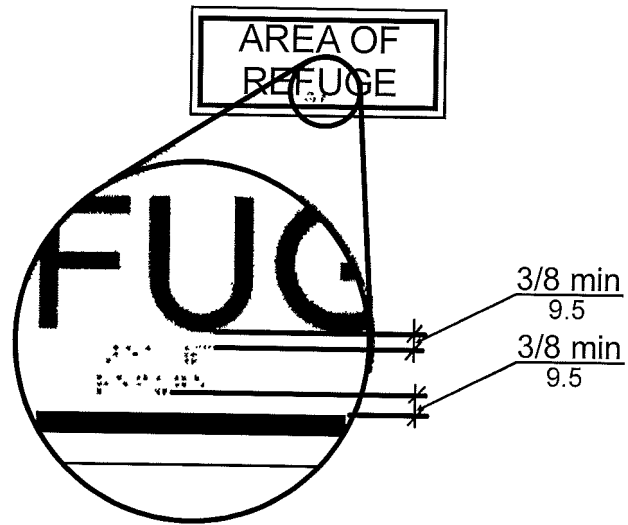
Height of Raised Characters

Figure 703.3.1



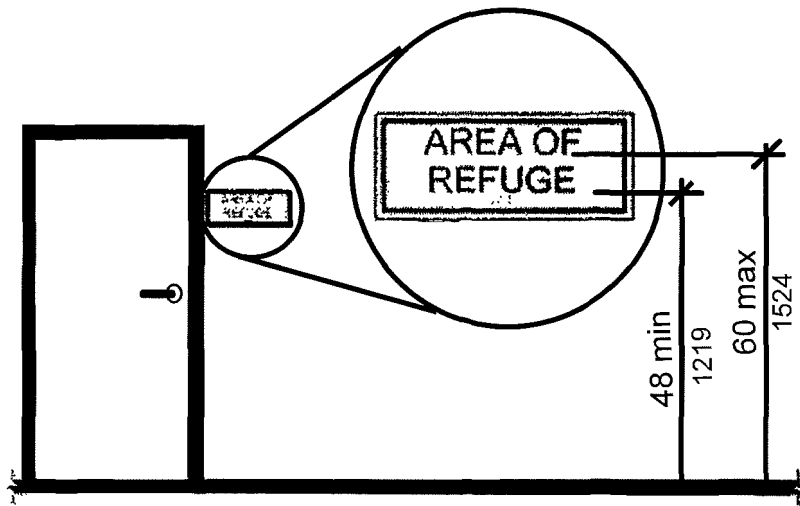
Braille Measurement

Figure 703.3.2



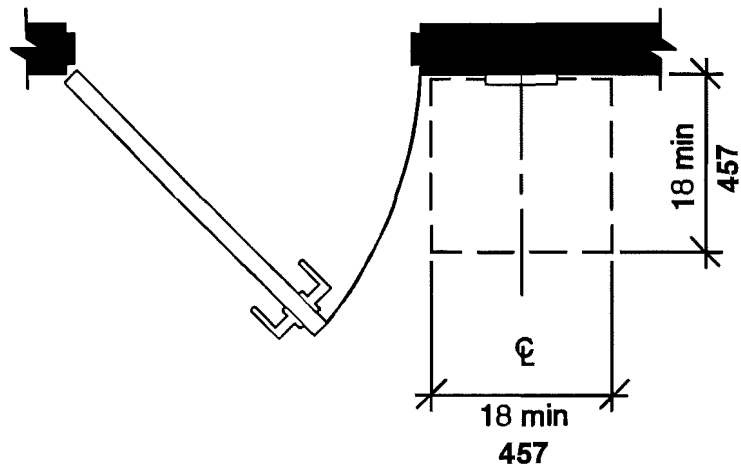
Position of Braille

Figure 703.4.1



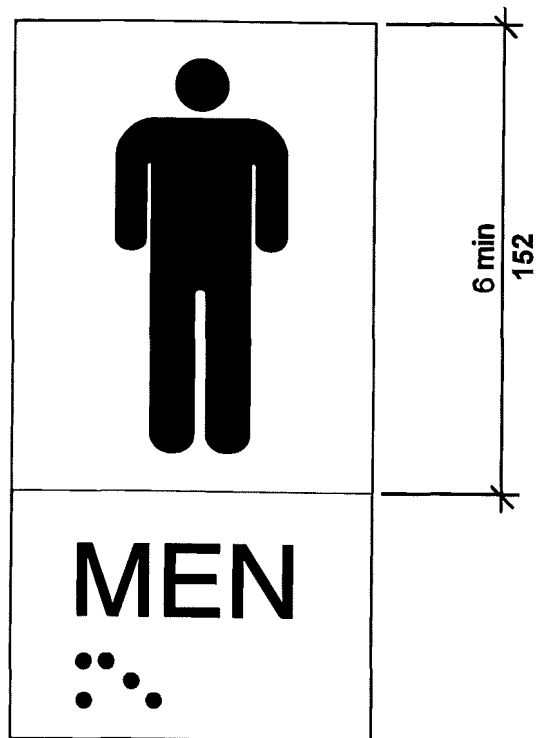
Height of Tactile Characters Above Finish Floor or Ground

Figure 703.4.2

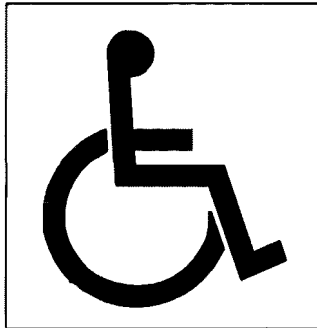


Location of Tactile Signs at Doors

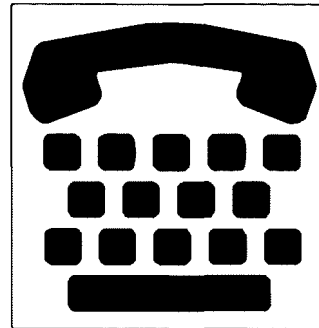
Figure 703.6.1



Pictogram Field



**International Symbol of
Accessibility**



**International TTY
Symbol**



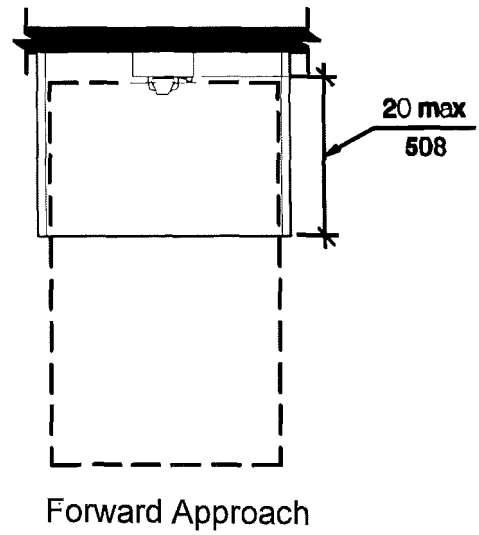
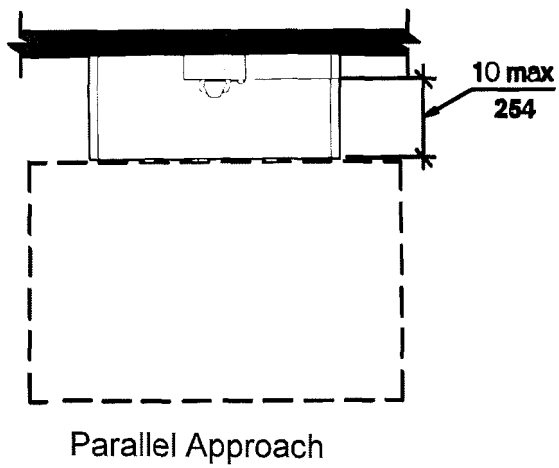
**Volume-Controlled
Telephone**



**International Symbol of
Access for Hearing Loss**

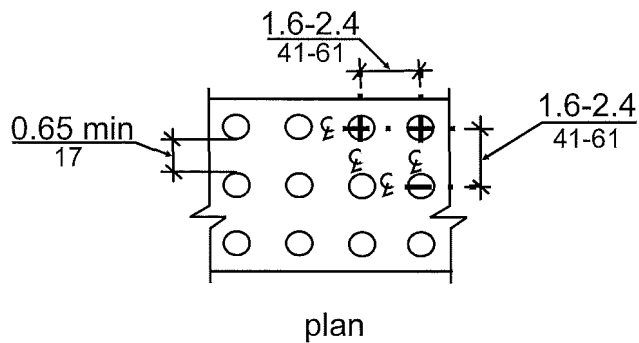
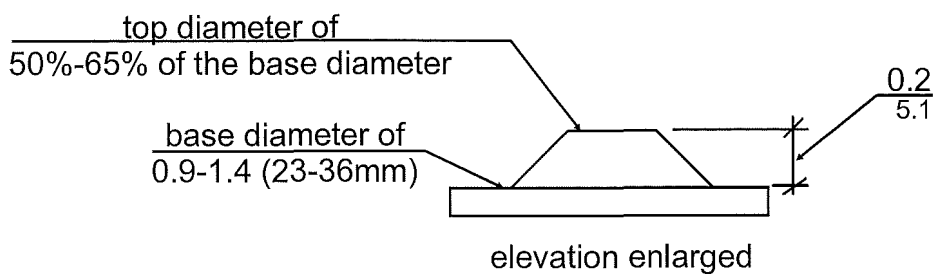
Symbols of Accessibility

Figures 704.2.1.1 and 704.2.1.2



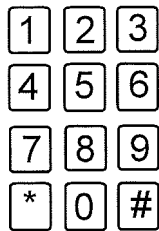
Approaches to Telephones

Figure 705.1



Size and Spacing of Truncated Domes

Figure 707.6.2



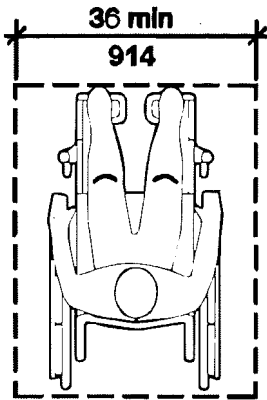
(a) 12-key ascending



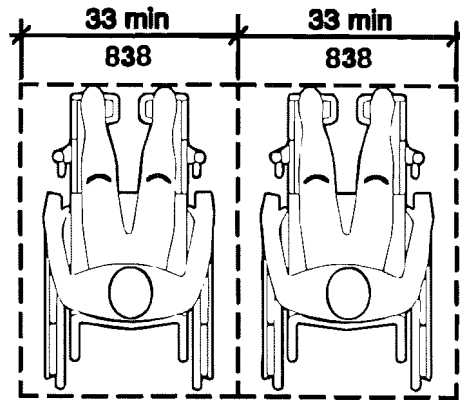
(b) 12-key descending

Numeric Key Layout

Figures 802.1.2 and 802.1.3

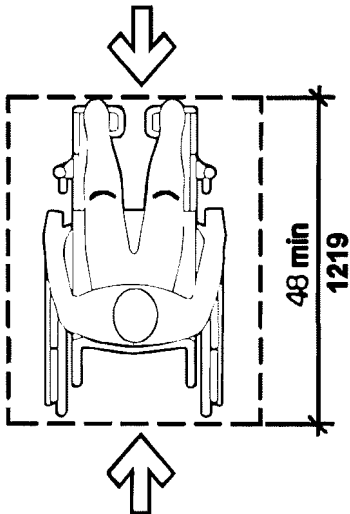


Single Space

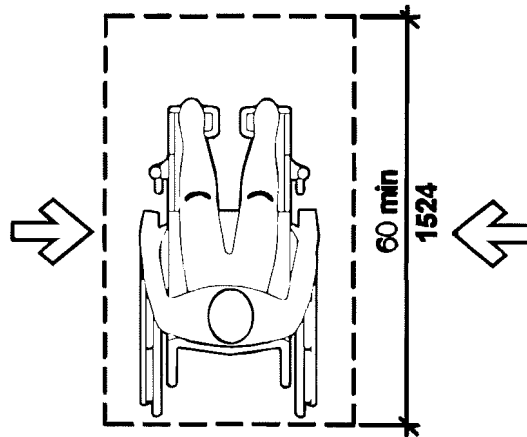


Multiple Adjacent Spaces

Width of a Wheelchair Space in Auditorium and Assembly Areas



Front or Rear Access

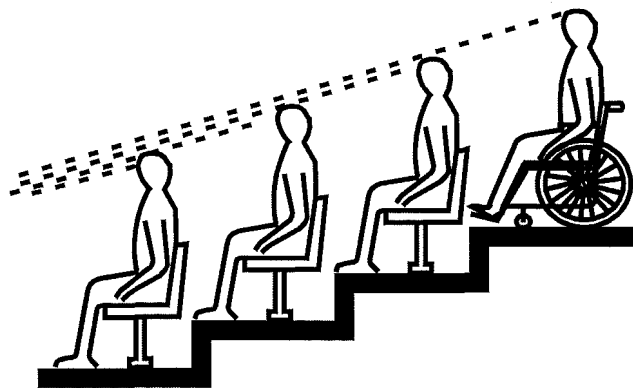
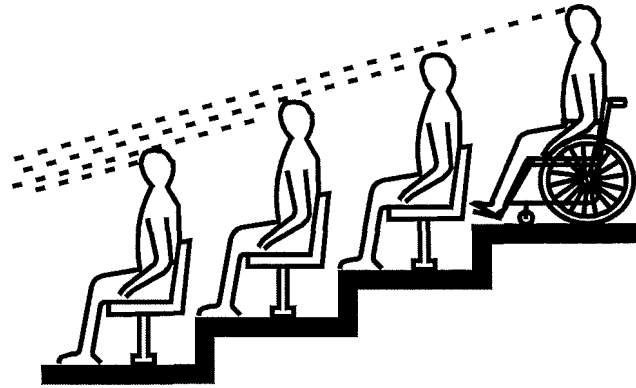


Side Access

Depth of a Wheelchair Space in Auditorium and Assembly Areas

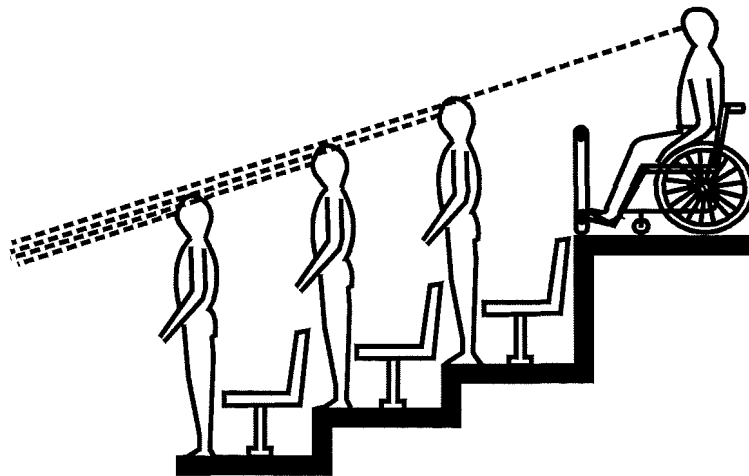
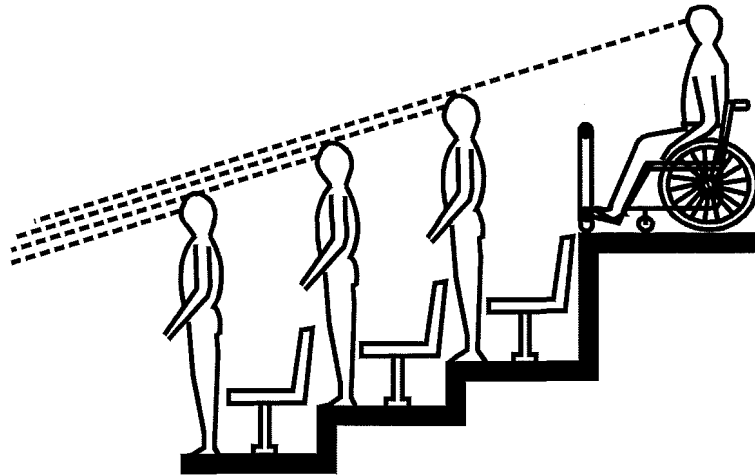
Wheelchair Spaces in Auditorium and Assembly Areas

Figures 802.2.1.1 and 802.2.1.2



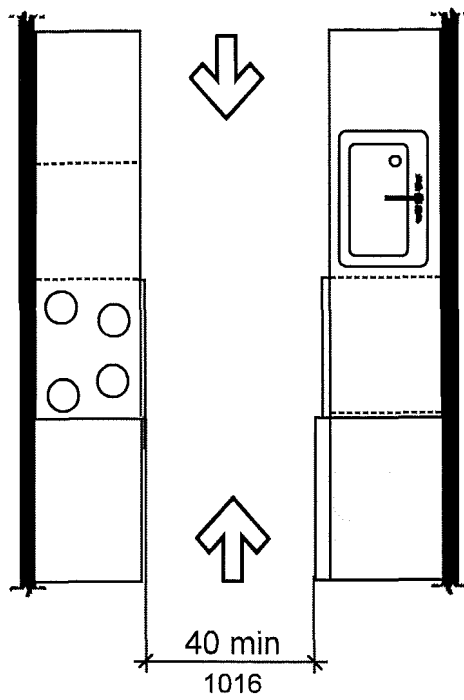
Lines of Sight Over and Between the Heads of Seated Spectators

Figures 802.2.2.1 and 802.2.2.2



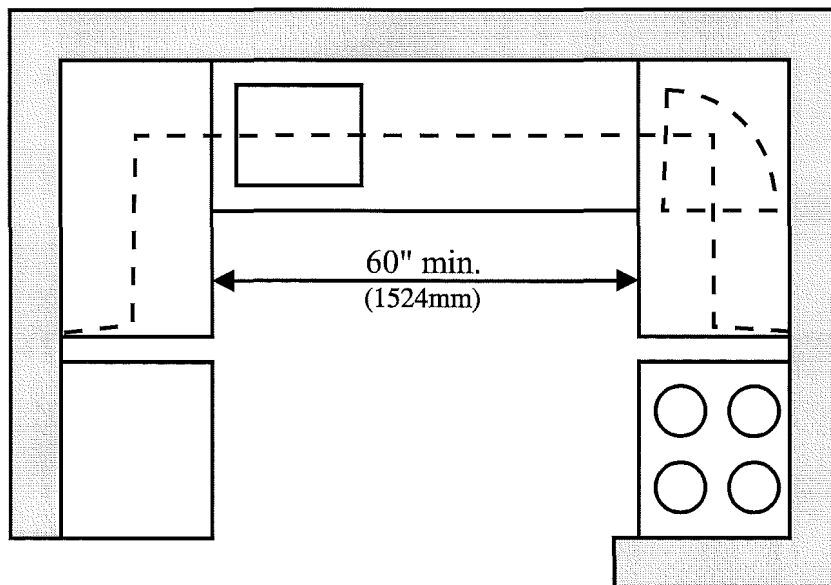
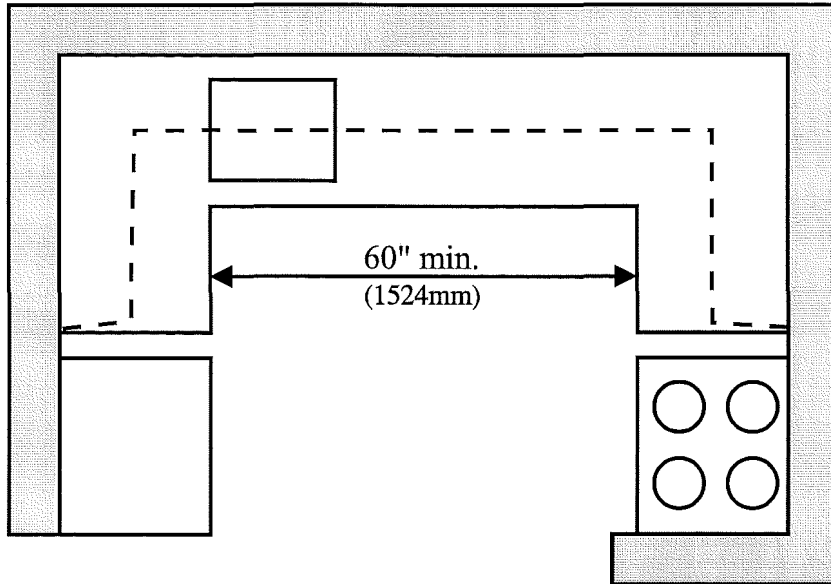
Lines of Sight Over and Between the Heads of Standing Spectators

Figure 804.2.1



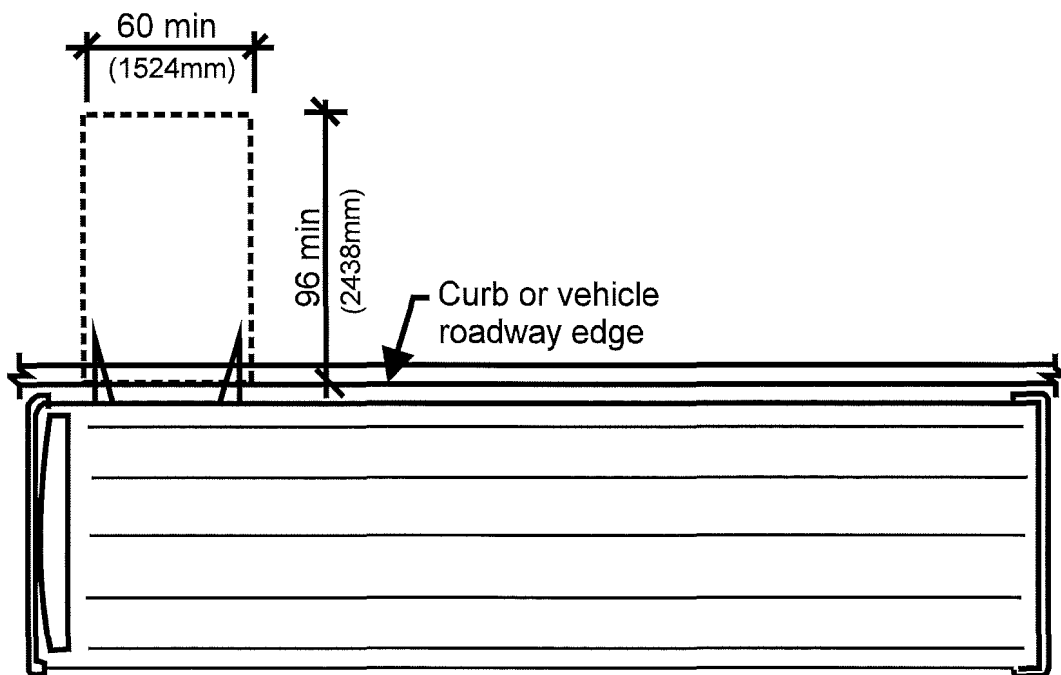
Pass Through Kitchens

Figure 804.2.2



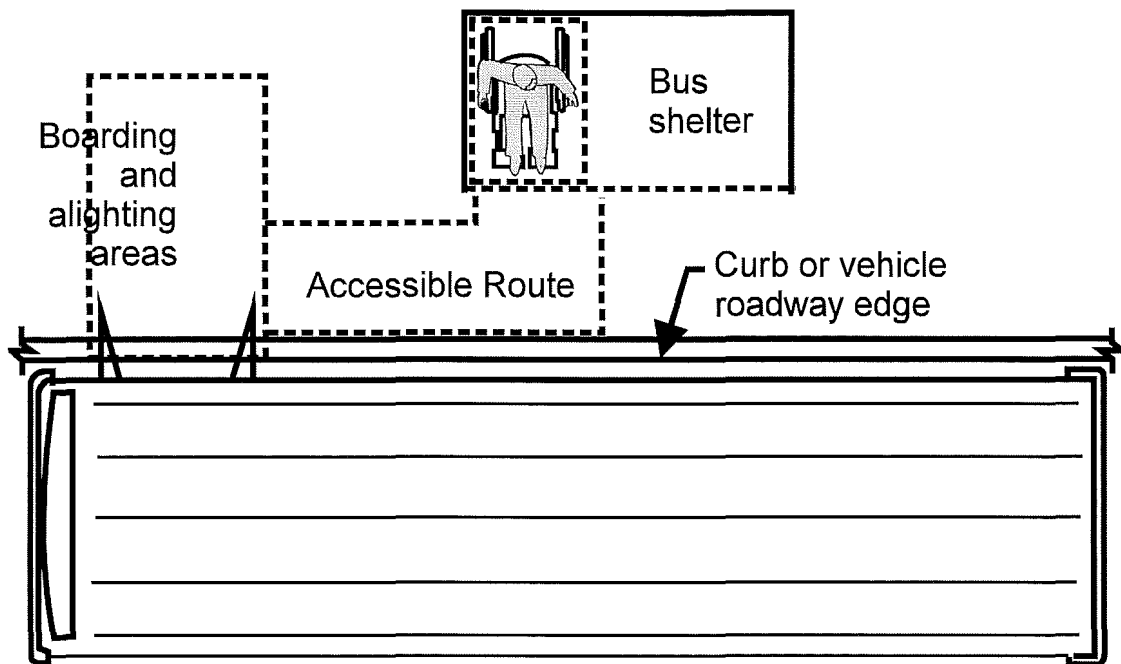
U-Shaped Kitchens

Figure 810.2.2



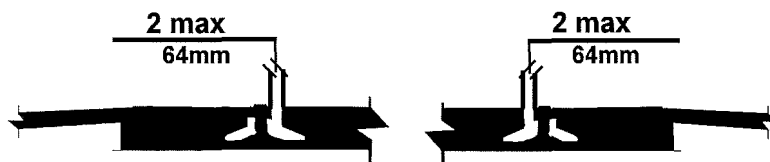
Dimensions of Bus Boarding and Alighting Areas

Figure 810.3



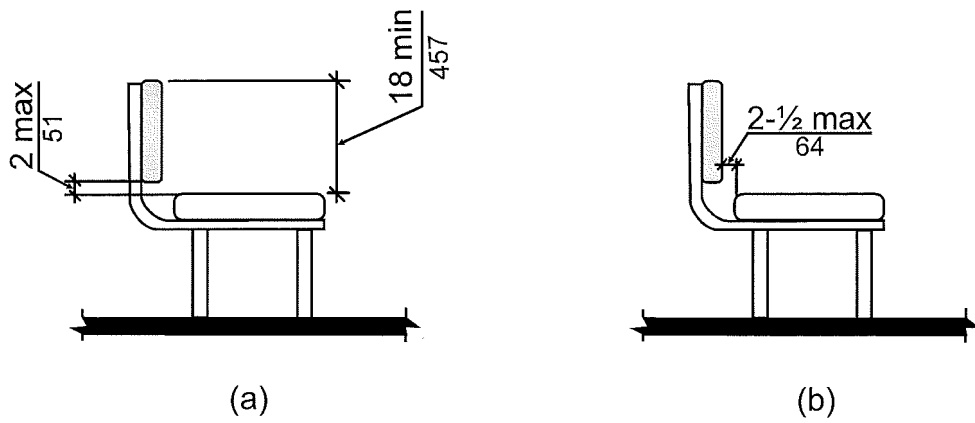
Bus Shelters

Figure 810.10



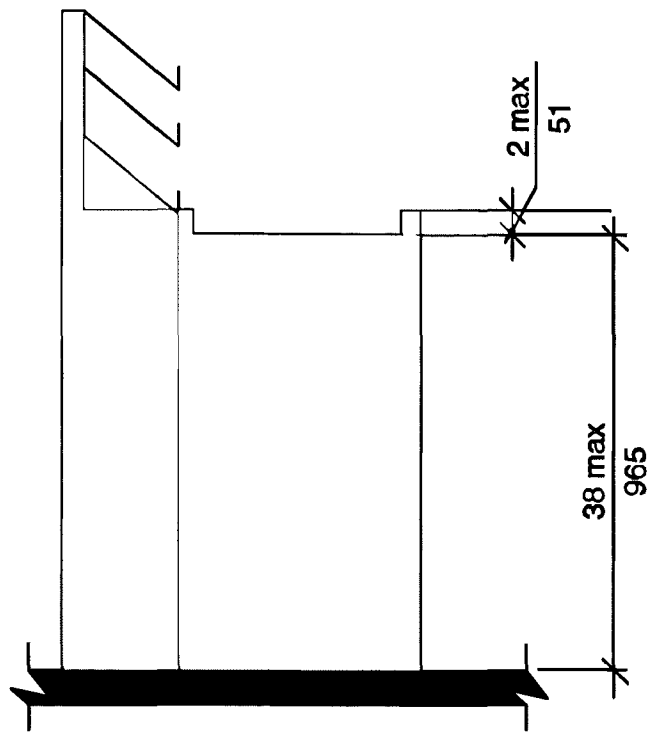
Exception - Track Crossings

Figure 903.4



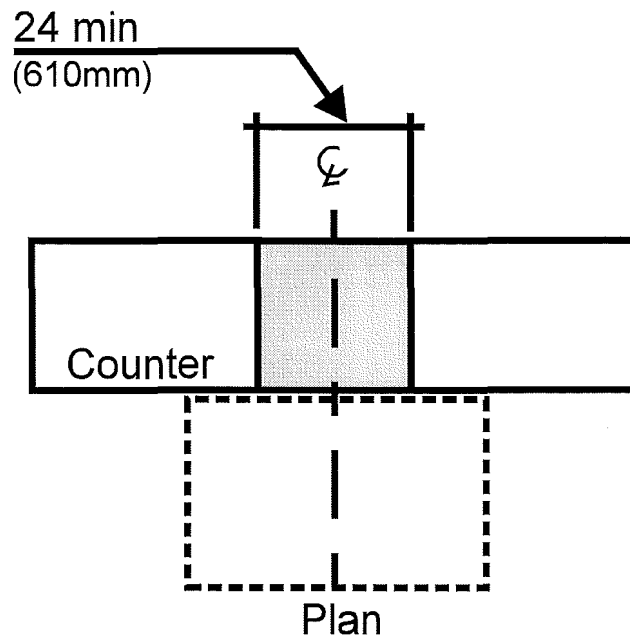
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Figure 904.3.2



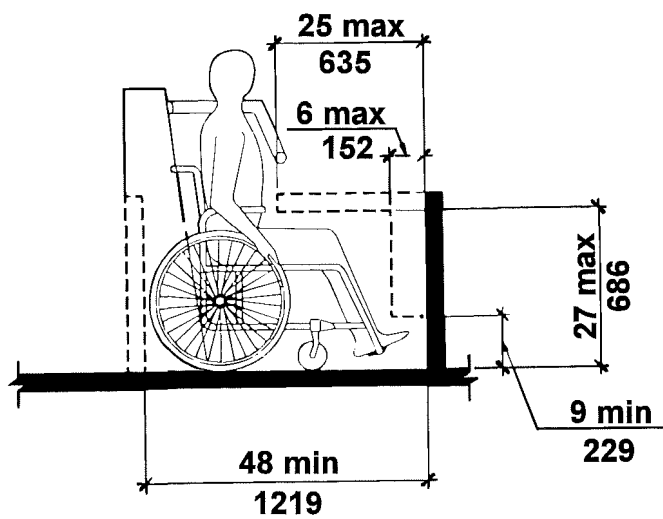
Check-Out Aisle Counters

Figure 904.4



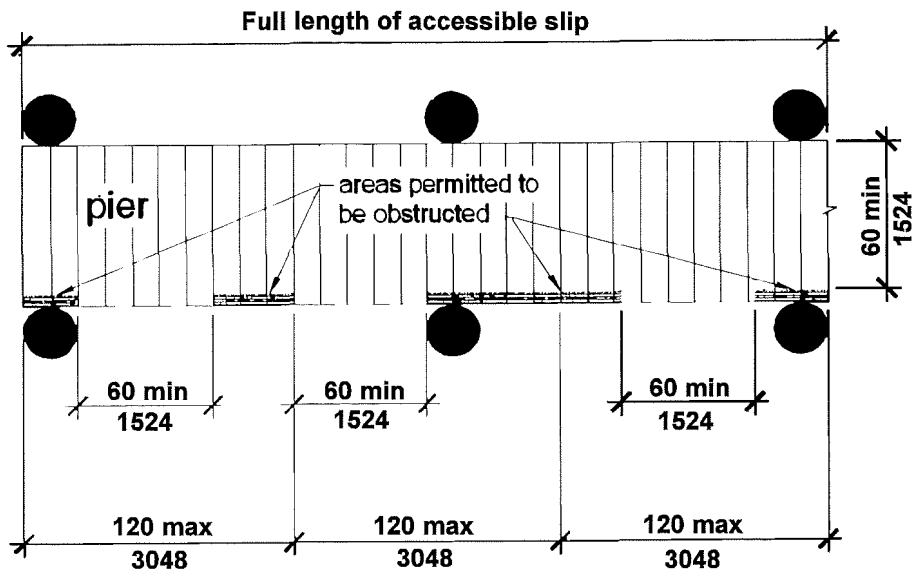
Exception - Alteration of Sales and Service Counters

Figure 1002.4.4.3



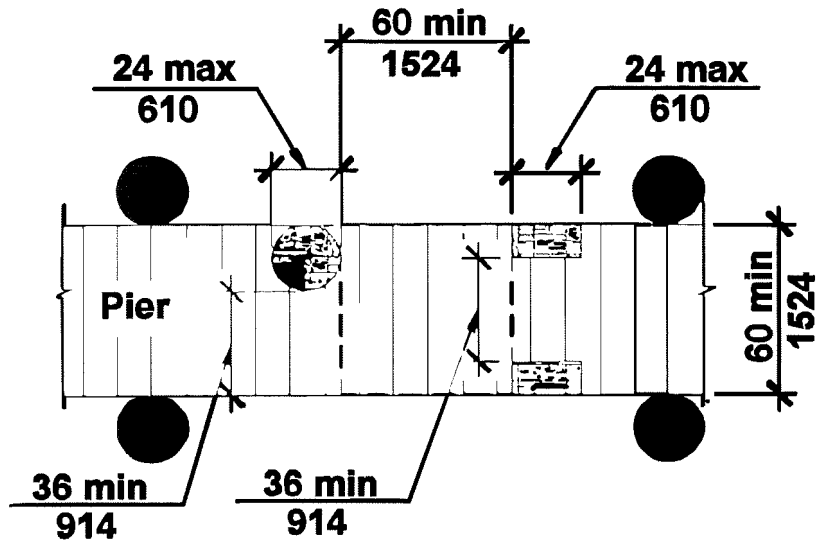
Protrusions in Wheelchair Spaces in Amusement Rides

Figure 1003.3.1

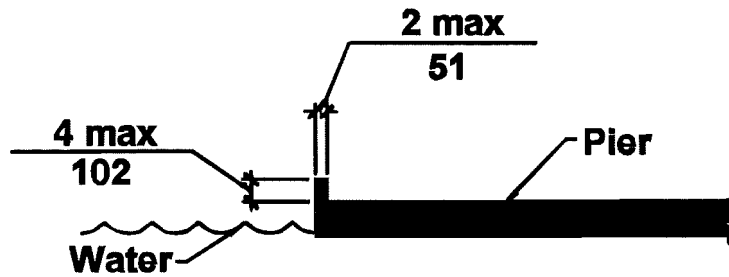


Boat Slip Clearance

Figure 1003.3.1



Pier Clear Space Reduction

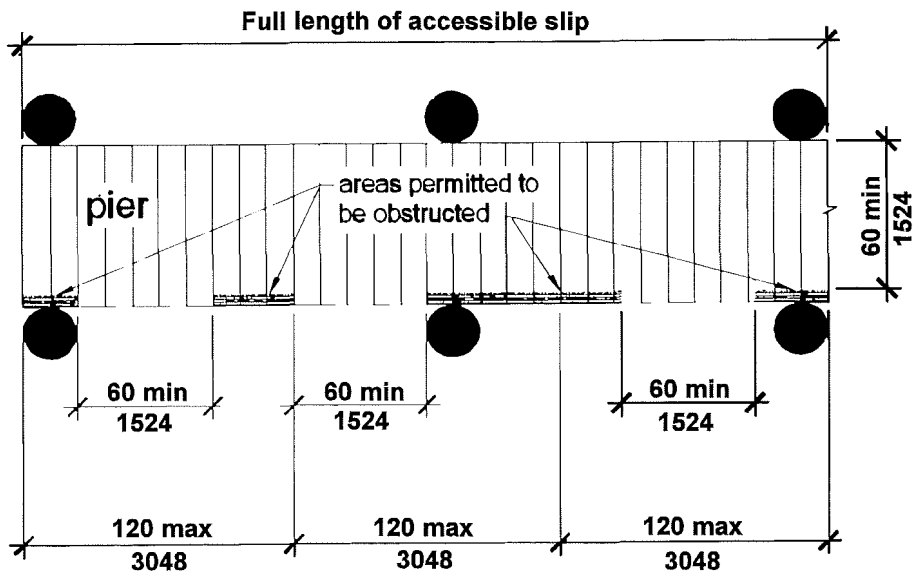


Edge Protection at Pier

Exception 1 - Clear Pier Space Reduction at Boat Slips

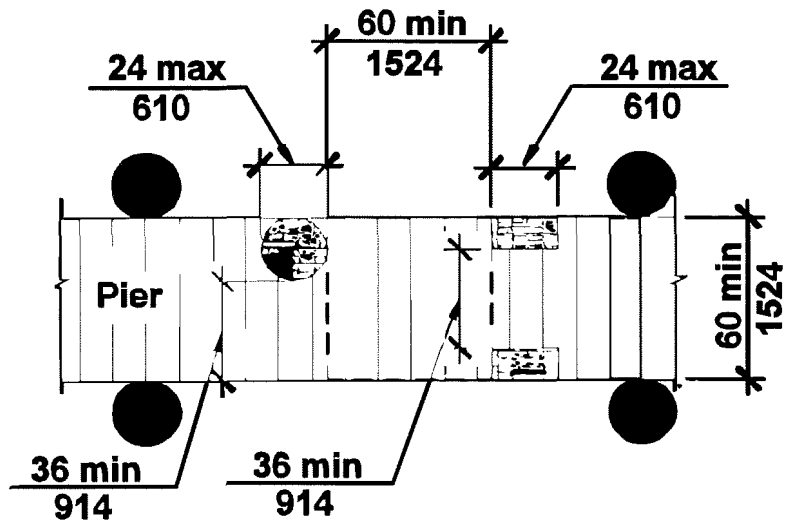
Exception 2 - Edge Protection at Boat Slips

Figure 1003.3.2

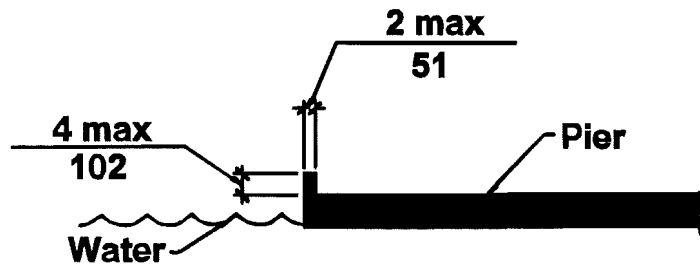


Boarding Pier Clearance

Figure 1003.3.2



Pier Clear Space Reduction

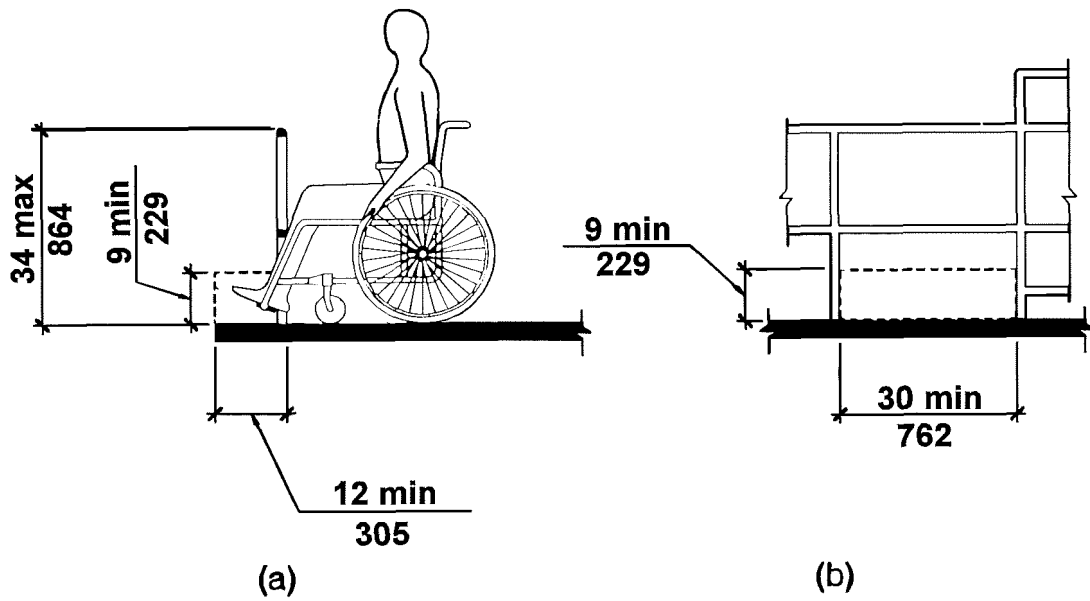


Edge Protection at Pier

Exception 1 - Clear Pier Space Reduction at Boarding Piers

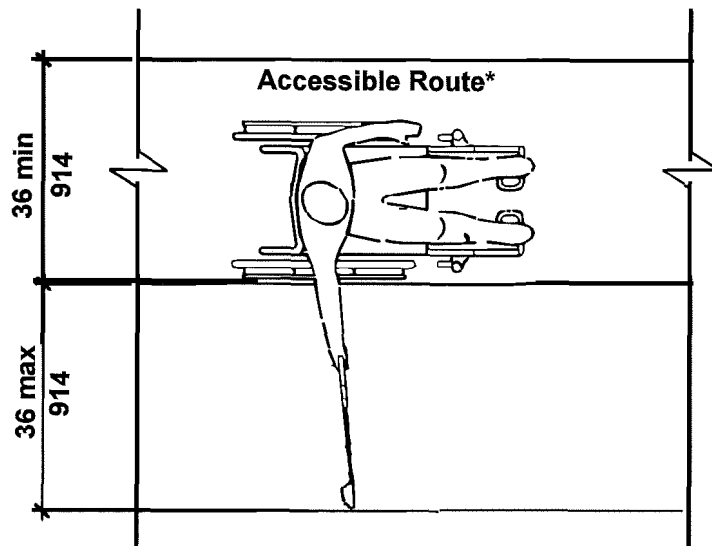
Exception 2 - Edge Protection at Boarding Piers

Figure 1005.3.2



Extended Ground or Deck Surface at Fishing Piers and Platforms

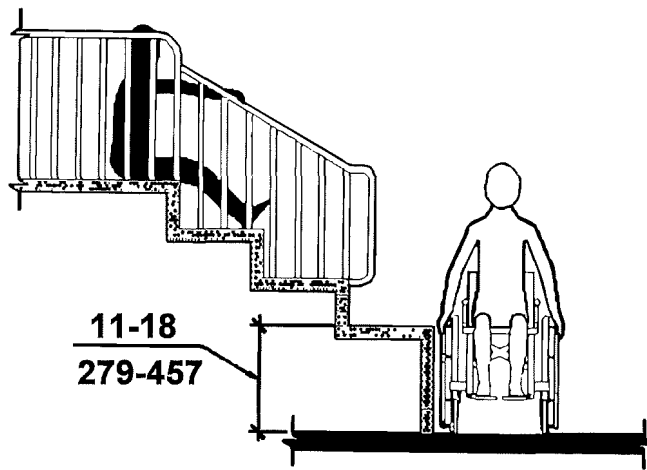
Figure 1007.3.2



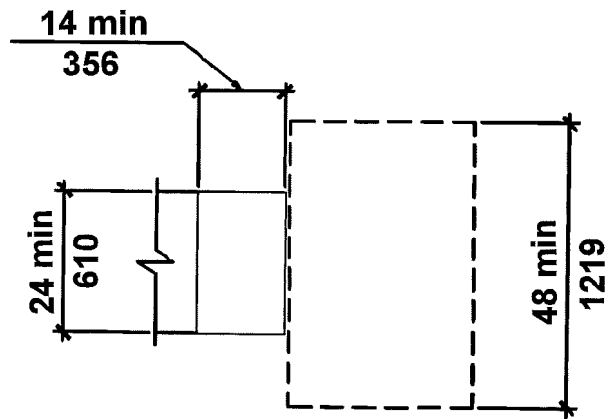
* Note: 1:20 maximum Slope

Golf Club Reach Range Area

Figure 1008.3.1



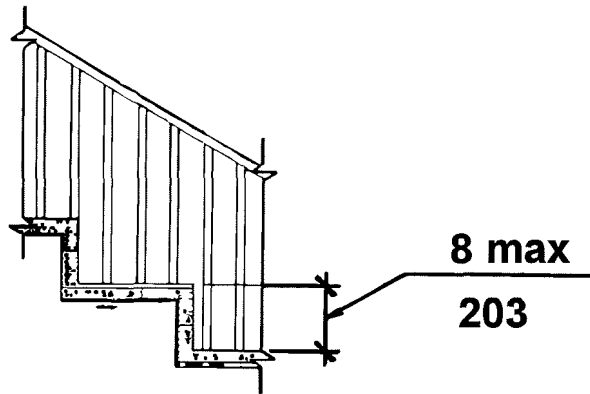
(A)



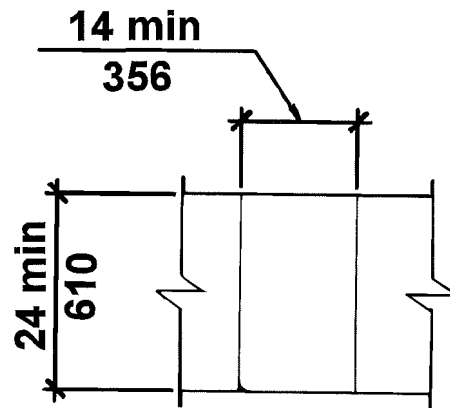
(B)

Transfer Platforms

Figure 1008.3.2



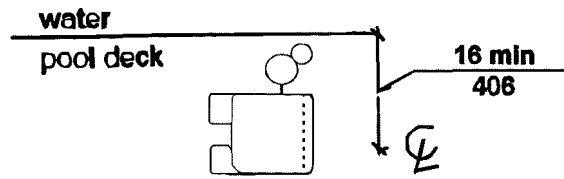
(A)



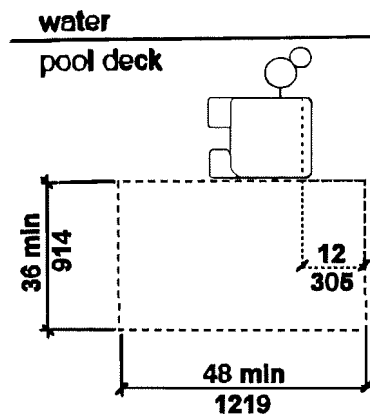
(B)

Transfer Steps

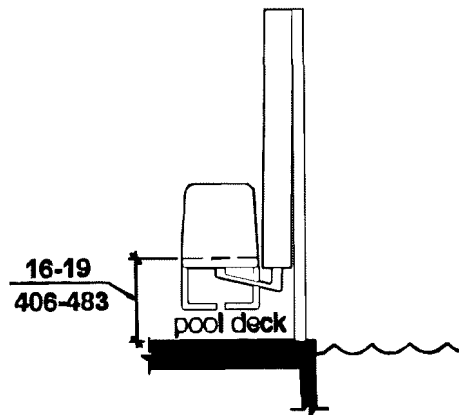
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Pool Lift Seat Location



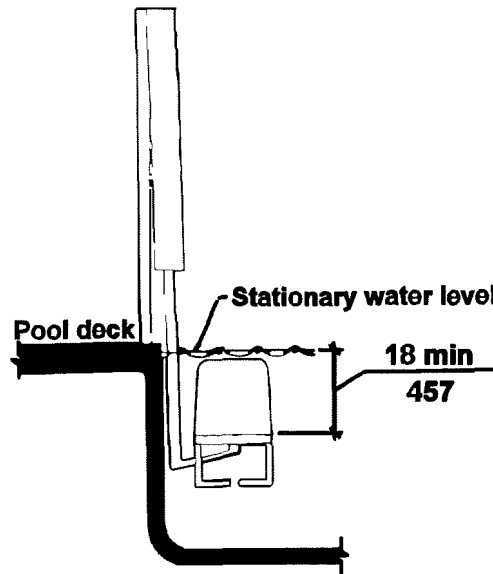
Clear Deck Space at Pool Lifts



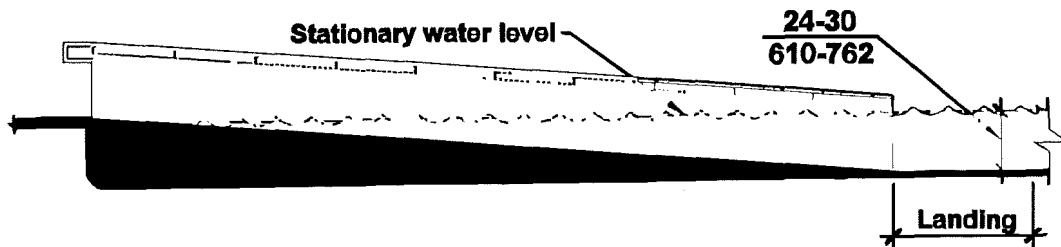
Pool Lift Seat Height

Pool Lifts

Figures 1009.2.8 and 1009.3.2



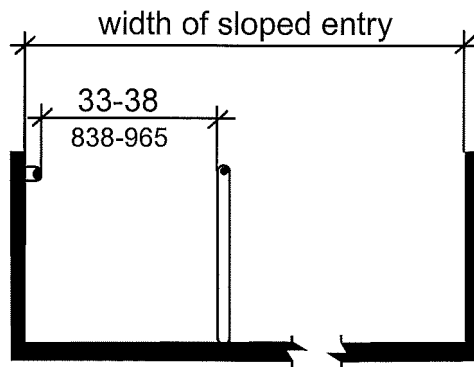
Pool Lift Submerged Depth



Sloped Entry Submerged Depth

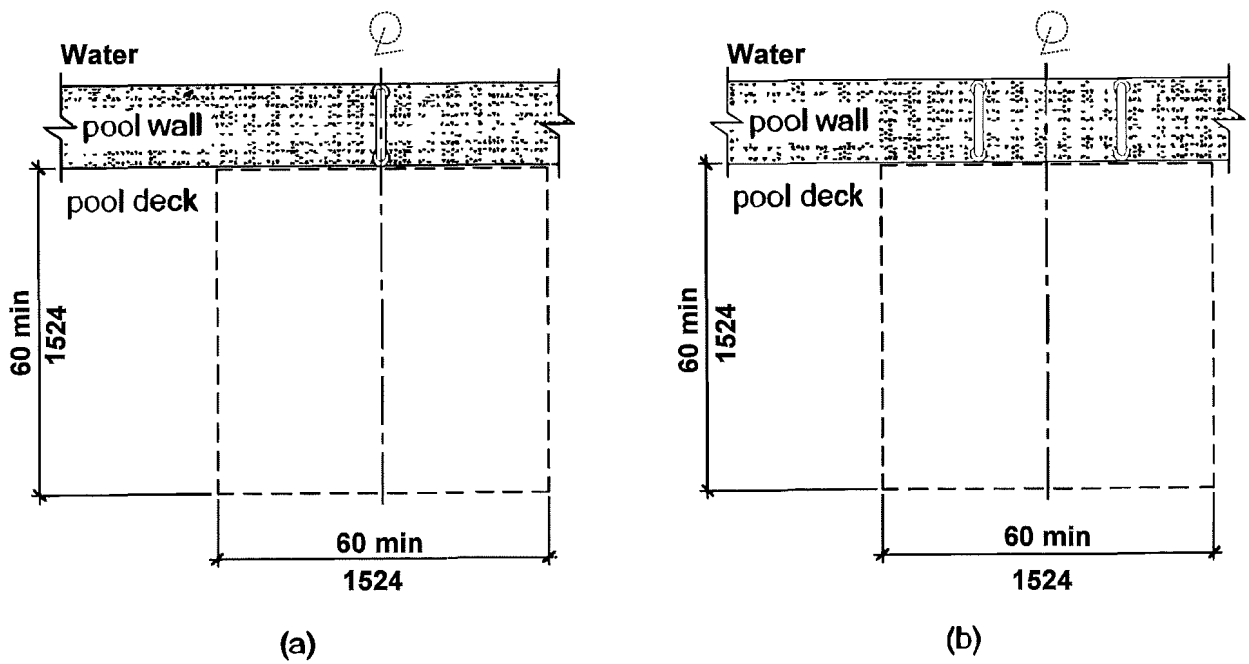
Pool Lift and Sloped Entry - Submerged Depth

Figure 1009.3.3



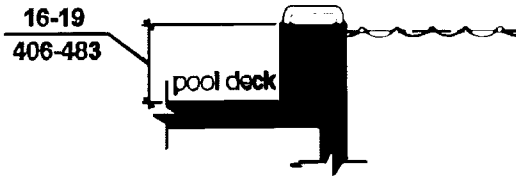
Handrails for Sloped Entry

Figure 1009.4.1

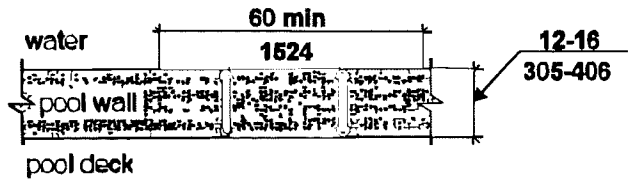


Clear Deck Space at Transfer Walls

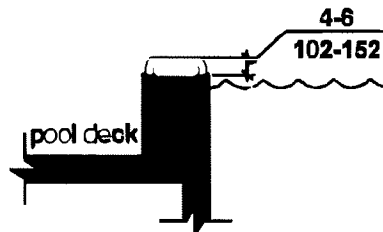
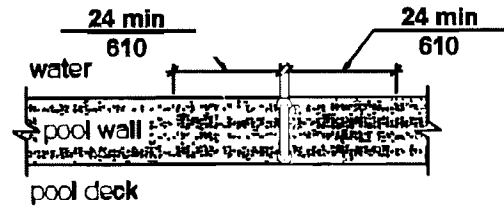
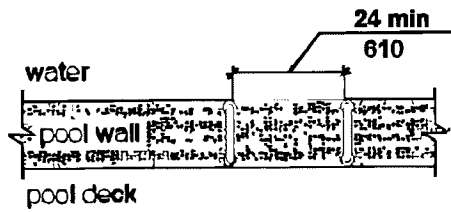
Figures 1009.4.2, 1009.4.3 and 1009.4.5



Transfer Wall Height



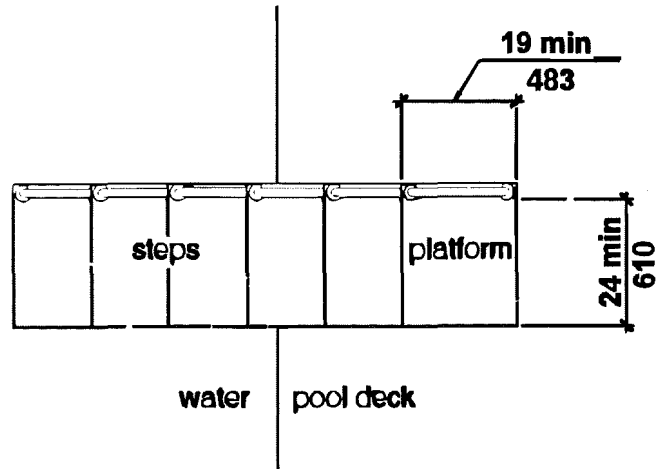
Transfer Wall Depth and Length



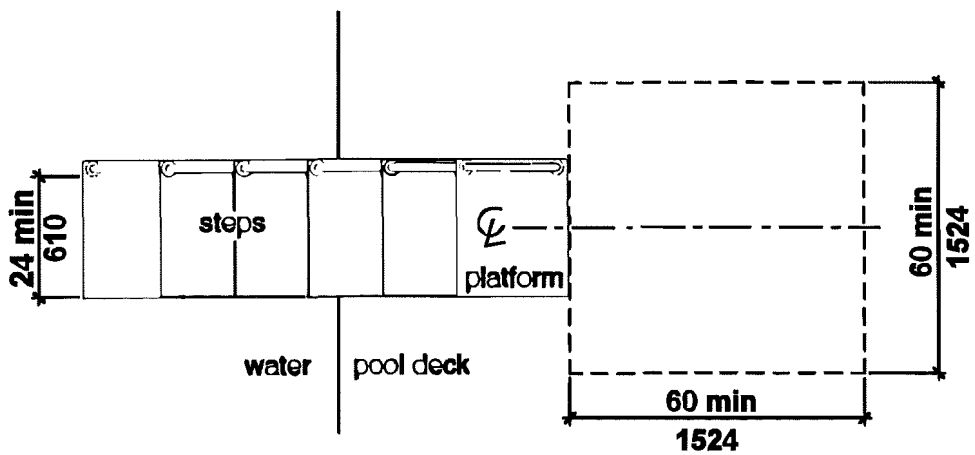
Grab Bars at Transfer Walls

Transfer Walls

Figures 1009.5.1 and 1009.5.2



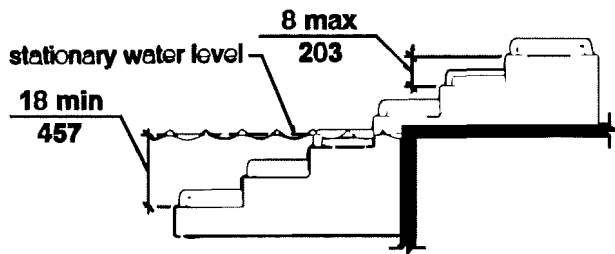
Transfer System Platform



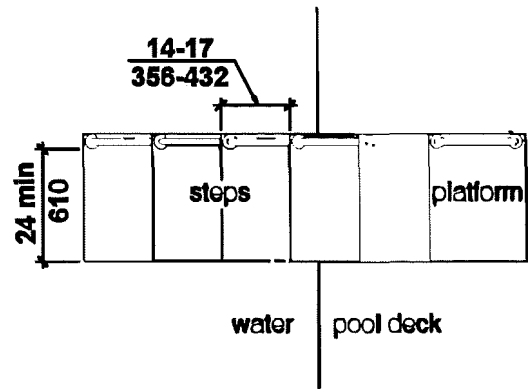
Clear Deck Space at Transfer Systems

Transfer Systems

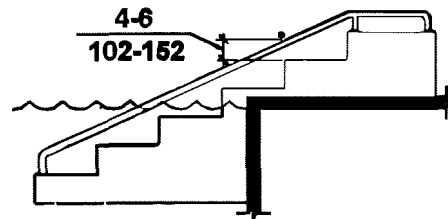
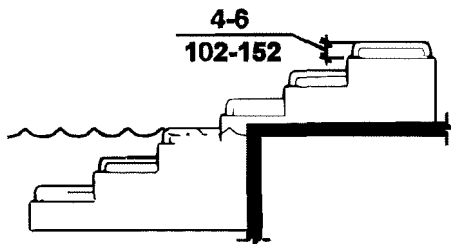
Figures 1009.5.4, 1009.5.6 and 1009.5.7



Transfer System Steps



Size of Transfer System Steps



Grab Bars at Transfer Systems

Transfer Systems

HOW TO USE THIS HANDBOOK

This book helps make it easier to find information and navigate freely throughout the ADA/ABA Accessibility Guidelines. It is divided in two parts; the ADA Accessibility Guidelines and the ABA Accessibility Guidelines for Federal applications.

ADA Accessibility Guidelines are located from pages 1 through 337:

Sections 1 through 9, code numbers 101 through 203, contain an overview of the application and scoping provisions. Chapters 1 through 71, code numbers 204 through 1010, contain both the scoping requirements and the related technical provisions for components of a building or facility. All like subjects have been contained in their own chapter regardless of code number.

ABA Accessibility Guidelines are located from pages 339 through 482:

Sections F1 through F9, code numbers F101 through F203, contain an overview of the application and scoping provisions. Chapters F1 through F41, code numbers F204 through F243, contain specific scoping for components of a building or facility.

The following is an explanation of the ADA/ABA Accessibility Guidelines numbering system.

<p>Part I: ADA Application and Scoping</p> <p>100 is application and administration 200 is scoping requirements</p>	<p>Part II: ABA Application and Scoping (Numbers here are preceded by an F)</p> <p>F100 is application and administration F200 is scoping requirements</p>
<p><u>And Both Codes Use the Same Technical Sections</u></p> <p>300 is building blocks 400 is accessible routes 500 is general site and building elements 600 is plumbing elements and facilities 700 is communication elements and features 800 is special rooms, spaces and elements 900 is built-in elements 1000 is recreation facilities</p>	

In Chapters 1 through 71, the ADA Scoping Requirements are combined with all related technical provisions. See the Table of Contents for a listing of code numbers. The Application, Scoping and Technical Section code numbers contained in each Section and Chapter have been placed directly to the right of the Section or Chapter name.

For example, Chapter 6 – Parking spaces, contains ADA Scoping Requirements (208) as well as the Technical Sections (501 and 502) that pertain to these requirements.

Chapter 6: Parking Spaces - 208, 501, 502..... 51

Whereby, 208 is the scoping requirement and 501, 502 are the technical elements.

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- Section 1- The ADA

PURPOSE

ADA

101	Purpose
101.1	General

This document contains scoping and technical requirements for accessibility to sites, facilities, buildings, and elements by individuals with disabilities.

The requirements are to be applied during the design, construction, additions to, and alteration of sites, facilities, buildings, and elements to the extent required by regulations issued by Federal agencies under the Americans with Disabilities Act of 1990 (ADA).

	<i>Advisory</i>
101.1	<i>General</i>

In addition to these requirements, covered entities must comply with the regulations issued by the Department of Justice and the Department of Transportation under the Americans with Disabilities Act.

There are issues affecting individuals with disabilities which are not addressed by these requirements, but which are covered by the Department of Justice and the Department of Transportation regulations.

101.2 **Effect on Removal of Barriers in Existing Facilities**

This document does not address existing facilities unless altered at the discretion of a covered entity.

The Department of Justice has authority over existing facilities that are subject to the requirement for removal of barriers under Title III of the ADA.

Any determination that this document applies to existing facilities subject to the barrier removal requirement is solely within the discretion of the Department of Justice and is effective only to the extent required by regulations issued by the Department of Justice.

- Section 2 -**DIMENSIONS FOR ADULTS AND CHILDREN**

102

Dimensions for Adults and Children

The technical requirements are based on adult dimensions and anthropometrics.

In addition, this document includes technical requirements based on children's dimensions and anthropometrics for drinking fountains, water closets, toilet compartments, lavatories and sinks, dining surfaces, and work surfaces.

- Section 3 -

EQUIVALENT FACILITATION

103

Equivalent Facilitation

Nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in substantially equivalent or greater accessibility and usability.

Advisory

103

Equivalent Facilitation

The responsibility for demonstrating equivalent facilitation in the event of a challenge rests with the covered entity.

With the exception of transit facilities, which are covered by regulations issued by the Department of Transportation, there is no process for certifying that an alternative design provides equivalent facilitation.

- Section 4 -

CONVENTIONS

104	Conventions
104.1	Dimensions

Dimensions that are not stated as “maximum” or “minimum” are absolute.

104.1.1 **Construction and Manufacturing Tolerances**

All dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points.

Advisory

104.1.1 *Construction and Manufacturing Tolerances*

Conventional industry tolerances recognized by this provision include those for field conditions and those that may be a necessary consequence of a particular manufacturing process.

Recognized tolerances are not intended to apply to design work.

It is good practice when specifying dimensions to avoid specifying a tolerance where dimensions are absolute.

For example, if this document requires “1 inches,” avoid specifying “1 inches plus or minus X inches.”

Where the requirement states a specified range, such as in Chapter 63: Grab Bars - 609.4 - p. 315 where grab bars must be installed between 33 inches and 36 inches (838mm and 914mm) above the floor, the range provides an adequate tolerance and therefore no tolerance outside of the range at either end point is permitted.

Where a requirement is a minimum or a maximum dimension that does not have two specific minimum and maximum end points, tolerances may apply.

Where an element is to be installed at the minimum or maximum permitted dimension, such as “15 inches minimum” or “5 pounds maximum”, it would not be good practice to specify “5 pounds (plus X pounds) or 15 inches (minus X inches).”

Rather, it would be good practice to specify a dimension less than the required maximum (or more than the required minimum) by the amount of the expected field or manufacturing tolerance and not to state any tolerance in conjunction with the specified dimension.

Specifying dimensions in design in the manner described above will better ensure that facilities and elements accomplish the level of accessibility intended by these requirements.

Section 4: Conventions (continued)

It will also more often produce an end result of strict and literal compliance with the stated requirements and eliminate enforcement difficulties and issues that might otherwise arise.

Information on specific tolerances may be available from industry or trade organizations, code groups and building officials, and published references.

104.2

Calculation of Percentages

Where the required number of elements or facilities to be provided is determined by calculations of ratios or percentages and remainders or fractions result, the next greater whole number of such elements or facilities shall be provided.

Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one half shall be permitted.

104.3

Figures

Unless specifically stated otherwise, figures are provided for informational purposes only.

See Figure 104 - p. 483.

- Section 5 -

REFERENCED STANDARDS

105 **Referenced Standards**
105.1 **General**

The standards listed in 105.2 - (below & following pages) are incorporated by reference in this document and are part of the requirements to the prescribed extent of each such reference.

The Director of the Federal Register has approved these standards for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

Copies of the referenced standards may be inspected at the Architectural and Transportation Barriers Compliance Board, 1331 F Street, NW, Suite 1000, Washington, DC 20004; at the Department of Justice, Civil Rights Division, Disability Rights Section, 1425 New York Avenue, NW, Washington, DC; at the Department of Transportation, 400 Seventh Street, SW, Room 10424, Washington DC; or at the National Archives and Records Administration (NARA).

For information on the availability of this material at NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

105.2 **Referenced Standards**

The specific edition of the standards listed below are referenced in this document.

Where differences occur between this document and the referenced standards, this document applies.

105.2.1 **ANSI/BHMA**

Copies of the referenced standards may be obtained from the Builders Hardware Manufacturers Association, 355 Lexington Avenue, 17th floor, New York, NY 10017 (<http://www.buildershardware.com>).

ANSI/BHMA A156.10-1999 American National Standard for Power Operated Pedestrian Doors (see Chapter 49: Doors - Doorways - Gates - 404.3 - pp. 249-251).

ANSI/BHMA A156.19-1997 American National Standard for Power Assist and Low Energy Power Operated Doors (see Chapter 49: Doors - Doorways - Gates - 404.3 - pp. 249-251, Chapter 53: Limited Use/Limited Application Elevators - 408.3.2.1 - p. 274 and Chapter 54: Private Residence Elevators - 409.3.1 - pp. 276 & 277).

ANSI/BHMA A156.19-2002 American National Standard for Power Assist and Low Energy Power Operated Doors (see Chapter 49: Doors - Doorways - Gates - 404.3 - pp. 249-251, Chapter 53: Limited Use/Limited Application Elevators - 408.3.2.1 - p. 274 and Chapter 54: Private Residence Elevators - 409.3.1 - pp. 276 & 277).

Section 5: Referenced Standards (continued)

105.2.1 *Advisory*
ANSI/BHMA

ANSI/BHMA A156.10-1999 applies to power operated doors for pedestrian use which open automatically when approached by pedestrians.

Included are provisions intended to reduce the chance of user injury or entrapment.

ANSI/BHMA A156.19-1997 and A156.19-2002 applies to power assist doors, low energy power operated doors or low energy power open doors for pedestrian use not provided for in ANSI/BHMA A156.10 for Power Operated Pedestrian Doors.

Included are provisions intended to reduce the chance of user injury or entrapment.

105.2.2 **ASME**

Copies of the referenced standards may be obtained from the American Society of Mechanical Engineers, Three Park Avenue, New York, New York 10016 (<http://www.asme.org>).

ASME A17.1- 2000 Safety Code for Elevators and Escalators, including ASME A17.1a-2002 Addenda and ASME A17.1b-2003 Addenda (see Chapter 52: Elevators - 407.1 - p. 259, Chapter 53: Limited Use/Limited Application Elevators - 408.1 - p. 273, Chapter 54: Private Residence Elevators - 409.1 - p. 276, and Chapter 16: Transportation Facilities - 810.9 - p. 110).

ASME A18.1-1999 Safety Standard for Platform Lifts and Stairway Chairlifts, including ASME A18.1a-2001 Addenda and ASME A18.1b-2001 Addenda (see Chapter 55: Platform Lifts - 410.1 - p. 281).

ASME A18.1-2003 Safety Standard for Platform Lifts and Stairway Chairlifts, (see Chapter 55: Platform Lifts - 410.1 - p. 281).

105.2.2 *Advisory*
ASME

ASME A17.1-2000 is used by local jurisdictions throughout the United States for the design, construction, installation, operation, inspection, testing, maintenance, alteration, and repair of elevators and escalators.

The majority of the requirements apply to the operational machinery not seen or used by elevator passengers.

ASME A17.1 requires a two-way means of emergency communications in passenger elevators.

This means of communication must connect with emergency or authorized personnel and not an automated answering system.

Section 5: Referenced Standards (continued)

The communication system must be push button activated. The activation button must be permanently identified with the word "HELP."

A visual indication acknowledging the establishment of a communications link to authorized personnel must be provided.

The visual indication must remain on until the call is terminated by authorized personnel.

The building location, the elevator car number, and the need for assistance must be provided to authorized personnel answering the emergency call.

The use of a handset by the communications system is prohibited.

Only the authorized personnel answering the call can terminate the call.

Operating instructions for the communications system must be provided in the elevator car.

The provisions for escalators require that at least two flat steps be provided at the entrance and exit of every escalator and that steps on escalators be demarcated by yellow lines 2 inches wide maximum along the back and sides of steps.

ASME A18.1-1999 and ASME A18.1-2003 address the design, construction, installation, operation, inspection, testing, maintenance and repair of lifts that are intended for transportation of persons with disabilities.

Lifts are classified as: vertical platform lifts, inclined platform lifts, inclined stairway chairlifts, private residence vertical platform lifts, private residence inclined platform lifts, and private residence inclined stairway chairlifts.

This document does not permit the use of inclined stairway chairlifts which do not provide platforms because such lifts require the user to transfer to a seat.

ASME A18.1 contains requirements for runways, which are the spaces in which platforms or seats move.

The standard includes additional provisions for runway enclosures, electrical equipment and wiring, structural support, headroom clearance (which is 80 inches (2032mm) minimum), lower level access ramps and pits.

The enclosure walls not used for entry or exit are required to have a grab bar the full length of the wall on platform lifts.

Access ramps are required to meet requirements similar to those for ramps in Chapter 50: Ramps - pp. 252-256 of this document.

Section 5: Referenced Standards (continued)

Each of the lift types addressed in ASME A18.1 must meet requirements for capacity, load, speed, travel, operating devices, and control equipment.

The maximum permitted height for operable parts is consistent with Chapter 47: Reach Ranges - 308 - pp. 237-239.

The standard also addresses attendant operation.

However, Chapter 55: Platform Lifts - 410.1 - p. 281 of this document does not permit attendant operation.

105.2.3 **ASTM**

Copies of the referenced standards may be obtained from the American Society for Testing and Materials, 100 Bar Harbor Drive, West Conshohocken, Pennsylvania 19428 (<http://www.astm.org>).

ASTM F 1292-99 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment (see Chapter 38: Play Areas - 1008.2.6.2 - p. 209).

ASTM F 1292-04 Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment (see Chapter 38: Play Areas - 1008.2.6.2 - p. 209).

ASTM F 1487-01 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use (see Section 6: Definitions - 106.5 - p. 18).

ASTM F 1951-99 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment (see Chapter 38: Play Areas - 1008.2.6.1 - p. 209).

105.2.3 *Advisory* *ASTM*

ASTM F 1292-99 and ASTM F 1292-04 establish a uniform means to measure and compare characteristics of surfacing materials to determine whether materials provide a safe surface under and around playground equipment.

These standards are referenced in the play areas requirements of this document when an accessible surface is required inside a play area use zone where a fall attenuating surface is also required.

The standards cover the minimum impact attenuation requirements, when tested in accordance with Test Method F 355, for surface systems to be used under and around any piece of playground equipment from which a person may fall.

ASTM F 1487-01 establishes a nationally recognized safety standard for public playground equipment to address injuries identified by the U.S. Consumer Product Safety Commission.

Section 5: Referenced Standards (continued)

It defines the use zone, which is the ground area beneath and immediately adjacent to a play structure or play equipment designed for unrestricted circulation around the equipment and on whose surface it is predicted that a user would land when falling from or exiting a play structure or equipment.

The play areas requirements in this document reference the ASTM F 1487 standard when defining accessible routes that overlap use zones requiring fall attenuating surfaces.

If the use zone of a playground is not entirely surfaced with an accessible material, at least one accessible route within the use zone must be provided from the perimeter to all accessible play structures or components within the playground.

ASTM F 1951-99 establishes a uniform means to measure the characteristics of surface systems in order to provide performance specifications to select materials for use as an accessible surface under and around playground equipment.

Surface materials that comply with this standard and are located in the use zone must also comply with ASTM F 1292.

The test methods in this standard address access for children and adults who may traverse the surfacing to aid children who are playing.

When a surface is tested it must have an average work per foot value for straight propulsion and for turning less than the average work per foot values for straight propulsion and for turning, respectively, on a hard, smooth surface with a grade of 7% (1:14).

105.2.4

ICC/IBC

Copies of the referenced standard may be obtained from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041 (www.iccsafe.org).

International Building Code, 2000 Edition (see Chapter 5: Accessible Means of Egress - 207.1, 207.2 - p. 50, Chapter 14: Signs - 216.4.2, 216.4.3 - p. 84, and Chapter 35: Fishing Piers and Platforms - 1005.2.1 - p. 189).

International Building Code, 2001 Supplement (see Chapter 5: Accessible Means of Egress - 207.1, 207.2 - p. 50).

International Building Code, 2003 Edition (see Chapter 5: Accessible Means of Egress - 207.1, 207.2 - p. 50, Chapter 14: Signs - 216.4.2, 216.4.3 - p. 84, and Chapter 35: Fishing Piers and Platforms - 1005.2.1 - p. 189).

Section 5: Referenced Standards (continued)

105.2.4 *Advisory*
ICC/IBC

International Building Code (IBC)-2000 (including 2001 Supplement to the International Codes) and IBC-2003 are referenced for means of egress, areas of refuge, and railings provided on fishing piers and platforms.

At least one accessible means of egress is required for every accessible space and at least two accessible means of egress are required where more than one means of egress is required.

The technical criteria for accessible means of egress allow the use of exit stairways and evacuation elevators when provided in conjunction with horizontal exits or areas of refuge.

While typical elevators are not designed to be used during an emergency evacuation, evacuation elevators are designed with standby power and other features according to the elevator safety standard and can be used for the evacuation of individuals with disabilities.

The IBC also provides requirements for areas of refuge, which are fire-rated spaces on levels above or below the exit discharge levels where people unable to use stairs can go to register a call for assistance and wait for evacuation.

The recreation facilities requirements of this document references two sections in the IBC for fishing piers and platforms.

An exception addresses the height of the railings, guards, or handrails where a fishing pier or platform is required to include a guard, railing, or handrail higher than 34 inches (864mm) above the ground or deck surface.

105.2.5 **NFPA**

Copies of the referenced standards may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, (<http://www.nfpa.org>).

NFPA 72 National Fire Alarm Code, 1999 Edition (see Chapter 13: Fire Alarm Systems - 702.1 - p. 81 and Chapter 69: Residential Dwelling Units - 809.5.2 - p. 331).

NFPA 72 National Fire Alarm Code, 2002 Edition (see Chapter 13: Fire Alarm Systems - 702.1 - p. 81 and Chapter 69: Residential Dwelling Units - 809.5.2 - p. 331).

105.2.5 *Advisory*
NFPA

NFPA 72-1999 and NFPA 72-2002 address the application, installation, performance, and maintenance of protective signaling systems and their components.

Section 5: Referenced Standards (continued)

The NFPA 72 incorporates Underwriters Laboratory (UL) 1971 by reference.

The standard specifies the characteristics of audible alarms, such as placement and sound levels.

However, Chapter 13: Fire Alarms Systems - 702 - p. 81 of these requirements limits the volume of an audible alarm to 110 dBA, rather than the maximum 120 dBA permitted by NFPA 72-1999.

NFPA 72 specifies characteristics for visible alarms, such as flash frequency, color, intensity, placement, and synchronization.

However, Chapter 13: Fire Alarms Systems - 702 - p. 81 of this document requires that visual alarm appliances be permanently installed.

UL 1971 specifies intensity dispersion requirements for visible alarms.

In particular, NFPA 72 requires visible alarms to have a light source that is clear or white and has polar dispersion complying with UL 1971.

- Section 6 -

DEFINITIONS

106 **Definitions**
106.1 **General**

For the purpose of this document, the terms defined in 106.5 - (below & following pages) have the indicated meaning.

106.2 **Terms Defined in Referenced Standards**

Terms not defined in 106.5 - (below & following pages) or in regulations issued by the Department of Justice and the Department of Transportation to implement the Americans with Disabilities Act, but specifically defined in a referenced standard, shall have the specified meaning from the referenced standard unless otherwise stated.

106.3 **Undefined Terms**

The meaning of terms not specifically defined in 106.5 - (below & following pages) or in regulations issued by the Department of Justice and the Department of Transportation to implement the Americans with Disabilities Act or in referenced standards shall be as defined by collegiate dictionaries in the sense that the context implies.

106.4 **Interchangeability**

Words, terms and phrases used in the singular include the plural and those used in the plural include the singular.

106.5 **Defined Terms**

Accessible:

A site, building, facility, or portion thereof that complies with this part.

Accessible Means of Egress:

A continuous and unobstructed way of egress travel from any point in a building or facility that provides an accessible route to an area of refuge, a horizontal exit, or a public way.

Addition:

An expansion, extension, or increase in the gross floor area or height of a building or facility.
Administrative Authority.

A governmental agency that adopts or enforces regulations and guidelines for the design, construction, or alteration of buildings and facilities.

Section 6: Definitions (continued)

Alteration:

A change to a building or facility that affects or could affect the usability of the building or facility or portion thereof.

Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions.

Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.

Amusement Attraction:

Any facility, or portion of a facility, located within an amusement park or theme park which provides amusement without the use of an amusement device.

Amusement attractions include, but are not limited to, fun houses, barrels, and other attractions without seats.

Amusement Ride:

A system that moves persons through a fixed course within a defined area for the purpose of amusement.

Amusement Ride Seat:

A seat that is built-in or mechanically fastened to an amusement ride intended to be occupied by one or more passengers.

Area of Sport Activity:

That portion of a room or space where the play or practice of a sport occurs.

Assembly Area:

A building or facility, or portion thereof, used for the purpose of entertainment, educational or civic gatherings, or similar purposes.

For the purposes of these requirements, assembly areas include, but are not limited to, classrooms, lecture halls, courtrooms, public meeting rooms, public hearing rooms, legislative chambers, motion picture houses, auditoria, theaters, playhouses, dinner theaters, concert halls, centers for the performing arts, amphitheaters, arenas, stadiums, grandstands, or convention centers.

Assistive Listening System (ALS):

An amplification system utilizing transmitters, receivers, and coupling devices to bypass the acoustical space between a sound source and a listener by means of induction loop, radio frequency, infrared, or direct-wired equipment.

Section 6: Definitions (continued)

Boarding Pier:

A portion of a pier where a boat is temporarily secured for the purpose of embarking or disembarking.

Boat Launch Ramp:

A sloped surface designed for launching and retrieving trailered boats and other water craft to and from a body of water.

Boat Slip:

That portion of a pier, main pier, finger pier, or float where a boat is moored for the purpose of berthing, embarking, or disembarking.

Building:

Any structure used or intended for supporting or sheltering any use or occupancy.

Catch Pool:

A pool or designated section of a pool used as a terminus for water slide flumes.

Characters:

Letters, numbers, punctuation marks and typographic symbols.

Children's Use:

Describes spaces and elements specifically designed for use primarily by people 12 years old and younger.

Circulation Path:

An exterior or interior way of passage provided for pedestrian travel, including but not limited to, walks, hallways, courtyards, elevators, platform lifts, ramps, stairways, and landings.

Closed-Circuit Telephone:

A telephone with a dedicated line such as a house phone, courtesy phone or phone that must be used to gain entry to a facility.

Common Use:

Interior or exterior circulation paths, rooms, spaces, or elements that are not for public use and are made available for the shared use of two or more people.

Cross Slope:

The slope that is perpendicular to the direction of travel (see running slope).

Curb Ramp:

A short ramp cutting through a curb or built up to it.

Section 6: Definitions (continued)

Detectable Warning:

A standardized surface feature built in or applied to walking surfaces or other elements to warn of hazards on a circulation path.

Element:

An architectural or mechanical component of a building, facility, space, or site.

Elevated Play Component:

A play component that is approached above or below grade and that is part of a composite play structure consisting of two or more play components attached or functionally linked to create an integrated unit providing more than one play activity.

Employee Work Area:

All or any portion of a space used only by employees and used only for work. Corridors, toilet rooms, kitchenettes and break rooms are not employee work areas.

Entrance:

Any access point to a building or portion of a building or facility used for the purpose of entering.

An entrance includes the approach walk, the vertical access leading to the entrance platform, the entrance platform itself, vestibule if provided, the entry door or gate, and the hardware of the entry door or gate.

Facility:

All or any portion of buildings, structures, site improvements, elements, and pedestrian routes or vehicular ways located on a site.

Gangway:

A variable-sloped pedestrian walkway that links a fixed structure or land with a floating structure.

Gangways that connect to vessels are not addressed by this document.

Golf Cart Passage:

A continuous passage on which a motorized golf cart can operate.

Ground Level Play Component:

A play component that is approached and exited at the ground level.

Key Station:

Rapid and light rail stations, and commuter rail stations, as defined under criteria established by the Department of Transportation in 49 CFR 37.47 and 49 CFR 37.51, respectively.

Mail Boxes:

Receptacles for the receipt of documents, packages, or other deliverable matter.

Section 6: Definitions (continued)

Mail boxes include, but are not limited to, post office boxes and receptacles provided by commercial mail-receiving agencies, apartment facilities, or schools.

Marked Crossing:

A crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

Mezzanine:

An intermediate level or levels between the floor and ceiling of any story with an aggregate floor area of not more than one-third of the area of the room or space in which the level or levels are located.

Mezzanines have sufficient elevation that space for human occupancy can be provided on the floor below.

Occupant Load:

The number of persons for which the means of egress of a building or portion of a building is designed.

Operable Part:

A component of an element used to insert or withdraw objects, or to activate, deactivate, or adjust the element.

Pictogram:

A pictorial symbol that represents activities, facilities, or concepts.

Play Area:

A portion of a site containing play components designed and constructed for children.

Play Component:

An element intended to generate specific opportunities for play, socialization, or learning.

Play components are manufactured or natural; and are stand-alone or part of a composite play structure.

Private Building or Facility:

A place of public accommodation or a commercial building or facility subject to Title III of the ADA and 28 CFR part 36 or a transportation building or facility subject to Title III of the ADA and 49 CFR 37.45.

Public Building or Facility:

A building or facility or portion of a building or facility designed, constructed, or altered by, on behalf of, or for the use of a public entity subject to Title II of the ADA and 28 CFR part 35 or to title II of the ADA and 49 CFR 37.41 or 37.43.

Section 6: Definitions (continued)

Public Entrance:

An entrance that is not a service entrance or a restricted entrance.

Public Use:

Interior or exterior rooms, spaces, or elements that are made available to the public.

Public use may be provided at a building or facility that is privately or publicly owned.

Public Way:

Any street, alley or other parcel of land open to the outside air leading to a public street, which has been deeded, dedicated or otherwise permanently appropriated to the public for public use and which has a clear width and height of not less than 10 feet (3048mm).

Qualified Historic Building or Facility:

A building or facility that is listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate State or local law.

Ramp:

A walking surface that has a running slope steeper than 1:20.

Residential Dwelling Unit:

A unit intended to be used as a residence, that is primarily long-term in nature.

Residential dwelling units do not include transient lodging, inpatient medical care, licensed long-term care, and detention or correctional facilities.

Restricted Entrance:

An entrance that is made available for common use on a controlled basis but not public use and that is not a service entrance.

Running Slope:

The slope that is parallel to the direction of travel (see cross slope).

Self-Service Storage:

Building or facility designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

Service Entrance:

An entrance intended primarily for delivery of goods or services.

Site:

A parcel of land bounded by a property line or a designated portion of a public right-of-way.

Section 6: Definitions (continued)

Soft Contained Play Structure:

A play structure made up of one or more play components where the user enters a fully enclosed play environment that utilizes pliable materials, such as plastic, netting, or fabric.

Space:

A definable area, such as a room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.

Story:

That portion of a building or facility designed for human occupancy included between the upper surface of a floor and upper surface of the floor or roof next above.

A story containing one or more mezzanines has more than one floor level.

Structural Frame:

The columns and the girders, beams, and trusses having direct connections to the columns and all other members that are essential to the stability of the building or facility as a whole.

Tactile:

An object that can be perceived using the sense of touch.

Technically Infeasible:

With respect to an alteration of a building or a facility, something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.

Teeing Ground:

In golf, the starting place for the hole to be played.

Transfer Device:

Equipment designed to facilitate the transfer of a person from a wheelchair or other mobility aid to and from an amusement ride seat.

Transient Lodging:

A building or facility containing one or more guest room(s) for sleeping that provides accommodations that are primarily short-term in nature.

Transient lodging does not include residential dwelling units intended to be used as a residence, inpatient medical care facilities, licensed long-term care facilities, detention or correctional facilities, or private buildings or facilities that contain not more than five rooms for rent or hire and that are actually occupied by the proprietor as the residence of such proprietor.

Section 6: Definitions (continued)

Transition Plate:

A sloping pedestrian walking surface located at the end(s) of a gangway.

TTY:

An abbreviation for teletypewriter.

Machinery that employs interactive text-based communication through the transmission of coded signals across the telephone network.

TTYs may include, for example, devices known as TDDs (telecommunication display devices or telecommunication devices for deaf persons) or computers with special modems.

TTYs are also called text telephones.

Use Zone:

The ground level area beneath and immediately adjacent to a play structure or play equipment that is designated by ASTM F 1487 (incorporated by reference, see “Referenced Standards” in *Section 5: Referenced Standards - 105 - p. 9*) for unrestricted circulation around the play equipment and where it is predicted that a user would land when falling from or exiting the play equipment.

Vehicular Way:

A route provided for vehicular traffic, such as in a street, driveway, or parking facility.

Walk:

An exterior prepared surface for pedestrian use, including pedestrian areas such as plazas and courts.

Wheelchair Space:

Space for a single wheelchair and its occupant.

Work Area Equipment:

Any machine, instrument, engine, motor, pump, conveyor, or other apparatus used to perform work.

As used in this document, this term shall apply only to equipment that is permanently installed or built-in employee work areas.

Work area equipment does not include passenger elevators and other accessible means of vertical transportation.

Section 8: Existing Buildings and Facilities (continued)

Any elements or spaces of the building or facility that are required to comply with these requirements must be made accessible within the scope of the alteration, to the maximum extent feasible.

If providing accessibility in compliance with these requirements for people with one type of disability (e.g., people who use wheelchairs) is not feasible, accessibility must still be provided in compliance with the requirements for people with other types of disabilities (e.g., people who have hearing impairments or who have vision impairments) to the extent that such accessibility is feasible.

202.3.1 **Prohibited Reduction in Access**

An alteration that decreases or has the effect of decreasing the accessibility of a building or facility below the requirements for new construction at the time of the alteration is prohibited.

202.3.2 **Extent of Application**

An alteration of an existing element, space, or area of a building or facility shall not impose a requirement for accessibility greater than required for new construction.

202.4 **Alterations Affecting Primary Function Areas**

In addition to the requirements of 202.3 - (preceding page & above), an alteration that affects or could affect the usability of or access to an area containing a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area, including the rest rooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, unless such alterations are disproportionate to the overall alterations in terms of cost and scope as determined under criteria established by the Attorney General.

In existing transportation facilities, an area of primary function shall be as defined under regulations published by the Secretary of the Department of Transportation or the Attorney General.

EXCEPTION:

Residential dwelling units shall not be required to comply with 202.4 - (above).

Advisory

202.4 *Alterations Affecting Primary Function Areas*

An area of a building or facility containing a major activity for which the building or facility is intended is a primary function area.

Section 8: Existing Buildings and Facilities (continued)

Department of Justice ADA regulations state, "Alterations made to provide an accessible path of travel to the altered area will be deemed disproportionate to the overall alteration when the cost exceeds 20% of the cost of the alteration to the primary function area."

(28 CFR 36.403 (f)(1))

See also Department of Transportation ADA regulations, which use similar concepts in the context of public sector transportation facilities.

(49 CFR 37.43 (e)(1))

There can be multiple areas containing a primary function in a single building.

Primary function areas are not limited to public use areas.

For example, both a bank lobby and the bank's employee areas such as the teller areas and walk-in safe are primary function areas.

Also, mixed use facilities may include numerous primary function areas for each use. Areas containing a primary function do not include: mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors, or rest rooms.

202.5 **Alterations to Qualified Historic Buildings and Facilities**

Alterations to a qualified historic building or facility shall comply with 202.3 and 202.4 - (preceding pages).

EXCEPTION:

Where the State Historic Preservation Officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the exceptions for alterations to qualified historic buildings or facilities for that element shall be permitted to apply.

Advisory

202.5 *Alterations to Qualified Historic Buildings and Facilities Exception*

State Historic Preservation Officers are State appointed officials who carry out certain responsibilities under the National Historic Preservation Act.

State Historic Preservation Officers consult with Federal and State agencies, local governments, and private entities on providing access and protecting significant elements of qualified historic buildings and facilities.

Section 8: Existing Buildings and Facilities (continued)

There are exceptions for alterations to qualified historic buildings and facilities for accessible routes (Chapter 3: Accessible Routes - 206.2.1 - Exception 1 - p. 35 and 206.2.3 - Exception 7 - p. 37); (Chapter 4: Entrances - 206.4 - Exception 2 - p. 47); and (Chapter 11: Toilet Facilities and Bathing Facilities - 213.2 - Exception 2 - p. 74).

When an entity believes that compliance with the requirements for any of these elements would threaten or destroy the historic significance of the building or facility, the entity should consult with the State Historic Preservation Officer.

If the State Historic Preservation Officer agrees that compliance with the requirements for a specific element would threaten or destroy the historic significance of the building or facility, use of the exception is permitted.

Public entities have an additional obligation to achieve program accessibility under the Department of Justice ADA regulations.

See 28 CFR 35.150.

These regulations require public entities that operate historic preservation programs to give priority to methods that provide physical access to individuals with disabilities.

If alterations to a qualified historic building or facility to achieve program accessibility would threaten or destroy the historic significance of the building or facility, fundamentally alter the program, or result in undue financial or administrative burdens, the Department of Justice ADA regulations allow alternative methods to be used to achieve program accessibility.

In the case of historic preservation programs, such as an historic house museum, alternative methods include using audio-visual materials to depict portions of the house that cannot otherwise be made accessible.

In the case of other qualified historic properties, such as an historic government office building, alternative methods include relocating programs and services to accessible locations.

The Department of Justice ADA regulations also allow public entities to use alternative methods when altering qualified historic buildings or facilities in the rare situations where the State Historic Preservation Officer determines that it is not feasible to provide physical access using the exceptions permitted in 202.5 - (preceding page) without threatening or destroying the historic significance of the building or facility.

See 28 CFR 35.151(d).

The AccessAbility Office at the National Endowment for the Arts (NEA) provides a variety of resources for museum operators and historic properties including: the Design for Accessibility Guide and the Disability Symbols.

Section 8: Existing Buildings and Facilities (continued)

Contact NEA about these and other resources at (202) 682-5532 or www.arts.gov.

- Section 9 -

GENERAL EXCEPTIONS

203 **General Exceptions**
203.1 **General**

Sites, buildings, facilities, and elements are exempt from these requirements to the extent specified by this Section - 203.

203.2 **Construction Sites**

Structures and sites directly associated with the actual processes of construction, including but not limited to, scaffolding, bridging, materials hoists, materials storage, and construction trailers shall not be required to comply with these requirements or to be on an accessible route.

Portable toilet units provided for use exclusively by construction personnel on a construction site shall not be required to comply with Chapter 11: Toilet Facilities and Bathing Facilities - 213 - pp. 74-77 or to be on an accessible route.

203.3 **Raised Areas**

Areas raised primarily for purposes of security, life safety, or fire safety, including but not limited to, observation or lookout galleries, prison guard towers, fire towers, or life guard stands shall not be required to comply with these requirements or to be on an accessible route.

203.4 **Limited Access Spaces**

Spaces accessed only by ladders, catwalks, crawl spaces, or very narrow passageways shall not be required to comply with these requirements or to be on an accessible route.

203.5 **Machinery Spaces**

Spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment shall not be required to comply with these requirements or to be on an accessible route.

Machinery spaces include, but are not limited to, elevator pits or elevator penthouses; mechanical, electrical or communications equipment rooms; piping or equipment catwalks; water or sewage treatment pump rooms and stations; electric substations and transformer vaults; and highway and tunnel utility facilities.

203.6 **Single Occupant Structures**

Single occupant structures accessed only by passageways below grade or elevated above standard curb height, including but not limited to, toll booths that are accessed only by underground tunnels, shall not be required to comply with these requirements or to be on an accessible route.

Section 9: General Exceptions (continued)

203.7

Detention and Correctional Facilities

In detention and correctional facilities, common use areas that are used only by inmates or detainees and security personnel and that do not serve holding cells or housing cells required to comply with Chapter 30: Detention Facilities and Correctional Facilities - 232 - pp. 157 & 159, shall not be required to comply with these requirements or to be on an accessible route.

203.8

Residential Facilities

In residential facilities, common use areas that do not serve residential dwelling units required to provide mobility features complying with Chapter 69: Residential Dwelling Units - 809.2-809.4 - p. 330 shall not be required to comply with these requirements or to be on an accessible route.

203.9

Employee Work Areas

Spaces and elements within employee work areas shall only be required to comply with Chapter 3: Accessible Routes - 206.2.8 - pp. 41 & 42, Chapter 5: Accessible Means of Egress - 207.1 - p. 50, and Chapter 13: Fire Alarm Systems - 215.3 - p. 80 and shall be designed and constructed so that individuals with disabilities can approach, enter, and exit the employee work area.

Employee work areas, or portions of employee work areas, that are less than 300 square feet (28 m²) and elevated 7 inches (178mm) or more above the finish floor or ground where the elevation is essential to the function of the space shall not be required to comply with these requirements or to be on an accessible route.

Advisory

203.9

Employee Work Areas

Although areas used exclusively by employees for work are not required to be fully accessible, consider designing such areas to include non-required turning spaces, and provide accessible elements whenever possible.

Under the ADA, employees with disabilities are entitled to reasonable accommodations in the workplace; accommodations can include alterations to spaces within the facility.

Designing employee work areas to be more accessible at the outset will avoid more costly retrofits when current employees become temporarily or permanently disabled, or when new employees with disabilities are hired.

Contact the Equal Employment Opportunity Commission (EEOC) at www.eeoc.gov for information about Title I of the ADA prohibiting discrimination against people with disabilities in the workplace.

Section 9: General Exceptions (continued)

203.10 **Raised Refereeing - Judging - Scoring Areas**

Raised structures used solely for refereeing, judging, or scoring a sport shall not be required to comply with these requirements or to be on an accessible route.

203.11 **Water Slides**

Water slides shall not be required to comply with these requirements or to be on an accessible route.

203.12 **Animal Containment Areas**

Animal containment areas that are not for public use shall not be required to comply with these requirements or to be on an accessible route.

203.12 *Advisory*
Animal Containment Areas

Public circulation routes where animals may travel, such as in petting zoos and passageways alongside animal pens in State fairs, are not eligible for the exception.

203.13 **Raised Boxing or Wrestling Rings**

Raised boxing or wrestling rings shall not be required to comply with these requirements or to be on an accessible route.

203.14 **Raised Diving Boards and Diving Platforms**

Raised diving boards and diving platforms shall not be required to comply with these requirements or to be on an accessible route.

- Section F1- The ABA

PURPOSE

ABA

F101

Purpose

This document contains scoping and technical requirements for accessibility to sites, facilities, buildings, and elements by individuals with disabilities.

The requirements are to be applied during the design, construction, addition to, alteration, and lease of sites, facilities, buildings, and elements to the extent required by regulations issued by Federal agencies under the Architectural Barriers Act of 1968 (ABA).

- Section F2 -**DIMENSIONS FOR ADULTS AND CHILDREN**

F102

Dimensions for Adults and Children

The technical requirements are based on adult dimensions and anthropometrics.

In addition, this document includes technical requirements based on children's dimensions and anthropometrics for drinking fountains, water closets, toilet compartments, lavatories and sinks, dining surfaces, and work surfaces.

- Section F3 -**MODIFICATIONS AND WAIVERS**

F103

Modifications and Waivers

The Architectural Barriers Act authorizes the Administrator of the General Services Administration, the Secretary of the Department of Housing and Urban Development, the Secretary of the Department of Defense, and the United States Postal Service to modify or waive the accessibility standards for buildings and facilities covered by the Architectural Barriers Act on a case-by-case basis, upon application made by the head of the department, agency, or instrumentality of the United States concerned.

The General Services Administration, the Department of Housing and Urban Development, the Department of Defense, and the United States Postal Service may grant a modification or waiver only upon a determination that it is clearly necessary.

Section 502(b)(1) of the Rehabilitation Act of 1973 authorizes the Access Board to ensure that modifications and waivers are based on findings of fact and are not inconsistent with the Architectural Barriers Act.

*Advisory**F103**Modifications and Waivers*

The provisions for modifications and waivers differ from the requirement issued under the Americans with Disabilities Act in that "equivalent facilitation" does not apply.

There is a formal procedure for Federal agencies to request a waiver or modification of applicable standards under the Architectural Barriers Act.

Section F4: Conventions (continued)

It will also more often produce an end result of strict and literal compliance with the stated requirements and eliminate enforcement difficulties and issues that might otherwise arise.

Information on specific tolerances may be available from industry or trade organizations, code groups and building officials, and published references.

F104.2 **Calculation of Percentages**

Where the required number of elements or facilities to be provided is determined by calculations of ratios or percentages and remainders or fractions result, the next greater whole number of such elements or facilities shall be provided.

Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one half shall be permitted.

F104.3 **Figures**

Unless specifically stated otherwise, figures are provided for informational purposes only.

See Figure F104 - p. 483.

- Section F5 -

REFERENCED STANDARDS

F105 **Referenced Standards**
F105.1 **General**

The standards listed in F105.2 - (below & following pages) are incorporated by reference in this document and are part of the requirements to the prescribed extent of each such reference.

The Director of the Federal Register has approved these standards for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

Copies of the referenced standards may be inspected at the Architectural and Transportation Barriers Compliance Board, 1331 F Street, NW, Suite 1000, Washington, DC 20004; at the Department of Justice, Civil Rights Division, Disability Rights Section, 1425 New York Avenue, NW, Washington, DC; at the Department of Transportation, 400 Seventh Street, SW, Room 10424, Washington DC; or at the National Archives and Records Administration (NARA).

For information on the availability of this material at NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

F105.2 **Referenced Standards**

The specific edition of the standards listed below are referenced in this document.

Where differences occur between this document and the referenced standards, this document applies.

F105.2.1 **ANSI/BHMA**

Copies of the referenced standards may be obtained from the Builders Hardware Manufacturers Association, 355 Lexington Avenue, 17th floor, New York, NY 10017 (<http://www.buildershardware.com>).

ANSI/BHMA A156.10-1999 American National Standard for Power Operated Pedestrian Doors (see Chapter 49: Doors - Doorways - Gates - 404.3 - pp. 249-251).

ANSI/BHMA A156.19-1997 American National Standard for Power Assist and Low Energy Power Operated Doors (see Chapter 49: Doors - Doorways - Gates - 404.3 - pp. 249-251, Chapter 53: Limited Use/Limited Application Elevators - 408.3.2.1 - p. 274, and Chapter 54: Private Residence Elevators - 409.3.1 - pp. 276 & 277).

ANSI/BHMA A156.19-2002 American National Standard for Power Assist and Low Energy Power Operated Doors (see Chapter 49: Doors - Doorways - Gates - 404.3 - pp. 249-251, Chapter 53: Limited Use/Limited Application Elevators - 408.3.2.1 - p. 274, and Chapter 54: Private Residence Elevators - 409.3.1 - pp. 276 & 277).

Section F5: Referenced Standards (continued)

F105.2.1 *Advisory*
ANSI/BHMA

ANSI/BHMA A156.10-1999 applies to power operated doors for pedestrian use which open automatically when approached by pedestrians.

Included are provisions intended to reduce the chance of user injury or entrapment.

ANSI/BHMA A156.19-1997 and A156.19-2002 applies to power assist doors, low energy power operated doors or low energy power open doors for pedestrian use not provided for in ANSI/BHMA A156.10 for Power Operated Pedestrian Doors.

Included are provisions intended to reduce the chance of user injury or entrapment.

F105.2.2 **ASME**

Copies of the referenced standards may be obtained from the American Society of Mechanical Engineers, Three Park Avenue, New York, New York 10016 (<http://www.asme.org>).

ASME A17.1- 2000 Safety Code for Elevators and Escalators, including ASME A17.1a-2002 Addenda and ASME A17.1b-2003 Addenda (see Chapter 52: Elevators - 407.1 - p. 259, Chapter 53: Limited Use/Limited Application Elevators - 408.1 - p. 273, Chapter 54: Private Residence Elevators - 409.1 - p. 276, and Chapter 16: Transportation Facilities - 810.9 - p. 110.

ASME A18.1-1999 Safety Standard for Platform Lifts and Stairway Chairlifts, including ASME A18.1a-2001 Addenda and ASME A18.1b-2001 Addenda (see Chapter 55: Platform Lifts - 410.1 - p. 281).

ASME A18.1-2003 Safety Standard for Platform Lifts and Stairway Chairlifts, (see Chapter 55: Platform Lifts - 410.1 - p. 281).

F105.2.2 *Advisory*
ASME

ASME A17.1-2000 is used by local jurisdictions throughout the United States for the design, construction, installation, operation, inspection, testing, maintenance, alteration, and repair of elevators and escalators.

The majority of the requirements apply to the operational machinery not seen or used by elevator passengers.

ASME A17.1 requires a two-way means of emergency communications in passenger elevators. This means of communication must connect with emergency or authorized personnel and not an automated answering system.

Section F5: Referenced Standards (continued)

The communication system must be push button activated. The activation button must be permanently identified with the word "HELP."

A visual indication acknowledging the establishment of a communications link to authorized personnel must be provided.

The visual indication must remain on until the call is terminated by authorized personnel.

The building location, the elevator car number, and the need for assistance must be provided to authorized personnel answering the emergency call.

The use of a handset by the communications system is prohibited.

Only the authorized personnel answering the call can terminate the call.

Operating instructions for the communications system must be provided in the elevator car.

The provisions for escalators require that at least two flat steps be provided at the entrance and exit of every escalator and that steps on escalators be demarcated by yellow lines 2 inches (51mm) wide maximum along the back and sides of steps.

ASME A18.1-1999 and ASME A18.1-2003 address the design, construction, installation, operation, inspection, testing, maintenance and repair of lifts that are intended for transportation of persons with disabilities.

Lifts are classified as: vertical platform lifts, inclined platform lifts, inclined stairway chairlifts, private residence vertical platform lifts, private residence inclined platform lifts, and private residence inclined stairway chairlifts.

This document does not permit the use of inclined stairway chairlifts which do not provide platforms because such lifts require the user to transfer to a seat.

ASME A18.1 contains requirements for runways, which are the spaces in which platforms or seats move.

The standard includes additional provisions for runway enclosures, electrical equipment and wiring, structural support, headroom clearance (which is 80 inches (2032mm) minimum), lower level access ramps and pits.

The enclosure walls not used for entry or exit are required to have a grab bar the full length of the wall on platform lifts.

Access ramps are required to meet requirements similar to those for ramps in Chapter 50: Ramps - 252-256 of this document.

Section F5: Referenced Standards (continued)

Each of the lift types addressed in ASME A18.1 must meet requirements for capacity, load, speed, travel, operating devices, and control equipment.

The maximum permitted height for operable parts is consistent with Chapter 47: Reach Ranges - 308 - pp. 237-239 of this document.

The standard also addresses attendant operation.

However, Chapter 55: Platform Lifts - 410.1 - p. 281 of this document does not permit attendant operation.

F105.2.3

ASTM

Copies of the referenced standards may be obtained from the American Society for Testing and Materials, 100 Bar Harbor Drive, West Conshohocken, Pennsylvania 19428 (<http://www.astm.org>).

ASTM F 1292-99 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment (see Chapter 38: Play Areas - 1008.2.6.2 - p. 209).

ASTM F 1292-04 Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment (see Chapter 38: Play Areas - 1008.2.6.2 - p. 209).

ASTM F 1487-01 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use (see Section F6: Definitions - F106.5 - p. 356).

ASTM F 1951-99 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment (see Chapter 38: Play Areas - 1008.2.6.1 - p. 209).

Advisory

F105.2.3

ASTM

ASTM F 1292-99 and ASTM F 1292-04 establish a uniform means to measure and compare characteristics of surfacing materials to determine whether materials provide a safe surface under and around playground equipment.

These standards are referenced in the play areas requirements of this document when an accessible surface is required inside a play area use zone where a fall attenuating surface is also required.

The standards cover the minimum impact attenuation requirements, when tested in accordance with Test Method F 355, for surface systems to be used under and around any piece of playground equipment from which a person may fall.

ASTM F 1487-01 establishes a nationally recognized safety standard for public playground equipment to address injuries identified by the U.S. Consumer Product Safety Commission.

Section F5: Referenced Standards (continued)

It defines the use zone, which is the ground area beneath and immediately adjacent to a play structure or play equipment designed for unrestricted circulation around the equipment and on whose surface it is predicted that a user would land when falling from or exiting a play structure or equipment.

The play areas requirements in this document reference the ASTM F 1487 standard when defining accessible routes that overlap use zones requiring fall attenuating surfaces.

If the use zone of a playground is not entirely surfaced with an accessible material, at least one accessible route within the use zone must be provided from the perimeter to all accessible play structures or components within the playground.

ASTM F 1951-99 establishes a uniform means to measure the characteristics of surface systems in order to provide performance specifications to select materials for use as an accessible surface under and around playground equipment.

Surface materials that comply with this standard and are located in the use zone must also comply with ASTM F 1292.

The test methods in this standard address access for children and adults who may traverse the surfacing to aid children who are playing.

When a surface is tested it must have an average work per foot value for straight propulsion and for turning less than the average work per foot values for straight propulsion and for turning, respectively, on a hard, smooth surface with a grade of 7% (1:14).

F105.2.4

ICC/IBC

Copies of the referenced standard may be obtained from the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041 (www.iccsafe.org).

International Building Code, 2000 Edition (see Chapter F5: Accessible Means of Egress - F207.1, F207.2 - p. 389, Chapter F14: Signs - F216.4.2, F216.4.3 - p. 409, and Chapter 35: Fishing Piers and Platforms - 1005.2.1 - p. 189).

International Building Code, 2001 Supplement (see Chapter F5: Accessible Means of Egress - F207.1, F207.2 - p. 389).

International Building Code, 2003 Edition (see Chapter F5: Accessible Means of Egress - F207.1, F207.2 - p. 389, Chapter F14: Signs - F216.4.2, F216.4.3 - p. 409, and Chapter 35: Fishing Piers and Platforms - 1005.2.1 - p. 189).

Section F5: Referenced Standards (continued)

F105.2.4 *Advisory*
ICC/IBC

International Building Code (IBC)-2000 (including 2001 Supplement to the International Codes) and IBC-2003 are referenced for means of egress, areas of refuge, and railings provided on fishing piers and platforms.

At least one accessible means of egress is required for every accessible space and at least two accessible means of egress are required where more than one means of egress is required.

The technical criteria for accessible means of egress allow the use of exit stairways and evacuation elevators when provided in conjunction with horizontal exits or areas of refuge.

While typical elevators are not designed to be used during an emergency evacuation, evacuation elevators are designed with standby power and other features according to the elevator safety standard and can be used for the evacuation of individuals with disabilities.

The IBC also provides requirements for areas of refuge, which are fire-rated spaces on levels above or below the exit discharge levels where people unable to use stairs can go to register a call for assistance and wait for evacuation.

The recreation facilities requirements of this document references two sections in the IBC for fishing piers and platforms.

An exception addresses the height of the railings, guards, or handrails where a fishing pier or platform is required to include a guard, railing, or handrail higher than 34 inches (864mm) above the ground or deck surface.

F105.2.5 **NFPA**

Copies of the referenced standards may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, (<http://www.nfpa.org>).

NFPA 72 National Fire Alarm Code, 1999 Edition (see Chapter 13: Fire Alarm Systems - 702.1 - p. 81 and Chapter 69: Residential Dwelling Units - 809.5.2 - p. 331).

NFPA 72 National Fire Alarm Code, 2002 Edition (see Chapter 13: Fire Alarm Systems - 702.1 - p. 81 and Chapter 69: Residential Dwelling Units - 809.5.2 - p. 331).

F105.2.5 *Advisory*
NFPA

NFPA 72-1999 and NFPA 72-2002 address the application, installation, performance, and maintenance of protective signaling systems and their components.

Section F5: Referenced Standards (continued)

The NFPA 72 incorporates Underwriters Laboratory (UL) 1971 by reference.

The standard specifies the characteristics of audible alarms, such as placement and sound levels.

However, Chapter 13: Fire Alarm Systems - 702 - p. 81 of these requirements limits the volume of an audible alarm to 110 dBA, rather than the maximum 120 dBA permitted by NFPA 72-1999.

NFPA 72 specifies characteristics for visible alarms, such as flash frequency, color, intensity, placement, and synchronization.

However, Chapter 13: Fire Alarm Systems - 702 - p. 81 of this document requires that visual alarm appliances be permanently installed.

UL 1971 specifies intensity dispersion requirements for visible alarms.

In particular, NFPA 72 requires visible alarms to have a light source that is clear or white and has polar dispersion complying with UL 1971.

- Section F6

DEFINITIONS

F106

Definitions

F106.1

General

For the purpose of this document, the terms defined in F106.5 - (below & following pages) have the indicated meaning.

F106.2

Terms Defined in Referenced Standard

Terms not defined in F106.5 - (below & following pages) or in regulations issued by the Administrator of the General Services Administration, the Secretary of Defense, the Secretary of Housing and Urban Development, or the United States Postal Service to implement the Architectural Barriers Act but specifically defined in a referenced standard, shall have the specified meaning from the referenced standard unless otherwise stated.

F106.3

Undefined Terms

The meaning of terms not specifically defined in F106.5 - (below & following pages) or in regulations issued by the Administrator of the General Services Administration, the Secretary of Defense, the Secretary of Housing and Urban Development, or the United States Postal Service to implement the Architectural Barriers Act or in referenced standards shall be as defined by collegiate dictionaries in the sense that the context implies.

F106.4

Interchangeability

Words, terms and phrases used in the singular include the plural and those used in the plural include the singular.

F106.5

Defined Terms

Accessible:

A site, building, facility, or portion thereof that complies with this part.

Accessible Means of Egress:

A continuous and unobstructed way of egress travel from any point in a building or facility that provides an accessible route to an area of refuge, a horizontal exit, or a public way.

Addition:

An expansion, extension, or increase in the gross floor area or height of a building or facility.

Administrative Authority:

A governmental agency that adopts or enforces regulations and guidelines for the design, construction, or alteration of buildings and facilities.

Section F6: Definitions (continued)

Alteration:

A change to a building or facility that affects or could affect the usability of the building or facility or portion thereof.

Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions.

Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.

Amusement Attraction:

Any facility, or portion of a facility, located within an amusement park or theme park which provides amusement without the use of an amusement device.

Amusement attractions include, but are not limited to, fun houses, barrels, and other attractions without seats.

Amusement Ride:

A system that moves persons through a fixed course within a defined area for the purpose of amusement.

Amusement Ride Seat:

A seat that is built-in or mechanically fastened to an amusement ride intended to be occupied by one or more passengers.

Area of Sport Activity:

That portion of a room or space where the play or practice of a sport occurs.

Assembly Area:

A building or facility, or portion thereof, used for the purpose of entertainment, worship, educational or civic gatherings, or similar purposes.

For the purposes of these requirements, assembly areas include, but are not limited to, classrooms, lecture halls, courtrooms, public meeting rooms, public hearing rooms, legislative chambers, motion picture houses, auditoria, theaters, playhouses, dinner theaters, concert halls, centers for the performing arts, amphitheaters, arenas, stadiums, grandstands, or convention centers.

Assistive Listening System (ALS):

An amplification system utilizing transmitters, receivers, and coupling devices to bypass the acoustical space between a sound source and a listener by means of induction loop, radio frequency, infrared, or direct-wired equipment.

Section F6: Definitions (continued)

Boarding Pier:

A portion of a pier where a boat is temporarily secured for the purpose of embarking or disembarking.

Boat Launch Ramp:

A sloped surface designed for launching and retrieving trailered boats and other water craft to and from a body of water.

Boat Slip:

That portion of a pier, main pier, finger pier, or float where a boat is moored for the purpose of berthing, embarking, or disembarking.

Building:

Any structure used or intended for supporting or sheltering any use or occupancy.

Catch Pool:

A pool or designated section of a pool used as a terminus for water slide flumes.

Characters:

Letters, numbers, punctuation marks and typographic symbols.

Children's Use:

Describes spaces and elements specifically designed for use primarily by people 12 years old and younger.

Circulation Path:

An exterior or interior way of passage provided for pedestrian travel, including but not limited to, walks, hallways, courtyards, elevators, platform lifts, ramps, stairways, and landings.

Closed-Circuit Telephone:

A telephone with a dedicated line such as a house phone, courtesy phone or phone that must be used to gain entry to a facility.

Common Use:

Interior or exterior circulation paths, rooms, spaces, or elements that are not for public use and are made available for the shared use of two or more people.

Cross Slope:

The slope that is perpendicular to the direction of travel (see running slope).

Curb Ramp:

A short ramp cutting through a curb or built up to it.

Section F6: Definitions (continued)

Detectable Warning:

A standardized surface feature built in or applied to walking surfaces or other elements to warn of hazards on a circulation path.

Element:

An architectural or mechanical component of a building, facility, space, or site.

Elevated Play Component:

A play component that is approached above or below grade and that is part of a composite play structure consisting of two or more play components attached or functionally linked to create an integrated unit providing more than one play activity.

Employee Work Area:

All or any portion of a space used only by employees and used only for work. Corridors, toilet rooms, kitchenettes and break rooms are not employee work areas.

Entrance:

Any access point to a building or portion of a building or facility used for the purpose of entering.

An entrance includes the approach walk, the vertical access leading to the entrance platform, the entrance platform itself, vestibule if provided, the entry door or gate, and the hardware of the entry door or gate.

Facility:

All or any portion of buildings, structures, site improvements, elements, and pedestrian routes or vehicular ways located on a site.

Gangway:

A variable-sloped pedestrian walkway that links a fixed structure or land with a floating structure.

Gangways that connect to vessels are not addressed by this document.

Golf Cart Passage:

A continuous passage on which a motorized golf cart can operate.

Ground Level Play Component:

A play component that is approached and exited at the ground level.

Joint Use:

Interior or exterior rooms, spaces, or elements that are common space available for use by all occupants of the building.

Joint use does not include mechanical or custodial rooms, or areas occupied by other tenants.

Section F6: Definitions (continued)

Lease:

Any agreement which establishes the relationship of landlord and tenant.

Mail Boxes:

Receptacles for the receipt of documents, packages, or other deliverable matter.

Mail boxes include, but are not limited to, post office boxes and receptacles provided by commercial mail-receiving agencies, apartment facilities, or schools.

Marked Crossing:

A crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

Mezzanine:

An intermediate level or levels between the floor and ceiling of any story with an aggregate floor area of not more than one-third of the area of the room or space in which the level or levels are located.

Mezzanines have sufficient elevation that space for human occupancy can be provided on the floor below.

Military Installation:

A base, camp, post, station, yard, center, homeport facility for any ship, or other activity or operation under the jurisdiction of the Department of Defense, including any leased facility.

Military installation does not include any facility used primarily for civil works, rivers and harbors projects, or flood control projects.

Multiple, contiguous, or collocated bases, camps, posts, stations, yards, centers, or home ports shall not be considered as constituting a single military installation.

Occupant Load:

The number of persons for which the means of egress of a building or portion of a building is designed.

Operable Part:

A component of an element used to insert or withdraw objects, or to activate, deactivate, or adjust the element.

Pictogram:

A pictorial symbol that represents activities, facilities, or concepts.

Play Area:

A portion of a site containing play components designed and constructed for children.

Section F6: Definitions (continued)

Play Component:

An element intended to generate specific opportunities for play, socialization, or learning.

Play components are manufactured or natural; and are stand-alone or part of a composite play structure.

Public Entrance:

An entrance that is not a service entrance or a restricted entrance.

Public Use:

Interior or exterior rooms, spaces, or elements that are made available to the public.

Public use may be provided at a building or facility that is privately or publicly owned.

Public Way:

Any street, alley or other parcel of land open to the outside air leading to a public street, which has been deeded, dedicated or otherwise permanently appropriated to the public for public use, and which has a clear width and height of not less than 10 feet (3048mm).

Qualified Historic Building or Facility:

A building or facility that is listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate State or local law.

Ramp:

A walking surface that has a running slope steeper than 1:20.

Residential Dwelling Unit:

A unit intended to be used as a residence, that is primarily long-term in nature.

Residential dwelling units do not include transient lodging, inpatient medical care, licensed long-term care, and detention or correctional facilities.

Restricted Entrance:

An entrance that is made available for common use on a controlled basis but not public use and that is not a service entrance.

Running Slope:

The slope that is parallel to the direction of travel (see cross slope).

Self-Service Storage:

Building or facility designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

Service Entrance:

An entrance intended primarily for delivery of goods or services.

Section F6: Definitions (continued)

Site:

A parcel of land bounded by a property line or a designated portion of a public right-of-way.

Soft Contained Play Structure:

A play structure made up of one or more play components where the user enters a fully enclosed play environment that utilizes pliable materials, such as plastic, netting, or fabric.

Space:

A definable area, such as a room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.

Story:

That portion of a building or facility designed for human occupancy included between the upper surface of a floor and upper surface of the floor or roof next above.

A story containing one or more mezzanines has more than one floor level.

Structural Frame:

The columns and the girders, beams, and trusses having direct connections to the columns and all other members that are essential to the stability of the building or facility as a whole.

Tactile:

An object that can be perceived using the sense of touch.

Technically Infeasible:

With respect to an alteration of a building or a facility, something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.

Teeing Ground:

In golf, the starting place for the hole to be played.

Transfer Device:

Equipment designed to facilitate the transfer of a person from a wheelchair or other mobility aid to and from an amusement ride seat.

Transient Lodging:

A building or facility containing one or more guest room(s) for sleeping that provides accommodations that are primarily short-term in nature.

Section F6: Definitions (continued)

Transient lodging does not include residential dwelling units intended to be used as a residence, inpatient medical care facilities, licensed long-term care facilities, detention or correctional facilities, or private buildings or facilities that contain not more than five rooms for rent or hire and that are actually occupied by the proprietor as the residence of such proprietor.

Transition Plate:

A sloping pedestrian walking surface located at the end(s) of a gangway.

TTY:

An abbreviation for teletypewriter.

Machinery that employs interactive text-based communication through the transmission of coded signals across the telephone network.

TTYs may include, for example, devices known as TDDs (telecommunication display devices or telecommunication devices for deaf persons) or computers with special modems.

TTYs are also called text telephones.

Use Zone:

The ground level area beneath and immediately adjacent to a play structure or play equipment that is designated by ASTM F 1487 (incorporated by reference, see “Referenced Standards” in Chapter F5: Referenced Standards - F105 - p. 347) for unrestricted circulation around the play equipment and where it is predicted that a user would land when falling from or exiting the play equipment.

Vehicular Way:

A route provided for vehicular traffic, such as in a street, driveway, or parking facility.

Walk:

An exterior prepared surface for pedestrian use, including pedestrian areas such as plazas and courts.

Wheelchair Space:

Space for a single wheelchair and its occupant.

Work Area Equipment:

Any machine, instrument, engine, motor, pump, conveyor, or other apparatus used to perform work.

As used in this document, this term shall apply only to equipment that is permanently installed or built-in employee work areas subject to the Americans with Disabilities Act of 1990 (ADA).

Work area equipment does not include passenger elevators and other accessible means of vertical transportation.

- Section F8 -

EXISTING BUILDINGS AND FACILITIES

F202 **Existing Buildings and Facilities**
F202.1 **General**

Additions and alterations to existing buildings or facilities, including leased buildings or facilities, shall comply with this Section - F202.

F202.2 **Additions**

Each addition to an existing building or facility shall comply with the requirements for new construction.

F202.2.1 **Accessible Route**

At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to an accessible entrance serving the addition.

If the only accessible entrances serving the addition are provided in the existing building or facility, the accessible route shall connect at least one existing entrance to all accessible spaces and elements within the addition.

In addition, elements and spaces specified in F202.2.2-F202.2.5 - (below & following page) shall be on an accessible route.

F202.2.2 **Entrance**

Where an entrance is not provided in an addition, at least one entrance in the existing building or facility shall comply with Chapter F4: Entrances - F206.4 - pp. 386-388 and shall serve the addition.

F202.2.3 **Toilet and Bathing Facilities**

Where toilet facilities and bathing facilities are not provided in an addition but are provided in the existing building or facility to serve the addition, the toilet facilities and bathing facilities shall comply with F202.2.3 - (above & following page).

EXCEPTION:

In alterations to areas serving additions where it is technically infeasible to comply with Chapter 57: Toilet and Bathing Rooms - 603 - pp. 288 & 289, altering existing toilet or bathing rooms is not required where a single unisex toilet room or bathing room complying with Chapter F11: Toilet Facilities and Bathing Facilities - F213.2.1 - p. 401 is provided to serve the addition.

Section F8: Existing Buildings and Facilities (continued)

F202.2.3.1 Existing Toilet Facility

Where existing toilet facilities are provided in the existing building or facility, at least one toilet facility for men and at least one toilet facility for women shall comply with Chapter F11: Toilet Facilities and Bathing Facilities - F213.2 and F213.3 - pp. 400-403 and shall serve the addition.

EXCEPTION:

Where only one toilet facility is provided in the existing building or facility, one toilet facility shall comply with Chapter F11: Toilet Facilities and Bathing Facilities - F213.2 and F213.3 - pp. 400-403 and shall serve the addition.

F202.2.3.2 Existing Bathing Facility

Where existing bathing facilities are provided in the existing building or facility, at least one bathing facility for men and at least one bathing facility for women shall comply with Chapter F11: Toilet Facilities and Bathing Facilities - F213.2 and F213.3 - pp. 400-403 and shall serve the addition.

EXCEPTION:

Where only one bathing facility is provided in the existing building or facility, one bathing facility shall comply with Chapter F11: Toilet Facilities and Bathing Facilities - F213.2 and F213.3 - pp. 400-403 and shall serve the addition.

F202.2.4 Public Telephone

Where a public telephone is not provided in an addition but is provided in the existing building or facility to serve the addition, at least one public telephone in the existing building or facility shall comply with Chapter F15: Telephones - F217 - pp. 413-416.

F202.2.5 Drinking Fountain

Where a drinking fountain is not provided in an addition but is provided in the existing building or facility to serve the addition, at least one drinking fountain in the existing building or facility shall comply with Chapter 9: Drinking Fountains - 602.1-602.6 - pp. 67 & 68.

F202.3 Alterations

Where existing elements or spaces are altered, each altered element or space shall comply with the applicable requirements of Sections F7-F9 - F201-F203 - pp. 359-370 and Chapters F1-F41 - F204-F243 - pp. 371-482.

Section F8: Existing Buildings and Facilities (continued)

EXCEPTIONS:

1. Unless required by F202.4 - (following page), where elements or spaces are altered and the circulation path to the altered element or space is not altered, an accessible route shall not be required.
2. In alterations, where compliance with applicable requirements is technically infeasible, the alteration shall comply with the requirements to the maximum extent feasible.
3. Residential dwelling units not required to be accessible in compliance with a standard issued pursuant to the Architectural Barriers Act or Section 504 of the Rehabilitation Act of 1973, as amended, shall not be required to comply with F202.3 - (above, below & following page).

F202.3

*Advisory
Alterations*

Although covered entities are permitted to limit the scope of an alteration to individual elements, the alteration of multiple elements within a room or space may provide a cost-effective opportunity to make the entire room or space accessible.

Any elements or spaces of the building or facility that are required to comply with these requirements must be made accessible within the scope of the alteration, to the maximum extent feasible.

If providing accessibility in compliance with these requirements for people with one type of disability (e.g., people who use wheelchairs) is not feasible, accessibility must still be provided in compliance with the requirements for people with other types of disabilities (e.g., people who have hearing impairments or who have vision impairments) to the extent that such accessibility is feasible.

F202.3.1

Prohibited Reduction in Access

An alteration that decreases or has the effect of decreasing the accessibility of a building or facility below the requirements for new construction at the time of the alteration is prohibited.

F202.3.2

Extent of Application

An alteration of an existing element, space, or area of a building or facility shall not impose a requirement for accessibility greater than required for new construction.

Section F8: Existing Buildings and Facilities (continued)

F202.4 Alterations Affecting Primary Function Areas

In addition to the requirements of F202.3 - (preceding pages & above), an alteration that affects or could affect the usability of or access to an area containing a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area, including the rest rooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, unless such alterations are disproportionate to the overall alterations in terms of cost and scope as determined under criteria established by the Administrator of the General Services Administration, the Secretary of Defense, the Secretary of Housing and Urban Development, or the United States Postal Service.

EXCEPTION:

Residential dwelling units shall not be required to comply with F202.4 - (above).

*Advisory***F202.4 Alterations Affecting Primary Function Areas**

An area of a building or facility containing a major activity for which the building or facility is intended is a primary function area.

There can be multiple areas containing a primary function in a single building.

Primary function areas are not limited to public use areas.

For example, both a bank lobby and the bank's employee areas such as the teller areas and walk-in safe are primary function areas.

Also, mixed use facilities may include numerous primary function areas for each use.

Areas containing a primary function do not include: mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors, or restrooms.

F202.5 Alterations to Qualified Historic Buildings and Facilities

Alterations to a qualified historic building or facility shall comply with F202.3 and F202.4 - (preceding pages & above).

EXCEPTION:

Where the State Historic Preservation Officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the exceptions for alterations to qualified historic buildings or facilities for that element shall be permitted to apply.

Section F8: Existing Buildings and Facilities (continued)

Advisory

F202.5 *Alterations to Qualified Historic Buildings and Facilities Exception*

Section 106 of the National Historic Preservation Act requires that a Federal agency with jurisdiction over a proposed Federal or federally assisted undertaking consider the effect of the action on buildings and facilities listed in or eligible for listing in the National Register of Historic Places prior to approving the expenditure of any Federal funds.

The Advisory Council on Historic Preservation has established procedures for Federal agencies to meet this statutory responsibility.

See 36 CFR Part 800.

The procedures require Federal agencies to consult with the State Historic Preservation Officer, and provide for involvement by the Advisory Council on Historic Preservation in certain cases.

There are exceptions for alterations to qualified historic buildings and facilities for accessible routes (Chapter F3: Accessible Routes - F206.2.1 - Exception 1 - p. 373 and F206.2.3 Exception 6 - p. 375); entrance (Chapter F4: Entrances - F206.4 - Exception 2 - p. 386); and toilet facilities (Chapter F11: Toilet Facilities and Bathing Facilities - F213.2 - Exception 2 - p. 400).

These exceptions apply only when the State Historic Preservation Officer or the Advisory Council on Historic Preservation agrees that compliance with requirements for the specific element would threaten or destroy the historic significance of the building or facility.

The AccessAbility Office at the National Endowment for the Arts (NEA) provides a variety of resources for museum operators and historic properties including: the Design for Accessibility Guide and the Disability Symbols. Contact NEA about these and other resources at (202) 682-5532 or www.arts.gov.

F202.6

Leases

Buildings or facilities for which new leases are negotiated by the Federal government after the effective date of the revised standards issued pursuant to the Architectural Barriers Act, including new leases for buildings or facilities previously occupied by the Federal government, shall comply with F202.6 - (above & following pages).

EXCEPTIONS:

1. Buildings or facilities leased for use by officials servicing disasters on a temporary, emergency basis shall not be required to comply with F202.6 - (preceding page, below & following pages).

Section F8: Existing Buildings and Facilities (continued)

2. Buildings or facilities leased for 12 months or less shall not be required to comply with F202.6 - (preceding page, below & following pages). provided that the lease may not be extended or renewed.

F202.6.1 **Joint Use Areas**

Joint use areas serving the leased space shall comply with F202.6 - (preceding page, below & following pages).

EXCEPTION:

Alterations and additions to joint use areas serving the leased space shall not be required to comply with F202.2, F202.3, and F202.5 - (preceding pages) provided that the alterations are not undertaken by or on behalf of the Federal government.

F202.6.1 *Advisory*
Joint Use Areas

EXCEPTION:

When negotiating a lease, ensure that joint use areas are accessible. Inaccessible joint use areas may prevent access to and from leased space.

F202.6.2 **Accessible Route**

Primary function areas, as defined by Administrator of the General Services Administration, the Secretary of Defense, the Secretary of Housing and Urban Development, and the United States Postal Service, shall be served by at least one accessible route complying with Chapter F4: Entrances - F206.4 - pp. 386-388.

Elements and spaces required to be accessible by Chapters F3 and F4 - F206, F206.4 - pp. 373-388 shall be on an accessible route complying with Chapters F3 and F4 - F206, F206.4 - pp. 373-388.

EXCEPTION:

Fire alarms required by F202.6.5.2 - (following page) and assistive listening systems required by this Chapter - F202.6.5.5 - p. 367 shall not be required to be on an accessible route.

F202.6.3 **Toilet and Bathing Facilities**

Where provided, toilet facilities and bathing facilities shall comply with F202.6.3 - (below).

Section F8: Existing Buildings and Facilities (continued)

F202.6.3.1 Multiple Facilities

At least one toilet facility or bathing facility for each sex on each floor that has toilet facilities or bathing facilities shall comply with Chapter F11: Toilet Facilities and Bathing Facilities - F213.2 and F213.3 - pp. 400-403.

F202.6.3.2 Single Facilities

Where only one toilet or bathing facility is provided in a building or facility for each sex, either one unisex toilet or bathing facility, or one toilet or bathing facility for each sex, shall comply with Chapter F11: Toilet Facilities and Bathing Facilities - F213.2 and F213.3 - pp. 400-403.

F202.6.4 Parking

Parking shall comply with Chapter F6: Parking Spaces - F208 - pp. 390-394.

F202.6.5 Other Elements and Spaces

Where provided, the following elements and spaces shall comply with F202.6.5 - (below & following page).

F202.6.5.1 Drinking Fountains

Drinking fountains shall comply with Chapter F9: Drinking Fountains - F211 - p. 398.

F202.6.5.2 Fire Alarms

Fire alarms shall comply with Chapter F13: Fire Alarm Systems - F215 - pp. 405 & 406.

EXCEPTION:

Fire alarms shall not be required to comply with Chapter 13: Fire Alarm Systems - 702 - p. 81 where existing power sources must be upgraded to meet the requirement.

F202.6.5.3 Public Telephones

Public telephones shall comply with Chapter F15: Telephones - F217 - pp. 413-413.

F202.6.5.4 Dining Surfaces and Work Surfaces

Dining surfaces and work surfaces shall comply with Chapter F24: Dining Surfaces and Work Surfaces - F226 - pp. 440 & 441.

Section F8: Existing Buildings and Facilities (continued)

F202.6.5.5

Assembly Areas

Assistive listening systems shall comply with Chapter F17: Assistive Listening Systems - F219 - pp. 418 & 419 and assembly seating shall comply with Chapter F19: Assembly Areas - F221 - pp. 421-427.

F202.6.5.6

Sales and Service Counters

Sales and service counters shall comply with Chapter F25: Sales and Service - F227 - pp. 442 & 443.

F202.6.5.7 **Depositories - Vending Machines - Change Machines - Mail Boxes**

Depositories, vending machines, change machines, and mail boxes shall comply with Chapter F26: Depositories - Vending Machines - Change Machines - Mail Boxes - Fuel Dispensers - F228 - p. 444.

F202.6.5.8

Residential Facilities

Residential dwelling units shall comply with Chapter F31: Residential Facilities - F233 - pp. 452-459.

- Section F9 -

GENERAL EXCEPTIONS

F203 **General Exceptions**
F203.1 **General**

Sites, buildings, facilities, and elements are exempt from these requirements to the extent specified by this Section - F203.

F203.2 **Existing Elements**

Elements in compliance with an earlier standard issued pursuant to the Architectural Barriers Act or Section 504 of the Rehabilitation Act of 1973, as amended shall not be required to comply with these requirements unless altered.

F203.2 *Advisory*
Existing Elements

The exception at F203.2 - (above) does not obviate or limit in any way a federal agency's obligation to provide reasonable accommodations pursuant to the Rehabilitation Act of 1973.

Federal employees with disabilities are entitled to reasonable accommodations in the workplace.

Such accommodations may include modifications to workstations or to other areas of the workplace, including the common areas such as toilet rooms, meeting rooms, or break rooms.

Reasonable accommodations are always provided on a case-by-case basis and are specific to the unique needs of a person.

As such, an accommodation may be consistent with, or depart from, the specific technical requirements of this, or any other, document.

In addition, the exception at F203.2 - (above) provides that compliance with an earlier standard issued under Section 504 of the Rehabilitation Act satisfies the requirements of the Architectural Barriers Act; the exception does not obviate or limit a Federal agency's authority to enforce requirements issued pursuant to Section 504 of the Rehabilitation Act, including requirements for making reasonable modifications to policies, practices, and procedures, or making structural changes to facilities in order to make a program or activity accessible to and usable by persons with disabilities.

F203.3 **Construction Sites**

Structures and sites directly associated with the actual processes of construction, including but not limited to, scaffolding, bridging, materials hoists, materials storage, and construction trailers shall not be required to comply with these requirements or to be on an accessible route.

Section F9: General Exceptions (continued)

F203.10 **Raised Refereeing - Judging - Scoring Areas**

Raised structures used solely for refereeing, judging, or scoring a sport shall not be required to comply with these requirements or to be on an accessible route.

F203.11 **Water Slides**

Water slides shall not be required to comply with these requirements or to be on an accessible route.

F203.12 **Animal Containment Areas**

Animal containment areas that are not for public use shall not be required to comply with these requirements or to be on an accessible route.

*F203.12 Advisory
Animal Containment Areas*

Public circulation routes where animals may travel, such as in petting zoos and passageways alongside animal pens in State fairs, are not eligible for the exception.

F203.13 **Raised Boxing or Wrestling Rings**

Raised boxing or wrestling rings shall not be required to comply with these requirements or to be on an accessible route.

F203.14 **Raised Diving Boards and Diving Platforms**

Raised diving boards and diving platforms shall not be required to comply with these requirements or to be on an accessible route.

PART III

TECHNICAL CHAPTERS

CHAPTER 3: BUILDING BLOCKS

301 General

302 Floor or Ground Surfaces

303 Changes in Level

304 Turning Space

305 Clear Floor or Ground Space

306 Knee and Toe Clearance

307 Protruding Objects

308 Reach Ranges

309 Operable Parts

301 General

301.1 Scope. The provisions of Chapter 3 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

302 Floor or Ground Surfaces

302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302.

EXCEPTIONS: 1. Within animal containment areas, floor and ground surfaces shall not be required to be stable, firm, and slip resistant.

2. Areas of sport activity shall not be required to comply with 302.

ADVISORY 302.1 General. A stable surface is one that remains unchanged by contaminants or applied force, so that when the contaminant or force is removed, the surface returns to its original condition. A firm surface resists deformation by either indentations or particles moving on its surface. A slip-resistant surface provides sufficient frictional counterforce to the forces exerted in walking to permit safe ambulation.

302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Pile height shall be 1/2 inch (13 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.

ADVISORY 302.2 Carpet. Carpets and permanently affixed mats can significantly increase the amount of force (roll resistance) needed to propel a wheelchair over a surface. The firmer the carpeting and backing, the lower the roll resistance. A pile thickness up to 1/2 inch (13 mm) (measured to the backing, cushion, or pad) is allowed, although a lower pile provides easier wheelchair maneuvering. If a backing, cushion or pad is used, it must be firm. Preferably, carpet pad should not be used because the soft padding increases roll resistance.

•Figure 302.2 Carpet Pile Height

302.3 Openings. Openings in floor or ground surfaces shall not allow passage of a sphere more than 1/2 inch (13 mm) diameter except as allowed in 407.4.3, 409.4.3, 410.4, 810.5.3 and 810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

•Figure 302.3 Elongated Openings in Floor or Ground Surfaces

303 Changes in Level

303.1 General. Where changes in level are permitted in floor or ground surfaces, they shall comply with 303.

EXCEPTIONS: 1. Animal containment areas shall not be required to comply with 303.

2. Areas of sport activity shall not be required to comply with 303.

303.2 Vertical. Changes in level of 1/4 inch (6.4 mm) high maximum shall be permitted to be vertical.

•Figure 303.2 Vertical Change in Level

303.3 Beveled. Changes in level between 1/4 inch (6.4 mm) high minimum and 1/2 inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.

ADVISORY 303.3 Beveled. A change in level of 1/2 inch (13 mm) is permitted to be 1/4 inch (6.4 mm) vertical plus 1/4 inch (6.4 mm) beveled. However, in no case may the combined change in level exceed 1/2 inch (13 mm). Changes in level exceeding 1/2 inch (13 mm) must comply with 405 (Ramps) or 406 (Curb Ramps).

•Figure 303.3 Beveled Change in Level

303.4 Ramps. Changes in level greater than 1/2 inch (13 mm) high shall be ramped, and shall comply with 405 or 406.

304 Turning Space

304.1 General. Turning space shall comply with 304.

304.2 Floor or Ground Surfaces. Floor or ground surfaces of a turning space shall comply with 302. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

ADVISORY 304.2 Floor or Ground Surface Exception. As used in this section, the phrase “changes in level” refers to surfaces with slopes and to surfaces with abrupt rise exceeding that permitted in Section 303.3. Such changes in level are prohibited in required clear floor and ground spaces, turning spaces, and in similar spaces where people using wheelchairs and other mobility devices must park their mobility aids such as in wheelchair spaces, or maneuver to use elements such as at doors, fixtures, and telephones. The exception permits slopes not steeper than 1:48.

304.3 Size. Turning space shall comply with 304.3.1 or 304.3.2.

304.3.1 Circular Space. The turning space shall be a space of 60 inches (1525 mm) diameter minimum. The space shall be permitted to include knee and toe clearance complying with 306.

304.3.2 T-Shaped Space. The turning space shall be a T-shaped space within a 60 inch (1525 mm) square minimum with arms and base 36 inches (915 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with 306 only at the end of either the base or one arm.

● **Figure 304.3.2 T-Shaped Turning Space**

304.4 Door Swing. Doors shall be permitted to swing into turning spaces.

305 Clear Floor or Ground Space

305.1 General. Clear floor or ground space shall comply with 305.

305.2 Floor or Ground Surfaces. Floor or ground surfaces of a clear floor or ground space shall comply with 302. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

305.3 Size. The clear floor or ground space shall be 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum.

● **Figure 305.3 Clear Floor or Ground Space**

305.4 Knee and Toe Clearance. Unless otherwise specified, clear floor or ground space shall be permitted to include knee and toe clearance complying with 306.

305.5 Position. Unless otherwise specified, clear floor or ground space shall be positioned for either forward or parallel approach to an element.

● **Figure 305.5 Position of Clear Floor or Ground Space**

305.6 Approach. One full unobstructed side of the clear floor or ground space shall adjoin an accessible route or adjoin another clear floor or ground space.

305.7 Maneuvering Clearance. Where a clear floor or ground space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearance shall be provided in accordance with 305.7.1 and 305.7.2.

305.7.1 Forward Approach. Alcoves shall be 36 inches (915 mm) wide minimum where the depth exceeds 24 inches (610 mm).

● **Figure 305.7.1 Maneuvering Clearance in an Alcove, Forward Approach**

305.7.2 Parallel Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

● **Figure 305.7.2 Maneuvering Clearance in an Alcove, Parallel Approach**

306 Knee and Toe Clearance

306.1 General. Where space beneath an element is included as part of clear floor or ground space or turning space, the space shall comply with 306. Additional space shall not be prohibited beneath an element but shall not be considered as part of the clear floor or ground space or turning space.

ADVISORY 306.1 General. Clearances are measured in relation to the usable clear floor space, not necessarily to the vertical support for an element. When determining clearance under an object for required turning or maneuvering space, care should be taken to ensure the space is clear of any obstructions.

306.2 Toe Clearance.

306.2.1 General. Space under an element between the finish floor or ground and 9 inches (230 mm) above the finish floor or ground shall be considered toe clearance and shall comply with 306.2.

306.2.2 Maximum Depth. Toe clearance shall extend 25 inches (635 mm) maximum under an element.

306.2.3 Minimum Required Depth. Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches (430 mm) minimum under the element.

306.2.4 Additional Clearance. Space extending greater than 6 inches (150 mm) beyond the available knee clearance at 9 inches (230 mm) above the finish floor or ground shall not be considered toe clearance.

306.2.5 Width. Toe clearance shall be 30 inches (760 mm) wide minimum.

● **Figure 306.2 Toe Clearance**

306.3 Knee Clearance.

306.3.1 General. Space under an element between 9 inches (230 mm) and 27 inches (685 mm) above the finish floor or ground shall be considered knee clearance and shall comply with 306.3.

306.3.2 Maximum Depth. Knee clearance shall extend 25 inches (635 mm) maximum under an element at 9 inches (230 mm) above the finish floor or ground.

306.3.3 Minimum Required Depth. Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches (280 mm) deep minimum at 9 inches (230 mm) above the finish floor or ground, and 8 inches (205 mm) deep minimum at 27 inches (685 mm) above the finish floor or ground.

306.3.4 Clearance Reduction. Between 9 inches (230 mm) and 27 inches (685 mm) above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1 inch (25 mm) in depth for each 6 inches (150 mm) in height.

306.3.5 Width. Knee clearance shall be 30 inches (760 mm) wide minimum.

● **Figure 306.3**

Knee Clearance

307 Protruding Objects

307.1 General. Protruding objects shall comply with 307.

307.2 Protrusion Limits. Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finish floor or ground shall protrude 4 inches (100 mm) maximum horizontally into the circulation path.

EXCEPTION: Handrails shall be permitted to protrude 4 1/2 inches (115 mm) maximum.

ADVISORY 307.2 Protrusion Limits. When a cane is used and the element is in the detectable range, it gives a person sufficient time to detect the element with the cane before there is body contact. Elements located on circulation paths, including operable elements, must comply with requirements for protruding objects. For example, awnings and their supporting structures cannot reduce the minimum required vertical clearance. Similarly, casement windows, when open, cannot encroach more than 4 inches (100 mm) into circulation paths above 27 inches (685 mm).

● **Figure 307.2 Limits of Protruding Objects**

307.3 Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground.

EXCEPTION: The sloping portions of handrails serving stairs and ramps shall not be required to comply with 307.3.

● **Figure 307.3 Post-Mounted Protruding Objects**

307.4 Vertical Clearance. Vertical clearance shall be 80 inches (2030 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (685 mm) maximum above the finish floor or ground.

EXCEPTION: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.

● **Figure 307.4 Vertical Clearance**

307.5 Required Clear Width. Protruding objects shall not reduce the clear width required for accessible routes.

308 Reach Ranges

308.1 General. Reach ranges shall comply with 308.

ADVISORY 308.1 General. The following table provides guidance on reach ranges for children according to age where building elements such as coat hooks, lockers, or operable parts are designed for use primarily by children. These dimensions apply to either forward or side reaches. Accessible elements and operable parts designed for adult use or children over age 12 can be located outside these ranges but must be within the adult reach ranges required by 308.

Children's Reach Ranges

Forward or Side Reach	Ages 3 and 4	Ages 5 through 8	Ages 9 through 12
High (maximum)	36 in (915 mm)	40 in (1015 mm)	44 in (1120 mm)
Low (minimum)	20 in (510 mm)	18 in (455 mm)	16 in (405 mm)

308.2 Forward Reach.

308.2.1 Unobstructed. Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

● **Figure 308.2.1 Unobstructed Forward Reach**

308.2.2 Obstructed High Reach. Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum where the reach depth is 20 inches (510 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.

● **Figure 308.2.2 Obstructed High Forward Reach**

308.3 Side Reach.

308.3.1 Unobstructed. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1220 mm) maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

EXCEPTIONS: 1. An obstruction shall be permitted between the clear floor or ground space and the element where the depth of the obstruction is 10 inches (255 mm) maximum.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

● **Figure 308.3.1 Unobstructed Side Reach**

308.3.2 Obstructed High Reach. Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

EXCEPTIONS: 1. The top of washing machines and clothes dryers shall be permitted to be 36 inches (915 mm) maximum above the finish floor.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

● **Figure 308.3.2 Obstructed High Side Reach**

309 Operable Parts

309.1 General. Operable parts shall comply with 309.

309.2 Clear Floor Space. A clear floor or ground space complying with 305 shall be provided.

309.3 Height. Operable parts shall be placed within one or more of the reach ranges specified in 308.

309.4 Operation. Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum.

EXCEPTION: Gas pump nozzles shall not be required to provide operable parts that have an activating force of 5 pounds (22.2 N) maximum.

CHAPTER 4: ACCESSIBLE ROUTES

401 General

402 Accessible Routes

403 Walking Surfaces

404 Doors, Doorways, and Gates

405 Ramps

406 Curb Ramps

407 Elevators

408 Limited Use/ Limited Application Elevators

409 Private Residence Elevators

410 Platform Lifts

401 General

401.1 Scope. The provisions of Chapter 4 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

402 Accessible Routes

402.1 General. Accessible routes shall comply with 402.

402.2 Components. Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.

ADVISORY 402.2 Components. Walking surfaces must have running slopes not steeper than 1:20, see 403.3. Other components of accessible routes, such as ramps (405) and curb ramps (406), are permitted to be more steeply sloped.

403 Walking Surfaces

403.1 General. Walking surfaces that are a part of an accessible route shall comply with 403.

403.2 Floor or Ground Surface. Floor or ground surfaces shall comply with 302.

403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

403.4 Changes in Level. Changes in level shall comply with 303.

403.5 Clearances. Walking surfaces shall provide clearances complying with 403.5.

EXCEPTION: Within employee work areas, clearances on common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

403.5.1 Clear Width. Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.

EXCEPTION: The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

●Figure 403.5.1 Clear Width of an Accessible Route

403.5.2 Clear Width at Turn. Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn.

EXCEPTION: Where the clear width at the turn is 60 inches (1525 mm) minimum compliance with 403.5.2 shall not be required.

●Figure 403.5.2 Clear Width at Turn

403.5.3 Passing Spaces. An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either: a space 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with 304.3.2 where the base and arms of the T-shaped space extend 48 inches (1220 mm) minimum beyond the intersection.

403.6 Handrails. Where handrails are provided along walking surfaces with running slopes not steeper than 1:20 they shall comply with 505.

ADVISORY 403.6 Handrails. Handrails provided in elevator cabs and platform lifts are not required to comply with the requirements for handrails on walking surfaces.

404 Doors, Doorways, and Gates

404.1 General. Doors, doorways, and gates that are part of an accessible route shall comply with 404.

EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with 404.2.7, 404.2.8, 404.2.9, 404.3.2 and 404.3.4 through 404.3.7.

ADVISORY 404.1 General Exception. Security personnel must have sole control of doors that are eligible for the Exception at 404.1. It would not be acceptable for security personnel to operate the doors for people with disabilities while allowing others to have independent access.

404.2 Manual Doors, Doorways, and Manual Gates. Manual doors and doorways and manual gates intended for user passage shall comply with 404.2.

404.2.1 Revolving Doors, Gates, and Turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

404.2.2 Double-Leaf Doors and Gates. At least one of the active leaves of doorways with two leaves shall comply with 404.2.3 and 404.2.4.

404.2.3 Clear Width. Door openings shall provide a clear width of 32 inches (815 mm) minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) deep shall provide a clear opening of 36 inches (915 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (865 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the finish floor or ground shall not exceed 4 inches (100 mm).

EXCEPTIONS: 1. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear width shall be permitted for the latch side stop.

2. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.

● **Figure 404.2.3 Clear Width of Doorways**

404.2.4 Maneuvering Clearances. Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.

EXCEPTION: Entry doors to hospital patient rooms shall not be required to provide the clearance beyond the latch side of the door.

404.2.4.1 Swinging Doors and Gates. Swinging doors and gates shall have maneuvering clearances complying with Table 404.2.4.1.

404.2.4.1 Maneuvering Clearances at Manual Swinging Doors and Gates (text version)

Type of Use		Minimum Maneuvering Clearance	
Approach Direction	Door or Gate Side	Perpendicular to Doorway	Parallel to Doorway (beyond latch side unless noted)
From front	Pull	60 inches (1525 mm)	18 inches (455 mm)
From front	Push	48 inches (1220 mm)	0 inches (0 mm) ¹
From hinge side	Pull	60 inches (1525 mm)	36 inches (915 mm)
From hinge side	Pull	54 inches (1370 mm)	42 inches (1065 mm)
From hinge side	Push	42 inches (1065 mm) ²	22 inches (560 mm) ³
From latch side	Pull	48 inches (1220 mm) ⁴	24 inches (610 mm)
From latch side	Push	42 inches (1065 mm) ⁴	24 inches (610 mm)

1. Add 12 inches (305 mm) if closer and latch are provided.
2. Add 6 inches (150 mm) if closer and latch are provided.
3. Beyond hinge side.
4. Add 6 inches (150 mm) if closer is provided.

● **Figure 404.2.4.1 Maneuvering Clearances at Manual Swinging Doors and Gates**

404.2.4.2 Doorways without Doors or Gates, Sliding Doors, and Folding Doors. Doorways less than 36 inches (915 mm) wide without doors or gates, sliding doors, or folding doors shall have maneuvering clearances complying with Table 404.2.4.2.

404.2.4.2 Maneuvering Clearances at Doorways without Doors or Gates, Manual Sliding Doors, and Manual Folding Doors

Approach Direction	Minimum Maneuvering Clearance	
	Perpendicular to Doorway	Parallel to Doorway (beyond stop/latch side unless noted)
From Front	48 inches (1220 mm)	0 inches (0 mm)
From side ¹	42 inches (1065 mm)	0 inches (0 mm)
From pocket/hinge side	42 inches (1065 mm)	22 inches (560 mm) ²
From stop/latch side	42 inches (1065 mm)	24 inches (610 mm)

1. Doorway with no door only.
2. Beyond pocket/hinge side.

● **Figure 404.2.4.2 Maneuvering Clearances at Doorways without Doors, Sliding Doors, Gates, and Folding Doors**

404.2.4.3 Recessed Doors and Gates. Maneuvering clearances for forward approach shall be provided when any obstruction within 18 inches (455 mm) of the latch side of a doorway projects more than 8 inches (205 mm) beyond the face of the door, measured perpendicular to the face of the door or gate.

ADVISORY 404.2.4.3 Recessed Doors and Gates. A door can be recessed due to wall thickness or because of the placement of casework and other fixed elements adjacent to the doorway. This provision must be applied wherever doors are recessed.

● **Figure 404.2.4.3 Maneuvering Clearances at Recessed Doors and Gates**

404.2.4.4 Floor or Ground Surface. Floor or ground surface within required maneuvering clearances shall comply with 302. Changes in level are not permitted.

EXCEPTIONS: 1. Slopes not steeper than 1:48 shall be permitted.
2. Changes in level at thresholds complying with 404.2.5 shall be permitted.

404.2.5 Thresholds. Thresholds, if provided at doorways, shall be 1/2 inch (13 mm) high maximum. Raised thresholds and changes in level at doorways shall comply with 302 and 303.

EXCEPTION: Existing or altered thresholds 3/4 inch (19 mm) high maximum that have a beveled edge on each side with a slope not steeper than 1:2 shall not be required to comply with 404.2.5.

404.2.6 Doors in Series and Gates in Series. The distance between two hinged or pivoted doors in series and gates in series shall be 48 inches (1220 mm) minimum plus the width of doors or gates swinging into the space.

● **Figure 404.2.6 Doors in Series and Gates in Series**

404.2.7 Door and Gate Hardware. Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. Operable parts of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

EXCEPTIONS: 1. Existing locks shall be permitted in any location at existing glazed doors without stiles, existing overhead rolling doors or grilles, and similar existing doors or grilles that are designed with locks that are activated only at the top or bottom rail.

2. Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finish floor or ground provided the self-latching devices are not also self-locking devices and operated by means of a key, electronic opener, or integral combination lock.

ADVISORY 404.2.7 Door and Gate Hardware. Door hardware that can be operated with a closed fist or a loose grip accommodates the greatest range of users. Hardware that requires simultaneous hand and finger movements require greater dexterity and coordination, and is not recommended.

404.2.8 Closing Speed. Door and gate closing speed shall comply with 404.2.8.

404.2.8.1 Door Closers and Gate Closers. Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

404.2.8.2 Spring Hinges. Door and gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

404.2.9 Door and Gate Opening Force. Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open a door or gate other than fire doors shall be as follows:

1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.
2. Sliding or folding doors: 5 pounds (22.2 N) maximum.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

ADVISORY 404.2.9 Door and Gate Opening Force. The maximum force pertains to the continuous application of force necessary to fully open a door, not the initial force needed to overcome the inertia of the door. It does not apply to the force required to retract bolts or to disengage other devices used to keep the door in a closed position.

404.2.10 Door and Gate Surfaces. Swinging door and gate surfaces within 10 inches (255 mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

EXCEPTIONS: 1. Sliding doors shall not be required to comply with 404.2.10.

2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at 60 degrees minimum from the horizontal shall not be required to meet the 10 inch (255 mm) bottom smooth surface height requirement.

3. Doors and gates that do not extend to within 10 inches (255 mm) of the finish floor or ground shall not be required to comply with 404.2.10.

4. Existing doors and gates without smooth surfaces within 10 inches (255 mm) of the finish floor or ground shall not be required to provide smooth surfaces complying with 404.2.10 provided that if added kick plates are installed, cavities created by such kick plates are capped.

404.2.11 Vision Lights. Doors, gates, and side lights adjacent to doors or gates, containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one glazed panel located 43 inches (1090 mm) maximum above the finish floor.

EXCEPTION: Vision lights with the lowest part more than 66 inches (1675 mm) from the finish floor or ground shall not be required to comply with 404.2.11.

404.3 Automatic and Power-Assisted Doors and Gates. Automatic doors and automatic gates shall comply with 404.3. Full-powered automatic doors shall comply with ANSI/BHMA A156.10 (incorporated by reference, see "Referenced Standards" in Chapter 1). Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

404.3.1 Clear Width. Doorways shall provide a clear opening of 32 inches (815 mm) minimum in power-on and power-off mode. The minimum clear width for automatic door systems in a doorway shall be based on the clear opening provided by all leaves in the open position.

404.3.2 Maneuvering Clearance. Clearances at power-assisted doors and gates shall comply with 404.2.4. Clearances at automatic doors and gates without standby power and serving an accessible means of egress shall comply with 404.2.4.

EXCEPTION: Where automatic doors and gates remain open in the power-off condition, compliance with 404.2.4 shall not be required.

404.3.3 Thresholds. Thresholds and changes in level at doorways shall comply with 404.2.5.

404.3.4 Doors in Series and Gates in Series. Doors in series and gates in series shall comply with 404.2.6.

404.3.5 Controls. Manually operated controls shall comply with 309. The clear floor space adjacent to the control shall be located beyond the arc of the door swing.

404.3.6 Break Out Opening. Where doors and gates without standby power are a part of a means of egress, the clear break out opening at swinging or sliding doors and gates shall be 32 inches (815 mm) minimum when operated in emergency mode.

EXCEPTION: Where manual swinging doors and gates comply with 404.2 and serve the same means of egress compliance with 404.3.6 shall not be required.

404.3.7 Revolving Doors, Revolving Gates, and Turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

405 Ramps

405.1 General. Ramps on accessible routes shall comply with 405.

EXCEPTION: In assembly areas, aisle ramps adjacent to seating and not serving elements required to be on an accessible route shall not be required to comply with 405.

405.2 Slope. Ramp runs shall have a running slope not steeper than 1:12.

EXCEPTION: In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.

405.2 Maximum Ramp Slope and Rise for Existing Sites, Buildings, and Facilities

Slope	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10	6 inches (150 mm)

1. A slope steeper than 1:8 is prohibited.

ADVISORY 405.2 Slope. To accommodate the widest range of users, provide ramps with the least possible running slope and, wherever possible, accompany ramps with stairs for use by those individuals for whom distance presents a greater barrier than steps, e.g., people with heart disease or limited stamina.

405.3 Cross Slope. Cross slope of ramp runs shall not be steeper than 1:48.

ADVISORY 405.3 Cross Slope. Cross slope is the slope of the surface perpendicular to the direction of travel. Cross slope is measured the same way as slope is measured (i.e., the rise over the run).

405.4 Floor or Ground Surfaces. Floor or ground surfaces of ramp runs shall comply with 302. Changes in level other than the running slope and cross slope are not permitted on ramp runs.

405.5 Clear Width. The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum.

EXCEPTION: Within employee work areas, the required clear width of ramps that are a part of common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

405.6 Rise. The rise for any ramp run shall be 30 inches (760 mm) maximum.

405.7 Landings. Ramps shall have landings at the top and the bottom of each ramp run. Landings shall comply with 405.7.

ADVISORY 405.7 Landings. Ramps that do not have level landings at changes in direction can create a compound slope that will not meet the requirements of this document. Circular or curved ramps continually change direction. Curvilinear ramps with small radii also can create compound cross slopes and cannot, by their nature, meet the requirements for accessible routes. A level landing is needed at the accessible door to permit maneuvering and simultaneously door operation.

● **Figure 405.7 Ramp Landings**

405.7.1 Slope. Landings shall comply with 302. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

405.7.2 Width. The landing clear width shall be at least as wide as the widest ramp run leading to the landing.

405.7.3 Length. The landing clear length shall be 60 inches (1525 mm) long minimum.

405.7.4 Change in Direction. Ramps that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum.

405.7.5 Doorways. Where doorways are located adjacent to a ramp landing, maneuvering clearances required by 404.2.4 and 404.3.2 shall be permitted to overlap the required landing area.

405.8 Handrails. Ramp runs with a rise greater than 6 inches (150 mm) shall have handrails complying with 505.

EXCEPTION: Within employee work areas, handrails shall not be required where ramps that are part of common use circulation paths are designed to permit the installation of handrails complying with 505. Ramps not subject to the exception to 405.5 shall be designed to maintain a 36 inch (915 mm) minimum clear width when handrails are installed.

405.9 Edge Protection. Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings.

EXCEPTIONS: 1. Edge protection shall not be required on ramps that are not required to have handrails and have sides complying with 406.3.

2. Edge protection shall not be required on the sides of ramp landings serving an adjoining ramp run or stairway.

3. Edge protection shall not be required on the sides of ramp landings having a vertical drop-off of 1/2 inch (13 mm) maximum within 10 inches (255 mm) horizontally of the minimum landing area specified in 405.7.

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a handrail complying with 505.

ADVISORY 405.9.1 Extended Floor or Ground Surface. The extended surface prevents wheelchair casters and crutch tips from slipping off the ramp surface.

● **Figure 405.9.1 Extended Floor or Ground Surface Edge Protection**

405.9.2 Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.

● **Figure 405.9.2 Curb or Barrier Edge Protection**

405.10 Wet Conditions. Landings subject to wet conditions shall be designed to prevent the accumulation of water.

406 Curb Ramps

406.1 General. Curb ramps on accessible routes shall comply with 406, 405.2 through 405.5, and 405.10.

406.2 Counter Slope. Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

Figure 406.2 Counter Slope of Surfaces Adjacent to Curb Ramps

406.3 Sides of Curb Ramps. Where provided, curb ramp flares shall not be steeper than 1:10.

● **Figure 406.3 Sides of Curb Ramps**

406.4 Landings. Landings shall be provided at the tops of curb ramps. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.

EXCEPTION: In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.

● **Figure 406.4 Landings at the Top of Curb Ramps**

406.5 Location. Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.

406.6 Diagonal Curb Ramps. Diagonal or corner type curb ramps with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have a clear space 48 inches (1220 mm) minimum outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches (1220 mm) minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches (610 mm) long minimum located on each side of the curb ramp and within the marked crossing.

● **Figure 406.6 Diagonal or Corner Type Curb Ramps**

406.7 Islands. Raised islands in crossings shall be cut through level with the street or have curb ramps at both sides. Each curb ramp shall have a level area 48 inches (1220 mm) long minimum by 36 inches (915 mm) wide minimum at the top of the curb ramp in the part of the island intersected by the crossings. Each 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum area shall be oriented so that the 48 inch (1220 mm) minimum length is in the direction of the running slope of the curb ramp it serves. The 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum areas and the accessible route shall be permitted to overlap.

● **Figure 406.7 Islands in Crossings**

407 Elevators

407.1 General. Elevators shall comply with 407 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Chapter 1). They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.

ADVISORY 407.1 General. The ADA and other Federal civil rights laws require that accessible features be maintained in working order so that they are accessible to and usable by those people they are intended to benefit. Building owners should note that the ASME Safety Code for Elevators and Escalators requires routine maintenance and inspections. Isolated or temporary interruptions in service due to maintenance or repairs may be unavoidable; however, failure to take prompt action to effect repairs could constitute a violation of Federal laws and these requirements.

407.2 Elevator Landing Requirements. Elevator landings shall comply with 407.2.

407.2.1 Call Controls. Where elevator call buttons or keypads are provided, they shall comply with 407.2.1 and 309.4. Call buttons shall be raised or flush.

EXCEPTION: Existing elevators shall be permitted to have recessed call buttons.

407.2.1.1 Height. Call buttons and keypads shall be located within one of the reach ranges specified in 308, measured to the centerline of the highest operable part.

EXCEPTION: Existing call buttons and existing keypads shall be permitted to be located at 54 inches (1370 mm) maximum above the finish floor, measured to the centerline of the highest operable part.

407.2.1.2 Size. Call buttons shall be 3/4 inch (19 mm) minimum in the smallest dimension.

EXCEPTION: Existing elevator call buttons shall not be required to comply with 407.2.1.2.

407.2.1.3 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided at call controls.

ADVISORY 407.2.1.3 Clear Floor or Ground Space. The clear floor or ground space required at elevator call buttons must remain free of obstructions including ashtrays, plants, and other decorative elements that prevent wheelchair users and others from reaching the call buttons. The height of the clear floor or ground space is considered to be a volume from the floor to 80 inches (2030 mm) above the floor. Recessed ashtrays should not be placed near elevator call buttons so that persons who are blind or visually impaired do not inadvertently contact them or their contents as they reach for the call buttons.

407.2.1.4 Location. The call button that designates the up direction shall be located above the call button that designates the down direction.

EXCEPTION: Destination-oriented elevators shall not be required to comply with 407.2.1.4.

ADVISORY 407.2.1.4 Location Exception. A destination-oriented elevator system provides lobby controls enabling passengers to select floor stops, lobby indicators designating which elevator to use, and a car indicator designating the floors at which the

car will stop. Responding cars are programmed for maximum efficiency by reducing the number of stops any passenger experiences.

407.2.1.5 Signals. Call buttons shall have visible signals to indicate when each call is registered and when each call is answered. EXCEPTIONS: 1. Destination-oriented elevators shall not be required to comply with 407.2.1.5 provided that visible and audible signals complying with 407.2.2 indicating which elevator car to enter are provided.

2. Existing elevators shall not be required to comply with 407.2.1.5.

407.2.1.6 Keypads. Where keypads are provided, keypads shall be in a standard telephone keypad arrangement and shall comply with 407.4.7.2.

407.2.2 Hall Signals. Hall signals, including in-car signals, shall comply with 407.2.2.

407.2.2.1 Visible and Audible Signals. A visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call and the car's direction of travel. Where in-car signals are provided, they shall be visible from the floor area adjacent to the hall call buttons.

EXCEPTIONS: 1. Visible and audible signals shall not be required at each destination-oriented elevator where a visible and audible signal complying with 407.2.2 is provided indicating the elevator car designation information.

2. In existing elevators, a signal indicating the direction of car travel shall not be required.

407.2.2.2 Visible Signals. Visible signal fixtures shall be centered at 72 inches (1830 mm) minimum above the finish floor or ground. The visible signal elements shall be 2 1/2 inches (64 mm) minimum measured along the vertical centerline of the element. Signals shall be visible from the floor area adjacent to the hall call button.

EXCEPTIONS: 1. Destination-oriented elevators shall be permitted to have signals visible from the floor area adjacent to the hoistway entrance.

2. Existing elevators shall not be required to comply with 407.2.2.2.

● **Figure 407.2.2.2 Visible Hall Signals**

407.2.2.3 Audible Signals. Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal annunciators that indicate the direction of elevator car travel. Audible signals shall have a frequency of 1500 Hz maximum. Verbal annunciators shall have a frequency of 300 Hz minimum and 3000 Hz maximum. The audible signal and verbal annunciator shall be 10 dB minimum above ambient, but shall not exceed 80 dB, measured at the hall call button.

EXCEPTIONS: 1. Destination-oriented elevators shall not be required to comply with 407.2.2.3 provided that the audible tone and verbal announcement is the same as those given at the call button or call button keypad.

2. Existing elevators shall not be required to comply with the requirements for frequency and dB range of audible signals.

407.2.2.4 Differentiation. Each destination-oriented elevator in a bank of elevators shall have audible and visible means for differentiation.

407.2.3 Hoistway Signs. Signs at elevator hoistways shall comply with 407.2.3.

407.2.3.1 Floor Designation. Floor designations complying with 703.2 and 703.4.1 and shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile star shall be provided on both jambs at the main entry level.

● **Figure 407.2.3.1 Floor Designations on Jambs of Elevator Hoistway Entrances**

407.2.3.2 Car Designations. Destination-oriented elevators shall provide tactile car identification complying with 703.2 on both jambs of the hoistway immediately below the floor designation. Car designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum.

● **Figure 407.2.3.2 Car Designations on Jambs of Destination-Oriented Elevator Hoistway Entrances**

407.3 Elevator Door Requirements. Hoistway and car doors shall comply with 407.3.

407.3.1 Type. Elevator doors shall be the horizontal sliding type. Car gates shall be prohibited.

407.3.2 Operation. Elevator hoistway and car doors shall open and close automatically.

EXCEPTION: Existing manually operated hoistway swing doors shall be permitted provided that they comply with 404.2.3 and 404.2.9. Car door closing shall not be initiated until the hoistway door is closed.

407.3.3 Reopening Device. Elevator doors shall be provided with a reopening device complying with 407.3.3 that shall stop and reopen a car door and hoistway door automatically if the door becomes obstructed by an object or person.

EXCEPTION: Existing elevators with manually operated doors shall not be required to comply with 407.3.3.

407.3.3.1 Height. The device shall be activated by sensing an obstruction passing through the opening at 5 inches (125 mm) nominal and 29 inches (735 mm) nominal above the finish floor.

407.3.3.2 Contact. The device shall not require physical contact to be activated, although contact is permitted to occur before the door reverses.

407.3.3.3 Duration. Door reopening devices shall remain effective for 20 seconds minimum.

407.3.4 Door and Signal Timing. The minimum acceptable time from notification that a car is answering a call or notification of the car assigned at the means for the entry of destination information until the doors of that car start to close shall be calculated from the following equation:

$T = D/(1.5 \text{ ft/s})$ or $T = D/(455 \text{ mm/s}) = 5$ seconds minimum where T equals the total time in seconds and D equals the distance (in feet or millimeters) from the point in the lobby or corridor 60 inches (1525 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door.

EXCEPTIONS: 1. For cars with in-car lanterns, T shall be permitted to begin when the signal is visible from the point 60 inches (1525 mm) directly in front of the farthest hall call button and the audible signal is sounded.

2. Destination-oriented elevators shall not be required to comply with 407.3.4.

407.3.5 Door Delay. Elevator doors shall remain fully open in response to a car call for 3 seconds minimum.

407.3.6 Width. The width of elevator doors shall comply with Table 407.4.1.

EXCEPTION: In existing elevators, a power-operated car door complying with 404.2.3 shall be permitted.

407.4 Elevator Car Requirements. Elevator cars shall comply with 407.4.

407.4.1 Car Dimensions. Inside dimensions of elevator cars and clear width of elevator doors shall comply with Table 407.4.1.

EXCEPTION: Existing elevator car configurations that provide a clear floor area of 16 square feet (1.5 m²) minimum and also provide an inside clear depth 54 inches (1370 mm) minimum and a clear width 36 inches (915 mm) minimum shall be permitted.

407.4.1 Elevator Car Dimensions (text version)

Door Location	Minimum Dimensions			
	Door Clear Width	Inside Car, Side to Side	Inside Car, Back Wall to Front Return	Inside Car, Back Wall to Inside Face of Door
Centered	42 inches (1065 mm)	80 inches (2030 mm)	51 inches (1295 mm)	54 inches (1370 mm)
Side (off-centered)	36 inches (915 mm) ¹	68 inches (1725 mm)	51 inches (1295 mm)	54 inches (1370 mm)
Any	36 inches (915 mm) ¹	54 inches (1370 mm)	80 inches (2030 mm)	80 inches (2030 mm)
Any	36 inches (915 mm) ¹	60 inches (1525 mm) ²	60 inches (1525 mm) ²	60 inches (1525 mm) ²

¹. A tolerance of minus 5/8 inch (16 mm) is permitted.

². Other car configurations that provide a turning space complying with 304 with the door closed shall be permitted.

•Figure 407.4.1 Elevator Car Dimensions

407.4.2 Floor Surfaces. Floor surfaces in elevator cars shall comply with 302 and 303.

407.4.3 Platform to Hoistway Clearance. The clearance between the car platform sill and the edge of any hoistway landing shall be 1 1/4 inch (32 mm) maximum.

407.4.4 Leveling. Each car shall be equipped with a self-leveling feature that will automatically bring and maintain the car at floor landings within a tolerance of 1/2 inch (13 mm) under rated loading to zero loading conditions.

407.4.5 Illumination. The level of illumination at the car controls, platform, car threshold and car landing sill shall be 5 foot candles (54 lux) minimum.

407.4.6 Elevator Car Controls. Where provided, elevator car controls shall comply with 407.4.6 and 309.4.

EXCEPTION: In existing elevators, where a new car operating panel complying with 407.4.6 is provided, existing car operating panels shall not be required to comply with 407.4.6.

407.4.6.1 Location. Controls shall be located within one of the reach ranges specified in 308.

EXCEPTIONS: 1. Where the elevator panel serves more than 16 openings and a parallel approach is provided, buttons with floor designations shall be permitted to be 54 inches (1370 mm) maximum above the finish floor.

2. In existing elevators, car control buttons with floor designations shall be permitted to be located 54 inches (1370 mm) maximum above the finish floor where a parallel approach is provided.

407.4.6.2 Buttons. Car control buttons with floor designations shall comply with 407.4.6.2 and shall be raised or flush.

EXCEPTION: In existing elevators, buttons shall be permitted to be recessed.

407.4.6.2.1 Size. Buttons shall be 3/4 inch (19 mm) minimum in their smallest dimension.

407.4.6.2.2 Arrangement. Buttons shall be arranged with numbers in ascending order. When two or more columns of buttons are provided they shall read from left to right.

407.4.6.3 Keypads. Car control keypads shall be in a standard telephone keypad arrangement and shall comply with 407.4.7.2.

407.4.6.4 Emergency Controls. Emergency controls shall comply with 407.4.6.4.

407.4.6.4.1 Height. Emergency control buttons shall have their centerlines 35 inches (890 mm) minimum above the finish floor.

407.4.6.4.2 Location. Emergency controls, including the emergency alarm, shall be grouped at the bottom of the panel.

407.4.7 Designations and Indicators of Car Controls. Designations and indicators of car controls shall comply with 407.4.7.

EXCEPTION: In existing elevators, where a new car operating panel complying with 407.4.7 is provided, existing car operating panels shall not be required to comply with 407.4.7.

407.4.7.1 Buttons. Car control buttons shall comply with 407.4.7.1.













407.4.7.1.1 Type. Control buttons shall be identified by tactile characters complying with 703.2.

407.4.7.1.2 Location. Raised character and braille designations shall be placed immediately to the left of the control button to which the designations apply.

EXCEPTION: Where space on an existing car operating panel precludes tactile markings to the left of the controls, markings shall be placed as near to the control as possible.

407.4.7.1.3 Symbols. The control button for the emergency stop, alarm, door open, door close, main entry floor, and phone, shall be identified with tactile symbols as shown in Table 407.4.7.1.3.

407.4.7.1.3 Elevator Control Button Identification

Control Button	Tactile Symbol	Braille Message
Emergency Stop		 "ST"OP" Three cells
Alarm		 AL"AR"M Four cells
Door Open		 OP"EN" Three cells
Door Close		 CLOSE Five cells
Main Entry Floor		 MA"IN" Three cells
Phone		 PH"ONE" Four cells

407.4.7.1.4 Visible Indicators. Buttons with floor designations shall be provided with visible indicators to show that a call has been registered. The visible indication shall extinguish when the car arrives at the designated floor.

407.4.7.2 Keypads. Keypads shall be identified by characters complying with 703.5 and shall be centered on the corresponding keypad button. The number five key shall have a single raised dot. The dot shall be 0.118 inch (3 mm) to 0.120 inch (3.05 mm) base diameter and in other aspects comply with Table 703.3.1.

407.4.8 Car Position Indicators. Audible and visible car position indicators shall be provided in elevator cars.

407.4.8.1 Visible Indicators. Visible indicators shall comply with 407.4.8.1.

407.4.8.1.1 Size. Characters shall be 1/2 inch (13 mm) high minimum.

407.4.8.1.2 Location. Indicators shall be located above the car control panel or above the door.

407.4.8.1.3 Floor Arrival. As the car passes a floor and when a car stops at a floor served by the elevator, the corresponding character shall illuminate.

EXCEPTION: Destination-oriented elevators shall not be required to comply with 407.4.8.1.3 provided that the visible indicators extinguish when the call has been answered.

407.4.8.1.4 Destination Indicator. In destination-oriented elevators, a display shall be provided in the car with visible indicators to show car destinations.

407.4.8.2 Audible Indicators. Audible indicators shall comply with 407.4.8.2.

407.4.8.2.1 Signal Type. The signal shall be an automatic verbal annunciator which announces the floor at which the car is about to stop.

EXCEPTION: For elevators other than destination-oriented elevators that have a rated speed of 200 feet per minute (1 m/s) or less, a non-verbal audible signal with a frequency of 1500 Hz maximum which sounds as the car passes or is about to stop at a floor served by the elevator shall be permitted.

407.4.8.2.2 Signal Level. The verbal annunciator shall be 10 dB minimum above ambient, but shall not exceed 80 dB, measured at the annunciator.

407.4.8.2.3 Frequency. The verbal annunciator shall have a frequency of 300 Hz minimum to 3000 Hz maximum.

407.4.9 Emergency Communication. Emergency two-way communication systems shall comply with 308. Tactile symbols and characters shall be provided adjacent to the device and shall comply with 703.2.

408 Limited-Use/Limited-Application Elevators

408.1 General. Limited-use/limited-application elevators shall comply with 408 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Chapter 1). They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.

408.2 Elevator Landings. Landings serving limited-use/limited-application elevators shall comply with 408.2.

408.2.1 Call Buttons. Elevator call buttons and keypads shall comply with 407.2.1.

408.2.2 Hall Signals. Hall signals shall comply with 407.2.2.

408.2.3 Hoistway Signs. Signs at elevator hoistways shall comply with 407.2.3.1.

408.3 Elevator Doors. Elevator hoistway doors shall comply with 408.3.

408.3.1 Sliding Doors. Sliding hoistway and car doors shall comply with 407.3.1 through 407.3.3 and 408.4.1.

408.3.2 Swinging Doors. Swinging hoistway doors shall open and close automatically and shall comply with 404, 407.3.2 and 408.3.2.

408.3.2.1 Power Operation. Swinging doors shall be power-operated and shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

408.3.2.2 Duration. Power-operated swinging doors shall remain open for 20 seconds minimum when activated.

408.4 Elevator Cars. Elevator cars shall comply with 408.4.

408.4.1 Car Dimensions and Doors. Elevator cars shall provide a clear width 42 inches (1065 mm) minimum and a clear depth 54 inches (1370 mm) minimum. Car doors shall be positioned at the narrow ends of cars and shall provide 32 inches (815 mm) minimum clear width.

EXCEPTIONS: 1. Cars that provide a clear width 51 inches (1295 mm) minimum shall be permitted to provide a clear depth 51 inches (1295 mm) minimum provided that car doors provide a clear opening 36 inches (915 mm) wide minimum.

2. Existing elevator cars shall be permitted to provide a clear width 36 inches (915 mm) minimum, clear depth 54 inches (1370 mm) minimum, and a net clear platform area 15 square feet (1.4 m²) minimum.

•Figure 408.4.1 Limited-Use/Limited-Application (LULA) Elevator Car Dimensions

408.4.2 Floor Surfaces. Floor surfaces in elevator cars shall comply with 302 and 303.

408.4.3 Platform to Hoistway Clearance. The platform to hoistway clearance shall comply with 407.4.3.

408.4.4 Leveling. Elevator car leveling shall comply with 407.4.4.

408.4.5 Illumination. Elevator car illumination shall comply with 407.4.5.

408.4.6 Car Controls. Elevator car controls shall comply with 407.4.6. Control panels shall be centered on a side wall.

408.4.7 Designations and Indicators of Car Controls. Designations and indicators of car controls shall comply with 407.4.7.

408.4.8 Emergency Communications. Car emergency signaling devices complying with 407.4.9 shall be provided.

409 Private Residence Elevators

409.1 General. Private residence elevators that are provided within a residential dwelling unit required to provide mobility features complying with 809.2 through 809.4 shall comply with 409 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Chapter 1). They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.

409.2 Call Buttons. Call buttons shall be 3/4 inch (19 mm) minimum in the smallest dimension and shall comply with 309.

409.3 Elevator Doors. Hoistway doors, car doors, and car gates shall comply with 409.3 and 404.

EXCEPTION: Doors shall not be required to comply with the maneuvering clearance requirements in 404.2.4.1 for approaches to the push side of swinging doors.

409.3.1 Power Operation. Elevator car and hoistway doors and gates shall be power operated and shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1). Power operated doors and gates shall remain open for 20 seconds minimum when activated.

EXCEPTION: In elevator cars with more than one opening, hoistway doors and gates shall be permitted to be of the manual-open, self-close type.

409.3.2 Location. Elevator car doors or gates shall be positioned at the narrow end of the clear floor spaces required by 409.4.1.

409.4 Elevator Cars. Private residence elevator cars shall comply with 409.4.

409.4.1 Inside Dimensions of Elevator Cars. Elevator cars shall provide a clear floor space of 36 inches (915 mm) minimum by 48 inches (1220 mm) minimum and shall comply with 305.

409.4.2 Floor Surfaces. Floor surfaces in elevator cars shall comply with 302 and 303.

409.4.3 Platform to Hoistway Clearance. The clearance between the car platform and the edge of any landing sill shall be 1 1/2 inch (38 mm) maximum.

409.4.4 Leveling. Each car shall automatically stop at a floor landing within a tolerance of 1/2 inch (13 mm) under rated loading to zero loading conditions.

409.4.5 Illumination Levels. Elevator car illumination shall comply with 407.4.5.

409.4.6 Car Controls. Elevator car control buttons shall comply with 409.4.6, 309.3, 309.4, and shall be raised or flush.

409.4.6.1 Size. Control buttons shall be 3/4 inch (19 mm) minimum in their smallest dimension.

409.4.6.2 Location. Control panels shall be on a side wall, 12 inches (305 mm) minimum from any adjacent wall.

● **Figure 409.4.6.2 Location of Private Residence Elevator Control Panel**

409.4.7 Emergency Communications. Emergency two-way communication systems shall comply with 409.4.7.

409.4.7.1 Type. A telephone and emergency signal device shall be provided in the car.

409.4.7.2 Operable Parts. The telephone and emergency signaling device shall comply with 309.3 and 309.4.

409.4.7.3 Compartment. If the telephone or device is in a closed compartment, the compartment door hardware shall comply with 309.

409.4.7.4 Cord. The telephone cord shall be 29 inches (735 mm) long minimum.

410 Platform Lifts

410.1 General. Platform lifts shall comply with ASME A18.1 (1999 edition or 2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1). Platform lifts shall not be attendant-operated and shall provide unassisted entry and exit from the lift.

ADVISORY 410.1 General. Inclined stairway chairlifts and inclined and vertical platform lifts are available for short-distance vertical transportation. Because an accessible route requires an 80 inch (2030 mm) vertical clearance, care should be taken in selecting lifts as they may not be equally suitable for use by people using wheelchairs and people standing. If a lift does not provide 80 inch (2030 mm) vertical clearance, it cannot be considered part of an accessible route in new construction.

The ADA and other Federal civil rights laws require that accessible features be maintained in working order so that they are accessible to and usable by those people they are intended to benefit. Building owners are reminded that the ASME A18 Safety Standard for Platform Lifts and Stairway Chairlifts requires routine maintenance and inspections. Isolated or temporary interruptions in service due to maintenance or repairs may be unavoidable; however, failure to take prompt action to effect repairs could constitute a violation of Federal laws and these requirements.

410.2 Floor Surfaces. Floor surfaces in platform lifts shall comply with 302 and 303.

410.3 Clear Floor Space. Clear floor space in platform lifts shall comply with 305.

410.4 Platform to Runway Clearance. The clearance between the platform sill and the edge of any runway landing shall be 1 inch (32 mm) maximum.

410.5 Operable Parts. Controls for platform lifts shall comply with 309.

410.6 Doors and Gates. Platform lifts shall have low-energy power-operated doors or gates complying with 404.3. Doors shall remain open for 20 seconds minimum. End doors and gates shall provide a clear width 32 inches (815 mm) minimum. Side doors and gates shall provide a clear width 42 inches (1065 mm) minimum.

EXCEPTION: Platform lifts serving two landings maximum and having doors or gates on opposite sides shall be permitted to have self-closing manual doors or gates.

● **Figure 410.6 Platform Lift Doors and Gates**

CHAPTER 5: GENERAL SITE AND BUILDING ELEMENTS

501 General

502 Parking Spaces

503 Passenger Loading Zones

504 Stairways

505 Handrails

501 General

501.1 Scope. The provisions of Chapter 5 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

502 Parking Spaces

502.1 General. Car and van parking spaces shall comply with 502. Where parking spaces are marked with lines, width measurements of parking spaces and access aisles shall be made from the centerline of the markings.

EXCEPTION: Where parking spaces or access aisles are not adjacent to another parking space or access aisle, measurements shall be permitted to include the full width of the line defining the parking space or access aisle.

502.2 Vehicle Spaces. Car parking spaces shall be 96 inches (2440 mm) wide minimum and van parking spaces shall be 132 inches (3350 mm) wide minimum, shall be marked to define the width, and shall have an adjacent access aisle complying with 502.3.

EXCEPTION: Van parking spaces shall be permitted to be 96 inches (2440 mm) wide minimum where the access aisle is 96 inches (2440 mm) wide minimum.

●Figure 502.2 Vehicle Parking Spaces

502.3 Access Aisle. Access aisles serving parking spaces shall comply with 502.3. Access aisles shall adjoin an accessible route. Two parking spaces shall be permitted to share a common access aisle.

ADVISORY 502.3 Access Aisle. Accessible routes must connect parking spaces to accessible entrances. In parking facilities where the accessible route must cross vehicular traffic lanes, marked crossings enhance pedestrian safety, particularly for people using wheelchairs and other mobility aids. Where possible, it is preferable that the accessible route not pass behind parked vehicles.

●Figure 502.3 Parking Space Access Aisle

502.3.1 Width. Access aisles serving car and van parking spaces shall be 60 inches (1525 mm) wide minimum.

502.3.2 Length. Access aisles shall extend the full length of the parking spaces they serve.

502.3.3 Marking. Access aisles shall be marked so as to discourage parking in them.

ADVISORY 502.3.3 Marking. The method and color of marking are not specified by these requirements but may be addressed by State or local laws or regulations. Because these requirements permit the van access aisle to be as wide as a parking space, it is important that the aisle be clearly marked.

502.3.4 Location. Access aisles shall not overlap the vehicular way. Access aisles shall be permitted to be placed on either side of the parking space except for angled van parking spaces which shall have access aisles located on the passenger side of the parking spaces.

ADVISORY 502.3.4 Location. Wheelchair lifts typically are installed on the passenger side of vans. Many drivers, especially those who operate vans, find it more difficult to back into parking spaces than to back out into comparatively unrestricted vehicular lanes. For this reason, where a van and car share an access aisle, consider locating the van space so that the access aisle is on the passenger side of the van space.

502.4 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

ADVISORY 502.4 Floor or Ground Surfaces. Access aisles are required to be nearly level in all directions to provide a surface for wheelchair transfer to and from vehicles. The exception allows sufficient slope for drainage. Built-up curb ramps are not permitted to project into access aisles and parking spaces because they would create slopes greater than 1:48.

502.5 Vertical Clearance. Parking spaces for vans and access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2490 mm) minimum.

ADVISORY 502.5 Vertical Clearance. Signs provided at entrances to parking facilities informing drivers of clearances and the location of van accessible parking spaces can provide useful customer assistance.

502.6 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation “van accessible.” Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

ADVISORY 502.6 Identification. The required “van accessible” designation is intended to be informative, not restrictive, in identifying those spaces that are better suited for van use. Enforcement of motor vehicle laws, including parking privileges, is a local matter.

502.7 Relationship to Accessible Routes. Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes.

ADVISORY 502.7 Relationship to Accessible Routes. Wheel stops are an effective way to prevent vehicle overhangs from reducing the clear width of accessible routes.

503 Passenger Loading Zones

503.1 General. Passenger loading zones shall comply with 503.

503.2 Vehicle Pull-Up Space. Passenger loading zones shall provide a vehicular pull-up space 96 inches (2440 mm) wide minimum and 20 feet (6100 mm) long minimum.

503.3 Access Aisle. Passenger loading zones shall provide access aisles complying with 503 adjacent to the vehicle pull-up space. Access aisles shall adjoin an accessible route and shall not overlap the vehicular way.

503.3.1 Width. Access aisles serving vehicle pull-up spaces shall be 60 inches (1525 mm) wide minimum.

503.3.2 Length. Access aisles shall extend the full length of the vehicle pull-up spaces they serve.

503.3.3 Marking. Access aisles shall be marked so as to discourage parking in them.

●Figure 503.3 Passenger Loading Zone Access Aisle

503.4 Floor and Ground Surfaces. Vehicle pull-up spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the vehicle pull-up space they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

503.5 Vertical Clearance. Vehicle pull-up spaces, access aisles serving them, and a vehicular route from an entrance to the passenger loading zone, and from the passenger loading zone to a vehicular exit shall provide a vertical clearance of 114 inches (2895 mm) minimum.

504 Stairways

504.1 General. Stairs shall comply with 504.

504.2 Treads and Risers. All steps on a flight of stairs shall have uniform riser heights and uniform tread depths. Risers shall be 4 inches (100 mm) high minimum and 7 inches (180 mm) high maximum. Treads shall be 11 inches (280 mm) deep minimum.

504.3 Open Risers. Open risers are not permitted.

504.4 Tread Surface. Stair treads shall comply with 302. Changes in level are not permitted.

EXCEPTION: Treads shall be permitted to have a slope not steeper than 1:48.

ADVISORY 504.4 Tread Surface. Consider providing visual contrast on tread nosings, or at the leading edges of treads without nosings, so that stair treads are more visible for people with low vision.

504.5 Nosings. The radius of curvature at the leading edge of the tread shall be 1/2 inch (13 mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall extend 1 1/2 inches (38 mm) maximum over the tread below.

●Figure 504.5 Stair Nosings

504.6 Handrails. Stairs shall have handrails complying with 505.

504.7 Wet Conditions. Stair treads and landings subject to wet conditions shall be designed to prevent the accumulation of water.

505 Handrails

505.1 General. Handrails provided along walking surfaces complying with 403, required at ramps complying with 405, and required at stairs complying with 504 shall comply with 505.

ADVISORY 505.1 General. Handrails are required on ramp runs with a rise greater than 6 inches (150 mm) (see 405.8) and on certain stairways (see 504). Handrails are not required on walking surfaces with running slopes less than 1:20. However, handrails are required to comply with 505 when they are provided on walking surfaces with running slopes less than 1:20 (see 403.6). Sections 505.2, 505.3, and 505.10 do not apply to handrails provided on walking surfaces with running slopes less than 1:20 as these sections only reference requirements for ramps and stairs.

505.2 Where Required. Handrails shall be provided on both sides of stairs and ramps.

EXCEPTION: In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.

505.3 Continuity. Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs.

EXCEPTION: In assembly areas, handrails on ramps shall not be required to be continuous in aisles serving seating.

505.4 Height. Top of gripping surfaces of handrails shall be 34 inches (865 mm) minimum and 38 inches (965 mm) maximum vertically above walking surfaces, stair nosings, and ramp surfaces. Handrails shall be at a consistent height above walking surfaces, stair nosings, and ramp surfaces.

ADVISORY 505.4 Height. The requirements for stair and ramp handrails in this document are for adults. When children are the principle users in a building or facility (e.g., elementary schools), a second set of handrails at an appropriate height can assist them and aid in preventing accidents. A maximum height of 28 inches (710 mm) measured to the top of the gripping surface from the ramp surface or stair nosing is recommended for handrails designed for children. Sufficient vertical clearance between upper and lower handrails, 9 inches (230 mm) minimum, should be provided to help prevent entrapment.

● **Figure 505.4 Handrail Height**

505.5 Clearance. Clearance between handrail gripping surfaces and adjacent surfaces shall be 1 1/2 inches (38 mm) minimum.

● **Figure 505.5 Handrail Clearance**

505.6 Gripping Surface. Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall occur 1 1/2 inches (38 mm) minimum below the bottom of the handrail gripping surface.

EXCEPTIONS: 1. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards.

2. The distance between horizontal projections and the bottom of the gripping surface shall be permitted to be reduced by 1/8 inch (3.2 mm) for each 1/2 inch (13 mm) of additional handrail perimeter dimension that exceeds 4 inches (100 mm).

ADVISORY 505.6 Gripping Surface. People with disabilities, older people, and others benefit from continuous gripping surfaces that permit users to reach the fingers outward or downward to grasp the handrail, particularly as the user senses a loss of equilibrium or begins to fall.

● **Figure 505.6 Horizontal Projections Below Gripping Surface**

505.7 Cross Section. Handrail gripping surfaces shall have a cross section complying with 505.7.1 or 505.7.2.

505.7.1 Circular Cross Section. Handrail gripping surfaces with a circular cross section shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

505.7.2 Non-Circular Cross Sections. Handrail gripping surfaces with a non-circular cross section shall have a perimeter dimension of 4 inches (100 mm) minimum and 6 1/4 inches (160 mm) maximum, and a cross-section dimension of 2 1/4 inches (57 mm) maximum.

● **Figure 505.7.2 Handrail Non-Circular Cross Section**

505.8 Surfaces. Handrail gripping surfaces and any surfaces adjacent to them shall be free of sharp or abrasive elements and shall have rounded edges.

505.9 Fittings. Handrails shall not rotate within their fittings.

505.10 Handrail Extensions. Handrail gripping surfaces shall extend beyond and in the same direction of stair flights and ramp runs in accordance with 505.10.

EXCEPTIONS: 1. Extensions shall not be required for continuous handrails at the inside turn of switchback or dogleg stairs and ramps.

2. In assembly areas, extensions shall not be required for ramp handrails in aisles serving seating where the handrails are discontinuous to provide access to seating and to permit crossovers within aisles.

3. In alterations, full extensions of handrails shall not be required where such extensions would be hazardous due to plan configuration.

505.10.1 Top and Bottom Extension at Ramps. Ramp handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent ramp run.

● **Figure 505.10.1 Top and Bottom Handrail Extension at Ramps**

505.10.2 Top Extension at Stairs. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the first riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

● **Figure 505.10.2 Top Handrail Extension at Stairs**

505.10.3 Bottom Extension at Stairs. At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance at least equal to one tread depth beyond the last riser nosing. Extension shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

● **Figure 505.10.3 Bottom Handrail Extension at Stairs**

CHAPTER 6: PLUMBING ELEMENTS AND FACILITIES

601 General

602 Drinking Fountains

603 Toilet and Bathing Rooms

604 Water Closets and Toilet Compartments

605 Urinals

606 Lavatories and Sinks

607 Bathtubs

608 Shower Compartments

609 Grab Bars

610 Seats

611 Washing Machines and Clothes Dryers

612 Saunas and Steam Rooms

601 General

601.1 Scope. The provisions of Chapter 6 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

602 Drinking Fountains

602.1 General. Drinking fountains shall comply with 307 and 602.

602.2 Clear Floor Space. Units shall have a clear floor or ground space complying with 305 positioned for a forward approach and centered on the unit. Knee and toe clearance complying with 306 shall be provided.

EXCEPTION: A parallel approach complying with 305 shall be permitted at units for children's use where the spout is 30 inches (760 mm) maximum above the finish floor or ground and is 3 1/2 inches (90 mm) maximum from the front edge of the unit, including bumpers.

602.3 Operable Parts. Operable parts shall comply with 309.

602.4 Spout Height. Spout outlets shall be 36 inches (915 mm) maximum above the finish floor or ground.

602.5 Spout Location. The spout shall be located 15 inches (380 mm) minimum from the vertical support and 5 inches (125 mm) maximum from the front edge of the unit, including bumpers.

•Figure 602.5 Drinking Fountain Spout Location

602.6 Water Flow. The spout shall provide a flow of water 4 inches (100 mm) high minimum and shall be located 5 inches (125 mm) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches (75 mm) of the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches (75 mm) and 5 inches (125 mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum.

ADVISORY 602.6 Water Flow. The purpose of requiring the drinking fountain spout to produce a flow of water 4 inches (100 mm) high minimum is so that a cup can be inserted under the flow of water to provide a drink of water for an individual who, because of a disability, would otherwise be incapable of using the drinking fountain.

602.7 Drinking Fountains for Standing Persons. Spout outlets of drinking fountains for standing persons shall be 38 inches (965 mm) minimum and 43 inches (1090 mm) maximum above the finish floor or ground.

603 Toilet and Bathing Rooms

603.1 General. Toilet and bathing rooms shall comply with 603.

603.2 Clearances. Clearances shall comply with 603.2.

603.2.1 Turning Space. Turning space complying with 304 shall be provided within the room.

603.2.2 Overlap. Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

603.2.3 Door Swing. Doors shall not swing into the clear floor space or clearance required for any fixture. Doors shall be permitted to swing into the required turning space.

EXCEPTIONS: 1. Doors to a toilet room or bathing room for a single occupant accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space or clearance provided the swing of the door can be reversed to comply with 603.2.3.

2. Where the toilet room or bathing room is for individual use and a clear floor space complying with 305.3 is provided within the room beyond the arc of the door swing, doors shall be permitted to swing into the clear floor space or clearance required for any fixture.

ADVISORY 603.2.3 Door Swing Exception 1. At the time the door is installed, and if the door swing is reversed in the future, the door must meet all the requirements specified in 404. Additionally, the door swing cannot reduce the required width of an accessible route. Also, avoid violating other building or life safety codes when the door swing is reversed.

603.3 Mirrors. Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the finish floor or ground.

ADVISORY 603.3 Mirrors. A single full-length mirror can accommodate a greater number of people, including children. In order for mirrors to be usable by people who are ambulatory and people who use wheelchairs, the top edge of mirrors should be 74 inches (1880 mm) minimum from the floor or ground.

603.4 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

604 Water Closets and Toilet Compartments

604.1 General. Water closets and toilet compartments shall comply with 604.2 through 604.8.

EXCEPTION: Water closets and toilet compartments for children's use shall be permitted to comply with 604.9.

604.2 Location. The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.

•Figure 604.2 Water Closet Location

604.3 Clearance. Clearances around water closets and in toilet compartments shall comply with 604.3.

604.3.1 Size. Clearance around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 56 inches (1420 mm) minimum measured perpendicular from the rear wall.

•Figure 604.3.1 Size of Clearance at Water Closets

604.3.2 Overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance.

EXCEPTION: In residential dwelling units, a lavatory complying with 606 shall be permitted on the rear wall 18 inches (455 mm) minimum from the water closet centerline where the clearance at the water closet is 66 inches (1675 mm) minimum measured perpendicular from the rear wall.

ADVISORY 604.3.2 Overlap. When the door to the toilet room is placed directly in front of the water closet, the water closet cannot overlap the required maneuvering clearance for the door inside the room.

•Figure 604.3.2 (Exception) Overlap of Water Closet Clearance in Residential Dwelling Units

604.4 Seats. The seat height of a water closet above the finish floor shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

EXCEPTIONS: 1. A water closet in a toilet room for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 604.4.

2. In residential dwelling units, the height of water closets shall be permitted to be 15 inches (380 mm) minimum and 19 inches (485 mm) maximum above the finish floor measured to the top of the seat.

604.5 Grab Bars. Grab bars for water closets shall comply with 609. Grab bars shall be provided on the side wall closest to the water closet and on the rear wall.

EXCEPTIONS: 1. Grab bars shall not be required to be installed in a toilet room for a single occupant accessed only through a private office and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5.

2. In residential dwelling units, grab bars shall not be required to be installed in toilet or bathrooms provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5.

3. In detention or correction facilities, grab bars shall not be required to be installed in housing or holding cells that are specially designed without protrusions for purposes of suicide prevention.

ADVISORY 604.5 Grab Bars Exception 2. Reinforcement must be sufficient to permit the installation of rear and side wall grab bars that fully meet all accessibility requirements including, but not limited to, required length, installation height, and structural strength.

604.5.1 Side Wall. The side wall grab bar shall be 42 inches (1065 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) minimum from the rear wall.

● **Figure 604.5.1 Side Wall Grab Bar at Water Closets**

604.5.2 Rear Wall. The rear wall grab bar shall be 36 inches (915 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side.

EXCEPTIONS: 1. The rear grab bar shall be permitted to be 24 inches (610 mm) long minimum, centered on the water closet, where wall space does not permit a length of 36 inches (915 mm) minimum due to the location of a recessed fixture adjacent to the water closet.

2. Where an administrative authority requires flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, then the rear grab bar shall be permitted to be split or shifted to the open side of the toilet area.

● **Figure 604.5.2 Rear Wall Grab Bar at Water Closets**

604.6 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with 604.8.2.

ADVISORY 604.6 Flush Controls. If plumbing valves are located directly behind the toilet seat, flush valves and related plumbing can cause injury or imbalance when a person leans back against them. To prevent causing injury or imbalance, the plumbing can be located behind walls or to the side of the toilet; or if approved by the local authority having jurisdiction, provide a toilet seat lid.

604.7 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches (380 mm) minimum and 48 inches (1220 mm) maximum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

ADVISORY 604.7 Dispensers. If toilet paper dispensers are installed above the side wall grab bar, the outlet of the toilet paper dispenser must be 48 inches (1220 mm) maximum above the finish floor and the top of the gripping surface of the grab bar must be 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor.

● **Figure 604.7 Dispenser Outlet Location**

604.8 Toilet Compartments. Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3. Compartments containing more than one plumbing fixture shall comply with 603. Ambulatory accessible compartments shall comply with 604.8.2 and 604.8.3.

604.8.1 Wheelchair Accessible Compartments. Wheelchair accessible compartments shall comply with 604.8.1.

604.8.1.1 Size. Wheelchair accessible compartments shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 56 inches (1420 mm) deep minimum for wall hung water closets and 59 inches (1500 mm) deep minimum for floor mounted water closets measured perpendicular to the rear wall. Wheelchair accessible compartments for children's use shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 59 inches (1500 mm) deep minimum for wall hung and floor mounted water closets measured perpendicular to the rear wall.

ADVISORY 604.8.1.1 Size. The minimum space required in toilet compartments is provided so that a person using a wheelchair can maneuver into position at the water closet. This space cannot be obstructed by baby changing tables or other fixtures or conveniences, except as specified at 604.3.2 (Overlap). If toilet compartments are to be used to house fixtures other than those associated with the water closet, they must be designed to exceed the minimum space requirements. Convenience fixtures such as baby changing tables must also be accessible to people with disabilities as well as to other users. Toilet compartments that are designed to meet, and not exceed, the minimum space requirements may not provide adequate space for maneuvering into position at a baby changing table.

● **Figure 604.8.1.1 Size of Wheelchair Accessible Toilet Compartment**

604.8.1.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404 except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches (100 mm) maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches (100 mm) maximum from the front partition. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

● **Figure 604.8.1.2 Wheelchair Accessible Toilet Compartment Doors**

604.8.1.3 Approach. Compartments shall be arranged for left-hand or right-hand approach to the water closet.

604.8.1.4 Toe Clearance. The front partition and at least one side partition shall provide a toe clearance of 9 inches (230 mm) minimum above the finish floor and 6 inches (150 mm) deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Compartments for children's use shall provide a toe clearance of 12 inches (305 mm) minimum above the finish floor.

EXCEPTION: Toe clearance at the front partition is not required in a compartment greater than 62 inches (1575 mm) deep with a wall-hung water closet or 65 inches (1650 mm) deep with a floor-mounted water closet. Toe clearance at the side partition is not required in a compartment greater than 66 inches (1675 mm) wide. Toe clearance at the front partition is not required in a compartment for children's use that is greater than 65 inches (1650 mm) deep.

• **Figure 604.8.1.4 Wheelchair Accessible Toilet Compartment Toe Clearance**

604.8.1.5 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided and shall be located on the wall closest to the water closet. In addition, a rear-wall grab bar complying with 604.5.2 shall be provided.

604.8.2 Ambulatory Accessible Compartments. Ambulatory accessible compartments shall comply with 604.8.2.

604.8.2.1 Size. Ambulatory accessible compartments shall have a depth of 60 inches (1525 mm) minimum and a width of 35 inches (890 mm) minimum and 37 inches (940 mm) maximum.

604.8.2.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

604.8.2.3 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided on both sides of the compartment.

• **Figure 604.8.2 Ambulatory Accessible Toilet Compartment**

604.8.3 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

604.9 Water Closets and Toilet Compartments for Children's Use. Water closets and toilet compartments for children's use shall comply with 604.9.

ADVISORY 604.9 Water Closets and Toilet Compartments for Children's Use. The requirements in 604.9 are to be followed where the exception for children's water closets in 604.1 is used. The following table provides additional guidance in applying the specifications for water closets for children according to the age group served and reflects the differences in the size, stature, and reach ranges of children ages 3 through 12. The specifications chosen should correspond to the age of the primary user group. The specifications of one age group should be applied consistently in the installation of a water closet and related elements.

Advisory Specifications for Water Closets Serving Children Ages 3 through 12

	Ages 3 and 4	Ages 5 through 8	Ages 9 through 12
Water Closet Centerline	12 inches (305 mm)	12 to 15 inches (305 to 380 mm)	15 to 18 inches (380 to 455 mm)
Toilet Seat Height	11 to 12 inches (280 to 305 mm)	12 to 15 inches (305 to 380 mm)	15 to 17 inches (380 to 430 mm)
Grab Bar Height	18 to 20 inches (455 to 510 mm)	20 to 25 inches (510 to 635 mm)	25 to 27 inches (635 to 685 mm)
Dispenser Height	14 inches (355 mm)	14 to 17 inches (355 to 430 mm)	17 to 19 inches (430 to 485 mm)

604.9.1 Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 12 inches (305 mm) minimum and 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Compartments shall be arranged for left-hand or right-hand approach to the water closet.

604.9.2 Clearance. Clearance around a water closet shall comply with 604.3.

604.9.3 Height. The height of water closets shall be 11 inches (280 mm) minimum and 17 inches (430 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

604.9.4 Grab Bars. Grab bars for water closets shall comply with 604.5.

604.9.5 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.2 and 309.4 and shall be installed 36 inches (915 mm) maximum above the finish floor. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with 604.8.2.

604.9.6 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 14 inches (355 mm) minimum and 19 inches (485 mm) maximum above the finish floor. There shall be a clearance of 1 1/2 inches (38 mm) minimum below the grab bar. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

604.9.7 Toilet Compartments. Toilet compartments shall comply with 604.8.

605 Urinals

605.1 General. Urinals shall comply with 605.

ADVISORY 605.1 General. Stall-type urinals provide greater accessibility for a broader range of persons, including people of short stature.

605.2 Height and Depth. Urinals shall be the stall-type or the wall-hung type with the rim 17 inches (430 mm) maximum above the finish floor or ground. Urinals shall be 13 1/2 inches (345 mm) deep minimum measured from the outer face of the urinal rim to the back of the fixture.

•Figure 605.2 Height and Depth of Urinals

605.3 Clear Floor Space. A clear floor or ground space complying with 305 positioned for forward approach shall be provided.

605.4 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.

606 Lavatories and Sinks

606.1 General. Lavatories and sinks shall comply with 606.

ADVISORY 606.1 General. If soap and towel dispensers are provided, they must be located within the reach ranges specified in 308. Locate soap and towel dispensers so that they are conveniently usable by a person at the accessible lavatory.

606.2 Clear Floor Space. A clear floor space complying with 305, positioned for a forward approach, and knee and toe clearance complying with 306 shall be provided.

EXCEPTIONS: 1. A parallel approach complying with 305 shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided and to wet bars.

2. A lavatory in a toilet room or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to provide knee and toe clearance complying with 306.

3. In residential dwelling units, cabinetry shall be permitted under lavatories and kitchen sinks provided that all of the following conditions are met:

- (a) the cabinetry can be removed without removal or replacement of the fixture;
- (b) the finish floor extends under the cabinetry; and
- (c) the walls behind and surrounding the cabinetry are finished.

4. A knee clearance of 24 inches (610 mm) minimum above the finish floor or ground shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or counter surface is 31 inches (785 mm) maximum above the finish floor or ground.

5. A parallel approach complying with 305 shall be permitted to lavatories and sinks used primarily by children 5 years and younger.

6. The dip of the overflow shall not be considered in determining knee and toe clearances.

7. No more than one bowl of a multi-bowl sink shall be required to provide knee and toe clearance complying with 306.

606.3 Height. Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (865 mm) maximum above the finish floor or ground.

EXCEPTIONS: 1. A lavatory in a toilet or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 606.3.

2. In residential dwelling unit kitchens, sinks that are adjustable to variable heights, 29 inches (735 mm) minimum and 36 inches (915 mm) maximum, shall be permitted where rough-in plumbing permits connections of supply and drain pipes for sinks mounted at the height of 29 inches (735 mm).

606.4 Faucets. Controls for faucets shall comply with 309. Hand-operated metering faucets shall remain open for 10 seconds minimum.

606.5 Exposed Pipes and Surfaces. Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks.

607 Bathtubs

607.1 General. Bathtubs shall comply with 607.

607.2 Clearance. Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches (760 mm) wide minimum. A lavatory complying with 606 shall be permitted at the control end of the clearance. Where a permanent seat is provided at the head end of the bathtub, the clearance shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.

●Figure 607.2 Clearance for Bathtubs

607.3 Seat. A permanent seat at the head end of the bathtub or a removable in-tub seat shall be provided. Seats shall comply with 610.

607.4 Grab Bars. Grab bars for bathtubs shall comply with 609 and shall be provided in accordance with 607.4.1 or 607.4.2.

EXCEPTIONS: 1. Grab bars shall not be required to be installed in a bathtub located in a bathing facility for a single occupant accessed only through a private office and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 607.4.

2. In residential dwelling units, grab bars shall not be required to be installed in bathtubs located in bathing facilities provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 607.4.

607.4.1 Bathtubs With Permanent Seats. For bathtubs with permanent seats, grab bars shall be provided in accordance with 607.4.1.

607.4.1.1 Back Wall. Two grab bars shall be installed on the back wall, one located in accordance with 609.4 and the other located 8 inches (205 mm) minimum and 10 inches (255 mm) maximum above the rim of the bathtub. Each grab bar shall be installed 15 inches (380 mm) maximum from the head end wall and 12 inches (305 mm) maximum from the control end wall.

607.4.1.2 Control End Wall. A grab bar 24 inches (610 mm) long minimum shall be installed on the control end wall at the front edge of the bathtub.

●Figure 607.4.1 Grab Bars for Bathtubs with Permanent Seats

607.4.2 Bathtubs Without Permanent Seats. For bathtubs without permanent seats, grab bars shall comply with 607.4.2.

607.4.2.1 Back Wall. Two grab bars shall be installed on the back wall, one located in accordance with 609.4 and other located 8 inches (205 mm) minimum and 10 inches (255 mm) maximum above the rim of the bathtub. Each grab bar shall be 24 inches (610 mm) long minimum and shall be installed 24 inches (610 mm) maximum from the head end wall and 12 inches (305 mm) maximum from the control end wall.

607.4.2.2 Control End Wall. A grab bar 24 inches (610 mm) long minimum shall be installed on the control end wall at the front edge of the bathtub.

607.4.2.3 Head End Wall. A grab bar 12 inches (305 mm) long minimum shall be installed on the head end wall at the front edge of the bathtub.

●Figure 607.4.2 Grab Bars for Bathtubs with Removable In-Tub Seats

607.5 Controls. Controls, other than drain stoppers, shall be located on an end wall. Controls shall be between the bathtub rim and grab bar, and between the open side of the bathtub and the centerline of the width of the bathtub. Controls shall comply with 309.4.

●Figure 607.5 Bathtub Control Location

607.6 Shower Spray Unit and Water. A shower spray unit with a hose 59 inches (1500 mm) long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Bathtub shower spray units shall deliver water that is 120°F (49°C) maximum.

ADVISORY 607.6 Shower Spray Unit and Water. Ensure that hand-held shower spray units are capable of delivering water pressure substantially equivalent to fixed shower heads.

607.7 Bathtub Enclosures. Enclosures for bathtubs shall not obstruct controls, faucets, shower and spray units or obstruct transfer from wheelchairs onto bathtub seats or into bathtubs. Enclosures on bathtubs shall not have tracks installed on the rim of the open face of the bathtub.

608 Shower Compartments

608.1 General. Shower compartments shall comply with 608.

ADVISORY 608.1 General. Shower stalls that are 60 inches (1525 mm) wide and have no curb may increase the usability of a bathroom because the shower area provides additional maneuvering space.

608.2 Size and Clearances for Shower Compartments. Shower compartments shall have sizes and clearances complying with 608.2.

608.2.1 Transfer Type Shower Compartments. Transfer type shower compartments shall be 36 inches (915 mm) by 36 inches (915 mm) clear inside dimensions measured at the center points of opposing sides and shall have a 36 inch (915 mm) wide minimum entry on the face of the shower compartment. Clearance of 36 inches (915 mm) wide minimum by 48 inches (1220 mm) long minimum measured from the control wall shall be provided.

● **Figure 608.2.1 Transfer Type Shower Compartment Size and Clearance**

608.2.2 Standard Roll-In Type Shower Compartments. Standard roll-in type shower compartments shall be 30 inches (760 mm) wide minimum by 60 inches (1525 mm) deep minimum clear inside dimensions measured at center points of opposing sides and shall have a 60 inches (1525 mm) wide minimum entry on the face of the shower compartment.

608.2.2.1 Clearance. A 30 inch (760 mm) wide minimum by 60 inch (1525 mm) long minimum clearance shall be provided adjacent to the open face of the shower compartment.

EXCEPTION: A lavatory complying with 606 shall be permitted on one 30 inch (760 mm) wide minimum side of the clearance provided that it is not on the side of the clearance adjacent to the controls or, where provided, not on the side of the clearance adjacent to the shower seat.

● **Figure 608.2.2 Standard Roll-In Type Shower Compartment Size and Clearance**

608.2.3 Alternate Roll-In Type Shower Compartments. Alternate roll-in type shower compartments shall be 36 inches (915 mm) wide and 60 inches (1525 mm) deep minimum clear inside dimensions measured at center points of opposing sides. A 36 inch (915 mm) wide minimum entry shall be provided at one end of the long side of the compartment.

● **Figure 608.2.3 Alternate Roll-In Type Shower Compartment Size and Clearance**

608.3 Grab Bars. Grab bars shall comply with 609 and shall be provided in accordance with 608.3. Where multiple grab bars are used, required horizontal grab bars shall be installed at the same height above the finish floor.

EXCEPTIONS: 1. Grab bars shall not be required to be installed in a shower located in a bathing facility for a single occupant accessed only through a private office, and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 608.3.

2. In residential dwelling units, grab bars shall not be required to be installed in showers located in bathing facilities provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 608.3.

608.3.1 Transfer Type Shower Compartments. In transfer type compartments, grab bars shall be provided across the control wall and back wall to a point 18 inches (455 mm) from the control wall.

● **Figure 608.3.1 Grab Bars for Transfer Type Showers**

608.3.2 Standard Roll-In Type Shower Compartments. Where a seat is provided in standard roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall opposite the seat. Grab bars shall not be provided above the seat. Where a seat is not provided in standard roll-in type shower compartments, grab bars shall be provided on three walls. Grab bars shall be installed 6 inches (150 mm) maximum from adjacent walls.

● **Figure 608.3.2 Grab Bars for Standard Roll-In Type Showers**

608.3.3 Alternate Roll-In Type Shower Compartments. In alternate roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall farthest from the compartment entry. Grab bars shall not be provided above the seat. Grab bars shall be installed 6 inches (150 mm) maximum from adjacent walls.

● **Figure 608.3.3 Grab Bars for Alternate Roll-In Type Showers**

608.4 Seats. A folding or non-folding seat shall be provided in transfer type shower compartments. A folding seat shall be provided in roll-in type showers required in transient lodging guest rooms with mobility features complying with 806.2. Seats shall comply with 610.

EXCEPTION: In residential dwelling units, seats shall not be required in transfer type shower compartments provided that reinforcement has been installed in walls so as to permit the installation of seats complying with 608.4.

608.5 Controls. Controls, faucets, and shower spray units shall comply with 309.4.

608.5.1 Transfer Type Shower Compartments. In transfer type shower compartments, the controls, faucets, and shower spray unit shall be installed on the side wall opposite the seat 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor and shall be located on the control wall 15 inches (380 mm) maximum from the centerline of the seat toward the shower opening.

● **Figure 608.5.1 Transfer Type Shower Compartment Control Location**

608.5.2 Standard Roll-In Type Shower Compartments. In standard roll-in type shower compartments, the controls, faucets, and shower spray unit shall be located above the grab bar, but no higher than 48 inches (1220 mm) above the shower floor. Where a seat is provided, the controls, faucets, and shower spray unit shall be installed on the back wall adjacent to the seat wall and shall be located 27 inches (685 mm) maximum from the seat wall.

ADVISORY 608.5.2 Standard Roll-in Type Shower Compartments. In standard roll-in type showers without seats, the shower head and operable parts can be located on any of the three walls of the shower without adversely affecting accessibility.

•**Figure 608.5.2 Standard Roll-In Type Shower Compartment Control Location**

608.5.3 Alternate Roll-In Type Shower Compartments. In alternate roll-in type shower compartments, the controls, faucets, and shower spray unit shall be located above the grab bar, but no higher than 48 inches (1220 mm) above the shower floor. Where a seat is provided, the controls, faucets, and shower spray unit shall be located on the side wall adjacent to the seat 27 inches (685 mm) maximum from the side wall behind the seat or shall be located on the back wall opposite the seat 15 inches (380 mm) maximum, left or right, of the centerline of the seat. Where a seat is not provided, the controls, faucets, and shower spray unit shall be installed on the side wall farthest from the compartment entry.

•**Figure 608.5.3 Alternate Roll-In Type Shower Compartment Control Location**

608.6 Shower Spray Unit and Water. A shower spray unit with a hose 59 inches (1500 mm) long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Shower spray units shall deliver water that is 120°F (49°C) maximum.

EXCEPTION: A fixed shower head located at 48 inches (1220 mm) maximum above the shower finish floor shall be permitted instead of a hand-held spray unit in facilities that are not medical care facilities, long-term care facilities, transient lodging guest rooms, or residential dwelling units.

ADVISORY 608.6 Shower Spray Unit and Water. Ensure that hand-held shower spray units are capable of delivering water pressure substantially equivalent to fixed shower heads.

608.7 Thresholds. Thresholds in roll-in type shower compartments shall be 1/2 inch (13 mm) high maximum in accordance with 303. In transfer type shower compartments, thresholds 1/2 inch (13 mm) high maximum shall be beveled, rounded, or vertical.

EXCEPTION: A threshold 2 inches (51 mm) high maximum shall be permitted in transfer type shower compartments in existing facilities where provision of a 1/2 inch (13 mm) high threshold would disturb the structural reinforcement of the floor slab.

608.8 Shower Enclosures. Enclosures for shower compartments shall not obstruct controls, faucets, and shower spray units or obstruct transfer from wheelchairs onto shower seats.

609 Grab Bars

609.1 General. Grab bars in toilet facilities and bathing facilities shall comply with 609.

609.2 Cross Section. Grab bars shall have a cross section complying with 609.2.1 or 609.2.2.

609.2.1 Circular Cross Section. Grab bars with circular cross sections shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

609.2.2 Non-Circular Cross Section. Grab bars with non-circular cross sections shall have a cross-section dimension of 2 inches (51 mm) maximum and a perimeter dimension of 4 inches (100 mm) minimum and 4.8 inches (120 mm) maximum.

•**Figure 609.2.2 Grab Bar Non-Circular Cross Section**

609.3 Spacing. The space between the wall and the grab bar shall be 1 1/2 inches (38 mm). The space between the grab bar and projecting objects below and at the ends shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar and projecting objects above shall be 12 inches (305 mm) minimum.

EXCEPTION: The space between the grab bars and shower controls, shower fittings, and other grab bars above shall be permitted to be 1 1/2 inches (38 mm) minimum.

•**Figure 609.3 Spacing of Grab Bars**

609.4 Position of Grab Bars. Grab bars shall be installed in a horizontal position, 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor measured to the top of the gripping surface, except that at water closets for children's use complying with 604.9, grab bars shall be installed in a horizontal position 18 inches (455 mm) minimum and 27 inches (685 mm) maximum above the finish floor measured to the top of the gripping surface. The height of the lower grab bar on the back wall of a bathtub shall comply with 607.4.1.1 or 607.4.2.1.

609.5 Surface Hazards. Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive elements and shall have rounded edges.

609.6 Fittings. Grab bars shall not rotate within their fittings.

609.7 Installation. Grab bars shall be installed in any manner that provides a gripping surface at the specified locations and that does not obstruct the required clear floor space.

609.8 Structural Strength. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the grab bar, fastener, mounting device, or supporting structure.

610 Seats

610.1 General. Seats in bathtubs and shower compartments shall comply with 610.

610.2 Bathtub Seats. The top of bathtub seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom finish floor. The depth of a removable in-tub seat shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum. The seat shall be capable of secure placement. Permanent seats at the head end of the bathtub shall be 15 inches (380 mm) deep minimum and shall extend from the back wall to or beyond the outer edge of the bathtub.

●Figure 610.2 Bathtub Seats

610.3 Shower Compartment Seats. Where a seat is provided in a standard roll-in shower compartment, it shall be a folding type, shall be installed on the side wall adjacent to the controls, and shall extend from the back wall to a point within 3 inches (75 mm) of the compartment entry. Where a seat is provided in an alternate roll-in type shower compartment, it shall be a folding type, shall be installed on the front wall opposite the back wall, and shall extend from the adjacent side wall to a point within 3 inches (75 mm) of the compartment entry. In transfer-type showers, the seat shall extend from the back wall to a point within 3 inches (75 mm) of the compartment entry. The top of the seat shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom finish floor. Seats shall comply with 610.3.1 or 610.3.2.

●Figure 610.3 Extent of Seat

610.3.1 Rectangular Seats. The rear edge of a rectangular seat shall be 2 1/2 inches (64 mm) maximum and the front edge 15 inches (380 mm) minimum and 16 inches (405 mm) maximum from the seat wall. The side edge of the seat shall be 1 1/2 inches (38 mm) maximum from the adjacent wall.

●Figure 610.3.1 Rectangular Shower Seat

610.3.2 L-Shaped Seats. The rear edge of an L-shaped seat shall be 2 1/2 inches (64 mm) maximum and the front edge 15 inches (380 mm) minimum and 16 inches (405 mm) maximum from the seat wall. The rear edge of the "L" portion of the seat shall be 1 1/2 inches (38 mm) maximum from the wall and the front edge shall be 14 inches (355 mm) minimum and 15 inches (380 mm) maximum from the wall. The end of the "L" shall be 22 inches (560 mm) minimum and 23 inches maximum (585 mm) from the main seat wall.

●Figure 610.3.2 L-Shaped Shower Seat

610.4 Structural Strength. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure.

611 Washing Machines and Clothes Dryers

611.1 General. Washing machines and clothes dryers shall comply with 611.

611.2 Clear Floor Space. A clear floor or ground space complying with 305 positioned for parallel approach shall be provided. The clear floor or ground space shall be centered on the appliance.

611.3 Operable Parts. Operable parts, including doors, lint screens, and detergent and bleach compartments shall comply with 309.

611.4 Height. Top loading machines shall have the door to the laundry compartment located 36 inches (915 mm) maximum above the finish floor. Front loading machines shall have the bottom of the opening to the laundry compartment located 15 inches (380 mm) minimum and 36 inches (915 mm) maximum above the finish floor.

●Figure 611.4 Height of Laundry Compartment Opening

612 Saunas and Steam Rooms

612.1 General. Saunas and steam rooms shall comply with 612.

612.2 Bench. Where seating is provided in saunas and steam rooms, at least one bench shall comply with 903. Doors shall not swing into the clear floor space required by 903.2.

EXCEPTION: A readily removable bench shall be permitted to obstruct the turning space required by 612.3 and the clear floor or ground space required by 903.2.

612.3 Turning Space. A turning space complying with 304 shall be provided within saunas and steam rooms.

CHAPTER 7: COMMUNICATION ELEMENTS AND FEATURES

701 General

702 Fire Alarm Systems

703 Signs

704 Telephones

705 Detectable Warnings

706 Assistive Listening Systems

707 Automatic Teller Machines and Fare Machines

708 Two-Way Communication Systems

701 General

701.1 Scope. The provisions of Chapter 7 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

702 Fire Alarm Systems

702.1 General. Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1), except that the maximum allowable sound level of audible notification appliances complying with section 4-3.2.1 of NFPA 72 (1999 edition) shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance. In addition, alarms in guest rooms required to provide communication features shall comply with sections 4-3 and 4-4 of NFPA 72 (1999 edition) or sections 7.4 and 7.5 of NFPA 72 (2002 edition).

EXCEPTION: Fire alarm systems in medical care facilities shall be permitted to be provided in accordance with industry practice.

703 Signs

703.1 General. Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

703.2 Raised Characters. Raised characters shall comply with 703.2 and shall be duplicated in braille complying with 703.3. Raised characters shall be installed in accordance with 703.4.

ADVISORY 703.2 Raised Characters. Signs that are designed to be read by touch should not have sharp or abrasive edges.

703.2.1 Depth. Raised characters shall be 1/32 inch (0.8 mm) minimum above their background.

703.2.2 Case. Characters shall be uppercase.

703.2.3 Style. Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.2.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

703.2.5 Character Height. Character height measured vertically from the baseline of the character shall be 5/8 inch (16 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter "I".

EXCEPTION: Where separate raised and visual characters with the same information are provided, raised character height shall be permitted to be 1/2 inch (13 mm) minimum.

●Figure 703.2.5 Height of Raised Characters

703.2.6 Stroke Thickness. Stroke thickness of the uppercase letter "I" shall be 15 percent maximum of the height of the character.

703.2.7 Character Spacing. Character spacing shall be measured between the two closest points of adjacent raised characters within a message, excluding word spaces. Where characters have rectangular cross sections, spacing between individual raised characters shall be 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum. Where characters have other cross sections, spacing between individual raised characters shall be 1/16 inch (1.6 mm) minimum and 4 times the raised character stroke width maximum at the base of the cross sections, and 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum at the top of the cross sections. Characters shall be separated from raised borders and decorative elements 3/8 inch (9.5 mm) minimum.

703.2.8 Line Spacing. Spacing between the baselines of separate lines of raised characters within a message shall be 135 percent minimum and 170 percent maximum of the raised character height.

703.3 Braille. Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4.

703.3.1 Dimensions and Capitalization. Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

703.3.1 Braille Dimensions

Measurement Range	Minimum in Inches Maximum in Inches
Dot base diameter	0.059 (1.5 mm) to 0.063 (1.6 mm)
Distance between two dots in the same cell ¹	0.090 (2.3 mm) to 0.100 (2.5 mm)
Distance between corresponding dots in adjacent cells ¹	0.241 (6.1 mm) to 0.300 (7.6 mm)
Dot height	0.025 (0.6 mm) to 0.037 (0.9 mm)
Distance between corresponding dots from one cell directly below ¹	0.395 (10 mm) to 0.400 (10.2 mm)

¹. Measured center to center.

●Figure 703.3.1 Braille Measurement

703.3.2 Position. Braille shall be positioned below the corresponding text. If text is multi-lined, braille shall be placed below the entire text. Braille shall be separated 3/8 inch (9.5 mm) minimum from any other tactile characters and 3/8 inch (9.5 mm) minimum from raised borders and decorative elements.

EXCEPTION: Braille provided on elevator car controls shall be separated 3/16 inch (4.8 mm) minimum and shall be located either directly below or adjacent to the corresponding raised characters or symbols.

●Figure 703.3.2 Position of Braille

703.4 Installation Height and Location. Signs with tactile characters shall comply with 703.4.

703.4.1 Height Above Finish Floor or Ground. Tactile characters on signs shall be located 48 inches (1220 mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest tactile character and 60 inches (1525 mm) maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character.

EXCEPTION: Tactile characters for elevator car controls shall not be required to comply with 703.4.1.

●Figure 703.4.1 Height of Tactile Characters Above Finish Floor or Ground

703.4.2 Location. Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leaves, the sign shall be located to the right of the right hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches (455 mm) minimum by 18 inches (455 mm) minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

EXCEPTION: Signs with tactile characters shall be permitted on the push side of doors with closers and without hold-open devices.

●Figure 703.4.2 Location of Tactile Signs at Doors

703.5 Visual Characters. Visual characters shall comply with 703.5.

EXCEPTION: Where visual characters comply with 703.2 and are accompanied by braille complying with 703.3, they shall not be required to comply with 703.5.2 through 703.5.9.

703.5.1 Finish and Contrast. Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

ADVISORY 703.5.1 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and its background colors and textures.

703.5.2 Case. Characters shall be uppercase or lowercase or a combination of both.

703.5.3 Style. Characters shall be conventional in form. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.5.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter “O” is 55 percent minimum and 110 percent maximum of the height of the uppercase letter “I”.

703.5.5 Character Height. Minimum character height shall comply with Table 703.5.5. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. Character height shall be based on the uppercase letter “I”.

703.5.5 Visual Character Height (text version)

Height to Finish Floor or Ground From Baseline of Character	Horizontal Viewing Distance	Minimum Character Height
40 inches (1015 mm) to less than or equal to 70 inches (1780 mm)	less than 72 inches (1830 mm)	5/8 inch (16 mm)
	72 inches (1830 mm) and greater	5/8 inch (16 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 72 inches (1830 mm)
Greater than 70 inches (1780 mm) to less than or equal to 120 inches (3050 mm)	less than 180 inches (4570 mm)	2 inches (51 mm)
	180 inches (4570 mm) and greater	2 inches (51 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 180 inches (4570 mm)
Greater than 120 inches (3050 mm)	less than 21 feet (6400 mm)	3 inches (75 mm)
	21 feet (6400 mm) and greater	3 inches (75 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 21 feet (6400 mm)

703.5.6 Height From Finish Floor or Ground. Visual characters shall be 40 inches (1015 mm) minimum above the finish floor or ground.

EXCEPTION: Visual characters indicating elevator car controls shall not be required to comply with 703.5.6.

703.5.7 Stroke Thickness. Stroke thickness of the uppercase letter “I” shall be 10 percent minimum and 30 percent maximum of the height of the character.

703.5.8 Character Spacing. Character spacing shall be measured between the two closest points of adjacent characters, excluding word spaces. Spacing between individual characters shall be 10 percent minimum and 35 percent maximum of character height.

703.5.9 Line Spacing. Spacing between the baselines of separate lines of characters within a message shall be 135 percent minimum and 170 percent maximum of the character height.

703.6 Pictograms. Pictograms shall comply with 703.6.

703.6.1 Pictogram Field. Pictograms shall have a field height of 6 inches (150 mm) minimum. Characters and braille shall not be located in the pictogram field.

•Figure 703.6.1 Pictogram Field

703.6.2 Finish and Contrast. Pictograms and their field shall have a non-glare finish. Pictograms shall contrast with their field with either a light pictogram on a dark field or a dark pictogram on a light field.

ADVISORY 703.6.2 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

703.6.3 Text Descriptors. Pictograms shall have text descriptors located directly below the pictogram field. Text descriptors shall comply with 703.2, 703.3 and 703.4.

703.7 Symbols of Accessibility. Symbols of accessibility shall comply with 703.7.

703.7.1 Finish and Contrast. Symbols of accessibility and their background shall have a non-glare finish. Symbols of accessibility shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.

ADVISORY 703.7.1 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

703.7.2 Symbols.

703.7.2.1 International Symbol of Accessibility. The International Symbol of Accessibility shall comply with Figure 703.7.2.1.

● **Figure 703.7.2.1 International Symbol of Accessibility**

703.7.2.2 International Symbol of TTY. The International Symbol of TTY shall comply with Figure 703.7.2.2.

● **Figure 703.7.2.2 International Symbol of TTY**

703.7.2.3 Volume Control Telephones. Telephones with a volume control shall be identified by a pictogram of a telephone handset with radiating sound waves on a square field such as shown in Figure 703.7.2.3.

● **Figure 703.7.2.3 Volume Control Telephone**

703.7.2.4 Assistive Listening Systems. Assistive listening systems shall be identified by the International Symbol of Access for Hearing Loss complying with Figure 703.7.2.4.

● **Figure 703.7.2.4 International Symbol of Access for Hearing Loss**

704 Telephones

704.1 General. Public telephones shall comply with 704.

704.2 Wheelchair Accessible Telephones. Wheelchair accessible telephones shall comply with 704.2.

704.2.1 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided. The clear floor or ground space shall not be obstructed by bases, enclosures, or seats.

ADVISORY 704.2.1 Clear Floor or Ground Space. Because clear floor and ground space is required to be unobstructed, telephones, enclosures and related telephone book storage cannot encroach on the required clear floor or ground space and must comply with the provisions for protruding objects. (See Section 307).

704.2.1.1 Parallel Approach. Where a parallel approach is provided, the distance from the edge of the telephone enclosure to the face of the telephone unit shall be 10 inches (255 mm) maximum.

● **Figure 704.2.1.1 Parallel Approach to Telephone**

704.2.1.2 Forward Approach. Where a forward approach is provided, the distance from the front edge of a counter within the telephone enclosure to the face of the telephone unit shall be 20 inches (510 mm) maximum.

● **Figure 704.2.1.2 Forward Approach to Telephone**

704.2.2 Operable Parts. Operable parts shall comply with 309. Telephones shall have push-button controls where such service is available.

704.2.3 Telephone Directories. Telephone directories, where provided, shall be located in accordance with 309.

704.2.4 Cord Length. The cord from the telephone to the handset shall be 29 inches (735 mm) long minimum.

704.3 Volume Control Telephones. Public telephones required to have volume controls shall be equipped with a receive volume control that provides a gain adjustable up to 20 dB minimum. For incremental volume control, provide at least one intermediate step of 12 dB of gain minimum. An automatic reset shall be provided.

ADVISORY 704.3 Volume Control Telephones. Amplifiers on pay phones are located in the base or the handset or are built into the telephone. Most are operated by pressing a button or key. If the microphone in the handset is not being used, a mute button that temporarily turns off the microphone can also reduce the amount of background noise which the person hears in the earpiece. If a volume adjustment is provided that allows the user to set the level anywhere from the base volume to the upper requirement of 20 dB, there is no need to specify a lower limit. If a stepped volume control is provided, one of the intermediate levels must provide 12 dB of gain. Consider compatibility issues when matching an amplified handset with a phone or phone system. Amplified handsets that can be switched with pay telephone handsets are available. Portable and in-line amplifiers can be used with some phones but are not practical at most public phones covered by these requirements.

704.4 TTYs. TTYs required at a public pay telephone shall be permanently affixed within, or adjacent to, the telephone enclosure. Where an acoustic coupler is used, the telephone cord shall be sufficiently long to allow connection of the TTY and the telephone receiver.

ADVISORY 704.4 TTYs. Ensure that sufficient electrical service is available where TTYs are to be installed.

704.4.1 Height. When in use, the touch surface of TTY keypads shall be 34 inches (865 mm) minimum above the finish floor.

EXCEPTION: Where seats are provided, TTYs shall not be required to comply with 704.4.1.

ADVISORY 704.4.1 Height. A telephone with a TTY installed underneath cannot also be a wheelchair accessible telephone because the required 34 inches (865 mm) minimum keypad height can cause the highest operable part of the telephone, usually the coin slot, to exceed the maximum permitted side and forward reach ranges. (See Section 308).

Advisory 704.4.1 Height Exception. While seats are not required at TTYs, reading and typing at a TTY is more suited to sitting than standing. Facilities that often provide seats at TTY's include, but are not limited to, airports and other passenger terminals or stations, courts, art galleries, and convention centers.

704.5 TTY Shelf. Public pay telephones required to accommodate portable TTYs shall be equipped with a shelf and an electrical outlet within or adjacent to the telephone enclosure. The telephone handset shall be capable of being placed flush on the surface of the shelf. The shelf shall be capable of accommodating a TTY and shall have 6 inches (150 mm) minimum vertical clearance above the area where the TTY is to be placed.

705 Detectable Warnings

705.1 General. Detectable warnings shall consist of a surface of truncated domes and shall comply with 705.

705.1.1 Dome Size. Truncated domes in a detectable warning surface shall have a base diameter of 0.9 inch (23 mm) minimum and 1.4 inches (36 mm) maximum, a top diameter of 50 percent of the base diameter minimum to 65 percent of the base diameter maximum, and a height of 0.2 inch (5.1 mm).

705.1.2 Dome Spacing. Truncated domes in a detectable warning surface shall have a center-to-center spacing of 1.6 inches (41 mm) minimum and 2.4 inches (61 mm) maximum, and a base-to-base spacing of 0.65 inch (17 mm) minimum, measured between the most adjacent domes on a square grid.

705.1.3 Contrast. Detectable warning surfaces shall contrast visually with adjacent walking surfaces either light-on-dark, or dark-on-light.

●Figure 705.1 Size and Spacing of Truncated Domes

705.2 Platform Edges. Detectable warning surfaces at platform boarding edges shall be 24 inches (610 mm) wide and shall extend the full length of the public use areas of the platform.

706 Assistive Listening Systems

706.1 General. Assistive listening systems required in assembly areas shall comply with 706.

ADVISORY 706.1 General. Assistive listening systems are generally categorized by their mode of transmission. There are hard-wired systems and three types of wireless systems: induction loop, infrared, and FM radio transmission. Each has different advantages and disadvantages that can help determine which system is best for a given application. For example, an FM system may be better than an infrared system in some open-air assemblies since infrared signals are less effective in sunlight. On the other hand, an infrared system is typically a better choice than an FM system where confidential transmission is important because it will be contained within a given space.

The technical standards for assistive listening systems describe minimum performance levels for volume, interference, and distortion. Sound pressure levels (SPL), expressed in decibels, measure output sound volume. Signal-to-noise ratio (SNR or S/N), also expressed in decibels, represents the relationship between the loudness of a desired sound (the signal) and the background noise in a space or piece of equipment. The higher the SNR, the more intelligible the signal. The peak clipping level limits the distortion in signal output produced when high-volume sound waves are manipulated to serve assistive listening devices.

Selecting or specifying an effective assistive listening system for a large or complex venue requires assistance from a professional sound engineer. The Access Board has published technical assistance on assistive listening devices and systems.

706.2 Receiver Jacks. Receivers required for use with an assistive listening system shall include a 1/8 inch (3.2 mm) standard mono jack.

706.3 Receiver Hearing-Aid Compatibility. Receivers required to be hearing-aid compatible shall interface with telecoils in hearing aids through the provision of neckloops.

ADVISORY 706.3 Receiver Hearing-Aid Compatibility. Neckloops and headsets that can be worn as neckloops are compatible with hearing aids. Receivers that are not compatible include earbuds, which may require removal of hearing aids, earphones, and headsets that must be worn over the ear, which can create disruptive interference in the transmission and can be uncomfortable for people wearing hearing aids.

706.4 Sound Pressure Level. Assistive listening systems shall be capable of providing a sound pressure level of 110 dB minimum and 118 dB maximum with a dynamic range on the volume control of 50 dB.

706.5 Signal-to-Noise Ratio. The signal-to-noise ratio for internally generated noise in assistive listening systems shall be 18 dB minimum.

706.6 Peak Clipping Level. Peak clipping shall not exceed 18 dB of clipping relative to the peaks of speech.

707 Automatic Teller Machines and Fare Machines

ADVISORY 707 Automatic Teller Machines and Fare Machines. Interactive transaction machines (ITMs), other than ATMs, are not covered by Section 707. However, for entities covered by the ADA, the Department of Justice regulations that implement the ADA provide additional guidance regarding the relationship between these requirements and elements that are not directly addressed by these requirements. Federal procurement law requires that ITMs purchased by the Federal government comply with standards issued by the Access Board under Section 508 of the Rehabilitation Act of 1973, as amended. This law covers a variety of products, including computer hardware and software, websites, phone systems, fax machines, copiers, and similar technologies. For more information on Section 508 consult the Access Board's website at www.access-board.gov.

707.1 General. Automatic teller machines and fare machines shall comply with 707.

ADVISORY 707.1 General. If farecards have one tactually distinctive corner they can be inserted with greater accuracy. Token collection devices that are designed to accommodate tokens which are perforated can allow a person to distinguish more readily between tokens and common coins. Place accessible gates and fare vending machines in close proximity to other accessible elements when feasible so the facility is easier to use.

707.2 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided.

EXCEPTION: Clear floor or ground space shall not be required at drive-up only automatic teller machines and fare machines.

707.3 Operable Parts. Operable parts shall comply with 309. Unless a clear or correct key is provided, each operable part shall be able to be differentiated by sound or touch, without activation.

EXCEPTION: Drive-up only automatic teller machines and fare machines shall not be required to comply with 309.2 and 309.3.

707.4 Privacy. Automatic teller machines shall provide the opportunity for the same degree of privacy of input and output available to all individuals.

ADVISORY 707.4 Privacy. In addition to people who are blind or visually impaired, people with limited reach who use wheelchairs or have short stature, who cannot effectively block the ATM screen with their bodies, may prefer to use speech output. Speech output users can benefit from an option to render the visible screen blank, thereby affording them greater personal security and privacy.

707.5 Speech Output. Machines shall be speech enabled. Operating instructions and orientation, visible transaction prompts, user input verification, error messages, and all displayed information for full use shall be accessible to and independently usable by individuals with vision impairments. Speech shall be delivered through a mechanism that is readily available to all users, including but not limited to, an industry standard connector or a telephone handset. Speech shall be recorded or digitized human, or synthesized.

EXCEPTIONS: 1. Audible tones shall be permitted instead of speech for visible output that is not displayed for security purposes, including but not limited to, asterisks representing personal identification numbers.

2. Advertisements and other similar information shall not be required to be audible unless they convey information that can be used in the transaction being conducted.

3. Where speech synthesis cannot be supported, dynamic alphabetic output shall not be required to be audible.

ADVISORY 707.5 Speech Output. If an ATM provides additional functions such as dispensing coupons, selling theater tickets, or providing copies of monthly statements, all such functions must be available to customers using speech output. To avoid confusion at the ATM, the method of initiating the speech mode should be easily discoverable and should not require specialized training. For example, if a telephone handset is provided, lifting the handset can initiate the speech mode.

707.5.1 User Control. Speech shall be capable of being repeated or interrupted. Volume control shall be provided for the speech function.

EXCEPTION: Speech output for any single function shall be permitted to be automatically interrupted when a transaction is selected.

707.5.2 Receipts. Where receipts are provided, speech output devices shall provide audible balance inquiry information, error messages, and all other information on the printed receipt necessary to complete or verify the transaction.

EXCEPTIONS: 1. Machine location, date and time of transaction, customer account number, and the machine identifier shall not be required to be audible.

2. Information on printed receipts that duplicates information available on-screen shall not be required to be presented in the form of an audible receipt.

3. Printed copies of bank statements and checks shall not be required to be audible.

707.6 Input. Input devices shall comply with 707.6.

707.6.1 Input Controls. At least one tactilely discernible input control shall be provided for each function. Where provided, key surfaces not on active areas of display screens, shall be raised above surrounding surfaces. Where membrane keys are the only method of input, each shall be tactilely discernible from surrounding surfaces and adjacent keys.

707.6.2 Numeric Keys. Numeric keys shall be arranged in a 12-key ascending or descending telephone keypad layout. The number five key shall be tactilely distinct from the other keys.

ADVISORY 707.6.2 Numeric Keys. Telephone keypads and computer keyboards differ in one significant feature, ascending versus descending numerical order. Both types of keypads are acceptable, provided the computer-style keypad is organized similarly to the number pad located at the right on most computer keyboards, and does not resemble the line of numbers located above the computer keys.

●**Figure 707.6.2 Numeric Key Layout**

707.6.3 Function Keys. Function keys shall comply with 707.6.3.

707.6.3.1 Contrast. Function keys shall contrast visually from background surfaces. Characters and symbols on key surfaces shall contrast visually from key surfaces. Visual contrast shall be either light-on-dark or dark-on-light.

EXCEPTION: Tactile symbols required by 707.6.3.2 shall not be required to comply with 707.6.3.1.

707.6.3.2 Tactile Symbols. Function key surfaces shall have tactile symbols as follows: Enter or Proceed key: raised circle; Clear or Correct key: raised left arrow; Cancel key: raised letter ex; Add Value key: raised plus sign; Decrease Value key: raised minus sign.

707.7 Display Screen. The display screen shall comply with 707.7.

EXCEPTION: Drive-up only automatic teller machines and fare machines shall not be required to comply with 707.7.1.

707.7.1 Visibility. The display screen shall be visible from a point located 40 inches (1015 mm) above the center of the clear floor space in front of the machine.

707.7.2 Characters. Characters displayed on the screen shall be in a sans serif font. Characters shall be 3/16 inch (4.8 mm) high minimum based on the uppercase letter "P". Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

707.8 Braille Instructions. Braille instructions for initiating the speech mode shall be provided. Braille shall comply with 703.3.

708 Two-Way Communication Systems

708.1 General. Two-way communication systems shall comply with 708.

ADVISORY 708.1 General. Devices that do not require handsets are easier to use by people who have a limited reach.

708.2 Audible and Visual Indicators. The system shall provide both audible and visual signals.

ADVISORY 708.2 Audible and Visual Indicators. A light can be used to indicate visually that assistance is on the way. Signs indicating the meaning of visual signals should be provided.

708.3 Handsets. Handset cords, if provided, shall be 29 inches (735 mm) long minimum.

708.4 Residential Dwelling Unit Communication Systems. Communications systems between a residential dwelling unit and a site, building, or floor entrance shall comply with 708.4.

708.4.1 Common Use or Public Use System Interface. The common use or public use system interface shall include the capability of supporting voice and TTY communication with the residential dwelling unit interface.

708.4.2 Residential Dwelling Unit Interface. The residential dwelling unit system interface shall include a telephone jack capable of supporting voice and TTY communication with the common use or public use system interface.

CHAPTER 8: SPECIAL ROOMS, SPACES, AND ELEMENTS

801 General

802 Wheelchair Spaces, Companion Seats, and Designated Aisle Seats

803 Dressing, Fitting, and Locker Rooms

804 Kitchens and Kitchenettes

805 Medical Care and Long-Term Care Facilities

806 Transient Lodging Guest Rooms

807 Holding Cells and Housing Cells

808 Courtrooms

809 Residential Dwelling Units

810 Transportation Facilities

811 Storage

801 General

801.1 Scope. The provisions of Chapter 8 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

ADVISORY 801.1 Scope. Facilities covered by these requirements are also subject to the requirements of the other chapters. For example, 806 addresses guest rooms in transient lodging facilities while 902 contains the technical specifications for dining surfaces. If a transient lodging facility contains a restaurant, the restaurant must comply with requirements in other chapters such as those applicable to certain dining surfaces.

802 Wheelchair Spaces, Companion Seats, and Designated Aisle Seats

802.1 Wheelchair Spaces. Wheelchair spaces shall comply with 802.1.

802.1.1 Floor or Ground Surface. The floor or ground surface of wheelchair spaces shall comply with 302. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

802.1.2 Width. A single wheelchair space shall be 36 inches (915 mm) wide minimum. Where two adjacent wheelchair spaces are provided, each wheelchair space shall be 33 inches (840 mm) wide minimum.

●Figure 802.1.2 Width of Wheelchair Spaces in Assembly Areas

802.1.3 Depth. Where a wheelchair space can be entered from the front or rear, the wheelchair space shall be 48 inches (1220 mm) deep minimum. Where a wheelchair space can be entered only from the side, the wheelchair space shall be 60 inches (1525 mm) deep minimum.

●Figure 802.1.3 Depth of Wheelchair Spaces in Assembly Areas

802.1.4 Approach. Wheelchair spaces shall adjoin accessible routes. Accessible routes shall not overlap wheelchair spaces.

ADVISORY 802.1.4 Approach. Because accessible routes serving wheelchair spaces are not permitted to overlap the clear floor space at wheelchair spaces, access to any wheelchair space cannot be through another wheelchair space.

802.1.5 Overlap. Wheelchair spaces shall not overlap circulation paths.

ADVISORY 802.1.5 Overlap. The term "circulation paths" used in Section 802.1.5 means aisle width required by applicable building or life safety codes for the specific assembly occupancy. Where the circulation path provided is wider than the required aisle width, the wheelchair space may intrude into that portion of the circulation path that is provided in excess of the required aisle width.

802.2 Lines of Sight. Lines of sight to the screen, performance area, or playing field for spectators in wheelchair spaces shall comply with 802.2.

802.2.1 Lines of Sight Over Seated Spectators. Where spectators are expected to remain seated during events, spectators in wheelchair spaces shall be afforded lines of sight complying with 802.2.1.

802.2.1.1 Lines of Sight Over Heads. Where spectators are provided lines of sight over the heads of spectators seated in the first row in front of their seats, spectators seated in wheelchair spaces shall be afforded lines of sight over the heads of seated spectators in the first row in front of wheelchair spaces.

●Figure 802.2.1.1 Lines of Sight Over the Heads of Seated Spectators

802.2.1.2 Lines of Sight Between Heads. Where spectators are provided lines of sight over the shoulders and between the heads of spectators seated in the first row in front of their seats, spectators seated in wheelchair spaces shall be afforded lines of sight over the shoulders and between the heads of seated spectators in the first row in front of wheelchair spaces.

● **Figure 802.2.1.2 Lines of Sight Between the Heads of Seated Spectators**

802.2.2 Lines of Sight Over Standing Spectators. Where spectators are expected to stand during events, spectators in wheelchair spaces shall be afforded lines of sight complying with 802.2.2.

802.2.2.1 Lines of Sight Over Heads. Where standing spectators are provided lines of sight over the heads of spectators standing in the first row in front of their seats, spectators seated in wheelchair spaces shall be afforded lines of sight over the heads of standing spectators in the first row in front of wheelchair spaces.

● **Figure 802.2.2.1 Lines of Sight Over the Heads of Standing Spectators**

802.2.2.2 Lines of Sight Between Heads. Where standing spectators are provided lines of sight over the shoulders and between the heads of spectators standing in the first row in front of their seats, spectators seated in wheelchair spaces shall be afforded lines of sight over the shoulders and between the heads of standing spectators in the first row in front of wheelchair spaces.

● **Figure 802.2.2.2 Lines of Sight Between the Heads of Standing Spectators**

802.3 Companion Seats. Companion seats shall comply with 802.3.

802.3.1 Alignment. In row seating, companion seats shall be located to provide shoulder alignment with adjacent wheelchair spaces. The shoulder alignment point of the wheelchair space shall be measured 36 inches (915 mm) from the front of the wheelchair space. The floor surface of the companion seat shall be at the same elevation as the floor surface of the wheelchair space.

802.3.2 Type. Companion seats shall be equivalent in size, quality, comfort, and amenities to the seating in the immediate area. Companion seats shall be permitted to be movable.

802.4 Designated Aisle Seats. Designated aisle seats shall comply with 802.4.

802.4.1 Armrests. Where armrests are provided on the seating in the immediate area, folding or retractable armrests shall be provided on the aisle side of the seat.

802.4.2 Identification. Each designated aisle seat shall be identified by a sign or marker.

ADVISORY 802.4.2 Identification. Seats with folding or retractable armrests are intended for use by individuals who have difficulty walking. Consider identifying such seats with signs that contrast (light-on-dark or dark-on-light) and that are also photo luminescent.

803 Dressing, Fitting, and Locker Rooms

803.1 General. Dressing, fitting, and locker rooms shall comply with 803.

ADVISORY 803.1 General. Partitions and doors should be designed to ensure people using accessible dressing and fitting rooms privacy equivalent to that afforded other users of the facility. Section 903.5 requires dressing room bench seats to be installed so that they are at the same height as a typical wheelchair seat, 17 inches (430 mm) to 19 inches (485 mm). However, wheelchair seats can be lower than dressing room benches for people of short stature or children using wheelchairs.

803.2 Turning Space. Turning space complying with 304 shall be provided within the room.

803.3 Door Swing. Doors shall not swing into the room unless a clear floor or ground space complying with 305.3 is provided beyond the arc of the door swing.

803.4 Benches. A bench complying with 903 shall be provided within the room.

803.5 Coat Hooks and Shelves. Coat hooks provided within the room shall be located within one of the reach ranges specified in 308. Shelves shall be 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor or ground.

804 Kitchens and Kitchenettes

804.1 General. Kitchens and kitchenettes shall comply with 804.

804.2 Clearance. Where a pass through kitchen is provided, clearances shall comply with 804.2.1. Where a U-shaped kitchen is provided, clearances shall comply with 804.2.2.

EXCEPTION: Spaces that do not provide a cooktop or conventional range shall not be required to comply with 804.2.

ADVISORY 804.2 Clearance. Clearances are measured from the furthest projecting face of all opposing base cabinets, counter tops, appliances, or walls, excluding hardware.

804.2.1 Pass Through Kitchen. In pass through kitchens where counters, appliances or cabinets are on two opposing sides, or where counters, appliances or cabinets are opposite a parallel wall, clearance between all opposing base cabinets, counter tops, appliances, or walls within kitchen work areas shall be 40 inches (1015 mm) minimum. Pass through kitchens shall have two entries.

● **Figure 804.2.1 Pass Through Kitchens**

804.2.2 U-Shaped. In U-shaped kitchens enclosed on three contiguous sides, clearance between all opposing base cabinets, counter tops, appliances, or walls within kitchen work areas shall be 60 inches (1525 mm) minimum.

● **Figure 804.2.2 U-Shaped Kitchens**

804.3 Kitchen Work Surface. In residential dwelling units required to comply with 809, at least one 30 inches (760 mm) wide minimum section of counter shall provide a kitchen work surface that complies with 804.3.

804.3.1 Clear Floor or Ground Space. A clear floor space complying with 305 positioned for a forward approach shall be provided. The clear floor or ground space shall be centered on the kitchen work surface and shall provide knee and toe clearance complying with 306.

EXCEPTION: Cabinetry shall be permitted under the kitchen work surface provided that all of the following conditions are met:

- (a) the cabinetry can be removed without removal or replacement of the kitchen work surface;
- (b) the finish floor extends under the cabinetry; and
- (c) the walls behind and surrounding the cabinetry are finished.

804.3.2 Height. The kitchen work surface shall be 34 inches (865 mm) maximum above the finish floor or ground.

EXCEPTION: A counter that is adjustable to provide a kitchen work surface at variable heights, 29 inches (735 mm) minimum and 36 inches (915 mm) maximum, shall be permitted.

804.3.3 Exposed Surfaces. There shall be no sharp or abrasive surfaces under the work surface counters.

804.4 Sinks. Sinks shall comply with 606.

804.5 Storage. At least 50 percent of shelf space in storage facilities shall comply with 811.

804.6 Appliances. Where provided, kitchen appliances shall comply with 804.6.

804.6.1 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided at each kitchen appliance. Clear floor or ground spaces shall be permitted to overlap.

804.6.2 Operable Parts. All appliance controls shall comply with 309.

EXCEPTIONS: 1. Appliance doors and door latching devices shall not be required to comply with 309.4.

2. Bottom-hinged appliance doors, when in the open position, shall not be required to comply with 309.3.

804.6.3 Dishwasher. Clear floor or ground space shall be positioned adjacent to the dishwasher door. The dishwasher door, in the open position, shall not obstruct the clear floor or ground space for the dishwasher or the sink.

804.6.4 Range or Cooktop. Where a forward approach is provided, the clear floor or ground space shall provide knee and toe clearance complying with 306. Where knee and toe space is provided, the underside of the range or cooktop shall be insulated or otherwise configured to prevent burns, abrasions, or electrical shock. The location of controls shall not require reaching across burners.

804.6.5 Oven. Ovens shall comply with 804.6.5.

804.6.5.1 Side-Hinged Door Ovens. Side-hinged door ovens shall have the work surface required by 804.3 positioned adjacent to the latch side of the oven door.

804.6.5.2 Bottom-Hinged Door Ovens. Bottom-hinged door ovens shall have the work surface required by 804.3 positioned adjacent to one side of the door.

804.6.5.3 Controls. Ovens shall have controls on front panels.

804.6.6 Refrigerator/Freezer. Combination refrigerators and freezers shall have at least 50 percent of the freezer space 54 inches (1370 mm) maximum above the finish floor or ground. The clear floor or ground space shall be positioned for a parallel approach to the space dedicated to a refrigerator/freezer with the centerline of the clear floor or ground space offset 24 inches (610 mm) maximum from the centerline of the dedicated space.

805 Medical Care and Long-Term Care Facilities

805.1 General. Medical care facility and long-term care facility patient or resident sleeping rooms required to provide mobility features shall comply with 805.

805.2 Turning Space. Turning space complying with 304 shall be provided within the room.

805.3 Clear Floor or Ground Space. A clear floor space complying with 305 shall be provided on each side of the bed. The clear floor space shall be positioned for parallel approach to the side of the bed.

805.4 Toilet and Bathing Rooms. Toilet and bathing rooms that are provided as part of a patient or resident sleeping room shall comply with 603. Where provided, no fewer than one water closet, one lavatory, and one bathtub or shower shall comply with the applicable requirements of 603 through 610.

806 Transient Lodging Guest Rooms

806.1 General. Transient lodging guest rooms shall comply with 806. Guest rooms required to provide mobility features shall comply with 806.2. Guest rooms required to provide communication features shall comply with 806.3.

806.2 Guest Rooms with Mobility Features. Guest rooms required to provide mobility features shall comply with 806.2.

ADVISORY 806.2 Guest Rooms. The requirements in Section 806.2 do not include requirements that are common to all accessible spaces. For example, closets in guest rooms must comply with the applicable provisions for storage specified in scoping.

806.2.1 Living and Dining Areas. Living and dining areas shall be accessible.

806.2.2 Exterior Spaces. Exterior spaces, including patios, terraces and balconies, that serve the guest room shall be accessible.

806.2.3 Sleeping Areas. At least one sleeping area shall provide a clear floor space complying with 305 on both sides of a bed. The clear floor space shall be positioned for parallel approach to the side of the bed.

EXCEPTION: Where a single clear floor space complying with 305 positioned for parallel approach is provided between two beds, a clear floor or ground space shall not be required on both sides of a bed.

806.2.4 Toilet and Bathing Facilities. No fewer than one water closet, one lavatory, and one bathtub or shower shall comply with 603. In addition, required roll-in shower compartments shall comply with 608.2.2 or 608.2.3.

806.2.4.1 Vanity Counter Top Space. If vanity counter top space is provided in non-accessible guest toilet or bathing rooms, comparable vanity counter top space, in terms of size and proximity to the lavatory, shall also be provided in accessible guest toilet or bathing rooms.

ADVISORY 806.2.4.1 Vanity Counter Top Space. This provision is intended to ensure that accessible guest rooms are provided with comparable vanity counter top space.

806.2.5 Kitchens and Kitchenettes. Kitchens and kitchenettes shall comply with 804.

806.2.6 Turning Space. Turning space complying with 304 shall be provided within the guest room.

806.3 Guest Rooms with Communication Features. Guest rooms required to provide communication features shall comply with 806.3.

ADVISORY 806.3 Guest Rooms with Communication Features. In guest rooms required to have accessible communication features, consider ensuring compatibility with adaptive equipment used by people with hearing impairments. To ensure communication within the facility, as well as on commercial lines, provide telephone interface jacks that are compatible with both digital and analog signal use. If an audio headphone jack is provided on a speaker phone, a cutoff switch can be included in the jack so that insertion of the jack cuts off the speaker. If a telephone-like handset is used, the external speakers can be turned off when the handset is removed from the cradle. For headset or external amplification system compatibility, a standard subminiature jack installed in the telephone will provide the most flexibility.

806.3.1 Alarms. Where emergency warning systems are provided, alarms complying with 702 shall be provided.

806.3.2 Notification Devices. Visible notification devices shall be provided to alert room occupants of incoming telephone calls and a door knock or bell. Notification devices shall not be connected to visible alarm signal appliances. Telephones shall have volume controls compatible with the telephone system and shall comply with 704.3. Telephones shall be served by an electrical outlet complying with 309 located within 48 inches (1220 mm) of the telephone to facilitate the use of a TTY.

807 Holding Cells and Housing Cells

807.1 General. Holding cells and housing cells shall comply with 807.

807.2 Cells with Mobility Features. Cells required to provide mobility features shall comply with 807.2.

807.2.1 Turning Space. Turning space complying with 304 shall be provided within the cell.

807.2.2 Benches. Where benches are provided, at least one bench shall comply with 903.

807.2.3 Beds. Where beds are provided, clear floor space complying with 305 shall be provided on at least one side of the bed. The clear floor space shall be positioned for parallel approach to the side of the bed.

807.2.4 Toilet and Bathing Facilities. Toilet facilities or bathing facilities that are provided as part of a cell shall comply with 603. Where provided, no fewer than one water closet, one lavatory, and one bathtub or shower shall comply with the applicable requirements of 603 through 610.

ADVISORY 807.2.4 Toilet and Bathing Facilities. In holding cells, housing cells, or rooms required to be accessible, these requirements do not require a separate toilet room.

807.3 Cells with Communication Features. Cells required to provide communication features shall comply with 807.3.

807.3.1 Alarms. Where audible emergency alarm systems are provided to serve the occupants of cells, visible alarms complying with 702 shall be provided.

EXCEPTION: Visible alarms shall not be required where inmates or detainees are not allowed independent means of egress.

807.3.2 Telephones. Telephones, where provided within cells, shall have volume controls complying with 704.3.

808 Courtrooms

808.1 General. Courtrooms shall comply with 808.

808.2 Turning Space. Where provided, areas that are raised or depressed and accessed by ramps or platform lifts with entry ramps shall provide unobstructed turning space complying with 304.

808.3 Clear Floor Space. Each jury box and witness stand shall have, within its defined area, clear floor space complying with 305.

EXCEPTION: In alterations, wheelchair spaces are not required to be located within the defined area of raised jury boxes or witness stands and shall be permitted to be located outside these spaces where ramp or platform lift access poses a hazard by restricting or projecting into a means of egress required by the appropriate administrative authority.

808.4 Judges' Benches and Courtroom Stations. Judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, court reporters' stations and litigants' and counsel stations shall comply with 902.

809 Residential Dwelling Units

809.1 General. Residential dwelling units shall comply with 809. Residential dwelling units required to provide mobility features shall comply with 809.2 through 809.4. Residential dwelling units required to provide communication features shall comply with 809.5.

809.2 Accessible Routes. Accessible routes complying with Chapter 4 shall be provided within residential dwelling units in accordance with 809.2.

EXCEPTION: Accessible routes shall not be required to or within unfinished attics or unfinished basements.

809.2.1 Location. At least one accessible route shall connect all spaces and elements which are a part of the residential dwelling unit. Where only one accessible route is provided, it shall not pass through bathrooms, closets, or similar spaces.

809.2.2 Turning Space. All rooms served by an accessible route shall provide a turning space complying with 304.

EXCEPTION: Turning space shall not be required in exterior spaces 30 inches (760 mm) maximum in depth or width.

ADVISORY 809.2.2 Turning Space. It is generally acceptable to use required clearances to provide wheelchair turning space. For example, in kitchens, 804.3.1 requires at least one work surface with clear floor space complying with 306 to be centered beneath. If designers elect to provide clear floor space that is at least 36 inches (915 mm) wide, as opposed to the required 30 inches (760 mm) wide, that clearance can be part of a T-turn, thereby maximizing efficient use of the kitchen area. However, the overlap of turning space must be limited to one segment of the T-turn so that back-up maneuvering is not restricted. It would, therefore, be unacceptable to use both the clearances under the work surface and the sink as part of a T-turn. See Section 304.3.2 regarding T-turns.

809.3 Kitchen. Where a kitchen is provided, it shall comply with 804.

809.4 Toilet Facilities and Bathing Facilities. At least one toilet facility and bathing facility shall comply with 603 through 610. At least one of each type of fixture provided shall comply with applicable requirements of 603 through 610. Toilet and bathing fixtures required to comply with 603 through 610 shall be located in the same toilet and bathing area, such that travel between fixtures does not require travel between other parts of the residential dwelling unit.

ADVISORY 809.4 Toilet Facilities and Bathing Facilities. All toilet rooms and bathing rooms in accessible residential dwelling units must be accessible. In addition, at least one of each type of fixture in accessible toilet rooms and bathing rooms must be accessible.

In an effort to promote space efficiency, vanity counter top space in accessible residential dwelling units is often omitted. This omission does not promote equal access or equal enjoyment of the unit. Where comparable units have vanity counter tops, accessible units should also have vanity counter tops located as close as possible to the lavatory for convenient access to toiletries.

809.5 Residential Dwelling Units with Communication Features. Residential dwelling units required to provide communication features shall comply with 809.5.

809.5.1 Building Fire Alarm System. Where a building fire alarm system is provided, the system wiring shall be extended to a point within the residential dwelling unit in the vicinity of the residential dwelling unit smoke detection system.

809.5.1.1 Alarm Appliances. Where alarm appliances are provided within a residential dwelling unit as part of the building fire alarm system, they shall comply with 702.

809.5.1.2 Activation. All visible alarm appliances provided within the residential dwelling unit for building fire alarm notification shall be activated upon activation of the building fire alarm in the portion of the building containing the residential dwelling unit.

809.5.2 Residential Dwelling Unit Smoke Detection System. Residential dwelling unit smoke detection systems shall comply with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

809.5.2.2 Activation. All visible alarm appliances provided within the residential dwelling unit for smoke detection notification shall be activated upon smoke detection.

809.5.3 Interconnection. The same visible alarm appliances shall be permitted to provide notification of residential dwelling unit smoke detection and building fire alarm activation.

809.5.4 Prohibited Use. Visible alarm appliances used to indicate residential dwelling unit smoke detection or building fire alarm activation shall not be used for any other purpose within the residential dwelling unit.

809.5.5 Residential Dwelling Unit Primary Entrance. Communication features shall be provided at the residential dwelling unit primary entrance complying with 809.5.5.

809.5.5.1 Notification. A hard-wired electric doorbell shall be provided. A button or switch shall be provided outside the residential dwelling unit primary entrance. Activation of the button or switch shall initiate an audible tone and visible signal within the residential dwelling unit. Where visible doorbell signals are located in sleeping areas, they shall have controls to deactivate the signal.

809.5.5.2 Identification. A means for visually identifying a visitor without opening the residential dwelling unit entry door shall be provided and shall allow for a minimum 180 degree range of view.

ADVISORY 809.5.5.2 Identification. In doors, peepholes that include prisms clarify the image and should offer a wide-angle view of the hallway or exterior for both standing persons and wheelchair users. Such peepholes can be placed at a standard height and permit a view from several feet from the door.

809.5.6 Site, Building, or Floor Entrance. Where a system, including a closed-circuit system, permitting voice communication between a visitor and the occupant of the residential dwelling unit is provided, the system shall comply with 708.4.

810 Transportation Facilities

810.1 General. Transportation facilities shall comply with 810.

810.2 Bus Boarding and Alighting Areas. Bus boarding and alighting areas shall comply with 810.2.

ADVISORY 810.2 Bus Boarding and Alighting Areas. At bus stops where a shelter is provided, the bus stop pad can be located either within or outside of the shelter.

810.2.1 Surface. Bus stop boarding and alighting areas shall have a firm, stable surface.

810.2.2 Dimensions. Bus stop boarding and alighting areas shall provide a clear length of 96 inches (2440 mm) minimum, measured perpendicular to the curb or vehicle roadway edge, and a clear width of 60 inches (1525 mm) minimum, measured parallel to the vehicle roadway.

●Figure 810.2.2 Dimensions of Bus Boarding and Alighting Areas

810.2.3 Connection. Bus stop boarding and alighting areas shall be connected to streets, sidewalks, or pedestrian paths by an accessible route complying with 402.

810.2.4 Slope. Parallel to the roadway, the slope of the bus stop boarding and alighting area shall be the same as the roadway, to the maximum extent practicable. Perpendicular to the roadway, the slope of the bus stop boarding and alighting area shall not be steeper than 1:48.

810.3 Bus Shelters. Bus shelters shall provide a minimum clear floor or ground space complying with 305 entirely within the shelter. Bus shelters shall be connected by an accessible route complying with 402 to a boarding and alighting area complying with 810.2.

●Figure 810.3 Bus Shelters

810.4 Bus Signs. Bus route identification signs shall comply with 703.5.1 through 703.5.4, and 703.5.7 and 703.5.8. In addition, to the maximum extent practicable, bus route identification signs shall comply with 703.5.5.

EXCEPTION: Bus schedules, timetables and maps that are posted at the bus stop or bus bay shall not be required to comply.

810.5 Rail Platforms. Rail platforms shall comply with 810.5.

810.5.1 Slope. Rail platforms shall not exceed a slope of 1:48 in all directions.

EXCEPTION: Where platforms serve vehicles operating on existing track or track laid in existing roadway, the slope of the platform parallel to the track shall be permitted to be equal to the slope (grade) of the roadway or existing track.

810.5.2 Detectable Warnings. Platform boarding edges not protected by platform screens or guards shall have detectable warnings complying with 705 along the full length of the public use area of the platform.

810.5.3 Platform and Vehicle Floor Coordination. Station platforms shall be positioned to coordinate with vehicles in accordance with the applicable requirements of 36 CFR Part 1192. Low-level platforms shall be 8 inches (205 mm) minimum above top of rail.

EXCEPTION: Where vehicles are boarded from sidewalks or street-level, low-level platforms shall be permitted to be less than 8 inches (205 mm).

ADVISORY 810.5.3 Platform and Vehicle Floor Coordination. The height and position of a platform must be coordinated with the floor of the vehicles it serves to minimize the vertical and horizontal gaps, in accordance with the ADA Accessibility Guidelines for Transportation Vehicles (36 CFR Part 1192). The vehicle guidelines, divided by bus, van, light rail, rapid rail,

commuter rail, intercity rail, are available at www.access-board.gov. The preferred alignment is a high platform, level with the vehicle floor. In some cases, the vehicle guidelines permit use of a low platform in conjunction with a lift or ramp. Most such low platforms must have a minimum height of eight inches above the top of the rail. Some vehicles are designed to be boarded from a street or the sidewalk along the street and the exception permits such boarding areas to be less than eight inches high.

810.6 Rail Station Signs. Rail station signs shall comply with 810.6.

EXCEPTION. Signs shall not be required to comply with 810.6.1 and 810.6.2 where audible signs are remotely transmitted to hand-held receivers, or are user- or proximity-actuated.

ADVISORY 810.6 Rail Station Signs Exception. Emerging technologies such as an audible sign systems using infrared transmitters and receivers may provide greater accessibility in the transit environment than traditional Braille and raised letter signs. The transmitters are placed on or next to print signs and transmit their information to an infrared receiver that is held by a person. By scanning an area, the person will hear the sign. This means that signs can be placed well out of reach of Braille readers, even on parapet walls and on walls beyond barriers. Additionally, such signs can be used to provide wayfinding information that cannot be efficiently conveyed on Braille signs.

810.6.1 Entrances. Where signs identify a station or its entrance, at least one sign at each entrance shall comply with 703.2 and shall be placed in uniform locations to the maximum extent practicable. Where signs identify a station that has no defined entrance, at least one sign shall comply with 703.2 and shall be placed in a central location.

810.6.2 Routes and Destinations. Lists of stations, routes and destinations served by the station which are located on boarding areas, platforms, or mezzanines shall comply with 703.5. At least one tactile sign identifying the specific station and complying with 703.2 shall be provided on each platform or boarding area. Signs covered by this requirement shall, to the maximum extent practicable, be placed in uniform locations within the system.

EXCEPTION: Where sign space is limited, characters shall not be required to exceed 3 inches (75 mm).

ADVISORY 810.6.2 Routes and Destinations. Route maps are not required to comply with the informational sign requirements in this document.

810.6.3 Station Names. Stations covered by this section shall have identification signs complying with 703.5. Signs shall be clearly visible and within the sight lines of standing and sitting passengers from within the vehicle on both sides when not obstructed by another vehicle.

ADVISORY 810.6.3 Station Names. It is also important to place signs at intervals in the station where passengers in the vehicle will be able to see a sign when the vehicle is either stopped at the station or about to come to a stop in the station. The number of signs necessary may be directly related to the size of the lettering displayed on the sign.

810.7 Public Address Systems. Where public address systems convey audible information to the public, the same or equivalent information shall be provided in a visual format.

810.8 Clocks. Where clocks are provided for use by the public, the clock face shall be uncluttered so that its elements are clearly visible. Hands, numerals and digits shall contrast with the background either light-on-dark or dark-on-light. Where clocks are installed overhead, numerals and digits shall comply with 703.5.

810.9 Escalators. Where provided, escalators shall comply with the sections 6.1.3.5.6 and 6.1.3.6.5 of ASME A17.1 (incorporated by reference, see "Referenced Standards" in Chapter 1) and shall have a clear width of 32 inches (815 mm) minimum.

EXCEPTION: Existing escalators in key stations shall not be required to comply with 810.9.

810.10 Track Crossings. Where a circulation path serving boarding platforms crosses tracks, it shall comply with 402.

EXCEPTION: Openings for wheel flanges shall be permitted to be 2 1/2 inches (64 mm) maximum.

● **Figure 810.10 (Exception) Track Crossings**

811 Storage

811.1 General. Storage shall comply with 811.

811.2 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided.

811.3 Height. Storage elements shall comply with at least one of the reach ranges specified in 308.

811.4 Operable Parts. Operable parts shall comply with 309.

Complete Text ADA / ABA (Published in the Federal Register on July 23, 2004)**CHAPTER 9: BUILT-IN ELEMENTS****901 General****902 Dining Surfaces and Work Surfaces****903 Benches****904 Check-Out Aisles and Sales and Service Counters****901 General**

901.1 Scope. The provisions of Chapter 9 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

902 Dining Surfaces and Work Surfaces

902.1 General. Dining surfaces and work surfaces shall comply with 902.2 and 902.3.

EXCEPTION: Dining surfaces and work surfaces for children's use shall be permitted to comply with 902.4.

ADVISORY 902.1 General. Dining surfaces include, but are not limited to, bars, tables, lunch counters, and booths. Examples of work surfaces include writing surfaces, study carrels, student laboratory stations, baby changing and other tables or fixtures for personal grooming, coupon counters, and where covered by the ABA scoping provisions, employee work stations.

902.2 Clear Floor or Ground Space. A clear floor space complying with 305 positioned for a forward approach shall be provided. Knee and toe clearance complying with 306 shall be provided.

902.3 Height. The tops of dining surfaces and work surfaces shall be 28 inches (710 mm) minimum and 34 inches (865 mm) maximum above the finish floor or ground.

902.4 Dining Surfaces and Work Surfaces for Children's Use. Accessible dining surfaces and work surfaces for children's use shall comply with 902.4.

EXCEPTION: Dining surfaces and work surfaces that are used primarily by children 5 years and younger shall not be required to comply with 902.4 where a clear floor or ground space complying with 305 positioned for a parallel approach is provided.

902.4.1 Clear Floor or Ground Space. A clear floor space complying with 305 positioned for forward approach shall be provided. Knee and toe clearance complying with 306 shall be provided, except that knee clearance 24 inches (610 mm) minimum above the finish floor or ground shall be permitted.

902.4.2 Height. The tops of tables and counters shall be 26 inches (660 mm) minimum and 30 inches (760 mm) maximum above the finish floor or ground.

903 Benches

903.1 General. Benches shall comply with 903.

903.2 Clear Floor or Ground Space. Clear floor or ground space complying with 305 shall be provided and shall be positioned at the end of the bench seat and parallel to the short axis of the bench.

903.3 Size. Benches shall have seats that are 42 inches (1065 mm) long minimum and 20 inches (510 mm) deep minimum and 24 inches (610 mm) deep maximum.

903.4 Back Support. The bench shall provide for back support or shall be affixed to a wall. Back support shall be 42 inches (1065 mm) long minimum and shall extend from a point 2 inches (51 mm) maximum above the seat surface to a point 18 inches (455 mm) minimum above the seat surface. Back support shall be 2 1/2 inches (64 mm) maximum from the rear edge of the seat measured horizontally.

ADVISORY 903.4 Back Support. To assist in transferring to the bench, consider providing grab bars on a wall adjacent to the bench, but not on the seat back. If provided, grab bars cannot obstruct transfer to the bench.

●Figure 903.4 Bench Back Support

903.5 Height. The top of the bench seat surface shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the finish floor or ground.

903.6 Structural Strength. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure.

903.7 Wet Locations. Where installed in wet locations, the surface of the seat shall be slip resistant and shall not accumulate water.

904 Check-Out Aisles and Sales and Service Counters

904.1 General. Check-out aisles and sales and service counters shall comply with the applicable requirements of 904.

904.2 Approach. All portions of counters required to comply with 904 shall be located adjacent to a walking surface complying with 403.

ADVISORY 904.2 Approach. If a cash register is provided at the sales or service counter, locate the accessible counter close to the cash register so that a person using a wheelchair is visible to sales or service personnel and to minimize the reach for a person with a disability.

904.3 Check-Out Aisles. Check-out aisles shall comply with 904.3.

904.3.1 Aisle. Aisles shall comply with 403.

904.3.2 Counter. The counter surface height shall be 38 inches (965 mm) maximum above the finish floor or ground. The top of the counter edge protection shall be 2 inches (51 mm) maximum above the top of the counter surface on the aisle side of the check-out counter.

● **Figure 904.3.2 Check-Out Aisle Counters**

904.3.3 Check Writing Surfaces. Where provided, check writing surfaces shall comply with 902.3.

904.4 Sales and Service Counters. Sales counters and service counters shall comply with 904.4.1 or 904.4.2. The accessible portion of the counter top shall extend the same depth as the sales or service counter top.

EXCEPTION: In alterations, when the provision of a counter complying with 904.4 would result in a reduction of the number of existing counters at work stations or a reduction of the number of existing mail boxes, the counter shall be permitted to have a portion which is 24 inches (610 mm) long minimum complying with 904.4.1 provided that the required clear floor or ground space is centered on the accessible length of the counter.

● **Figure 904.4 (Exception) Alteration of Sales and Service Counters**

904.4.1 Parallel Approach. A portion of the counter surface that is 36 inches (915 mm) long minimum and 36 inches (915 mm) high maximum above the finish floor shall be provided. A clear floor or ground space complying with 305 shall be positioned for a parallel approach adjacent to the 36 inch (915 mm) minimum length of counter.

EXCEPTION: Where the provided counter surface is less than 36 inches (915 mm) long, the entire counter surface shall be 36 inches (915 mm) high maximum above the finish floor.

904.4.2 Forward Approach. A portion of the counter surface that is 30 inches (760 mm) long minimum and 36 inches (915 mm) high maximum shall be provided. Knee and toe space complying with 306 shall be provided under the counter. A clear floor or ground space complying with 305 shall be positioned for a forward approach to the counter.

904.5 Food Service Lines. Counters in food service lines shall comply with 904.5.

904.5.1 Self-Service Shelves and Dispensing Devices. Self-service shelves and dispensing devices for tableware, dishware, condiments, food and beverages shall comply with 308.

904.5.2 Tray Slides. The tops of tray slides shall be 28 inches (710 mm) minimum and 34 inches (865 mm) maximum above the finish floor or ground.

904.6 Security Glazing. Where counters or teller windows have security glazing to separate personnel from the public, a method to facilitate voice communication shall be provided. Telephone handset devices, if provided, shall comply with 704.3.

ADVISORY 904.6 Security Glazing. Assistive listening devices complying with 706 can facilitate voice communication at counters or teller windows where there is security glazing which promotes distortion in audible information. Where assistive listening devices are installed, place signs complying with 703.7.2.4 to identify those facilities which are so equipped. Other voice communication methods include, but are not limited to, grilles, slats, talk-through baffles, intercoms, or telephone handset devices.

CHAPTER 10: RECREATION FACILITIES

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1001 General

1001.1 Scope. The provisions of Chapter 10 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

ADVISORY 1001.1 Scope. Unless otherwise modified or specifically addressed in Chapter 10, all other ADAAG provisions apply to the design and construction of recreation facilities and elements. The provisions in Section 1001.1 apply wherever these elements are provided. For example, office buildings may contain a room with exercise equipment to which these sections would apply.

1002 Amusement Rides

1002.1 General. Amusement rides shall comply with 1002.

1002.2 Accessible Routes. Accessible routes serving amusement rides shall comply with Chapter 4.

EXCEPTIONS: 1. In load or unload areas and on amusement rides, where compliance with 405.2 is not structurally or operationally feasible, ramp slope shall be permitted to be 1:8 maximum.

2. In load or unload areas and on amusement rides, handrails provided along walking surfaces complying with 403 and required on ramps complying with 405 shall not be required to comply with 505 where compliance is not structurally or operationally feasible.

ADVISORY 1002.2 Accessible Routes Exception 1. Steeper slopes are permitted on accessible routes connecting the amusement ride in the load and unload position where it is "structurally or operationally infeasible." In most cases, this will be limited to areas where the accessible route leads directly to the amusement ride and where there are space limitations on the ride, not the queue line. Where possible, the least possible slope should be used on the accessible route that serves the amusement ride.

1002.3 Load and Unload Areas. A turning space complying with 304.2 and 304.3 shall be provided in load and unload areas.

1002.4 Wheelchair Spaces in Amusement Rides. Wheelchair spaces in amusement rides shall comply with 1002.4.

1002.4.1 Floor or Ground Surface. The floor or ground surface of wheelchair spaces shall be stable and firm.

1002.4.2 Slope. The floor or ground surface of wheelchair spaces shall have a slope not steeper than 1:48 when in the load and unload position.

1002.4.3 Gaps. Floors of amusement rides with wheelchair spaces and floors of load and unload areas shall be coordinated so that, when amusement rides are at rest in the load and unload position, the vertical difference between the floors shall be within plus or minus 5/8 inches (16 mm) and the horizontal gap shall be 3 inches (75 mm) maximum under normal passenger load conditions.

EXCEPTION: Where compliance is not operationally or structurally feasible, ramps, bridge plates, or similar devices complying with the applicable requirements of 36 CFR 1192.83(c) shall be provided.

ADVISORY 1002.4.3 Gaps Exception. 36 CFR 1192.83(c) ADA Accessibility Guidelines for Transportation Vehicles - Light Rail Vehicles and Systems - Mobility Aid Accessibility is available at www.access-board.gov. It includes provisions for bridge plates and ramps that can be used at gaps between wheelchair spaces and floors of load and unload areas.

1002.4.4 Clearances. Clearances for wheelchair spaces shall comply with 1002.4.4.

EXCEPTIONS:

1. Where provided, securement devices shall be permitted to overlap required clearances.
2. Wheelchair spaces shall be permitted to be mechanically or manually repositioned.
3. Wheelchair spaces shall not be required to comply with 307.4.

ADVISORY 1002.4.4 Clearances Exception 3. This exception for protruding objects applies to the ride devices, not to circulation areas or accessible routes in the queue lines or the load and unload areas.

1002.4.4.1 Width and Length. Wheelchair spaces shall provide a clear width of 30 inches (760 mm) minimum and a clear length of 48 inches (1220 mm) minimum measured to 9 inches (230 mm) minimum above the floor surface.

1002.4.4.2 Side Entry. Where wheelchair spaces are entered only from the side, amusement rides shall be designed to permit sufficient maneuvering clearance for individuals using a wheelchair or mobility aid to enter and exit the ride.

ADVISORY 1002.4.4.2 Side Entry. The amount of clear space needed within the ride, and the size and position of the opening are interrelated. A 32 inch (815 mm) clear opening will not provide sufficient width when entered through a turn into an amusement ride. Additional space for maneuvering and a wider door will be needed where a side opening is centered on the ride. For example, where a 42 inch (1065 mm) opening is provided, a minimum clear space of 60 inches (1525 mm) in length and 36 inches (915mm) in depth is needed to ensure adequate space for maneuvering.

1002.4.4.3 Permitted Protrusions in Wheelchair Spaces. Objects are permitted to protrude a distance of 6 inches (150 mm) maximum along the front of the wheelchair space, where located 9 inches (230 mm) minimum and 27 inches (685 mm) maximum above the floor or ground surface of the wheelchair space. Objects are permitted to protrude a distance of 25 inches (635 mm) maximum along the front of the wheelchair space, where located more than 27 inches (685 mm) above the floor or ground surface of the wheelchair space.

● **Figure 1002.4.4.3 Protrusions in Wheelchair Spaces in Amusement Rides**

1002.4.5 Ride Entry. Openings providing entry to wheelchair spaces on amusement rides shall be 32 inches (815 mm) minimum clear.

1002.4.6 Approach. One side of the wheelchair space shall adjoin an accessible route when in the load and unload position.

1002.4.7 Companion Seats. Where the interior width of the amusement ride is greater than 53 inches (1345 mm), seating is provided for more than one rider, and the wheelchair is not required to be centered within the amusement ride, a companion seat shall be provided for each wheelchair space.

1002.4.7.1 Shoulder-to-Shoulder Seating. Where an amusement ride provides shoulder-to-shoulder seating, companion seats shall be shoulder-to-shoulder with the adjacent wheelchair space.

EXCEPTION: Where shoulder-to-shoulder companion seating is not operationally or structurally feasible, compliance with this requirement shall be required to the maximum extent practicable.

1002.5 Amusement Ride Seats Designed for Transfer. Amusement ride seats designed for transfer shall comply with 1002.5 when positioned for loading and unloading.

ADVISORY 1002.5 Amusement Ride Seats Designed for Transfer. The proximity of the clear floor or ground space next to an element and the height of the element one is transferring to are both critical for a safe and independent transfer. Providing additional clear floor or ground space both in front of and diagonal to the element will provide flexibility and will increase usability for a more diverse population of individuals with disabilities. Ride seats designed for transfer should involve only one transfer. Where possible, designers are encouraged to locate the ride seat no higher than 17 to 19 inches (430 to 485 mm) above the load and unload surface. Where greater distances are required for transfers, providing gripping surfaces, seat padding, and avoiding sharp objects in the path of transfer will facilitate the transfer.

1002.5.1 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided in the load and unload area adjacent to the amusement ride seats designed for transfer.

1002.5.2 Transfer Height. The height of amusement ride seats designed for transfer shall be 14 inches (355 mm) minimum and 24 inches (610 mm) maximum measured from the surface of the load and unload area.

1002.5.3 Transfer Entry. Where openings are provided for transfer to amusement ride seats, the openings shall provide clearance for transfer from a wheelchair or mobility aid to the amusement ride seat.

1002.5.4 Wheelchair Storage Space. Wheelchair storage spaces complying with 305 shall be provided in or adjacent to unload areas for each required amusement ride seat designed for transfer and shall not overlap any required means of egress or accessible route.

1002.6 Transfer Devices for Use with Amusement Rides. Transfer devices for use with amusement rides shall comply with 1002.6 when positioned for loading and unloading.

ADVISORY 1002.6 Transfer Devices for Use with Amusement Rides. Transfer devices for use with amusement rides should permit individuals to make independent transfers to and from their wheelchairs or mobility devices. There are a variety of transfer devices available that could be adapted to provide access onto an amusement ride. Examples of devices that may provide for transfers include, but are not limited to, transfer systems, lifts, mechanized seats, and custom designed systems. Operators and designers have flexibility in developing designs that will facilitate individuals to transfer onto amusement rides. These systems or devices should be designed to be reliable and sturdy.

Designs that limit the number of transfers required from a wheelchair or mobility device to the ride seat are encouraged. When using a transfer device to access an amusement ride, the least number of transfers and the shortest distance is most usable. Where possible, designers are encouraged to locate the transfer device seat no higher than 17 to 19 inches (430 to 485 mm) above the load and unload surface. Where greater distances are required for transfers, providing gripping surfaces, seat padding, and avoiding sharp objects in the path of transfer will facilitate the transfer. Where a series of transfers are required to reach the amusement ride seat, each vertical transfer should not exceed 8 inches (205 mm).

1002.6.1 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided in the load and unload area adjacent to the transfer device.

1002.6.2 Transfer Height. The height of transfer device seats shall be 14 inches (355 mm) minimum and 24 inches (610 mm) maximum measured from the load and unload surface.

1002.6.3 Wheelchair Storage Space. Wheelchair storage spaces complying with 305 shall be provided in or adjacent to unload areas for each required transfer device and shall not overlap any required means of egress or accessible route.

1003 Recreational Boating Facilities

1003.1 General. Recreational boating facilities shall comply with 1003.

1003.2 Accessible Routes. Accessible routes serving recreational boating facilities, including gangways and floating piers, shall comply with Chapter 4 except as modified by the exceptions in 1003.2.

1003.2.1 Boat Slips. Accessible routes serving boat slips shall be permitted to use the exceptions in 1003.2.1.

EXCEPTIONS: 1. Where an existing gangway or series of gangways is replaced or altered, an increase in the length of the gangway shall not be required to comply with 1003.2 unless required by 202.4.

2. Gangways shall not be required to comply with the maximum rise specified in 405.6.

3. Where the total length of a gangway or series of gangways serving as part of a required accessible route is 80 feet (24 m) minimum, gangways shall not be required to comply with 405.2.

4. Where facilities contain fewer than 25 boat slips and the total length of the gangway or series of gangways serving as part of a required accessible route is 30 feet (9145 mm) minimum, gangways shall not be required to comply with 405.2.

5. Where gangways connect to transition plates, landings specified by 405.7 shall not be required.

6. Where gangways and transition plates connect and are required to have handrails, handrail extensions shall not be required. Where handrail extensions are provided on gangways or transition plates, the handrail extensions shall not be required to be parallel with the ground or floor surface.

7. The cross slope specified in 403.3 and 405.3 for gangways, transition plates, and floating piers that are part of accessible routes shall be measured in the static position.

8. Changes in level complying with 303.3 and 303.4 shall be permitted on the surfaces of gangways and boat launch ramps.

ADVISORY 1003.2.1 Boat Slips Exception 3. The following example shows how exception 3 would be applied: A gangway is provided to a floating pier which is required to be on an accessible route. The vertical distance is 10 feet (3050 mm) between the elevation where the gangway departs the landside connection and the elevation of the pier surface at the lowest water level. Exception 3 permits the gangway to be 80 feet (24 m) long. Another design solution would be to have two 40 foot (12 m) plus continuous gangways joined together at a float, where the float (as the water level falls) will stop dropping at an elevation five feet below the landside connection. The length of transition plates would not be included in determining if the gangway(s) meet the requirements of the exception.

1003.2.2 Boarding Piers at Boat Launch Ramps. Accessible routes serving boarding piers at boat launch ramps shall be permitted to use the exceptions in 1003.2.2.

EXCEPTIONS: 1. Accessible routes serving floating boarding piers shall be permitted to use Exceptions 1, 2, 5, 6, 7 and 8 in 1003.2.1.

2. Where the total length of the gangway or series of gangways serving as part of a required accessible route is 30 feet (9145 mm) minimum, gangways shall not be required to comply with 405.2.

3. Where the accessible route serving a floating boarding pier or skid pier is located within a boat launch ramp, the portion of the accessible route located within the boat launch ramp shall not be required to comply with 405.

1003.3 Clearances. Clearances at boat slips and on boarding piers at boat launch ramps shall comply with 1003.3.

ADVISORY 1003.3 Clearances. Although the minimum width of the clear pier space is 60 inches (1525 mm), it is recommended that piers be wider than 60 inches (1525 mm) to improve the safety for persons with disabilities, particularly on floating piers.

1003.3.1 Boat Slip Clearance. Boat slips shall provide clear pier space 60 inches (1525 mm) wide minimum and at least as long as the boat slips. Each 10 feet (3050 mm) maximum of linear pier edge serving boat slips shall contain at least one continuous clear opening 60 inches (1525 mm) wide minimum.

EXCEPTIONS: 1. Clear pier space shall be permitted to be 36 inches (915 mm) wide minimum for a length of 24 inches (610 mm) maximum, provided that multiple 36 inch (915 mm) wide segments are separated by segments that are 60 inches (1525 mm) wide minimum and 60 inches (1525 mm) long minimum.

2. Edge protection shall be permitted at the continuous clear openings, provided that it is 4 inches (100 mm) high maximum and 2 inches (51 mm) wide maximum.

3. In existing piers, clear pier space shall be permitted to be located perpendicular to the boat slip and shall extend the width of the boat slip, where the facility has at least one boat slip complying with 1003.3, and further compliance with 1003.3 would result in a reduction in the number of boat slips available or result in a reduction of the widths of existing slips.

ADVISORY 1003.3.1 Boat Slip Clearance Exception 3. Where the conditions in exception 3 are satisfied, existing facilities are only required to have one accessible boat slip with a pier clearance which runs the length of the slip. All other accessible slips are allowed to have the required pier clearance at the head of the slip. Under this exception, at piers with perpendicular boat slips, the width of most “finger piers” will remain unchanged. However, where mooring systems for floating piers are replaced as part of pier alteration projects, an opportunity may exist for increasing accessibility. Piers may be reconfigured to allow an increase in the number of wider finger piers, and serve as accessible boat slips.

● **Figure 1003.3.1 Boat Slip Clearance**

● **Figure 1003.3.1 (Exception 1) Clear Pier Space Reduction at Boat Slips**

● **Figure 1003.3.1 (Exception 2) Edge Protection at Boat Slips**

1003.3.2 Boarding Pier Clearances. Boarding piers at boat launch ramps shall provide clear pier space 60 inches (1525 mm) wide minimum and shall extend the full length of the boarding pier. Every 10 feet (3050 mm) maximum of linear pier edge shall contain at least one continuous clear opening 60 inches (1525 mm) wide minimum.

EXCEPTIONS: 1. The clear pier space shall be permitted to be 36 inches (915 mm) wide minimum for a length of 24 inches (610 mm) maximum provided that multiple 36 inch (915 mm) wide segments are separated by segments that are 60 inches (1525 mm) wide minimum and 60 inches (1525 mm) long minimum.

2. Edge protection shall be permitted at the continuous clear openings provided that it is 4 inches (100 mm) high maximum and 2 inches (51 mm) wide maximum.

ADVISORY 1003.3.2 Boarding Pier Clearances. These requirements do not establish a minimum length for accessible boarding piers at boat launch ramps. The accessible boarding pier should have a length at least equal to that of other boarding piers provided at the facility. If no other boarding pier is provided, the pier would have a length equal to what would have been provided if no access requirements applied. The entire length of accessible boarding piers would be required to comply with the same technical provisions that apply to accessible boat slips. For example, at a launch ramp, if a 20 foot (6100 mm) long accessible boarding pier is provided, the entire 20 feet (6100 mm) must comply with the pier clearance requirements in 1003.3. Likewise, if a 60 foot (18 m) long accessible boarding pier is provided, the pier clearance requirements in 1003.3 would apply to the entire 60 feet (18 m).

The following example applies to a boat launch ramp boarding pier: A chain of floats is provided on a launch ramp to be used as a boarding pier which is required to be accessible by 1003.3.2. At high water, the entire chain is floating and a transition plate connects the first float to the surface of the launch ramp. As the water level decreases, segments of the chain end up resting on the launch ramp surface, matching the slope of the launch ramp.

● **Figure 1003.3.2 Boarding Pier Clearance**

● **Figure 1003.3.2 (Exception 1) Clear Pier Space Reduction at Boarding Piers**

● **Figure 1003.3.2 (Exception 2) Edge Protection at Boarding Piers**

1004 Exercise Machines and Equipment

1004.1 Clear Floor Space. Exercise machines and equipment shall have a clear floor space complying with 305 positioned for transfer or for use by an individual seated in a wheelchair. Clear floor or ground spaces required at exercise machines and equipment shall be permitted to overlap.

ADVISORY 1004.1 Clear Floor Space. One clear floor or ground space is permitted to be shared between two pieces of exercise equipment. To optimize space use, designers should carefully consider layout options such as connecting ends of the row and center aisle spaces. The position of the clear floor space may vary greatly depending on the use of the equipment or machine. For example, to provide access to a shoulder press machine, clear floor space next to the seat would be appropriate to allow for transfer. Clear floor space for a bench press machine designed for use by an individual seated in a wheelchair, however, will most likely be centered on the operating mechanisms.

1005 Fishing Piers and Platforms

1005.1 Accessible Routes. Accessible routes serving fishing piers and platforms, including gangways and floating piers, shall comply with Chapter 4.

EXCEPTIONS: 1. Accessible routes serving floating fishing piers and platforms shall be permitted to use Exceptions 1, 2, 5, 6, 7 and 8 in 1003.2.1.

2. Where the total length of the gangway or series of gangways serving as part of a required accessible route is 30 feet (9145 mm) minimum, gangways shall not be required to comply with 405.2.

1005.2 Railings. Where provided, railings, guards, or handrails shall comply with 1005.2.

1005.2.1 Height. At least 25 percent of the railings, guards, or handrails shall be 34 inches (865 mm) maximum above the ground or deck surface.

EXCEPTION: Where a guard complying with sections 1003.2.12.1 and 1003.2.12.2 of the International Building Code (2000 edition) or sections 1012.2 and 1012.3 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1) is provided, the guard shall not be required to comply with 1005.2.1.

1005.2.1.1 Dispersion. Railings, guards, or handrails required to comply with 1005.2.1 shall be dispersed throughout the fishing pier or platform.

ADVISORY 1005.2.1.1 Dispersion. Portions of the railings that are lowered to provide fishing opportunities for persons with disabilities must be located in a variety of locations on the fishing pier or platform to give people a variety of locations to fish. Different fishing locations may provide varying water depths, shade (at certain times of the day), vegetation, and proximity to the shoreline or bank.

1005.3 Edge Protection. Where railings, guards, or handrails complying with 1005.2 are provided, edge protection complying with 1005.3.1 or 1005.3.2 shall be provided.

ADVISORY 1005.3 Edge Protection. Edge protection is required only where railings, guards, or handrails are provided on a fishing pier or platform. Edge protection will prevent wheelchairs or other mobility devices from slipping off the fishing pier or platform. Extending the deck of the fishing pier or platform 12 inches (305 mm) where the 34 inch (865 mm) high railing is provided is an alternative design, permitting individuals using wheelchairs or other mobility devices to pull into a clear space and move beyond the face of the railing. In such a design, curbs or barriers are not required.

1005.3.1 Curb or Barrier. Curbs or barriers shall extend 2 inches (51 mm) minimum above the surface of the fishing pier or platform.

1005.3.2 Extended Ground or Deck Surface. The ground or deck surface shall extend 12 inches (305 mm) minimum beyond the inside face of the railing. Toe clearance shall be provided and shall be 30 inches (760 mm) wide minimum and 9 inches (230 mm) minimum above the ground or deck surface beyond the railing.

● **Figure 1005.3.2 Extended Ground or Deck Surface at Fishing Piers and Platforms**

1005.4 Clear Floor or Ground Space. At each location where there are railings, guards, or handrails complying with 1005.2.1, a clear floor or ground space complying with 305 shall be provided. Where there are no railings, guards, or handrails, at least one clear floor or ground space complying with 305 shall be provided on the fishing pier or platform.

1005.5 Turning Space. At least one turning space complying with 304.3 shall be provided on fishing piers and platforms.

1006 Golf Facilities

1006.1 General. Golf facilities shall comply with 1006.

1006.2 Accessible Routes. Accessible routes serving teeing grounds, practice teeing grounds, putting greens, practice putting greens, teeing stations at driving ranges, course weather shelters, golf car rental areas, bag drop areas, and course toilet rooms shall comply with Chapter 4 and shall be 48 inches (1220 mm) wide minimum. Where handrails are provided, accessible routes shall be 60 inches (1525 mm) wide minimum.

EXCEPTION: Handrails shall not be required on golf courses. Where handrails are provided on golf courses, the handrails shall not be required to comply with 505.

ADVISORY 1006.2 Accessible Routes. The 48 inch (1220 mm) minimum width for the accessible route is necessary to ensure passage of a golf car on either the accessible route or the golf car passage. This is important where the accessible route is used to connect the golf car rental area, bag drop areas, practice putting greens, practice teeing grounds, course toilet rooms, and course weather shelters. These are areas outside the boundary of the golf course, but are areas where an individual using an adapted golf car may travel. A golf car passage may not be substituted for other accessible routes to be located outside the boundary of the course. For example, an accessible route connecting an accessible parking space to the entrance of a golf course clubhouse is not covered by this provision.

Providing a golf car passage will permit a person that uses a golf car to practice driving a golf ball from the same position and stance used when playing the game. Additionally, the space required for a person using a golf car to enter and maneuver within the teeing stations required to be accessible should be considered.

1006.3 Golf Car Passages. Golf car passages shall comply with 1006.3.

1006.3.1 Clear Width. The clear width of golf car passages shall be 48 inches (1220 mm) minimum.

1006.3.2 Barriers. Where curbs or other constructed barriers prevent golf cars from entering a fairway, openings 60 inches (1525 mm) wide minimum shall be provided at intervals not to exceed 75 yards (69 m).

1006.4 Weather Shelters. A clear floor or ground space 60 inches (1525 mm) minimum by 96 inches (2440 mm) minimum shall be provided within weather shelters.

1007 Miniature Golf Facilities

1007.1 General. Miniature golf facilities shall comply with 1007.

1007.2 Accessible Routes. Accessible routes serving holes on miniature golf courses shall comply with Chapter 4. Accessible routes located on playing surfaces of miniature golf holes shall be permitted to use the exceptions in 1007.2.

EXCEPTIONS: 1. Playing surfaces shall not be required to comply with 302.2.

2. Where accessible routes intersect playing surfaces of holes, a 1 inch (25 mm) maximum curb shall be permitted for a width of 32 inches (815 mm) minimum.

3. A slope not steeper than 1:4 for a 4 inch (100 mm) maximum rise shall be permitted.

4. Ramp landing slopes specified by 405.7.1 shall be permitted to be 1:20 maximum.

5. Ramp landing length specified by 405.7.3 shall be permitted to be 48 inches (1220 mm) long minimum.

6. Ramp landing size specified by 405.7.4 shall be permitted to be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum.

7. Handrails shall not be required on holes. Where handrails are provided on holes, the handrails shall not be required to comply with 505.

1007.3 Miniature Golf Holes. Miniature golf holes shall comply with 1007.3.

1007.3.1 Start of Play. A clear floor or ground space 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum with slopes not steeper than 1:48 shall be provided at the start of play.

1007.3.2 Golf Club Reach Range Area. All areas within holes where golf balls rest shall be within 36 inches (915 mm) maximum of a clear floor or ground space 36 inches (915 mm) wide minimum and 48 inches (1220 mm) long minimum having a running slope not steeper than 1:20. The clear floor or ground space shall be served by an accessible route.

ADVISORY 1007.3.2 Golf Club Reach Range Area. The golf club reach range applies to all holes required to be accessible. This includes accessible routes provided adjacent to or, where provided, on the playing surface of the hole.

•Figure 1007.3.2 Golf Club Reach Range Area

1008 Play Areas

1008.1 General. Play areas shall comply with 1008.

1008.2 Accessible Routes. Accessible routes serving play areas shall comply with Chapter 4 and 1008.2 and shall be permitted to use the exceptions in 1008.2.1 through 1008.2.3. Where accessible routes serve ground level play components, the vertical clearance shall be 80 inches high (2030 mm) minimum.

1008.2.1 Ground Level and Elevated Play Components. Accessible routes serving ground level play components and elevated play components shall be permitted to use the exceptions in 1008.2.1.

EXCEPTIONS: 1. Transfer systems complying with 1008.3 shall be permitted to connect elevated play components except where 20 or more elevated play components are provided no more than 25 percent of the elevated play components shall be permitted to be connected by transfer systems.

2. Where transfer systems are provided, an elevated play component shall be permitted to connect to another elevated play component as part of an accessible route.

1008.2.2 Soft Contained Play Structures. Accessible routes serving soft contained play structures shall be permitted to use the exception in 1008.2.2.

EXCEPTION: Transfer systems complying with 1008.3 shall be permitted to be used as part of an accessible route.

1008.2.3 Water Play Components. Accessible routes serving water play components shall be permitted to use the exceptions in 1008.2.3.

EXCEPTIONS: 1. Where the surface of the accessible route, clear floor or ground spaces, or turning spaces serving water play components is submerged, compliance with 302, 403.3, 405.2, 405.3, and 1008.2.6 shall not be required.

2. Transfer systems complying with 1008.3 shall be permitted to connect elevated play components in water.

ADVISORY 1008.2.3 Water Play Components. Personal wheelchairs and mobility devices may not be appropriate for submerging in water when using play components in water. Some may have batteries, motors, and electrical systems that when submerged in water may cause damage to the personal mobility device or wheelchair or may contaminate the water. Providing an aquatic wheelchair made of non-corrosive materials and designed for access into the water will protect the water from contamination and avoid damage to personal wheelchairs.

1008.2.4 Clear Width. Accessible routes connecting play components shall provide a clear width complying with 1008.2.4.

1008.2.4.1 Ground Level. At ground level, the clear width of accessible routes shall be 60 inches (1525 mm) minimum.

EXCEPTIONS: 1. In play areas less than 1000 square feet (93 m²), the clear width of accessible routes shall be permitted to be 44 inches (1120 mm) minimum, if at least one turning space complying with 304.3 is provided where the restricted accessible route exceeds 30 feet (9145 mm) in length.

2. The clear width of accessible routes shall be permitted to be 36 inches (915 mm) minimum for a distance of 60 inches (1525 mm) maximum provided that multiple reduced width segments are separated by segments that are 60 inches (1525 mm) wide minimum and 60 inches (1525 mm) long minimum.

1008.2.4.2 Elevated. The clear width of accessible routes connecting elevated play components shall be 36 inches (915 mm) minimum.

EXCEPTIONS: 1. The clear width of accessible routes connecting elevated play components shall be permitted to be reduced to 32 inches (815 mm) minimum for a distance of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

2. The clear width of transfer systems connecting elevated play components shall be permitted to be 24 inches (610 mm) minimum.

1008.2.5 Ramps. Within play areas, ramps connecting ground level play components and ramps connecting elevated play components shall comply with 1008.2.5.

1008.2.5.1 Ground Level. Ramp runs connecting ground level play components shall have a running slope not steeper than 1:16.

1008.2.5.2 Elevated. The rise for any ramp run connecting elevated play components shall be 12 inches (305 mm) maximum.

1008.2.5.3 Handrails. Where required on ramps serving play components, the handrails shall comply with 505 except as modified by 1008.2.5.3.

EXCEPTIONS: 1. Handrails shall not be required on ramps located within ground level use zones.

2. Handrail extensions shall not be required.

1008.2.5.3.1 Handrail Gripping Surfaces. Handrail gripping surfaces with a circular cross section shall have an outside diameter of 0.95 inch (24 mm) minimum and 1.55 inches (39 mm) maximum. Where the shape of the gripping surface is non-circular, the handrail shall provide an equivalent gripping surface.

1008.2.5.3.2 Handrail Height. The top of handrail gripping surfaces shall be 20 inches (510 mm) minimum and 28 inches (710 mm) maximum above the ramp surface.

1008.2.6 Ground Surfaces. Ground surfaces on accessible routes, clear floor or ground spaces, and turning spaces shall comply with 1008.2.6.

ADVISORY 1008.2.6 Ground Surfaces. Ground surfaces must be inspected and maintained regularly to ensure continued compliance with the ASTM F 1951 standard. The type of surface material selected and play area use levels will determine the frequency of inspection and maintenance activities.

1008.2.6.1 Accessibility. Ground surfaces shall comply with ASTM F 1951 (incorporated by reference, see "Referenced Standards" in Chapter 1). Ground surfaces shall be inspected and maintained regularly and frequently to ensure continued compliance with ASTM F 1951.

1008.2.6.2 Use Zones. Ground surfaces located within use zones shall comply with ASTM F 1292 (1999 edition or 2004 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

1008.3 Transfer Systems. Where transfer systems are provided to connect to elevated play components, transfer systems shall comply with 1008.3.

ADVISORY 1008.3 Transfer Systems. Where transfer systems are provided, consideration should be given to the distance between the transfer system and the elevated play components. Moving between a transfer platform and a series of transfer steps requires extensive exertion for some children. Designers should minimize the distance between the points where a child transfers from a wheelchair or mobility device and where the elevated play components are located. Where elevated play components are used to connect to another elevated play component instead of an accessible route, careful consideration should be used in the selection of the play components used for this purpose.

1008.3.1 Transfer Platforms. Transfer platforms shall be provided where transfer is intended from wheelchairs or other mobility aids. Transfer platforms shall comply with 1008.3.1.

1008.3.1.1 Size. Transfer platforms shall have level surfaces 14 inches (355 mm) deep minimum and 24 inches (610 mm) wide minimum.

1008.3.1.2 Height. The height of transfer platforms shall be 11 inches (280 mm) minimum and 18 inches (455 mm) maximum measured to the top of the surface from the ground or floor surface.

1008.3.1.3 Transfer Space. A transfer space complying with 305.2 and 305.3 shall be provided adjacent to the transfer platform. The 48 inch (1220 mm) long minimum dimension of the transfer space shall be centered on and parallel to the 24 inch (610 mm) long minimum side of the transfer platform. The side of the transfer platform serving the transfer space shall be unobstructed.

1008.3.1.4 Transfer Supports. At least one means of support for transferring shall be provided.

•Figure 1008.3.1 Transfer Platforms

1008.3.2 Transfer Steps. Transfer steps shall be provided where movement is intended from transfer platforms to levels with elevated play components required to be on accessible routes. Transfer steps shall comply with 1008.3.2.

1008.3.2.1 Size. Transfer steps shall have level surfaces 14 inches (355 mm) deep minimum and 24 inches (610 mm) wide minimum.

1008.3.2.2 Height. Each transfer step shall be 8 inches (205 mm) high maximum.

1008.3.2.3 Transfer Supports. At least one means of support for transferring shall be provided.

ADVISORY 1008.3.2.3 Transfer Supports. Transfer supports are required on transfer platforms and transfer steps to assist children when transferring. Some examples of supports include a rope loop, a loop type handle, a slot in the edge of a flat horizontal or vertical member, poles or bars, or D rings on the corner posts.

•Figure 1008.3.2 Transfer Steps

1008.4 Play Components. Ground level play components on accessible routes and elevated play components connected by ramps shall comply with 1008.4.

1008.4.1 Turning Space. At least one turning space complying with 304 shall be provided on the same level as play components. Where swings are provided, the turning space shall be located immediately adjacent to the swing.

1008.4.2 Clear Floor or Ground Space. Clear floor or ground space complying with 305.2 and 305.3 shall be provided at play components.

ADVISORY 1008.4.2 Clear Floor or Ground Space. Clear floor or ground spaces, turning spaces, and accessible routes are permitted to overlap within play areas. A specific location has not been designated for the clear floor or ground spaces or turning spaces, except swings, because each play component may require that the spaces be placed in a unique location. Where play components include a seat or entry point, designs that provide for an unobstructed transfer from a wheelchair or other mobility device are recommended. This will enhance the ability of children with disabilities to independently use the play component. When designing play components with manipulative or interactive features, consider appropriate reach ranges for children seated in wheelchairs. The following table provides guidance on reach ranges for children seated in wheelchairs. These dimensions apply to either forward or side reaches. The reach ranges are appropriate for use with those play components that children seated in wheelchairs may access and reach. Where transfer systems provide access to elevated play components, the reach ranges are not appropriate.

Children's Reach Ranges			
Forward or Side Reach	Ages 3 and 4	Ages 5 through 8	Ages 9 through 12
High (maximum)	36 in (915 mm)	40 in (1015 mm)	44 in (1120 mm)
Low (minimum)	20 in (510 mm)	18 in (455 mm)	16 in (405 mm)

1008.4.3 Play Tables. Where play tables are provided, knee clearance 24 inches (610 mm) high minimum, 17 inches deep (430 mm) minimum, and 30 inches (760 mm) wide minimum shall be provided. The tops of rims, curbs, or other obstructions shall be 31 inches (785 mm) high maximum.

EXCEPTION: Play tables designed and constructed primarily for children 5 years and younger shall not be required to provide knee clearance where the clear floor or ground space required by 1008.4.2 is arranged for a parallel approach.

1008.4.4 Entry Points and Seats. Where play components require transfer to entry points or seats, the entry points or seats shall be 11 inches (280 mm) minimum and 24 inches (610 mm) maximum from the clear floor or ground space.

EXCEPTION: Entry points of slides shall not be required to comply with 1008.4.4.

1008.4.5 Transfer Supports. Where play components require transfer to entry points or seats, at least one means of support for transferring shall be provided.

1009 Swimming Pools, Wading Pools, and Spas

1009.1 General. Where provided, pool lifts, sloped entries, transfer walls, transfer systems, and pool stairs shall comply with 1009.

1009.2 Pool Lifts. Pool lifts shall comply with 1009.2.

ADVISORY 1009.2 Pool Lifts. There are a variety of seats available on pool lifts ranging from sling seats to those that are preformed or molded. Pool lift seats with backs will enable a larger population of persons with disabilities to use the lift. Pool lift seats that consist of materials that resist corrosion and provide a firm base to transfer will be usable by a wider range of people with disabilities. Additional options such as armrests, head rests, seat belts, and leg support will enhance accessibility and better accommodate people with a wide range of disabilities.

1009.2.1 Pool Lift Location. Pool lifts shall be located where the water level does not exceed 48 inches (1220 mm).

EXCEPTIONS: 1. Where the entire pool depth is greater than 48 inches (1220 mm), compliance with 1009.2.1 shall not be required.

2. Where multiple pool lift locations are provided, no more than one pool lift shall be required to be located in an area where the water level is 48 inches (1220 mm) maximum.

1009.2.2 Seat Location. In the raised position, the centerline of the seat shall be located over the deck and 16 inches (405 mm) minimum from the edge of the pool. The deck surface between the centerline of the seat and the pool edge shall have a slope not steeper than 1:48.

● **Figure 1009.2.2 Pool Lift Seat Location**

1009.2.3 Clear Deck Space. On the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat. The space shall be 36 inches (915 mm) wide minimum and shall extend forward 48 inches (1220 mm) minimum from a line located 12 inches (305 mm) behind the rear edge of the seat. The clear deck space shall have a slope not steeper than 1:48.

● **Figure 1009.2.3 Clear Deck Space at Pool Lifts**

1009.2.4 Seat Height. The height of the lift seat shall be designed to allow a stop at 16 inches (405 mm) minimum to 19 inches (485 mm) maximum measured from the deck to the top of the seat surface when in the raised (load) position.

● **Figure 1009.2.4 Pool Lift Seat Height**

1009.2.5 Seat Width. The seat shall be 16 inches (405 mm) wide minimum.

1009.2.6 Footrests and Armrests. Footrests shall be provided and shall move with the seat. If provided, the armrest positioned opposite the water shall be removable or shall fold clear of the seat when the seat is in the raised (load) position.

EXCEPTION: Footrests shall not be required on pool lifts provided in spas.

1009.2.7 Operation. The lift shall be capable of unassisted operation from both the deck and water levels. Controls and operating mechanisms shall be unobstructed when the lift is in use and shall comply with 309.4.

ADVISORY 1009.2.7 Operation. Pool lifts must be capable of unassisted operation from both the deck and water levels. This will permit a person to call the pool lift when the pool lift is in the opposite position. It is extremely important for a person who is swimming alone to be able to call the pool lift when it is in the up position so he or she will not be stranded in the water for extended periods of time awaiting assistance. The requirement for a pool lift to be independently operable does not preclude assistance from being provided.

1009.2.8 Submerged Depth. The lift shall be designed so that the seat will submerge to a water depth of 18 inches (455 mm) minimum below the stationary water level.

● **Figure 1009.2.8 Pool Lift Submerged Depth**

1009.2.9 Lifting Capacity. Single person pool lifts shall have a weight capacity of 300 pounds (136 kg) minimum and be capable of sustaining a static load of at least one and a half times the rated load.

ADVISORY 1009.2.9 Lifting Capacity. Single person pool lifts must be capable of supporting a minimum weight of 300 pounds (136 kg) and sustaining a static load of at least one and a half times the rated load. Pool lifts should be provided that meet the needs of the population they serve. Providing a pool lift with a weight capacity greater than 300 pounds (136 kg) may be advisable.

1009.3 Sloped Entries. Sloped entries shall comply with 1009.3.

ADVISORY 1009.3 Sloped Entries. Personal wheelchairs and mobility devices may not be appropriate for submerging in water. Some may have batteries, motors, and electrical systems that when submerged in water may cause damage to the personal mobility device or wheelchair or may contaminate the pool water. Providing an aquatic wheelchair made of non-corrosive materials and designed for access into the water will protect the water from contamination and avoid damage to personal wheelchairs or other mobility aids.

1009.3.1 Sloped Entries. Sloped entries shall comply with Chapter 4 except as modified in 1109.3.1 through 1109.3.3.

EXCEPTION: Where sloped entries are provided, the surfaces shall not be required to be slip resistant.

1009.3.2 Submerged Depth. Sloped entries shall extend to a depth of 24 inches (610 mm) minimum and 30 inches (760 mm) maximum below the stationary water level. Where landings are required by 405.7, at least one landing shall be located 24 inches (610 mm) minimum and 30 inches (760 mm) maximum below the stationary water level.

EXCEPTION: In wading pools, the sloped entry and landings, if provided, shall extend to the deepest part of the wading pool.

● **Figure 1009.3.2 Sloped Entry Submerged Depth**

1009.3.3 Handrails. At least two handrails complying with 505 shall be provided on the sloped entry. The clear width between required handrails shall be 33 inches (840 mm) minimum and 38 inches (965 mm) maximum.

EXCEPTIONS: 1. Handrail extensions specified by 505.10.1 shall not be required at the bottom landing serving a sloped entry.

2. Where a sloped entry is provided for wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area, the handrails shall not be required to comply with the clear width requirements of 1009.3.3.

3. Sloped entries in wading pools shall not be required to provide handrails complying with 1009.3.3. If provided, handrails on sloped entries in wading pools shall not be required to comply with 505.

● **Figure 1009.3.3 Handrails for Sloped Entry**

1009.4 Transfer Walls. Transfer walls shall comply with 1009.4.

1009.4.1 Clear Deck Space. A clear deck space of 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum with a slope not steeper than 1:48 shall be provided at the base of the transfer wall. Where one grab bar is provided, the clear deck space shall be centered on the grab bar. Where two grab bars are provided, the clear deck space shall be centered on the clearance between the grab bars.

● **Figure 1009.4.1 Clear Deck Space at Transfer Walls**

1009.4.2 Height. The height of the transfer wall shall be 16 inches (405 mm) minimum and 19 inches (485 mm) maximum measured from the deck.

● **Figure 1009.4.2 Transfer Wall Height**

1009.4.3 Wall Depth and Length. The depth of the transfer wall shall be 12 inches (305 mm) minimum and 16 inches (405 mm) maximum. The length of the transfer wall shall be 60 inches (1525 mm) minimum and shall be centered on the clear deck space.

● **Figure 1009.4.3 Depth and Length of Transfer Walls**

1009.4.4 Surface. Surfaces of transfer walls shall not be sharp and shall have rounded edges.

1009.4.5 Grab Bars. At least one grab bar complying with 609 shall be provided on the transfer wall. Grab bars shall be perpendicular to the pool wall and shall extend the full depth of the transfer wall. The top of the gripping surface shall be 4 inches (100 mm) minimum and 6 inches (150 mm) maximum above transfer walls. Where one grab bar is provided, clearance shall be 24 inches (610 mm) minimum on both sides of the grab bar. Where two grab bars are provided, clearance between grab bars shall be 24 inches (610 mm) minimum.

EXCEPTION: Grab bars on transfer walls shall not be required to comply with 609.4.

● **Figure 1009.4.5 Grab Bars for Transfer Walls**

1009.5 Transfer Systems. Transfer systems shall comply with 1009.5.

1009.5.1 Transfer Platform. A transfer platform shall be provided at the head of each transfer system. Transfer platforms shall provide 19 inches (485 mm) minimum clear depth and 24 inches (610 mm) minimum clear width.

● **Figure 1009.5.1 Size of Transfer Platform**

1009.5.2 Transfer Space. A transfer space of 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum with a slope not steeper than 1:48 shall be provided at the base of the transfer platform surface and shall be centered along a 24 inch (610 mm) minimum side of the transfer platform. The side of the transfer platform serving the transfer space shall be unobstructed.

● **Figure 1009.5.2 Clear Deck Space at Transfer Platform**

1009.5.3 Height. The height of the transfer platform shall comply with 1009.4.2.

1009.5.4 Transfer Steps. Transfer step height shall be 8 inches (205 mm) maximum. The surface of the bottom tread shall extend to a water depth of 18 inches (455 mm) minimum below the stationary water level.

ADVISORY 1009.5.4 Transfer Steps. Where possible, the height of the transfer step should be minimized to decrease the distance an individual is required to lift up or move down to reach the next step to gain access.

● **Figure 1009.5.4 Transfer Steps**

1009.5.5 Surface. The surface of the transfer system shall not be sharp and shall have rounded edges.

1009.5.6 Size. Each transfer step shall have a tread clear depth of 14 inches (355 mm) minimum and 17 inches (430 mm) maximum and shall have a tread clear width of 24 inches (610 mm) minimum.

● **Figure 1009.5.6 Size of Transfer Steps**

1009.5.7 Grab Bars. At least one grab bar on each transfer step and the transfer platform or a continuous grab bar serving each transfer step and the transfer platform shall be provided. Where a grab bar is provided on each step, the tops of gripping surfaces shall be 4 inches (100 mm) minimum and 6 inches (150 mm) maximum above each step and transfer platform. Where a continuous grab bar is provided, the top of the gripping surface shall be 4 inches (100 mm) minimum and 6 inches (150 mm)

maximum above the step nosing and transfer platform. Grab bars shall comply with 609 and be located on at least one side of the transfer system. The grab bar located at the transfer platform shall not obstruct transfer.

EXCEPTION: Grab bars on transfer systems shall not be required to comply with 609.4.

● **Figure 1009.5.7 Grab Bars**

1009.6 Pool Stairs. Pool stairs shall comply with 1009.6.

1009.6.1 Pool Stairs. Pool stairs shall comply with 504.

EXCEPTION: Pool step riser heights shall not be required to be 4 inches (100 mm) high minimum and 7 inches (180 mm) high maximum provided that riser heights are uniform.

1009.6.2 Handrails. The width between handrails shall be 20 inches (510 mm) minimum and 24 inches (610 mm) maximum. Handrail extensions required by 505.10.3 shall not be required on pool stairs.

1010 Shooting Facilities with Firing Positions

1010.1 Turning Space. A circular turning space 60 inches (1525 mm) diameter minimum with slopes not steeper than 1:48 shall be provided at shooting facilities with firing positions.

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