

Spon's Middle East Construction Costs Handbook

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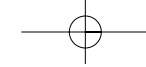
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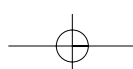
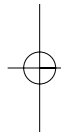
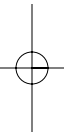


Spon's Middle East Construction Costs Handbook

Second edition

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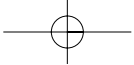
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Preface

This publication is one of a set of three volumes that have been compiled in an endeavour to address a need in the construction industry for information relating to individual countries within a specific continent or region. This volume presents profiles for a selection of country locations within the Middle East in an individual and comparative format to allow evaluation of each country in isolation and in relation to the other countries within that continent. Comparative data for the UK is also included.

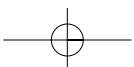
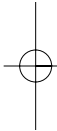
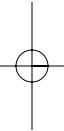
The publication has been prepared as a convenient reference point for those involved in construction including developers, contractors and suppliers who wish to become involved in the industry in that region of the world. It provides an introductory synopsis of the construction activities relevant to a specific region within the Middle East together with the domestic profile of each country.



Acknowledgements

The information for the various countries that has been provided within this publication has been gathered from a wide variety of sources and due acknowledgement is given to all those organisations, publications and individuals each of whose contribution has enabled the production of this volume.

Important sources of a general financial nature have been prepared by reference to the various reports from international bank facilities and from government intelligence statistics offices.



Publication users guide

The publication is divided into three sections: – Part One: Regional Overview, Part Two: Individual Countries and Part Three: Comparative Data. There are thirteen individual countries covered by this volume each one of which is specifically covered in Part Two and compared collectively in the third section. The UK is included to allow for comparative benchmarking.

Part One: Regional Overview

This section provides an introduction to and an overview of the region giving basic details to allow a feel for the area. It presents key characteristics such as population, land area and GDP for each country and also provides membership data of various organisations.

Part Two: Individual Countries

Part Two covers each of the countries individually in the following format:

- Key data
- Construction cost data
- Exchange rates and inflation and
- Useful addresses

Part Three: Comparative data

Part Three collects the data from Part Two and presents it on comparative bases allowing a view of each country in terms of its relationship with the others in the form of descriptive text and tables. The individual tables provides general data comparisons in accordance with the following:

- Key data
- Construction output
- Construction cost data

Conversion Factors

Conversion table

	Metric unit	Abbreviation	Imperial equivalent
Length	1 millimetre	1 mm	0.039 in
	1 metre	1 m	3.281 ft 1.094 yd
	1 kilometre	1 km	0.621 mile
Area	1 square millimetre	1 mm ²	0.001 55 in ²
	1 square metre	1 m ²	10.764 ft ² 1.196 yd ²
	1 hectare	1 ha	11.960 yd ² 2.471 acre
Volume	1 cubic metre	1 m ³	35.315 ft ³ 1.308 yd ³
	1 litre	1 l	1.760 pint
	0.220 5 litres	UK gal 5 l	1.100 UK gal
Weight	1 kilogram	1 kg	2.205 lb
	50 kilograms	50 kg	110.231 lb 0.984 cwt
	1 tonne	1 t	0.984 ton
	1 kilogram per metre	1 kg/m	0.672 lb/ft 2.016 lb/yd
	1 kilogram per square metre	1 kg/m ²	0.205 lb/ft ² 1.843 lb/yd ²
	1 kilogram per cubic metre	1 kg/m ³	0.062 lb/ft ³ 1.686 lb/yd ³
	Force	1 newton 1 kilonewton	1 N 1 kN
Pressure	1 newton per square millimetre	1 N/mm ²	145.038 lbf/in ² 0.145 lbf/in ²
	1 kilonewton per square metre	1 kN/m ²	20.885 lbf/ft ² 0.009 tonf/ft ²
Energy (work, heat)	1 kilojoule	1 kJ	0.948 Btu

Conversion factors**xi**

	Imperial unit	Abbreviation	Metric equivalent
Length	1 inch	1 in	25.400 mm
	1 foot	1 ft	304.800 mm
	1 yard	1 yd	0.914 m
	1 mile	1 mile	1.609 km
Area	1 square inch	1 in ²	645.160 mm ²
	1 square foot	1 ft ²	0.093 m ²
	1 square yard	1 yd ²	0.836 m ²
	1 acre	1 acre	4,046.856 m ² 0.405 ha
Volume	1 cubic inch	1 in ³	16,387.064 mm ³
	1 cubic foot	1 ft ³	0.028 m ³
	1 cubic yard	1 yd ³	0.765 m ³
	1 pint	1 pint	0.568 litre
	1 UK gallon	1 UK gal	4.546 litre
Weight	1 pound	1 lb	0.454 kg
	1 hundredweight	1 cwt	50.802 kg
	1 ton	1 ton	1.016 tonne
	1 pound per foot	1 lb/ft	1.488 kg/m
	1 pound per yard	1 lb/yd	0.496 kg/m
	1 pound per square foot	1 lb/ft ²	4.882 kg/m ²
	1 pound per square yard	1 lb/yd ²	0.542 kg/m ²
	1 pound per cubic foot	1 lb/ft ³	16.018 kg/m ³
1 pound per cubic yard	1 lb/yd ³	0.593 kg/m ³	
Force	1 pound force	1 lbf	4.448 N
	1 ton force	1 tonf	9.964 kN
Pressure	1 pound force per square inch	1 lbf/in ²	0.007 N/mm ² 6.895 kN/m ²
	1 pound force per square foot	1 lbf/ft ²	0.048 kN/m ²
	1 ton force per square foot	1 tonf/ft ²	107.252 kN/m ²
Energy (work, heat)	1 British thermal unit	1 Btu	1.055 kJ

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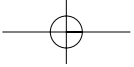
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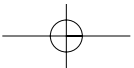
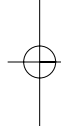
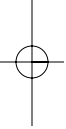
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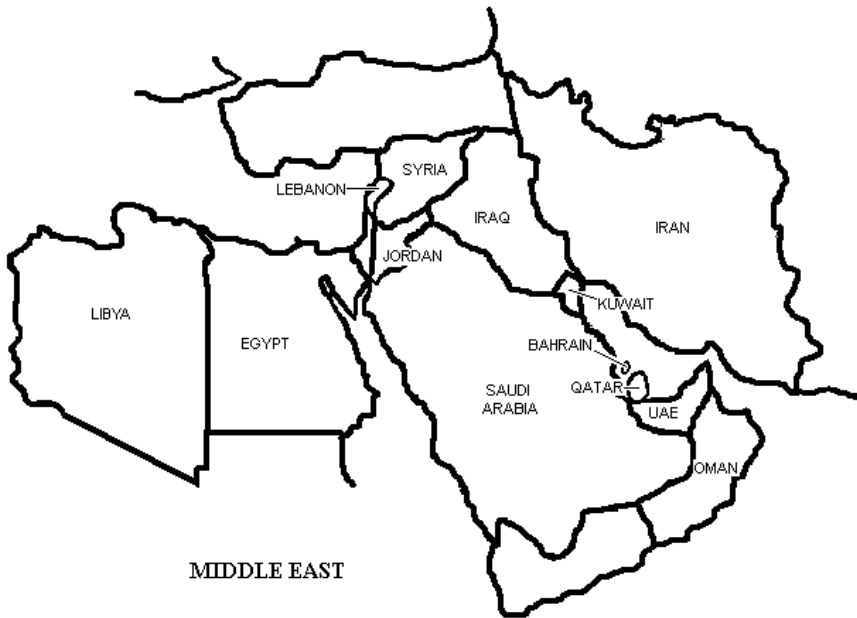
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SECTION ONE REGIONAL OVERVIEW





Spon's Middle East Cost Database

Introduction

This book contains construction related and general information for thirteen countries located in the Middle East region. The Middle East is known as the world's most economically, politically and culturally sensitive area. Today the region is characterised by strong political tensions such as the Palestine/Israel issue, rights to water resources and the Kurdistan issue. The publication also includes UK information for comparative purposes.

Included in this publication are some of the poorest countries in the world. It also includes some of the richest, for example, United Arab Emirates, a country with an economy that has been influenced to a great extent by a single commodity – oil. The publication also includes Saudi Arabia, the world's largest crude oil producer, and Qatar, a country that has the third largest gas reserves in the world.

The Middle East countries have passed through a couple of decades with relatively little economical progress with wealth being unevenly distributed between the countries. The Middle East possesses huge stocks of crude oil, which accounts for over 50% of the world oil reserves, and remains the centre of the global oil market.

The Middle East is rich in a diverse range of resources. Most of the individual countries rely heavily on the oil industry as their main contribution to GDP. The Middle East had enjoyed a period of strong growth with a GDP of 6.0 percent in 2003 underpinned by higher oil production and prices. With oil production now close to capacity and the pace of economic expansion beginning to taper off, the GDP growth of the region is projected to decline by 1 percentage point to about 5 percent in 2004.

The Arab League, the main political alliance, includes all the Arab states of the area as well as those in North Africa. Its members, however, have very little in common politically, ranging from conservative monarchies to republics. The Arab Common Market, established in 1964, provides for free trade and capital movements among member states.

The information provided for each of the selected countries is the latest data available and gives an accurate overview of the financial status in terms of

4

Regional Overview

both a global and construction related nature. Table 1.A lists the particular countries and highlights membership of various international groups such as the Organisation of the Petroleum Exporting Countries (OPEC) and the Organisation of the Islamic Conference (OIC).

Table 1.A: Membership of international organisations

Country	AL	Damasc	OIC	NAM	OPEC
Bahrain	x	x	x	x	
Egypt	x	x	x	x	
Iran			x	x	x
Iraq	x		x	x	x
Jordan	x		x	x	
Kuwait	x	x	x	x	x
Lebanon	x		x	x	
Libya	x		x	x	x
Oman	x	x	x	x	
Qatar	x	x	x	x	x
Saudi Arabia	x	x	x	x	x
Turkey			x		
UAE	x	x	x	x	x

Key: AL - Arab League
 Damasc - Damascus declaration
 OIC - Organisation of the Islamic Conference
 NAM - Non-Aligned Movement
 OPEC - Organisation of the Petroleum Exporting Countries

The next table, Table 1.B, highlights the key characteristics of each of the countries included in the volume. In terms of total population for each of the various countries, the range is from 680 thousand in Bahrain to approximately 76 million in Egypt. The smallest country in terms of physical area is Bahrain with Saudi Arabia being the largest with an overall area of over 1.9 million square kilometres.

The column displaying population per square kilometre identifies Oman having a density of approximately 14 inhabitants per square kilometre whereas, on the other hand, Bahrain has a population density of around 1000 people per square kilometre. The final columns in the table highlight the individual country's gross domestic product (GDP) and GDP per capita which gives an indication of the wealth of each country in terms of the respective individual standard of living.

Table 1.B: Key characteristics of countries

Country	Population mn	Land area km ²	Population per km ²	GDP	GDP
				US\$bn (PPP basis) 2003	per capita US\$ (PPP basis) 2003
Bahrain	0.7	665	1,020	11.3	16,900
Egypt	76.1	995,450	76	295.2	4,000
Iran	69.0	1,636,000	42	478.2	7,000
Iraq	27.1	432,162	63	37.9	1,500
Jordan	5.6	91,971	61	23.6	4,300
Kuwait	2.3	17,820	129	41.5	19,000
Lebanon	3.8	10,230	371	17.8	4,800
Libya	5.6	1,759,540	3	35.0	6,400
Oman	2.9	212,460	14	36.7	13,100
Qatar	0.8	11,437	73	17.5	21,500
Saudi Arabia	25.8	1,960,582	13	287.8	11,800
Syria	18.0	184,050	98	58.0	3,300
UAE	4.3	82,880	52	57.7	23,200

Source: Central Intelligence Agency World Factbook
PPP - Purchasing Power Parity

forecasting world markets

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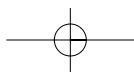
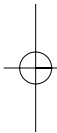
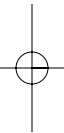
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SECTION TWO INDIVIDUAL COUNTRIES



Introductory notes to individual countries

Introduction

This section of the publication deals with the thirteen countries in country name alphabetical order and presents regional data under five main headings: Key data, Country profile, Construction cost data, Exchange rates and inflation, and Useful addresses. These notes introduce the five information sets for each country which provides for comparative analyses.

Key data

The Key Data information sheet at the beginning of each country section provides general statistics for population, geography, transportation, economy and construction. The data has been collated from various sources including the International Monetary Fund (IMF), World Bank and United Nations (UN) among others. In view of a lack of statistics in respect of the construction industry it has not been able to completely deliver a full overview of the situation.

Construction cost data

The information provided in this section presents typical construction cost data for a range of resources, unit rates and approximate estimating rates for various forms of construction. The approximate estimating section provides a representative overview of expected charges for a range of facility types. It is advised that extreme caution is used in the use of any construction cost data presented here. In view of differing construction requirements for individual country regions and the availability of resources comparison on a like for like basis may not be possible.

Labour, plant and material costs

A selection of resources covering labour, plant and materials is provided for each country location. These rates are considered to be typical for construction projects situated in and around capital locations where the supply of such resources would be readily available.

The labour rates are charge out costs per day for a selection of artisans and general labour. The cost to the employer including all mandatory taxes and obligations has been included. A reasonable uplift has also been added to cover travel time and fares, lodging and general subsistence, insurance liabilities, incentive payments and employment taxes. Taxes, other than those specific to employment requirements, have not been included, expressly any value added taxes which may be country specific.

Unit rates

The unit rates provided in this section are a practical assessment of the costs of common construction activities for a reasonably large building project in and around a populous region, generally within the boundaries of a major or capital city location.

The rates will generally include all necessary labour, plant and material resources at charge out costs, including a sensible and competitive profit element. Preliminary and general items such as site set-up, access equipment and the like have not been included and would need to be assessed on a project specific basis.

The rates are presented in local currency as well as equivalents in UK £ Sterling, US Dollar and the Euro. All rates are based at third quarter 2004 levels.

Approximate estimating

Facility construction costs on a unit area basis are indicated in this section of the publication and are typical for the type of facility indicated. The method of measurement used relates to Gross Floor Area (GFA) and are for internal areas of the facility type measured inside external walls but excluding the area

taken up by all internal partitions, columns, projections and such like. As with all costs and financial construction data in this publication value added or similar tax obligations have been excluded.

The approximate estimating rates are only intended to provide information for similar facility types and are not intended to reflect exact construction specifications but to relate to the provision of a like facility entity. Differing construction detailing throughout the various countries are to be expected for similar function categories although the end use will be the same. Each country will optimise the use of local labour, plant and materials as available in order to restrict imported goods and services.

Exchange Rates and Inflation Values

Exchange rates

The exchange rates between the various currencies will reflect relative values of construction costs but should not be considered as an accurate guide to comparative rates between the individual countries. Exchange rates for the individual countries can fluctuate considerably and no one country has a stable currency for any real length of time. Exchange rate fluctuations are extremely complex and are no ready guide to real situations. Politics and government involvement and intervention can distort the true value of any country's financial state. Any direct comparisons between individual countries cannot be considered a fair reflection of comparative costs.

Exchange rate values for the past five or six years are provided in the form of a graph with values against three other currencies; UK £ Sterling, US Dollar and, since its introduction, the Euro. Some currencies are pegged at US Dollar values and would take the form of a straight line when displayed on a comparative graph. Indicating no movement at all between the two currencies. The vertical scale, or y-axis, on the graph has been adjusted in order to accommodate the magnitude of the local currency for that graphic display.

Inflation values

The inflation values indicate the Consumer Price Index, or CPI, value for each country over a period of five or six years. These rates reflect price changes in a selection, or basket, of common goods available for the domestic market and have been selected to reflect the cost variations of basic goods and services to suit a typical family. Any variations over a period are an indication of how prices change and affect the cost of living. A rise in inflation effectively reduces the purchasing power of the local currency within its own domestic market and results in increased basic living costs.

The graphs display the movement in a country's individual and local inflation circumstance and are provided here to give some insight into the country's own domestic situation. Living cost adjustments are not an effective form of comparison to a country's industrial market. Political and governmental intervention which may be determined in order to raise domestic taxes may not affect the cost of industrial consumer goods.

Useful Addresses

At the end of each country section there is a list of addresses and contact numbers for a selection of various governmental, professional and other miscellaneous bodies which may prove useful.

Bahrain

ECONOMIC INDICATORS AND KEY DATA

Population

Population	677,886
Urban Population (2003)	90%
Population under 15	28%
Population 65 and over	3%
Population growth rate	1.6%

Geography

Land area	665 sq km
Agricultural area	8.5%
Capital city	Manama
Population of capital city (2003)	203,000

Transportation

Railways	0 km
Highways:	
paved	2,531 km
unpaved	730 km
Waterways	n.a.
Pipelines:	
crude oil	53 km
petroleum products	16 km
natural gas	20 km
Ports and Harbours	3
Merchant Marine	6 ships
International Airport	Bahrain International, Muharraq

Economy

Monetary unit	Bahraini Dinar
Exchange rate	
£ Stg	0.684
US \$	0.377
Euro	0.472
Yen (×100)	0.347
Average annual inflation (1998 to 2003)	-1.1%
Inflation rate (2004 est.)	1.0%
Gross Domestic Product (GDP) at market prices (2003)	BD3.6 billion
GDP PPP basis (2003)	US\$11.3 billion
GDP per capita (2000)	US\$9,684
GDP per capita PPP basis (2003)	US\$16,900
Average annual real change in GDP (1998 to 2003)	4.8%
Private consumption as a proportion of GDP	47.9%
General government consumption as a proportion of GDP	19.7%
Gross domestic investment as a proportion of GDP (2003)	12.0%

Construction

Gross value of construction output	BD139.05 million
Net value of construction output as a proportion of GDP	3.85%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
United Nations World Statistics Pocketbook
The World Bank
Ministry of Finance & National Economy for Bahrain

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Bahrain lies in the Arabian Gulf and comprises 36 islands, close to the eastern coast of Saudi Arabia and the western coast of Qatar. The largest island is Bahrain from which the country takes its name, accounting for nearly 85% of the total area of the State. The southern archipelago, called Hawar, is the second largest element, near the coast of Qatar, followed by the desert island of Umm Nassan, the populous Muharraq Island and the industrial island of Sitra, connected by causeways to Bahrain. The 25-km King Fahd Causeway linking the island of Bahrain to Saudi Arabia has boosted Bahrain's economy.

The climate throughout the islands is exceptionally hot and humid in summer but mild and pleasant in winter with temperatures ranging from 10°C to 20°C in winter and 36°C to 42°C in summer. Bahrain is low lying and typically the limestone bedrock slopes very gently towards the roughly central peak of Jebel Dukhan. Cultivated areas are situated in the north and sandy wastes spread over the south.

The Kingdom of Bahrain is a constitutional monarchy with its king as the Head of State. The monarchy appoints the Prime Minister and the Cabinet. In 2002 Bahrain established the new parliament that consists of a lower elected chamber of 40 members, and an appointed upper chamber, or Shura (Consultative) chamber, also of 40 members. The legal system is based on Islamic law and English common law.

Islam is the principal religion and 85% of the population are Muslims with a relatively small group of Christians, Jews, Bahais, and Hindus. The official language is Arabic. English and Farsi are also commonly used in the business community.

The size of the Bahraini construction industry is comparatively small with a total output of BD466 million (2003 est.), sharing only 4% of its Gross Domestic Product.

Construction cost data

Labour resources

The figures below are typical labour costs in an urban environment within Bahrain and are taken at the third quarter 2004. The labour resources are a combination of the employee's basic pay and the financial cost to the employer of that labour. The cost of labour is based on the employee's basic pay and includes those allowances for employee's expenses, holidays, insurance, and other mandatory and voluntary contributions.

The Labour Law for the Private Sector 1976 governs Labour in Bahrain. The law states that the basic maximum number of hours for each worker shall not exceed eight hours a day or forty-eight hours a week. Working hours during the month of Ramadan shall not exceed six hours a day or thirty-six hours a week.

Overtime can be granted in certain situations at an additional minimum compensation of twenty-five per cent of the basic wage during the day and a minimum of fifty per cent during the night.

Friday is the paid day of rest by default but employers can arrange another more suitable day if necessary. One day of rest per week is compulsory and in the circumstances where work requires, compensation will be granted at an additional fifty per cent of the basic wage. No worker shall be employed on his weekly day of rest more than twice consecutively.

The basic and additional hours of work should not exceed sixty hours per week unless the Ministry of Labour deems the work critical.

Construction cost data

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Paid annual leave ranges from twenty-one to twenty-eight eight days depending on the length of service with the employer. In addition, official paid public holidays are listed below:

First day of Al-Hijra Calendar year

1st Muharram

El-Adha Feast

10th, 11th and 12th Dhal-Haj

El-Fitr Feast

1st, 2nd and 3rd Shawal

The prophet's birthday

12th Rabie Al-Awal

National Day

16th December

Ashoora

9th and 10th Muharram

First day of Gregorian Year

1st January

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>BHD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	8.48	12.15	22.50	17.35
Groundworks Labourer	10.80	15.47	28.65	22.10
Bricklayer	21.94	31.43	58.20	44.89
Shuttering Carpenter	14.46	20.72	38.36	29.59
Carpenter	21.94	31.43	58.20	44.89
Steel Fixer	14.46	20.72	38.36	29.59
Metalworker Craftsman	21.94	31.43	58.20	44.89
Roof Tiler	21.94	31.43	58.20	44.89
Sheet Metal Roofer	21.94	31.43	58.20	44.89
Glazier	18.12	25.96	48.06	37.07
Plasterer	21.94	31.43	58.20	44.89
Plasterers Labourer	10.80	15.47	28.65	22.10
Suspended Ceiling Installer	21.94	31.43	58.20	44.89
Painter	18.12	25.96	48.06	37.07
Floor/Wall Tiler	21.94	31.43	58.20	44.89
Plumber	27.36	39.19	72.57	55.97
Electrician	27.36	39.19	72.57	55.97

Plant resources

The figures below indicate the hire costs of construction plant, delivered to site in an urban area of Bahrain and are current at the third quarter 2004. The rates do not include for any fuel or maintenance and also exclude operator costs and charges.

Plant costs

<i>Plant resources</i>	<i>Unit</i>	<i>Rate</i>			
		<i>BHD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
General labourer	m ³	19,533	19.10	31.29	29.74
Hymac 580 (360 deg tracked excavator)	Hour	14.15	20.27	37.53	28.94
JCB 3C (180 deg wheeled excavator)	Hour	10.74	15.39	28.50	21.98
Vibrating Roller 6–8 Tonne	Hour	3.61	5.16	9.56	7.38
Dumper 4WD Hydraulic Tip 1270	Hour	5.75	8.24	15.25	11.76
Poker Vibrator 48 mm	Day	4.63	6.64	12.29	9.48
Beam Vibrator 6.2 m	Day	7.01	10.04	18.59	14.33
Reinforcement bending machine	Hour	0.72	1.03	1.91	1.48
25 Tonne Mobile Crane	Hour	14.15	20.27	37.53	28.94
13 Tonne Mobile Crane	Hour	10.69	15.31	28.36	21.87
10 Tonne Mobile Crane	Hour	8.68	12.43	23.02	17.76
Wacker Plate	Hour	0.46	0.65	1.21	0.93
2.5 Tonne Block and Tackle	Hour	0.72	1.03	1.91	1.47
Craneage/lifting equipment	Hour	14.52	20.80	38.51	29.70

Construction cost data

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Material resources

The figures below indicate the costs of main construction materials, delivered to site in an urban area of Bahrain, and are taken at the third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading as necessary.

Material costs					
<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>BHD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	5.77	8.27	15.31	11.81
Clean brick rubble hardcore	m ³	5.35	7.66	14.19	10.94
As-raised hoggin	m ³	6.05	8.66	16.04	12.37
Washed sand	m ³	5.77	8.27	15.31	11.81
Drainage					
100 mm clay drain pipes	m	2.98	4.27	7.91	6.10
150 mm clay drain pipes	m	6.27	8.98	16.64	12.83
225 mm clay drain pipes	m	20.69	29.64	54.88	42.33
150 mm concrete pipe class L	m	3.40	4.87	9.01	6.95
300 mm concrete pipe class L	m	7.31	10.47	19.39	14.95
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	24.17	34.62	64.11	49.45
Readymix concrete 30 N/mm ²	m ³	25.48	36.50	67.59	52.13
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	319.13	457.14	846.49	652.88
Mild steel bars BS4449 10 mm	Tonne	319.13	457.14	846.49	652.88
Mild steel bars BS4449 16 mm	Tonne	319.13	457.14	846.49	652.88
Mild steel bars BS4449 25 mm	Tonne	319.13	457.14	846.49	652.88
Mild steel bars BS4449 40 mm	Tonne	319.13	457.14	846.49	652.88
High yield bars BS4449 8 mm	Tonne	354.24	507.43	939.62	724.71
High yield bars BS4449 10 mm	Tonne	354.24	507.43	939.62	724.71
High yield bars BS4449 16 mm	Tonne	354.24	507.43	939.62	724.71
High yield bars BS4449 25 mm	Tonne	354.24	507.43	939.62	724.71
High yield bars BS4449 40 mm	Tonne	354.24	507.43	939.62	724.71
Tying wire mild steel	Tonne	349.20	500.22	926.26	714.41
Reinforcement spacer blocks	100	3.01	4.31	7.98	6.15

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>BHD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	182.12	260.88	483.08	372.58
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	1.41	2.03	3.75	2.89
150 mm concrete blocks 3.5N (solid)	m ²	1.77	2.53	4.69	3.62
200 mm concrete blocks 3.5N (solid)	m ²	2.34	3.35	6.21	4.79
100 mm concrete blocks 3.5N (hollow)	m ²	1.56	2.23	4.13	3.18
150 mm concrete blocks 3.5N (hollow)	m ²	1.68	2.41	4.47	3.44
200 mm concrete blocks 3.5N (hollow)	m ²	2.12	3.03	5.62	4.33
Cement and Sand					
Portland Cement in bags	Tonne	38.91	55.74	103.21	79.60
Soft sand for mortar	Tonne	5.70	8.17	15.12	11.66
Cement mortar (1:3)	m ³	45.53	65.22	120.77	93.15
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	746.96	1,069.99	1,981.33	1,528.15
UB BS4360 610 × 305 mm × 238kg	Tonne	746.96	1,069.99	1,981.33	1,528.15
UB BS4360 457 × 191 mm × 98kg	Tonne	716.74	1,026.69	1,901.15	1,466.32
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	695.44	996.19	1,844.67	1,422.75
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	695.44	996.19	1,844.67	1,422.75
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	766.87	1,098.51	2,034.14	1,568.88
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	746.96	1,069.99	1,981.33	1,528.15
RHS BS4360 450 × 250 mm × 167kg	Tonne	773.67	1,108.26	2,052.19	1,582.80
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	746.96	1,069.99	1,981.33	1,528.15

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>BHD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	0.85	1.22	2.26	1.75
50 × 100 mm sawn softwood	m	1.44	2.07	3.83	2.95
38 × 25 mm tanalised batten	m	0.33	0.47	0.87	0.67
Boarding to Flooring					
12 mm WBP ply	m ²	6.22	8.91	16.50	12.72
18 mm WBP ply	m ²	9.68	13.87	25.69	19.81
25 mm WBP ply	m ²	14.01	20.08	37.17	28.67
Nails					
Galvanised nails 75 mm	kg	3.24	4.64	8.58	6.62
Alloy nails 65 mm × 10g	kg	4.14	5.93	10.99	8.47
50 mm Oval wire nails	kg	2.35	3.36	6.22	4.80
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	28.61	40.98	75.88	58.53
Sheet zinc BS849 0.60 mm	m ²	23.33	33.41	61.87	47.72
Sheet copper BS2870 0.45 mm	m ²	37.75	54.08	100.14	77.24
Felts					
Underslating felt Type 1F	m ²	0.53	0.76	1.41	1.09
Clay roofing products					
265 × 165 mm plain tile, red	1000	343.23	491.66	910.41	702.18
380 × 260 mm pantile, red	1000	606.89	869.35	1,609.79	1,241.59
Damp-proof membranes					
1000g polythene d.p.m.	m ²	0.51	0.74	1.36	1.05
Insulation					
100 mm thick fibreglass quilt	m ²	2.99	4.29	7.94	6.12
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	19.91	28.52	52.81	40.73
Corrugated galv sheet 1830 mm	Nr	14.28	20.46	37.89	29.22

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>BHD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	128.15	183.57	339.92	262.18
UPVC s/casement 1000 × 900 glazed	Nr	149.02	213.47	395.29	304.88
UPVC s/casement 1000 × 1200 glazed	Nr	179.41	257.00	475.90	367.05
Glass and glazing					
4 mm clear sheet glass	m ²	31.56	45.21	83.72	64.57
6 mm Georgian wired polished plate	m ²	85.31	122.20	226.28	174.52
5 mm toughened safety glass	m ²	75.42	108.03	200.05	154.29
5.4 mm laminated safety glass	m ²	74.69	106.99	198.11	152.80
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	1.57	2.25	4.17	3.22
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	15.41	22.07	40.86	31.52
9mm × 150 × 150 mm ceramic floor tile	m ²	13.47	19.29	35.72	27.55
Decorations					
Paints and Sundries					
Emulsion paint matt white	5Litre	8.09	11.59	21.46	16.55
Masonry textured paint white	5Litre	14.66	21.00	38.89	30.00
Oil/Alkyd paint undercoat	5Litre	14.04	20.11	37.24	28.72
Oil/Alkyd paint gloss white	5Litre	14.04	20.11	37.24	28.72

Construction cost data**23****Unit rates**

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			BHD	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	0.90	1.29	2.39	1.85
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	4.31	6.18	11.44	8.82
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	2.56	3.66	6.78	5.23
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	12.13	17.38	32.18	24.82
0.05	hardcore	m ³	13.82	19.80	36.66	28.28

Ref. No.	Description	Unit	Price			
			BHD	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	4.12	5.90	10.93	8.43
0.07	150 mm dia.	m	8.32	11.92	22.06	17.02
0.08	225 mm dia.	m	26.60	38.10	70.56	54.42
Concrete:						
0.09	150 mm dia.	m	5.28	7.56	14.00	10.80
0.10	300 mm dia.	m	16.80	24.06	44.55	34.36
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	32.87	47.09	87.20	67.25
1.02	over 300 mm thick	m ³	31.35	44.91	83.16	64.14
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	34.03	48.75	90.27	69.63
1.04	0.05–0.20 m ²	m ³	33.63	48.17	89.19	68.79
1.05	over 0.20 m ²	m ³	32.03	45.89	84.97	65.53
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	35.60	50.99	94.43	72.83
1.07	150–300 mm thick	m ³	35.32	50.60	93.70	72.27
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	41.67	59.69	110.52	85.24
1.09	0.05–0.10 m ²	m ³	39.50	56.58	104.77	80.80
1.10	over 0.10 m ²	m ³	38.08	54.54	101.00	77.90

Ref. No.	Description	Unit	Price			
			BHD	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	524.35	751.12	1,390.86	1,072.74
1.12	10 mm	Tonne	497.03	711.97	1,318.38	1,016.83
1.13	16 mm	Tonne	464.85	665.88	1,233.03	951.01
1.14	25 mm	Tonne	444.25	636.38	1,178.39	908.87
1.15	40 mm	Tonne	426.91	611.53	1,132.38	873.38
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	566.49	811.47	1,502.62	1,158.93
1.17	10 mm	Tonne	539.16	772.32	1,430.13	1,103.03
1.18	16 mm	Tonne	506.99	726.24	1,344.79	1,037.21
1.19	25 mm	Tonne	486.39	696.73	1,290.15	995.06
1.20	40 mm	Tonne	469.04	671.88	1,244.14	959.57
2 Masonry						
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	4.56	6.53	12.09	9.33
2.02	150 mm solid blocks	m ²	5.23	7.49	13.86	10.69
2.03	200 mm solid blocks	m ²	6.26	8.97	16.60	12.81

Ref. No.	Description	Unit	Price			
			BHD	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	992.34	1,421.49	2,632.21	2,030.16
3.02	610 × 305 mm × 238 kg/m	Tonne	1,015.76	1,455.04	2,694.33	2,078.07
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	1,005.60	1,440.48	2,667.38	2,057.29
3.04	254 × 76 mm × 28.89 kg/m	Tonne	1,012.48	1,450.33	2,685.62	2,071.35
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	1.53	2.19	4.06	3.13
4.02	50 × 100 mm	m	2.31	3.31	6.14	4.73
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	9.18	13.15	24.35	18.78
4.04	18 mm thick	m ²	14.01	20.07	37.16	28.66
4.05	25 mm thick	m ²	20.02	28.68	53.10	40.96
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	36.05	51.64	95.62	73.75
5.02	380 × 260 mm clay pantile, red	m ²	17.54	25.13	46.53	35.89

Ref. No.	Description	Unit	Price			
			BHD	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	2.72	3.90	7.22	5.57
6.02	38 mm thick	m ²	3.43	4.92	9.10	7.02
6.03	65 mm thick	m ²	5.37	7.69	14.24	10.98
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	23.41	33.53	62.09	47.89
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	1.08	1.55	2.87	2.21
6.06	rendered backgrounds	m ²	1.26	1.80	3.33	2.57
6.07	concrete backgrounds	m ²	1.10	1.58	2.93	2.26
6.08	blockwork backgrounds	m ²	1.66	2.37	4.39	3.39
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	1.15	1.64	3.04	2.35
6.10	rendered backgrounds	m ²	1.37	1.96	3.62	2.79
6.11	concrete backgrounds	m ²	1.23	1.77	3.28	2.53
6.12	textured plastic coating backgrounds	m ²	1.32	1.89	3.51	2.70

Ref. No.	Description	Unit	Price			
			BHD	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	1,382.04	1,979.72	3,665.89	2,827.41
7.02	5.0 kw cooling unit	Nr	1,564.61	2,241.24	4,150.15	3,200.91
7.03	7.5 kw cooling unit	Nr	2,699.99	3,867.62	7,161.77	5,523.71
7.04	10.0 kw cooling unit	Nr	3,163.48	4,531.56	8,391.20	6,471.94
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	766.41	1,097.85	2,032.91	1,567.94
7.06	1000 gallon	Nr	1,569.17	2,247.77	4,162.25	3,210.24
7.07	2000 gallon	Nr	2,387.32	3,419.74	6,332.42	4,884.05
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	23.53	33.71	62.42	48.15
7.09	182 litre	Nr	42.63	61.07	113.08	87.21
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	195.38	279.88	518.26	399.72
	Basins:					
7.11	vitreous china	Nr	99.86	143.04	264.87	204.29
	Sinks:					
7.12	stainless steel	Nr	125.82	180.23	333.74	257.41
	WC suites:					
7.13	low level washdown	Nr	189.36	271.25	502.28	387.40
7.14	low level syphonic	Nr	365.11	523.00	968.46	746.95
	Bidets:					
7.15	vitreous china	Nr	189.36	271.25	502.28	387.40

Ref. No.	Description	Unit	Price			
			BHD	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	4.20	6.02	11.15	8.60
	Standard cable trays; 1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	7.34	10.51	19.47	15.02
8.03	100 mm	m	8.85	12.67	23.46	18.10
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	7.49	10.72	19.85	15.31
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	22.28	31.91	59.09	45.58
8.06	12-way	Nr	40.10	57.44	106.36	82.04

Ref. No.	Description	Unit	Price			
			BHD	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	2.82	4.04	7.48	5.77
8.08	2 gang, 2 way	Nr	4.99	7.15	13.25	10.22
8.09	3 gang, 2 way	Nr	6.79	9.72	18.00	13.88
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	3.64	5.21	9.65	7.44
8.11	2 gang	Nr	10.37	14.86	27.52	21.22
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	5.74	8.22	15.22	11.74
8.13	1 gang, with neon indicator	Nr	6.68	9.57	17.73	13.67
8.14	1 gang, with neon indicator, metalplate	Nr	9.45	13.53	25.06	19.33

Construction cost data

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Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>BHD/ft²</i>	<i>BHD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	16	176	252	467	360
Petrol Stations	95	1,022	1,464	2,710	2,090
Airport Terminal Buildings	93	997	1,429	2,645	2,040
Sorting Offices	44	470	673	1,247	962
Refuse Depots	26	283	406	751	580
Stables and the like	43	462	661	1,224	944
Factories	29	316	453	838	647
Advanced Factories	26	280	401	742	572
Purpose Built Workshops	36	392	562	1,040	802
Warehouses	27	293	420	778	600
Town Halls	65	698	1,000	1,851	1,428
Law Courts	80	856	1,226	2,271	1,752
Offices	62	672	963	1,783	1,375
Banks/Building Societies	79	846	1,211	2,243	1,730
Retail Warehouses	27	287	411	761	587

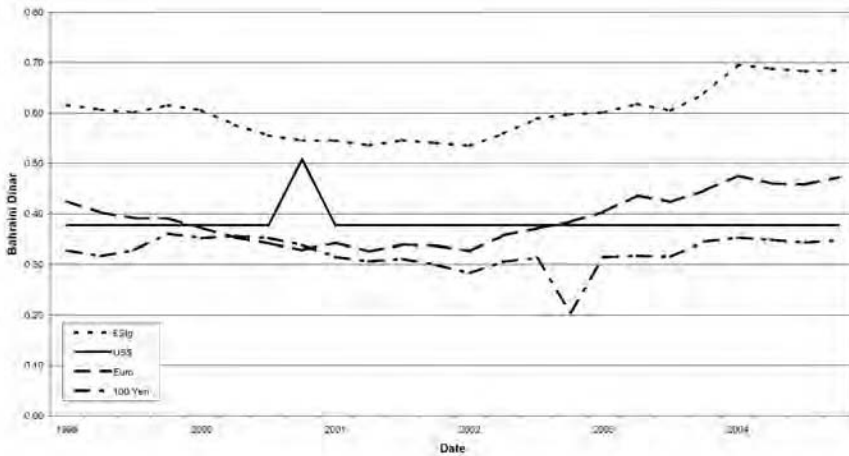
<i>Facility type</i>	<i>BHD/ft²</i>	<i>BHD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	40	432	619	1,146	884
Department Stores	50	542	776	1,437	1,109
Hypermarkets / Supermarkets	49	527	755	1,398	1,078
Shops	38	413	591	1,094	844
Stadia	57	615	880	1,630	1,257
Pavilions and Sports Club Houses	56	601	861	1,595	1,230
Religious Buildings	65	700	1,002	1,856	1,431
Schools	56	604	865	1,601	1,235
Sixth Form Colleges	54	584	836	1,548	1,194
Universities	68	733	1,050	1,943	1,499
Colleges	54	585	838	1,551	1,197
Research Facilities	77	826	1,183	2,190	1,689
Laboratories	79	849	1,217	2,253	1,737
Exhibition Buildings	84	903	1,293	2,394	1,846
Public Libraries	62	667	955	1,768	1,364
Flats	42	451	647	1,197	923
Housing Detached	60	651	933	1,727	1,332
Hotels	59	630	903	1,672	1,289
Halls of Residence	62	667	955	1,768	1,364
Fire Stations	73	790	1,131	2,094	1,615
Police Stations	75	803	1,150	2,130	1,643
Closed Prisons	82	885	1,267	2,347	1,810
Hospitals	80	866	1,241	2,298	1,773
Intensive Care / Acute Wards	78	843	1,207	2,236	1,724
Health Centres	52	559	800	1,482	1,143
Nursing Homes	58	621	889	1,646	1,270
Homes for the Elderly	52	560	803	1,487	1,147
Day Centres	63	681	975	1,806	1,393
Veterinary Hospitals	68	735	1,052	1,949	1,503
Restaurants	77	827	1,184	2,193	1,692
Theatres	57	616	883	1,634	1,261
Cinemas	66	714	1,022	1,893	1,460
Clubs	50	541	775	1,435	1,107
Covered Swimming Pools	97	1,039	1,488	2,756	2,126
Sports Centres exc. Pools	50	542	776	1,438	1,109
Sports Centres inc. Pools	75	811	1,162	2,151	1,659
Sports Halls	46	491	703	1,301	1,004
Gymnasia	71	766	1,097	2,031	1,567

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Bahraini Dinar, against four other international currencies; £ Stg, US \$, Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Bahraini Dinar with each of them and the relative value to each other.

Exchange Rates



Consumer price inflation

The following table presents indices for consumer prices since 1990. Bahrain has experienced a relatively low level of CPI inflation over the last decade and has also seen negative inflation. The average inflation figure from 1990 to 2004 is 0.5%. In 2003, however, the annual rate of inflation has increased over the average to 1.6%. The prediction for the current year appears to indicate a return to normal inflationary levels with an anticipated average figure for 2004 of 1.0% from figures provided by the Bahraini authorities.

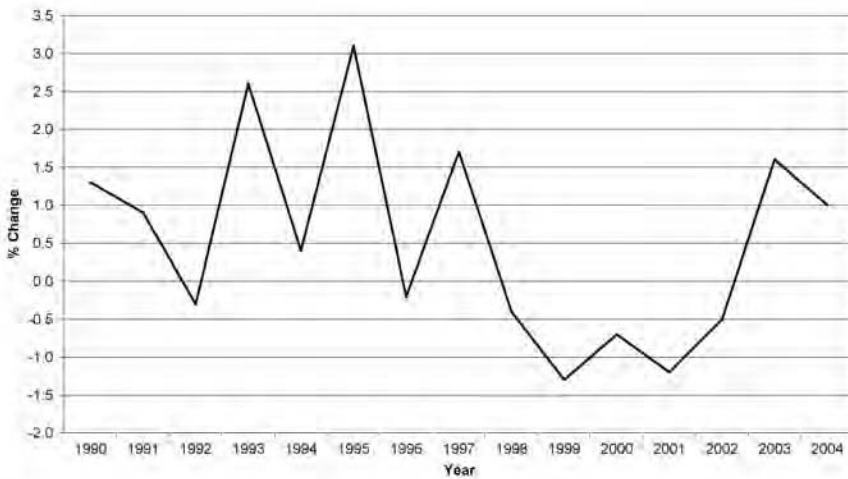
The graph, which follows the table below, plots the annual percentage change in consumer price inflation since 1990.

Consumer Prices

Year	annual average	change %
1990	95.9	1.3
1991	96.8	0.9
1992	96.5	-0.3
1993	99.0	2.6
1994	99.4	0.4
1995	102.5	3.1
1996	102.3	-0.2
1997	104.6	1.7
1998	104.2	-0.4
1999	102.8	-1.3
2000	102.1	-0.7
2001	100.9	-1.2
2002	100.4	-0.5
2003	102.0	1.6
2004	103.0	1.0

Source: *Ministry of Finance & National Economy For Bahrain*
International Monetary Fund

Consumer Price Inflation for Years 1990 through 2004



Useful addresses

Public organisations

Ministry of Industry
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FRANKLIN ANDREWS
CONSTRUCTION ECONOMISTS

Egypt

ECONOMIC INDICATORS AND KEY DATA

Population

Population	76.1 million
Urban Population (2003)	42%
Population under 15	33%
Population 65 and over	4%
Population growth rate	1.83%

Geography

Land area	995,450 sq km
Agricultural area	3.4%
Capital city	Cairo
Population of capital city (1Q2004)	7.6 million

Transportation

Railways	5,063 km
Highways:	
paved	49,984 km
unpaved	14,016 km
Waterways	3,500 km
Pipelines (2003):	
crude oil	5,726 km
condensate	327 km
condensate/gas	94 km
liquid petroleum gas	382 km
oil/gas/water	36 km
water	62 km
Ports and Harbours	9
Merchant Marine	159 ships
International Airport	Cairo

Economy

Monetary unit	Egyptian Pound
Exchange rate	
£ Stg	11.329
US \$	6.240
Euro	7.819
Yen (×100)	5.746
Average annual inflation (1998 to 2003)	3.2%
Inflation rate	5.2%
Gross Domestic Product (GDP) at market prices (2003)	££365.8 billion
GDP PPP basis (2003)	US\$295.2 billion
GDP per capita	££4,807
GDP per capita PPP basis (2003)	US\$4,000
Average annual real change in GDP (1998 to 2003)	4.3%
Private consumption as a proportion of GDP (2003)	73.0%
General government consumption as a proportion of GDP (2003)	12.5%
Gross domestic investment as a proportion of GDP (2003)	16.7%

Construction

Gross value of construction output	££15.8 billion
Net value of construction output as a proportion of GDP	4.3%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
Central Bank of Egypt

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Egypt is situated in the northeast corner of Africa. It is bordered by Libya on the west, the Mediterranean Sea on the north, Sudan on the south and Israel with the Red Sea on the east. The Nile river divides the country into four broad regions; the Western Desert, the Eastern Desert, the Sinai Peninsula and the Nile Valley and Delta, which is the most densely populated region of the country. Cairo, the capital and largest city, lies on the Nile in the highly fertile Nile valley and is linked to the other cities by an adequate road and rail system. Outside the Nile valley region, to the east and west, the terrain is desert of arid and semi-arid conditions.

Egypt lies in a sub-tropical region with a dry climate, warm summers and mild winters. 96% of Egypt land areas are desert. Daytime and night time temperatures vary substantially from 19°C to 8°C on average in the winter months and from 33°C to 20°C in the summer months. The Khamsin, a type of warm and dry sandstorm, occurs mainly in April and May.

Egypt is an Arab Republic with a democratic system and the executive power rests with the President, who can appoint and dismiss the Prime Minister and Cabinet. The People's Assembly, the legislative body, consists of 454 members, of which 444 members are elected by universal suffrage and the remaining 10 are appointed by the President. The Shura Council is Egypt's consultative council that offers advice and consultation, and proposes new laws and regulations to the People's Assembly. The political system is based on a multi-party system with the National Democratic Party currently holding the majority of seats in the People's Assembly.

The principal religion is Islam and 90% of the population are Muslims with 9% of Coptic Christians and the rest Greek Orthodox, Roman Catholic and Anglican. Arabic is the official language but English and French are widely used in business.

The Egyptian construction industry shares 10–15% of its Gross Domestic Product. Egypt is currently involved in a huge infrastructure project over the next 20 years intended to create a new river delta parallel to the Nile Valley which will open up tracts of land for agriculture, industry and settlement. The core of the project is a 310km long canal taking Nile water from Lake Nasser to the Western Desert.

Construction cost data

Labour resources

The figures below are typical labour costs within a larger urban area in Egypt and are taken at the third quarter 2004. The labour resources are a combination of the employee's basic and the financial cost to the employer of that labour. The cost of labour is based on the employee's basic pay and includes those allowances for employer and employee expenses, holidays, insurance, and other mandatory and voluntary contributions.

Law number 12, that enacts the Labour Code, governs labour in Egypt. The law states the basic maximum number of hours for each worker shall not exceed eight hours a day or forty-eight hours a week.

Typical working hours are 08:00–15:00 Saturday to Thursday.

Friday is the paid day of rest by default but employers can arrange another suitable day if necessary. One day of rest per week is compulsory and in the circumstances where work requires, compensation will be granted at an additional twenty-five to fifty per cent of the basic wage.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>EGP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	127.35	10.98	20.33	15.68
Groundworks Labourer	162.13	13.98	25.88	19.96
Bricklayer	335.88	28.95	53.61	41.35
Shuttering Carpenter	217.75	18.77	34.75	26.81
Carpenter	335.88	28.95	53.61	41.35
Steel Fixer	217.75	18.77	34.75	26.81
Metalworker Craftsman	335.88	28.95	53.61	41.35
Roof Tiler	335.88	28.95	53.61	41.35
Sheet Metal Roofer	335.88	28.95	53.61	41.35
Glazier	274.82	23.69	43.86	33.83
Plasterer	335.88	28.95	53.61	41.35
Plasterers Labourer	162.13	13.98	25.88	19.96
Suspended Ceiling Installer	340.16	29.32	54.29	41.88
Painter	276.82	23.86	44.18	34.08
Floor/Wall Tiler	335.88	28.95	53.61	41.35
Plumber	375.93	32.40	60.00	46.28
Electrician	375.93	32.40	60.00	46.28

Construction cost data

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Plant resources

The figures below indicate the hire costs of construction plant, delivered to site in an urban location in Egypt and are current at the third quarter 2004. The rates do not include for any fuel or maintenance expenses and exclude operator costs and charges.

		Plant costs			
Plant resources	Unit	Employer's cost of labour (per day)			
		EGP	£ Stg	US \$	Euro
Hymac 580 (360 deg tracked excavator)	Hour	216.47	18.66	34.55	26.65
JCB 3C (180 deg wheeled excavator)	Hour	165.73	14.29	26.45	20.40
Vibrating Roller 6 - 8 Tonne	Hour	54.47	4.70	8.69	6.71
Dumper 4WD Hydraulic Tip 1270	Hour	88.69	7.64	14.15	10.92
Poker Vibrator 48 mm	Day	70.81	6.10	11.30	8.72
Beam Vibrator 6.2 m	Day	108.11	9.32	17.26	13.31
Reinforcement bending machine	Hour	11.34	0.98	1.81	1.40
25 Tonne Mobile Crane	Hour	220.41	19.00	35.18	27.13
13 Tonne Mobile Crane	Hour	163.81	14.12	26.14	20.17
10 Tonne Mobile Crane	Hour	132.85	11.45	21.20	16.35
Wacker Plate	Hour	7.09	0.61	1.13	0.87
2.5 Tonne Block and Tackle	Hour	11.00	0.95	1.76	1.35
Craneage / lifting equipment	Hour	222.22	19.15	35.47	27.36

Material resources

The figures below indicate the costs of main construction materials, delivered to site in an urban location in Egypt, and are taken at the third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading as necessary.

Material costs

Material resources	Unit	Price			
		EGP	£ Stg	US \$	Euro
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	89.02	7.67	14.21	10.96
Clean brick rubble hardcore	m ³	82.71	7.13	13.20	10.18
As-raised hoggin	m ³	91.81	7.91	14.65	11.30
Washed sand	m ³	89.02	7.67	14.21	10.96
Drainage					
100 mm clay drain pipes	m	45.66	3.94	7.29	5.62
150 mm clay drain pipes	m	96.76	8.34	15.44	11.91
225 mm clay drain pipes	m	313.02	26.98	49.96	38.53
150 mm concrete pipe class L	m	53.84	4.64	8.59	6.63
300 mm concrete pipe class L	m	116.45	10.04	18.59	14.34
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	367.65	31.69	58.68	45.26
Readymix concrete 30 N/mm ²	m ³	393.11	33.89	62.74	48.39
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	4,851.58	418.20	774.33	597.25
Mild steel bars BS4449 10 mm	Tonne	4,851.58	418.20	774.33	597.25
Mild steel bars BS4449 16 mm	Tonne	4,851.58	418.20	774.33	597.25
Mild steel bars BS4449 25 mm	Tonne	4,851.58	418.20	774.33	597.25
Mild steel bars BS4449 40 mm	Tonne	4,851.58	418.20	774.33	597.25
High yield bars BS4449 8 mm	Tonne	5,411.94	466.50	863.77	666.23
High yield bars BS4449 10 mm	Tonne	5,411.94	466.50	863.77	666.23
High yield bars BS4449 16 mm	Tonne	5,411.94	466.50	863.77	666.23
High yield bars BS4449 25 mm	Tonne	5,411.94	466.50	863.77	666.23
High yield bars BS4449 40 mm	Tonne	5,411.94	466.50	863.77	666.23
Tying wire mild steel	Tonne	5,335.01	459.87	851.49	656.76
Reinforcement spacer blocks	100	46.18	3.98	7.37	5.68

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>EGP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	2,913.88	251.17	465.07	358.71
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	21.78	1.88	3.48	2.68
150 mm concrete blocks 3.5N (solid)	m ²	27.02	2.33	4.31	3.33
200 mm concrete blocks 3.5N (solid)	m ²	35.82	3.09	5.72	4.41
100 mm concrete blocks 3.5N (hollow)	m ²	20.25	1.75	3.23	2.49
150 mm concrete blocks 3.5N (hollow)	m ²	25.87	2.23	4.13	3.18
200 mm concrete blocks 3.5N (hollow)	m ²	34.28	2.95	5.47	4.22
Cement and Sand					
Portland cement in bags	Tonne	600.29	51.74	95.81	73.90
Soft sand for mortar	Tonne	87.53	7.54	13.97	10.78
Cement mortar (1:3)	m ³	699.05	60.26	111.57	86.06
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	12,056.75	1,039.27	1,924.31	1,484.24
UB BS4360 610 × 305 mm × 238kg	Tonne	12,056.75	1,039.27	1,924.31	1,484.24
UB BS4360 457 × 191 mm × 98kg	Tonne	10,950.09	943.88	1,747.68	1,348.00
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	10,588.14	912.68	1,689.91	1,303.44
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	10,588.14	912.68	1,689.91	1,303.44
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	11,716.02	1,009.90	1,869.93	1,442.29
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	11,664.20	1,005.43	1,861.66	1,435.91
RHS BS4360 450 × 250 mm × 167kg	Tonne	11,819.98	1,018.86	1,886.52	1,455.09
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	11,664.20	1,005.43	1,861.66	1,435.91
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	13.03	1.12	2.08	1.60
50 × 100 mm sawn softwood	m	22.05	1.90	3.52	2.71
38 × 25 mm tanalised batten	m	5.03	0.43	0.80	0.62
Boarding to Flooring					
12 mm WBP ply	m ²	95.01	8.19	15.16	11.70
18 mm WBP ply	m ²	147.95	12.75	23.61	18.21
25 mm WBP ply	m ²	214.11	18.46	34.17	26.36
Nails					
Galvanised nails 75 mm	kg	49.44	4.26	7.89	6.09
Alloy nails 65 mm × 10g	kg	63.27	5.45	10.10	7.79
50 mm Oval wire nails	kg	35.84	3.09	5.72	4.41

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>EGP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	438.13	37.77	69.93	53.94
Sheet zinc BS849 0.60 mm	m ²	356.38	30.72	56.88	43.87
Sheet copper BS2870 0.45 mm	m ²	576.79	49.72	92.06	71.00
Felts					
Underslating felt Type 1F	m ²	8.19	0.71	1.31	1.01
Clay roofing products					
265 × 165 mm plain tile, red	1000	5,243.70	452.00	836.92	645.52
380 × 260 mm pantile, red	1000	9,271.91	799.22	1,479.84	1,141.41
Damp-proof membranes					
1000g polythene d.p.m.	m ²	7.97	0.69	1.27	0.98
Insulation					
100 mm thick fibreglass quilt	m ²	45.73	3.94	7.30	5.63
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	304.14	26.22	48.54	37.44
Corrugated galv sheet 1830 mm	Nr	218.21	18.81	34.83	26.86
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	1,957.86	168.76	312.48	241.02
UPVC s/casement 1000 × 900 glazed	Nr	2,276.74	196.25	363.38	280.28
UPVC s/casement 1000 × 1200 glazed	Nr	2,741.03	236.27	437.48	337.43
Glass and glazing					
4 mm clear sheet glass	m ²	482.21	41.57	76.96	59.36
6 mm Georgian wired polished plate	m ²	1,303.29	112.34	208.01	160.44
5 mm toughened safety glass	m ²	1,152.23	99.32	183.90	141.84
5.4 mm laminated safety glass	m ²	1,141.04	98.36	182.11	140.47
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	24.04	2.07	3.84	2.96
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	235.37	20.29	37.57	28.97
9mm × 150 × 150 mm ceramic floor tile	m ²	205.74	17.73	32.84	25.33
Decorations					
Paints and Sundries					
Emulsion paint matt white	5Litre	126.06	10.87	20.12	15.52
Masonry textured paint white	5Litre	224.02	19.31	35.75	27.58
Oil/Alkyd paint undercoat	5Litre	215.54	18.58	34.40	26.53
Oil/Alkyd paint gloss white	5Litre	215.54	18.58	34.40	26.53

Construction cost data**47****Unit rates**

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			EGP	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	13.92	1.20	2.22	1.71
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	66.39	5.72	10.60	8.17
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	39.30	3.39	6.27	4.84
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	187.03	16.12	29.85	23.02
0.05	hardcore	m ³	213.38	18.39	34.06	26.27

Ref. No.	Description	Unit	Price			
			EGP	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	62.98	5.43	10.05	7.75
0.07	150 mm dia.	m	128.15	11.05	20.45	15.78
0.08	225 mm dia.	m	402.39	34.69	64.22	49.54
Concrete:						
0.09	150 mm dia.	m	82.82	7.14	13.22	10.20
0.10	300 mm dia.	m	263.24	22.69	42.01	32.41
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	499.82	43.08	79.77	61.53
1.02	over 300 mm thick	m ³	476.69	41.09	76.08	58.68
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	517.24	44.58	82.55	63.67
1.04	0.05–0.20 m ²	m ³	511.12	44.06	81.58	62.92
1.05	over 0.20 m ²	m ³	486.93	41.97	77.72	59.94
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	548.53	47.28	87.55	67.53
1.07	150–300 mm thick	m ³	544.39	46.93	86.89	67.02
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	639.97	55.16	102.14	78.78
1.09	0.05–0.10 m ²	m ³	606.95	52.32	96.87	74.72
1.10	over 0.10 m ²	m ³	585.32	50.45	93.42	72.06

Ref. No.	Description	Unit	Price			
			EGP	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	7,957.50	685.92	1,270.05	979.60
1.12	10 mm	Tonne	7,544.69	650.34	1,204.16	928.78
1.13	16 mm	Tonne	7,059.72	608.53	1,126.76	869.08
1.14	25 mm	Tonne	6,747.97	581.66	1,077.00	830.70
1.15	40 mm	Tonne	6,485.50	559.04	1,035.11	798.39
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	8,629.93	743.88	1,377.37	1,062.38
1.17	10 mm	Tonne	8,217.13	708.30	1,311.49	1,011.56
1.18	16 mm	Tonne	7,732.15	666.50	1,234.08	951.86
1.19	25 mm	Tonne	7,420.40	639.62	1,184.33	913.48
1.20	40 mm	Tonne	7,157.93	617.00	1,142.44	881.17
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	69.87	6.02	11.15	8.60
2.02	150 mm solid blocks	m ²	79.83	6.88	12.74	9.83
2.03	200 mm solid blocks	m ²	95.71	8.25	15.28	11.78

Ref. No.	Description	Unit	Price			
			EGP	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	15,951.03	1,374.95	2,545.85	1,963.64
3.02	610 × 305 mm × 238 kg/m	Tonne	16,309.10	1,405.81	2,603.00	2,007.72
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	15,363.10	1,324.27	2,452.02	1,891.26
3.04	254 × 76 mm × 28.89 kg/m	Tonne	15,776.93	1,359.94	2,518.06	1,942.21
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	23.37	2.01	3.73	2.88
4.02	50 × 100 mm	m	35.35	3.05	5.64	4.35
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	140.31	12.09	22.39	17.27
4.04	18 mm thick	m ²	214.10	18.45	34.17	26.36
4.05	25 mm thick	m ²	305.91	26.37	48.82	37.66
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	551.00	47.50	87.94	67.83
5.02	380 × 260 mm clay pantile, red	m ²	268.27	23.12	42.82	33.03

Ref. No.	Description	Unit	Price			
			EGP	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	41.68	3.59	6.65	5.13
6.02	38 mm thick	m ²	52.57	4.53	8.39	6.47
6.03	65 mm thick	m ²	82.24	7.09	13.13	10.12
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	357.75	30.84	57.10	44.04
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	16.72	1.44	2.67	2.06
6.06	rendered backgrounds	m ²	19.37	1.67	3.09	2.39
6.07	concrete backgrounds	m ²	17.05	1.47	2.72	2.10
6.08	blockwork backgrounds	m ²	25.57	2.20	4.08	3.15
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	17.71	1.53	2.83	2.18
6.10	rendered backgrounds	m ²	21.04	1.81	3.36	2.59
6.11	concrete backgrounds	m ²	19.04	1.64	3.04	2.34
6.12	textured plastic coating backgrounds	m ²	20.37	1.76	3.25	2.51

Ref. No.	Description	Unit	Price			
			EGP	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	21,069.78	1,816.17	3,362.83	2,593.78
7.02	5.0 kw cooling unit	Nr	23,836.68	2,054.67	3,804.43	2,934.40
7.03	7.5 kw cooling unit	Nr	41,160.40	3,547.94	6,569.37	5,067.02
7.04	10.0 kw cooling unit	Nr	48,219.25	4,156.40	7,695.99	5,935.99
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	11,698.20	1,008.36	1,867.08	1,440.10
7.06	1000 gallon	Nr	23,958.95	2,065.21	3,823.95	2,949.45
7.07	2000 gallon	Nr	36,447.73	3,141.72	5,817.21	4,486.87
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	356.94	30.77	56.97	43.94
7.09	182 litre	Nr	647.57	55.82	103.36	79.72
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	2,947.01	254.03	470.36	362.79
	Basins:					
7.11	vitreous china	Nr	1,508.85	130.06	240.82	185.75
	Sinks:					
7.12	stainless steel	Nr	1,911.08	164.73	305.02	235.26
	WC suites:					
7.13	low level washdown	Nr	2,878.13	248.09	459.36	354.31
7.14	low level syphonic	Nr	5,561.29	479.37	887.60	684.62
	Bidets:					
7.15	vitreous china	Nr	2,862.46	246.74	456.86	352.38

Ref. No.	Description	Unit	Price			
			EGP	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	63.90	5.51	10.20	7.87
	Standard cable trays;					
	1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	109.84	9.47	17.53	13.52
8.03	100 mm	m	132.79	11.45	21.19	16.35
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	113.43	9.78	18.10	13.96
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	338.14	29.15	53.97	41.63
8.06	12-way	Nr	615.93	53.09	98.30	75.82

Ref. No.	Description	Unit	Price			
			EGP	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	42.43	3.66	6.77	5.22
8.08	2 gang, 2 way	Nr	75.13	6.48	11.99	9.25
8.09	3 gang, 2 way	Nr	102.03	8.79	16.28	12.56
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	56.92	4.91	9.09	7.01
8.11	2 gang	Nr	157.41	13.57	25.12	19.38
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	86.89	7.49	13.87	10.70
8.13	1 gang, with neon indicator	Nr	101.28	8.73	16.16	12.47
8.14	1 gang, with neon indicator, metalplate	Nr	143.53	12.37	22.91	17.67

Construction cost data

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Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>EGP/ft²</i>	<i>EGP/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	249	2,682	231	428	330
Petrol Stations	1,446	15,569	1,342	2,485	1,917
Airport Terminal Buildings	1,454	15,654	1,349	2,498	1,927
Sorting Offices	675	7,269	627	1,160	895
Refuse Depots	406	4,370	377	698	538
Stables and the like	651	7,011	604	1,119	863
Factories	457	4,924	424	786	606
Advanced Factories	402	4,325	373	690	532
Purpose Built Workshops	566	6,089	525	972	750
Warehouses	416	4,478	386	715	551
Town Halls	990	10,661	919	1,702	1,312
Law Courts	1,215	13,080	1,127	2,088	1,610
Offices	954	10,271	885	1,639	1,264
Banks/Building Societies	1,221	13,143	1,133	2,098	1,618
Retail Warehouses	395	4,247	366	678	523

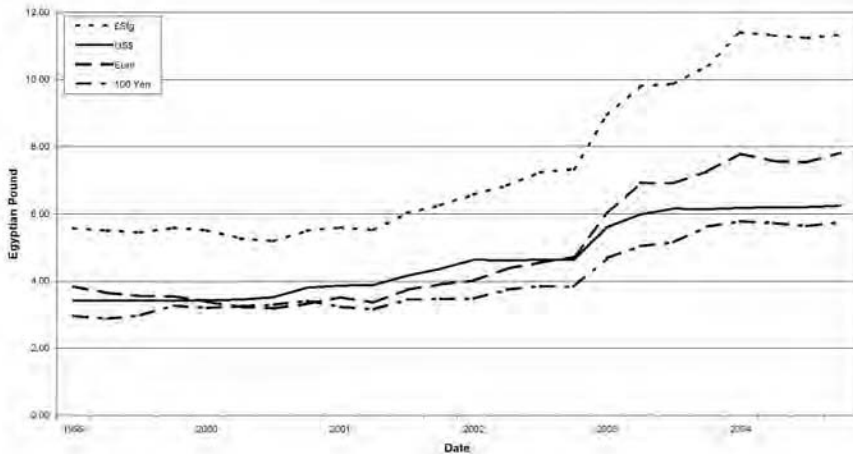
<i>Facility type</i>	<i>EGP/ft²</i>	<i>EGP/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	618	6,648	573	1,061	818
Department Stores	752	8,096	698	1,292	997
Hypermarkets / Supermarkets	757	8,144	702	1,300	1,003
Shops	585	6,302	543	1,006	776
Stadia	872	9,389	809	1,499	1,156
Pavilions and Sports Club Houses	874	9,403	811	1,501	1,158
Religious Buildings	987	10,626	916	1,696	1,308
Schools	858	9,232	796	1,473	1,136
Sixth Form Colleges	843	9,072	782	1,448	1,117
Universities	1,003	10,801	931	1,724	1,330
Colleges	845	9,097	784	1,452	1,120
Research Facilities	1,189	12,803	1,104	2,043	1,576
Laboratories	1,197	12,880	1,110	2,056	1,586
Exhibition Buildings	1,303	14,025	1,209	2,239	1,727
Public Libraries	944	10,158	876	1,621	1,250
Flats	638	6,862	592	1,095	845
Housing Detached	918	9,886	852	1,578	1,217
Hotels	923	9,931	856	1,585	1,222
Halls of Residence	933	10,045	866	1,603	1,237
Fire Stations	1,138	12,245	1,056	1,954	1,507
Police Stations	1,135	12,212	1,053	1,949	1,503
Closed Prisons	1,271	13,683	1,179	2,184	1,684
Hospitals	1,239	13,334	1,149	2,128	1,641
Intensive Care / Acute Wards	1,169	12,583	1,085	2,008	1,549
Health Centres	813	8,747	754	1,396	1,077
Nursing Homes	881	9,482	817	1,513	1,167
Homes for the Elderly	795	8,563	738	1,367	1,054
Day Centres	966	10,401	897	1,660	1,280
Veterinary Hospitals	1,043	11,224	968	1,791	1,382
Restaurants	1,194	12,852	1,108	2,051	1,582
Theatres	874	9,413	811	1,502	1,159
Cinemas	1,013	10,900	940	1,740	1,342
Clubs	792	8,525	735	1,361	1,049
Covered Swimming Pools	1,475	15,873	1,368	2,533	1,954
Sports Centres exc. Pools	769	8,281	714	1,322	1,019
Sports Centres inc. Pools	1,185	12,753	1,099	2,035	1,570
Sports Halls	703	7,569	652	1,208	932
Gymnasia	1,089	11,720	1,010	1,871	1,443

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Egyptian pound, against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Egyptian pound with each of them and the relative value to each other.

Exchange Rates



Consumer price inflation

The table below highlights the inflation index for consumer prices since 1996. Inflation in Egypt was at a relatively high level during the mid-nineties averaging around 13%. Since 1997, however, a decline has occurred and inflation has fallen to a level of around 2.4% recorded at the end of 2002. The trend appears to have changed once again with an inflation figure of 3.2% recorded in 2003. Predictions for the current year indicate a continued rise of 5.2% for 2004 from predicted figures provided by Egyptian authorities.

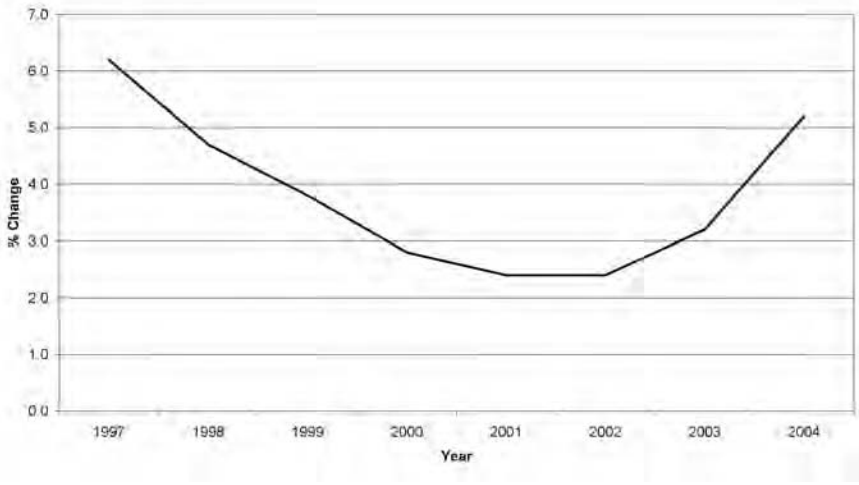
The graph, which follows the table below, plots the annual percentage change in consumer price inflation since 1996.

Consumer Prices

Year	annual average	change %
1996	100.0	–
1997	106.2	6.2
1998	111.2	4.7
1999	115.4	3.8
2000	118.6	2.8
2001	121.4	2.4
2002	124.3	2.4
2003	128.3	3.2
2004	135.0	5.2

Source: *International Monetary Fund*

Consumer Price Inflation for Years 1997 through 2004



Useful addresses

Public organisations

Cabinet Information & Decision
Support Center (IDSC)

1 Magless Al-Shaab street
Cairo

Egypt

Tel: (0020) 2 792 9292

Fax: (0020) 2 792 9222

Email: info@idsc.net.eg

Website: www.idsc.gov.eg

Central Agency for Mobilisation
and Statistics (CAPMAS)

National Information Centre
PO Box 2080

Selah Salem Nasr city

Egypt

Tel: (0020) 402 0574

Fax: (0020) 202 4099

Website: www.capmas.gov.eg

Ministry of Foreign Trade

8 Adly Street

Cairo

Egypt

Tel: (0020) 2 391 9661

Fax: (0020) 2 390 3029

Email: [mof.t@mof.t.gov.eg](mailto:moft@mof.t.gov.eg)

Website: www.moft.gov.eg

The Egyptian International Trade
Point

96 Ahmed Orabi Street

Mohandesseen

PO Box 140

Imbaba 12411

Giza

Egypt

Tel: (0020) 2 303 3485

Fax: (0020) 2 303 3480

Email: moeitcnt@idsc.net.eg

Website: www.tpegyp.t.gov.eg

Ministry of Investment

Public Enterprise Office

2 Latin America Street

Garden City

Cairo

Egypt

Tel: (0020) 2 795 9287

Fax: (0020) 2 795 9233

Email: investment@investment.gov.eg

Website: www.investment.gov.eg

National Authority for Tunnels

Ramses building

Ramses square

PO Box 466

Cairo 11794

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Tel: (0020) 2 574 2968

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Email: InfoC@NAT.org.eg

Website: www.nat.org.eg

Construction cost data**61***Foreign Embassies*

British Embassy
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Garden City
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Tel: (0020) 2 794 0852
Fax: (0020) 2 794 0859
Email: info@britishembassy.org.eg
Website: <http://www.britishembassy.gov.uk>

American Embassy
8 Kamal El-Din Salah Street
Garden City
Cairo
Egypt
Tel: (0020) 2 797 3300
Fax: (0020) 2 797 3200
Email: cairo.office.box@mail.doc.gov
Website: www.usembassy.egnet.net

Industrial Organisations

American Chamber of Commerce
Cairo office
33 Soliman Abaza Street
Dokki – Giza
Cairo
Egypt
Tel: (0020) 2 338 1050
Fax: (0020) 2 338 1060
Email: info@amcham.org.eg
Website: www.amcham.org.eg

American Chamber of Commerce
Alexandria office
36 Bani Abbas Street, Azarita
Alexandria
Egypt
Tel: (0020) 3 484 4415
Fax: (0020) 3 484 4413
Email: alexoffice@amcham.org.eg
Website: www.amcham.org.eg

Housing and Building Research
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87 Tahrir Street
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PO Box 1770
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ECONOMIC INDICATORS AND KEY DATA

Population

Population	69 million
Urban Population	67%
Population under 15	28%
Population 65 and over	5%
Population growth rate	1.1%

Geography

Land area	1.636 million sq km
Agricultural area	10.1%
Capital city	Tehran
Population of capital city (2004 est.)	12 million

Transportation

Railways	7,203 km
Highways:	
paved	94,109 km
unpaved (1998)	73,048 km
Waterways	850 km
Pipelines:	
crude oil	8,256 km
condensate/gas	212 km
liquid petroleum gas	570 km
gas	16,998 km
refined products	7,808 km
Ports and Harbours	15
Merchant Marine	134 ships
International Airport	Mehrabad, Tehran

Economy

Monetary unit	Iranian rial
Exchange rate	
£ Stg	15,919
US \$	8,768
Euro	10,987
Yen (×100)	8,075
Average annual inflation (1998 to 2003)	15.6%
Inflation rate	16.4%
Gross Domestic Product (GDP) at market prices (2003) billion	IR1,132,634
GDP PPP basis (2003)	US\$478.2 billion
GDP per capita (2003)	IR16,414,985
GDP per capita PPP basis (2003)	US\$7,000
Average annual real change in GDP (1998 to 2003)	4.8%
Private consumption as a proportion of GDP (2003)	42.6%
General government consumption as a proportion of GDP (2003)	14.0%
Gross domestic investment as a proportion of GDP (2003)	28.6%

Construction

Gross value of construction output	IR51,969 billion
Net value of construction output as a proportion of GDP	4.5%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
Central Bank of the Islamic Republic of Iran

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Iran is located in the south-west of Asia and within the Middle East. It is bordered by the Caspian Sea, Armenia, Azerbaijan and Turkmenistan to the north, Turkey and Iraq to the west, the Arabian Gulf to the south-west, the Gulf of Oman to the south and Pakistan and Afghanistan to the east. Generally the country is a plateau region averaging 1,219 m in elevation with lowlands in the maritime areas along the Arabian Gulf and the Caspian Sea. A 1,300 km long desert crosses the country from northwest to southeast. The climate is mostly of desert with mild to cool winters and hot and dry summers. The weather is sub-tropical along the Caspian Sea coastline region, Iran's most temperate area.

The Islamic Republic of Iran has been transformed from the existing monarchy since the Islamic Revolution in 1979. The political system now comprises both elected and un-elected institutions. The Supreme Leader is Iran's highest political authority and is chosen by the Assembly of Experts, a body of 86 clerics. The President, as head of government, and municipal councils are elected every four years on the basis of universal suffrage. Legislative power lies in the unicameral Islamic Consultative Assembly, or Majles, comprising 290 seats whose members are also elected to serve for four-year terms.

Iran is a member of the United Nations and the second largest oil producer in the Organisation of the Petroleum Exporting Countries (OPEC). Tehran, the capital with a population of approximately 12 million, is also Iran's administrative and commercial centre. The official religion is Shia Islam which accounts for 98% of the population. The remainder comprises Armenians, Assyrians, Christians and Jews. The official language is Persian, or Farsi, written in a script derived from Arabic. Other languages and dialects including Turkish in the north-west and Arabic in the south-west are common. English is not widely spoken outside hotels and airlines although it is understood by many businessmen and government officials.

Construction cost data

Labour resources

The figures below are typical labour costs throughout general urban regions of Iran and are taken at the third quarter 2004. The labour resources are a combination of the employee's basic pay and the financial cost to the employer of that labour. The cost of labour is based on the employee's basic pay and includes those allowances for employee's expenses, holidays, insurance and other mandatory and voluntary contributions.

The Labour Code dated 20th November 1990 governs labour in the Islamic Republic of Iran. Section 51 governs working hours and states that the hours of work shall not exceed an average of eight hours per day or 44 hours per week.

Shift work bonus is stated at an additional ten, fifteen or twenty two and a half per cent of the employee's wage respectively for the morning and evening shifts; the morning, evening and night shifts; the morning and night shifts or the evening and night shifts. Through shift work the hours may exceed those stated in section 51 of the code as long as the total hours of work over four consecutive weeks does not exceed 176 hours.

Non-shift workers are entitled to an additional thirty five per cent of their basic wage per hour if working during the night.

Any hour of overtime will be compensated for by a forty percent supplement to the basic hourly wage. Overtime shall not exceed four hours a day unless critical.

Friday is the paid day of rest by default but employers can arrange another suitable day if necessary. One day of rest per week is compulsory and in the circumstances where work requires, compensation will be granted at an additional forty per cent of the basic wage.

A workers annual paid leave entitlement is one month not including public holiday entitlement. Workers conducting arduous or harmful work are entitled to five weeks.

Every worker is entitled to take one full month of paid leave entitlement or one month of unpaid leave once during working life to perform the pilgrimage to Mecca.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>IRR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	119,496	8.17	15.13	11.67
Groundworks Labourer	172,925	11.82	21.89	16.88
Bricklayer	306,955	20.98	38.86	29.97
Shuttering Carpenter	203,641	13.92	25.78	19.88
Carpenter	306,955	20.98	38.86	29.97
Steel Fixer	203,641	13.92	25.78	19.88
Metalworker Craftsman	306,955	20.98	38.86	29.97
Roof Tiler	306,955	20.98	38.86	29.97
Sheet Metal Roofer	306,955	20.98	38.86	29.97
Glazier	257,289	17.59	32.57	25.12
Plasterer	306,955	20.98	38.86	29.97
Plasterers Labourer	172,925	11.82	21.89	16.88
Suspended Ceiling Installer	306,955	20.98	38.86	29.97
Painter	257,289	17.59	32.57	25.12
Floor/Wall Tiler	306,955	20.98	38.86	29.97
Plumber	362,471	24.78	45.88	35.39
Electrician	362,471	24.78	45.88	35.39

Plant resources

The figures below indicate the hire costs of construction plant, delivered to site in the urban area in and around Tehran and are current at the third quarter 2004. The rates do not include for any fuel or maintenance expenses and exclude operator costs and charges.

		Plant costs			
<i>Plant resources</i>	<i>Unit</i>	<i>Employer's cost of labour (per day)</i>			
		<i>IRR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Hymac 580 (360 deg tracked excavator)	Hour	201,649	13.79	25.53	19.69
JCB 3C (180 deg wheeled excavator)	Hour	149,370	10.21	18.91	14.58
Vibrating Roller 6–8 Tonne	Hour	50,960	3.48	6.45	4.98
Dumper 4WD Hydraulic Tip 1270	Hour	82,970	5.67	10.50	8.10
Poker Vibrator 48 mm	Day	66,248	4.53	8.39	6.47
Beam Vibrator 6.2 m	Day	99,580	6.81	12.61	9.72
Reinforcement bending machine	Hour	10,605	0.73	1.34	1.04
25 Tonne Mobile Crane	Hour	206,130	14.09	26.09	20.13
13 Tonne Mobile Crane	Hour	149,370	10.21	18.91	14.58
10 Tonne Mobile Crane	Hour	124,216	8.49	15.72	12.13
Wacker Plate	Hour	6,635	0.45	0.84	0.65
2.5 Tonne Block and Tackle	Hour	10,292	0.70	1.30	1.00
Craneage/lifting equipment	Hour	199,160	13.62	25.21	19.44

Construction cost data

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Material resources

The figures below indicate the costs of main construction materials, delivered to site in the Tehran urban region, and are taken at the third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material costs					
<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>IRR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	82,333	5.63	10.42	8.04
Clean brick rubble hardcore	m ³	76,229	5.21	9.65	7.44
As-raised hoggin	m ³	83,630	5.72	10.59	8.17
Washed sand	m ³	79,664	5.45	10.08	7.78
Drainage					
100 mm clay drain pipes	m	42,699	2.92	5.40	4.17
150 mm clay drain pipes	m	90,491	6.19	11.45	8.83
225 mm clay drain pipes	m	285,595	19.52	36.15	27.88
150 mm concrete pipe class L	m	50,349	3.44	6.37	4.92
300 mm concrete pipe class L	m	108,900	7.44	13.78	10.63
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	343,819	23.50	43.52	33.57
Readymix concrete 30 N/mm ²	m ³	367,629	25.13	46.54	35.89
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	4,581,917	313.24	579.99	447.35
Mild steel bars BS4449 10 mm	Tonne	4,581,917	313.24	579.99	447.35
Mild steel bars BS4449 16 mm	Tonne	4,581,917	313.24	579.99	447.35
Mild steel bars BS4449 25 mm	Tonne	4,581,917	313.24	579.99	447.35
Mild steel bars BS4449 40 mm	Tonne	4,581,917	313.24	579.99	447.35
High yield bars BS4449 8 mm	Tonne	5,103,466	348.89	646.01	498.27
High yield bars BS4449 10 mm	Tonne	5,103,466	348.89	646.01	498.27
High yield bars BS4449 16 mm	Tonne	5,103,466	348.89	646.01	498.27
High yield bars BS4449 25 mm	Tonne	5,103,466	348.89	646.01	498.27
High yield bars BS4449 40 mm	Tonne	5,103,466	348.89	646.01	498.27
Tying wire mild steel	Tonne	5,001,397	341.92	633.09	488.30
Reinforcement spacer blocks	100	43,289	2.96	5.48	4.23

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>IRR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	2,589,076	177.00	327.73	252.78
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	20,364	1.39	2.58	1.99
150 mm concrete blocks 3.5N (solid)	m ²	25,268	1.73	3.20	2.47
200 mm concrete blocks 3.5N (solid)	m ²	33,496	2.29	4.24	3.27
100 mm concrete blocks 3.5N (hollow)	m ²	18,939	1.29	2.40	1.85
150 mm concrete blocks 3.5N (hollow)	m ²	24,194	1.65	3.06	2.36
200 mm concrete blocks 3.5N (hollow)	m ²	32,054	2.19	4.06	3.13
Cement and Sand					
Portland cement in bags	Tonne	561,381	38.38	71.06	54.81
Soft sand for mortar	Tonne	82,333	5.63	10.42	8.04
Cement mortar (1:3)	m ³	689,341	47.13	87.26	67.30
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	11,275,239	770.82	1,427.25	1,100.84
UB BS4360 610 × 305 mm × 238kg	Tonne	11,275,239	770.82	1,427.25	1,100.84
UB BS4360 457 × 191 mm × 98kg	Tonne	10,240,309	700.07	1,296.24	999.80
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	9,911,611	677.60	1,254.63	967.70
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	9,911,611	677.60	1,254.63	967.70
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	10,956,599	749.04	1,386.91	1,069.73
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	11,117,910	760.06	1,407.33	1,085.48
RHS BS4360 450 × 250 mm × 167kg	Tonne	11,053,815	755.68	1,399.22	1,079.22
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	11,117,910	760.06	1,407.33	1,085.48
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	12,308	0.84	1.56	1.20
50 × 100 mm sawn softwood	m	20,618	1.41	2.61	2.01
38 × 25 mm tanalised batten	m	4,705	0.32	0.60	0.46
Boarding to Flooring					
12 mm WBP ply	m ²	88,851	6.07	11.25	8.67
18 mm WBP ply	m ²	138,362	9.46	17.51	13.51
25 mm WBP ply	m ²	200,231	13.69	25.35	19.55

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>IRR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Nails					
Galvanised nails 75 mm	kg	46,236	3.16	5.85	4.51
Alloy nails 65 mm × 10g	kg	59,172	4.05	7.49	5.78
50 mm Oval wire nails	kg	33,519	2.29	4.24	3.27
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	410,132	28.04	51.92	40.04
Sheet zinc BS849 0.60 mm	m ²	333,279	22.78	42.19	32.54
Sheet copper BS2870 0.45 mm	m ²	539,400	36.88	68.28	52.66
Felts					
Underslating felt Type 1F	m ²	7,659	0.52	0.97	0.75
Clay roofing products					
265 × 165 mm plain tile, red	1000	4,740,349	324.07	600.04	462.82
380 × 260 mm pantile, red	1000	8,670,914	592.78	1,097.58	846.57
Damp-proof membranes					
1000g polythene d.p.m.	m ²	7,451	0.51	0.94	0.73
Insulation					
100 mm thick fibreglass quilt	m ²	42,765	2.92	5.41	4.18
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	284,428	19.44	36.00	27.77
Corrugated galv sheet 1830 mm	Nr	204,069	13.95	25.83	19.92
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	1,830,952	125.17	231.77	178.76
UPVC s/casement 1000 × 900 glazed	Nr	2,129,166	145.56	269.51	207.88
UPVC s/casement 1000 × 1200 glazed	Nr	2,563,360	175.24	324.48	250.27
Glass and glazing					
4 mm clear sheet glass	m ²	450,950	30.83	57.08	44.03
6 mm Georgian wired polished plate	m ²	1,218,810	83.32	154.28	119.00
5 mm toughened safety glass	m ²	1,077,545	73.67	136.40	105.20
5.4 mm laminated safety glass	m ²	1,067,078	72.95	135.07	104.18

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>IRR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	22,761	1.56	2.88	2.22
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	220,109	15.05	27.86	21.49
9mm × 150 × 150 mm ceramic floor tile	m ²	192,401	13.15	24.35	18.78
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	117,890	8.06	14.92	11.51
Masonry textured paint white	5 Litre	209,499	14.32	26.52	20.45
Oil/Alkyd paint undercoat	5 Litre	200,390	13.70	25.37	19.56
Oil/Alkyd paint gloss white	5 Litre	200,390	13.70	25.37	19.56

Construction cost data

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Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			IRR	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	12,547	0.86	1.59	1.23
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	60,011	4.10	7.60	5.86
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	35,924	2.46	4.55	3.51
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	168,738	11.54	21.36	16.47
0.05	hardcore	m ³	196,275	13.42	24.84	19.16

Ref. No.	Description	Unit	Price			
			IRR	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	59,611	4.08	7.55	5.82
0.07	150 mm dia.	m	120,659	8.25	15.27	11.78
0.08	225 mm dia.	m	368,358	25.18	46.63	35.96
Concrete:						
0.09	150 mm dia.	m	79,418	5.43	10.05	7.75
0.10	300 mm dia.	m	245,379	16.78	31.06	23.96
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	467,464	31.96	59.17	45.64
1.02	over 300 mm thick	m ³	445,831	30.48	56.43	43.53
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	483,811	33.08	61.24	47.24
1.04	0.05–0.20 m ²	m ³	478,075	32.68	60.52	46.68
1.05	over 0.20 m ²	m ³	455,439	31.14	57.65	44.47
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	513,053	35.07	64.94	50.09
1.07	150–300 mm thick	m ³	509,171	34.81	64.45	49.71
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	598,801	40.94	75.80	58.46
1.09	0.05–0.10 m ²	m ³	567,867	38.82	71.88	55.44
1.10	over 0.10 m ²	m ³	547,614	37.44	69.32	53.47

Ref. No.	Description	Unit	Price			
			IRR	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	7,496,388	512.48	948.91	731.90
1.12	10 mm	Tonne	7,110,131	486.08	900.02	694.19
1.13	16 mm	Tonne	6,656,513	455.07	842.60	649.90
1.14	25 mm	Tonne	6,364,770	435.12	805.67	621.41
1.15	40 mm	Tonne	6,119,158	418.33	774.58	597.43
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	8,122,247	555.27	1,028.13	793.00
1.17	10 mm	Tonne	7,735,991	528.86	979.24	755.29
1.18	16 mm	Tonne	7,282,372	497.85	921.82	711.00
1.19	25 mm	Tonne	6,990,630	477.91	884.89	682.52
1.20	40 mm	Tonne	6,745,017	461.12	853.80	658.54
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	65,174	4.46	8.25	6.36
2.02	150 mm solid blocks	m ²	74,434	5.09	9.42	7.27
2.03	200 mm solid blocks	m ²	89,201	6.10	11.29	8.71

Ref. No.	Description	Unit	Price			
			IRR	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	14,905,201	1,018.98	1,886.73	1,455.24
3.02	610 × 305 mm × 238 kg/m	Tonne	15,236,493	1,041.63	1,928.67	1,487.59
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	14,349,617	981.00	1,816.41	1,401.00
3.04	254 × 76 mm × 28.89 kg/m	Tonne	14,985,140	1,024.44	1,896.85	1,463.05
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	21,884	1.50	2.77	2.14
4.02	50 × 100 mm	m	32,922	2.25	4.17	3.21
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	130,835	8.94	16.56	12.77
4.04	18 mm thick	m ²	199,706	13.65	25.28	19.50
4.05	25 mm thick	m ²	285,402	19.51	36.13	27.86
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	501,520	34.29	63.48	48.97
5.02	380 × 260 mm clay pantile, red	m ²	249,478	17.06	31.58	24.36

Ref. No.	Description	Unit	Price			
			IRR	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	40,396	2.76	5.11	3.94
6.02	38 mm thick	m ²	51,028	3.49	6.46	4.98
6.03	65 mm thick	m ²	80,093	5.48	10.14	7.82
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	333,863	22.82	42.26	32.60
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	15,589	1.07	1.97	1.52
6.06	rendered backgrounds	m ²	18,059	1.23	2.29	1.76
6.07	concrete backgrounds	m ²	15,898	1.09	2.01	1.55
6.08	blockwork backgrounds	m ²	23,847	1.63	3.02	2.33
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	16,516	1.13	2.09	1.61
6.10	rendered backgrounds	m ²	19,603	1.34	2.48	1.91
6.11	concrete backgrounds	m ²	17,751	1.21	2.25	1.73
6.12	textured plastic coating backgrounds	m ²	18,985	1.30	2.40	1.85

Ref. No.	Description	Unit	Price			
			IRR	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	19,715,457	1,347.83	2,495.63	1,924.89
7.02	5.0 kw cooling unit	Nr	22,308,708	1,525.11	2,823.89	2,178.07
7.03	7.5 kw cooling unit	Nr	38,515,217	2,633.05	4,875.34	3,760.37
7.04	10.0 kw cooling unit	Nr	45,122,222	3,084.73	5,711.67	4,405.43
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	10,934,993	747.56	1,384.18	1,067.62
7.06	1000 gallon	Nr	22,399,363	1,531.31	2,835.36	2,186.93
7.07	2000 gallon	Nr	34,073,696	2,329.41	4,313.13	3,326.73
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	334,470	22.87	42.34	32.66
7.09	182 litre	Nr	606,550	41.47	76.78	59.22
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	2,761,688	188.80	349.58	269.63
	Basins:					
7.11	vitreous china	Nr	1,415,322	96.76	179.15	138.18
	Sinks:					
7.12	stainless steel	Nr	1,790,059	122.38	226.59	174.77
	WC suites:					
7.13	low level washdown	Nr	2,695,369	184.27	341.19	263.16
7.14	low level syphonic	Nr	5,205,086	355.84	658.87	508.19
	Bidets:					
7.15	vitreous china	Nr	2,680,718	183.26	339.33	261.73

Ref. No.	Description	Unit	Price			
			IRR	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	59,845	4.09	7.58	5.84
	Standard cable trays;					
	1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	103,861	7.10	13.15	10.14
8.03	100 mm	m	125,360	8.57	15.87	12.24
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	106,488	7.28	13.48	10.40
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	316,798	21.66	40.10	30.93
8.06	12-way	Nr	576,619	39.42	72.99	56.30

Ref. No.	Description	Unit	Price			
			IRR	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	39,867	2.73	5.05	3.89
8.08	2 gang, 2 way	Nr	70,660	4.83	8.94	6.90
8.09	3 gang, 2 way	Nr	95,940	6.56	12.14	9.37
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	53,392	3.65	6.76	5.21
8.11	2 gang	Nr	147,580	10.09	18.68	14.41
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	81,584	5.58	10.33	7.97
8.13	1 gang, with neon indicator	Nr	94,935	6.49	12.02	9.27
8.14	1 gang, with neon indicator, metalplate	Nr	128,529	8.79	16.27	12.55

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>IRR/ft²</i>	<i>IRR/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	288,202	3,102,204	212	393	303
Petrol Stations	1,672,381	18,001,509	1,231	2,279	1,758
Airport Terminal Buildings	1,698,211	18,279,540	1,250	2,314	1,785
Sorting Offices	761,870	8,200,774	561	1,038	801
Refuse Depots	474,111	5,103,334	349	646	498
Stables and the like	760,566	8,186,734	560	1,036	799
Factories	534,138	5,749,462	393	728	561
Advanced Factories	469,139	5,049,811	345	639	493
Purpose Built Workshops	660,525	7,109,888	486	900	694
Warehouses	485,820	5,229,362	357	662	511
Town Halls	1,156,536	12,448,957	851	1,576	1,215
Law Courts	1,418,972	15,273,814	1,044	1,933	1,491
Offices	1,080,180	11,627,055	795	1,472	1,135
Banks/Building Societies	1,425,837	15,347,713	1,049	1,943	1,498
Retail Warehouses	460,732	4,959,319	339	628	484

<i>Facility type</i>	<i>IRR/ft²</i>	<i>IRR/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	721,237	7,763,391	531	983	758
Department Stores	878,308	9,454,103	646	1,197	923
Hypermarkets/Supermarkets	883,531	9,510,330	650	1,204	929
Shops	683,630	7,358,598	503	931	718
Stadia	1,018,548	10,963,654	750	1,388	1,070
Pavilions and Sports Club Houses	1,020,059	10,979,914	751	1,390	1,072
Religious Buildings	1,152,743	12,408,131	848	1,571	1,211
Schools	978,471	10,532,267	720	1,333	1,028
Sixth Form Colleges	984,117	10,593,038	724	1,341	1,034
Universities	1,171,708	12,612,263	862	1,596	1,231
Colleges	986,918	10,623,185	726	1,345	1,037
Research Facilities	1,388,879	14,949,889	1,022	1,892	1,460
Laboratories	1,397,274	15,040,260	1,028	1,904	1,468
Exhibition Buildings	1,521,514	16,377,574	1,120	2,073	1,599
Public Libraries	1,101,958	11,861,471	811	1,501	1,158
Flats	729,851	7,856,118	537	994	767
Housing Detached	1,072,434	11,543,679	789	1,461	1,127
Hotels	1,077,292	11,595,970	793	1,468	1,132
Halls of Residence	1,089,698	11,729,504	802	1,485	1,145
Fire Stations	1,328,417	14,299,081	978	1,810	1,396
Police Stations	1,324,835	14,260,527	975	1,805	1,392
Closed Prisons	1,484,362	15,977,672	1,092	2,022	1,560
Hospitals	1,446,461	15,569,711	1,064	1,971	1,520
Intensive Care / Acute Wards	1,365,038	14,693,268	1,004	1,860	1,435
Health Centres	925,734	9,964,599	681	1,261	973
Nursing Homes	1,028,603	11,071,881	757	1,402	1,081
Homes for the Elderly	928,893	9,998,608	684	1,266	976
Day Centres	1,128,284	12,144,849	830	1,537	1,186
Veterinary Hospitals	1,212,871	13,055,348	893	1,653	1,275
Restaurants	1,394,216	15,007,340	1,026	1,900	1,465
Theatres	1,001,073	10,775,553	737	1,364	1,052
Cinemas	1,182,477	12,728,179	870	1,611	1,243
Clubs	924,781	9,954,340	681	1,260	972
Covered Swimming Pools	1,721,929	18,534,838	1,267	2,346	1,810
Sports Centres exc. Pools	898,331	9,669,635	661	1,224	944
Sports Centres inc. Pools	1,343,868	14,465,395	989	1,831	1,412
Sports Halls	821,092	8,838,234	604	1,119	863
Gymnasia	1,266,565	13,633,305	932	1,726	1,331

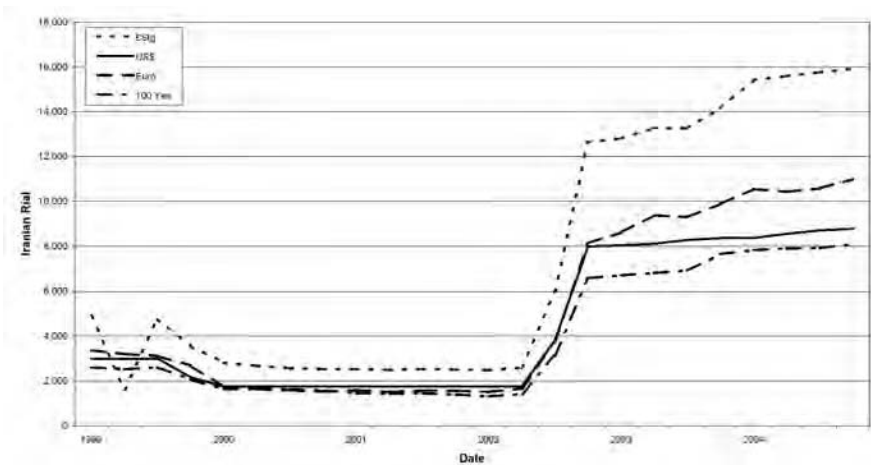
Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Iranian Rial, against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Iranian Rial with each of them and the relative value to each other.

Please note: Since unifying multiple exchange rates in March 2002, Iran has been using a managed floating exchange rate regime.

Exchange Rates



Price inflation

The following tables present indices for consumer prices and wholesale prices for construction related items since 1990 and 1991 respectively. The indices are rebased to 1997=100.

Consumer Price Inflation

Iran has historically experienced a high level of CPI inflation over the years. The CPI level peaked at the end of 1995, during which the average inflation figure for the year was 49.5%. The subsequent years, 1996 and 1997, witnessed a significant decline as the rate of inflation nearly halved with average yearly figures of 23.1% and 17.4% recorded respectively. Since 1997 CPI has been up and down with average inflation bordering the 15.5% mark. The prediction for the current year appears to indicate another upward trend in the inflation level with an anticipated average figure for 2004 of 16% from figures provided by the Iranian authorities.

The graph, which follows the tables below, plots the annual percentage change in consumer price inflation since 1991.

Consumer Prices		
Year	annual average	change %
1990	18.6	-
1991	22.4	20.4
1992	27.9	24.6
1993	34.3	22.9
1994	46.3	35.0
1995	69.2	49.5
1996	85.2	23.1
1997	100.0	17.4
1998	118.1	18.1
1999	141.8	20.1
2000	159.7	12.6
2001	177.9	11.4
2002	206.0	15.8
2003	238.2	15.6
2004	276.2	16.0

Source: *Central Bank of the Islamic Republic of Iran*
International Monetary Fund

* *Republic of Iran Year = July to June*

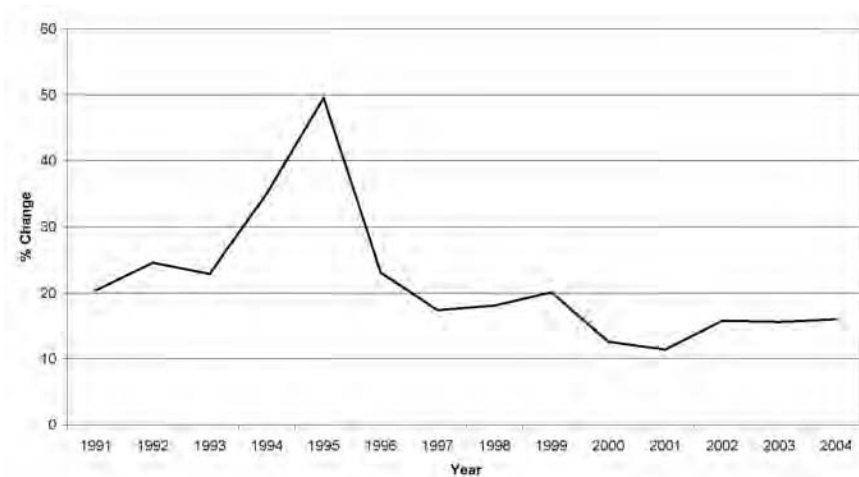
Wholesale Price Indices

Year	General Index		Building Materials		Machinery & Transport Equipment	
	annual average	change %	annual average	change %	annual average	change %
1991	19.1	–	19.8	–	13.5	–
1992	25.5	33.5	26.5	33.8	20.9	54.8
1993	31.9	25.1	32.6	23.0	27.6	32.1
1994	45.4	42.3	45.1	38.3	39.6	43.5
1995	72.7	60.1	65.3	44.8	66.4	67.7
1996	91.0	25.2	94.4	44.6	85.5	28.8
1997	100.0	9.9	100.0	5.9	100.0	17.0
1998	116.7	16.7	108.7	8.7	112.7	12.7
1999	144.9	24.2	134.8	24.0	135.9	20.6
2000	166.3	14.8	155.2	15.1	151.0	11.1
2001	174.7	5.1	160.9	3.7	150.7	–0.2
2002	191.5	9.6	192.1	19.4	155.7	3.3
2003	210.9	10.1	217.0	13.0	159.6	2.5

Source: Central Bank of the Islamic Republic of Iran

* Republic of Iran Year = July to June

Consumer Price Inflation for Years 1991 through 2004



Useful addresses

Public organisations

Ministry of Foreign Affairs
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Emam Khomeini SQ
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Organisation
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Tehran
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Tel: (0098) 21 879 5473
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Construction cost data**87***Foreign Embassies*

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Industrial Organisations

Iran Transportation and Terminals
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 254 Taleghani Ave
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 Website: www.iccim.org/english

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 201, Italia Crossing
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 Iran
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 Fax: (0098) 21 65 14 62
 Email: info@irirw.com
 Website: www.irirw.com

Export Promotion Centre of Iran
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Iraq

ECONOMIC INDICATORS AND KEY DATA

Population

Population (2004 est)	27.1 million
Urban Population	68%
Population under 15	40%
Population 65 and over	3%
Population growth rate	2.7%

Geography

Land area	432,162 sq km
Agricultural area	14%
Capital city	Baghdad
Population of capital city (2000)	4.7 million

Transportation

Railways	1,963 km
Highways:	
paved	38,399 km
unpaved	7,151 km
Waterways	5,275 km
Pipelines (2003):	
crude oil	5,418 km
petroleum products	1,343 km
natural gas	1,739 km
Ports and Harbours (2003)	3
Merchant Marine	13 ships
International Airport	Baghdad International (BIAP), Baghdad

Economy

Monetary unit	New Iraqi Dinar
Exchange rate	
£ Stg	2,702.6
US \$	1,462.5
Euro	1,872.0
Yen (×100)	1,378.0
Average annual inflation (1998 to 2003)	14%
Inflation rate	27%
Gross Domestic Product (GDP) at market prices	US\$31.8 billion
GDP PPP basis	US\$37.9 billion
GDP per capita	US\$1,173
GDP per capita PPP basis	US\$1,500
Average annual real change in GDP (2000 to 2004 est.)	5%
Private consumption as a proportion of GDP (2003)	38.9%
General government consumption as a proportion of GDP (2003)	50.5%
Gross domestic investment as a proportion of GDP (2003)	34.9%

Construction

Gross value of construction output	US\$3.2 billion
Net value of construction output as a proportion of GDP	10.1%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
Central Bank of Iraq
Central Statistical Organisation, Republic of Iraq

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Iraq is located in the Middle East and borders Iran to the east, the Arabian Gulf and Kuwait to the south-east, Saudi Arabia to the south, Jordan and Syria to the west and Turkey to the north. The terrain is arid desert to the west with a broad central valley between the Euphrates and Tigris Rivers and mountains to the north-east. The country is well rich with petroleum and natural gas and about 50% of its land is arable.

Iraq has a mainly continental climate bringing a wide range of temperatures, with hot summers particularly in the south and cold winters in the northern mountains. Rainfall is heaviest in the north-east mostly between October and May and desert areas receive virtually no rainfall. Central and southern Iraq has high humidity with temperatures soaring to as high as 50°C.

Iraq became independent in 1932 from a British Mandate, ruled as a constitutional monarchy. Since then there were a number of coups and regime changes taking place until 1979 when Saddam Hussein took power and declared Iraq a republic state. The Republic of Iraq was plunged into wars during the past two decades, the Iraq-Iran war from 1980 to 1988, the invasion of Kuwait in 1990 and subsequently the Gulf War in 1991 which have all proven disastrous for the country. UN economic sanctions have been imposed since 1992 demanding the disclosure and destruction of all stockpiles of weapons. The operation of the US-led invasion in March to April 2003 resulted in the removal of Saddam Hussein's regime and the shutdown of much of the central economic administrative structure. The Iraqi Interim Government (IIG) was established in June 2004 to govern Iraq until a government could be elected through national elections.

Iraq is a member of the United Nations, the Arab League, Organisation of Petroleum Exporting Countries (OPEC) and Organisation of the Islamic Conference (OIC). The principal religion is Islam, comprising Shi'a and Sunni Muslims and the rest Christians and other minorities. The official languages are Arabic and Kurdish in Kurdish regions, Assyrian and Armenian.

The Iraqi construction industry was characterised by a heavy dependence on oil-driven sectors and is now involved in a process of reconstruction and rehabilitation of all damaged infrastructure. A joint UN and World Bank report released in the fall of 2003 estimated that Iraq's key reconstruction needs through 2007 would cost US \$55 billion.

Construction cost data

Labour resources

The figures below are typical labour costs that may be expected on building sites within an urban area of Iraq and are taken at a pre-war date of fourth quarter 2002. The labour resources are a combination of the employee's basic pay and the financial cost to the employer of that labour. The cost of labour is based on the employee's basic pay and includes those allowances for the employer and employee expenses such as holidays, insurance and other mandatory and voluntary contributions.

The Labour Law No. 71 of 1987 governs labour in Iraq. This law has two amendments, Law No. 15 of 1991 and Law No. 17 of 2000.

The second amendment introduces the obligation for the employer to inform the Labour section in Baghdad in case an Arab employee is hired. Also, the employer is under the prohibition to terminate an employee's contract if the latter holds trade union responsibilities and the organisation does not agree with the termination. In addition, overtime should not exceed 300 per cent of the normal hours worked per year.

Considering the latest developments within the country the reader is advised to contact the British Embassy for up to date advice.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>IQD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	20,770	7.61	14.21	10.87
Groundworks Labourer	29,868	10.95	20.44	15.63
Bricklayer	52,447	19.22	35.89	27.44
Shuttering Carpenter	35,538	13.02	24.32	18.59
Carpenter	52,447	19.22	35.89	27.44
Steel Fixer	35,538	13.02	24.32	18.59
Metalworker Craftsman	52,447	19.22	35.89	27.44
Roof Tiler	52,447	19.22	35.89	27.44
Sheet Metal Roofer	52,447	19.22	35.89	27.44
Glazier	44,358	16.26	30.36	23.21
Plasterer	52,447	19.22	35.89	27.44
Plasterers Labourer	29,868	10.95	20.44	15.63
Suspended Ceiling Installer	52,447	19.22	35.89	27.44
Painter	44,358	16.26	30.36	23.21
Floor/Wall Tiler	52,447	19.22	35.89	27.44
Plumber	60,883	22.31	41.67	31.85
Electrician	60,883	22.31	41.67	31.85

Plant resources

The figures below indicate the hire costs of construction plant, delivered to site in an urban location within Iraq, and are current at a pre-war date of fourth quarter 2002. The rates do not include for any fuel or maintenance expenses and exclude operator costs and charges.

Plant resources	Unit	Employer's cost of labour (per day)			
		IQD	£ Stg	US \$	Euro
Hymac 580 (360 deg tracked excavator)	Hour	34,790	12.75	23.81	18.20
JCB 3C (180 deg wheeled excavator)	Hour	26,223	9.61	17.95	13.72
Vibrating Roller 6-8 Tonne	Hour	8,698	3.19	5.95	4.55
Dumper 4WD Hydraulic Tip 1270	Hour	13,986	5.13	9.57	7.32
Poker Vibrator 48 mm	Day	11,533	4.23	7.89	6.03
Beam Vibrator 6.2 m	Day	17,352	6.36	11.88	9.08
Reinforcement bending machine	Hour	1,777	0.65	1.22	0.93
25 Tonne Mobile Crane	Hour	34,095	12.50	23.33	17.84
13 Tonne Mobile Crane	Hour	26,093	9.56	17.86	13.65
10 Tonne Mobile Crane	Hour	20,979	7.69	14.36	10.98
Wacker Plate	Hour	1,102	0.40	0.75	0.58
2.5 Tonne Block and Tackle	Hour	1,713	0.63	1.17	0.90
Craneage/lifting equipment	Hour	34,790	12.75	23.81	18.20

Construction cost data

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Material resources

The figures below indicate the costs of main construction materials, delivered to a building site in and around the capital city, Baghdad, and are taken at a pre-war date of the fourth quarter 2002. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material costs					
<i>Material resources</i>	<i>Unit</i>	<i>Employer's cost of labour (per day)</i>			
		<i>IQD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	13,916	5.10	9.52	7.28
Clean brick rubble hardcore	m ³	13,088	4.80	8.96	6.85
As-raised hoggin	m ³	14,479	5.31	9.91	7.58
Washed sand	m ³	13,916	5.10	9.52	7.28
Drainage					
100 mm clay drain pipes	m	7,360	2.70	5.04	3.85
150 mm clay drain pipes	m	15,258	5.59	10.44	7.98
225 mm clay drain pipes	m	49,890	18.28	34.14	26.10
150 mm concrete pipe class L	m	8,352	3.06	5.72	4.37
300 mm concrete pipe class L	m	18,286	6.70	12.51	9.57
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	60,061	22.01	41.10	31.42
Readymix concrete 30 N/mm ²	m ³	64,220	23.54	43.95	33.60
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	774,958	284.02	530.36	405.44
Mild steel bars BS4449 10 mm	Tonne	774,958	284.02	530.36	405.44
Mild steel bars BS4449 16 mm	Tonne	774,958	284.02	530.36	405.44
Mild steel bars BS4449 25 mm	Tonne	774,958	284.02	530.36	405.44
Mild steel bars BS4449 40 mm	Tonne	774,958	284.02	530.36	405.44
High yield bars BS4449 8 mm	Tonne	869,762	318.77	595.24	455.04
High yield bars BS4449 10 mm	Tonne	869,762	318.77	595.24	455.04
High yield bars BS4449 16 mm	Tonne	869,762	318.77	595.24	455.04
High yield bars BS4449 25 mm	Tonne	869,762	318.77	595.24	455.04
High yield bars BS4449 40 mm	Tonne	869,762	318.77	595.24	455.04
Tying wire mild steel	Tonne	856,629	313.96	586.25	448.17
Reinforcement spacer blocks	100	7,325	2.68	5.01	3.83

<i>Material resources</i>	<i>Unit</i>	<i>Employer's cost of labour (per day)</i>			
		<i>IQD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	457,477	167.67	313.08	239.34
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	3,543	1.30	2.43	1.85
150 mm concrete blocks 3.5N (solid)	m ²	4,327	1.59	2.96	2.26
200 mm concrete blocks 3.5N (solid)	m ²	5,662	2.08	3.87	2.96
100 mm concrete blocks 3.5N (hollow)	m ²	3,236	1.19	2.21	1.69
150 mm concrete blocks 3.5N (hollow)	m ²	4,226	1.55	2.89	2.21
200 mm concrete blocks 3.5N (hollow)	m ²	5,599	2.05	3.83	2.93
Cement and Sand					
Portland cement in bags	Tonne	98,066	35.94	67.11	51.31
Soft sand for mortar	Tonne	13,986	5.13	9.57	7.32
Cement mortar (1:3)	m ³	113,069	41.44	77.38	59.16
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	1,823,053	668.15	1,247.64	953.78
UB BS4360 610 × 305 mm × 238kg	Tonne	1,823,053	668.15	1,247.64	953.78
UB BS4360 457 × 191 mm × 98kg	Tonne	1,788,842	655.61	1,224.23	935.88
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	1,712,613	627.68	1,172.06	896.00
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	1,712,613	627.68	1,172.06	896.00
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	1,913,968	701.47	1,309.86	1,001.34
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	1,823,053	668.15	1,247.64	953.78
RHS BS4360 450 × 250 mm × 167kg	Tonne	1,930,951	707.70	1,321.48	1,010.23
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	1,823,053	668.15	1,247.64	953.78
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	2,115	0.78	1.45	1.11
50 × 100 mm sawn softwood	m	3,602	1.32	2.46	1.88
38 × 25 mm tanalised batten	m	818	0.30	0.56	0.43
Boarding to Flooring					
12 mm WBP ply	m ²	15,521	5.69	10.62	8.12
18 mm WBP ply	m ²	24,170	8.86	16.54	12.65
25 mm WBP ply	m ²	34,051	12.48	23.30	17.81
Nails					
Galvanised nails 75 mm	kg	8,077	2.96	5.53	4.23
Alloy nails 65 mm × 10g	kg	10,337	3.79	7.07	5.41
50 mm Oval wire nails	kg	5,855	2.15	4.01	3.06

<i>Material resources</i>	<i>Unit</i>	<i>Employer's cost of labour (per day)</i>			
		<i>IQD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	70,343	25.78	48.14	36.80
Sheet zinc BS849 0.60 mm	m ²	56,471	20.70	38.65	29.54
Sheet copper BS2870 0.45 mm	m ²	90,924	33.32	62.23	47.57
Felts					
Underslating felt Type 1F	m ²	1,338	0.49	0.92	0.70
Clay roofing products					
265 × 165 mm plain tile, red	1000	828,074	303.49	566.71	433.23
380 × 260 mm pantile, red	1000	1,488,511	545.54	1,018.69	778.75
Damp-proof membranes					
1000g polythene d.p.m.	m ²	1,302	0.48	0.89	0.68
Insulation					
100 mm thick fibreglass quilt	m ²	7,306	2.68	5.00	3.82
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	49,686	18.21	34.00	25.99
Corrugated galv sheet 1830 mm	Nr	36,337	13.32	24.87	19.01
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	298,417	109.37	204.23	156.13
UPVC s/casement 1000 × 900 glazed	Nr	371,936	136.32	254.54	194.59
UPVC s/casement 1000 × 1200 glazed	Nr	449,958	164.91	307.94	235.41
Glass and glazing					
4 mm clear sheet glass	m ²	78,775	28.87	53.91	41.21
6 mm Georgian wired polished plate	m ²	212,909	78.03	145.71	111.39
5 mm toughened safety glass	m ²	188,232	68.99	128.82	98.48
5.4 mm laminated safety glass	m ²	182,302	66.81	124.76	95.38
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	3,976	1.46	2.72	2.08
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	37,517	13.75	25.68	19.63
9mm × 150 × 150 mm ceramic floor tile	m ²	33,610	12.32	23.00	17.58

<i>Material resources</i>	<i>Unit</i>	<i>Employer's cost of labour (per day)</i>			
		<i>IQD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	20,594	7.55	14.09	10.77
Masonry textured paint white	5 Litre	36,597	13.41	25.05	19.15
Oil/Alkyd paint undercoat	5 Litre	34,097	12.50	23.34	17.84
Oil/Alkyd paint gloss white	5 Litre	34,097	12.50	23.34	17.84

Construction cost data

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Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at a pre-war date of fourth quarter 2002. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			IQD	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	2,203	0.81	1.51	1.15
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	10,528	3.86	7.20	5.51
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	6,287	2.30	4.30	3.29
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	29,475	10.80	20.17	15.42
0.05	hardcore	m ³	33,934	12.44	23.22	17.75

Ref. No.	Description	Unit	Price			
			IQD	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	10,277	3.77	7.03	5.38
0.07	150 mm dia.	m	20,372	7.47	13.94	10.66
0.08	225 mm dia.	m	64,330	23.58	44.03	33.66
Concrete:						
0.09	150 mm dia.	m	13,284	4.87	9.09	6.95
0.10	300 mm dia.	m	41,973	15.38	28.72	21.96
1	Concrete work					
Poured concrete						
Plain concrete mix						
20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	81,648	29.92	55.88	42.72
1.02	over 300 mm thick	m ³	77,870	28.54	53.29	40.74
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	84,489	30.97	57.82	44.20
1.04	0.05–0.20 m ²	m ³	83,492	30.60	57.14	43.68
1.05	over 0.20 m ²	m ³	79,539	29.15	54.43	41.61
Reinforced concrete mix						
30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	89,601	32.84	61.32	46.88
1.07	150–300 mm thick	m ³	88,926	32.59	60.86	46.52
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	104,510	38.30	71.52	54.68
1.09	0.05–0.10 m ²	m ³	99,121	36.33	67.84	51.86
1.10	over 0.10 m ²	m ³	95,592	35.03	65.42	50.01

Ref. No.	Description	Unit	Price			
			IQD	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	1,277,046	468.04	873.97	668.12
1.12	10 mm	Tonne	1,209,943	443.45	828.05	633.01
1.13	16 mm	Tonne	1,130,917	414.48	773.96	591.67
1.14	25 mm	Tonne	1,080,417	395.97	739.40	565.25
1.15	40 mm	Tonne	1,037,884	380.39	710.30	543.00
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	1,390,811	509.73	951.83	727.64
1.17	10 mm	Tonne	1,323,708	485.14	905.90	692.53
1.18	16 mm	Tonne	1,244,682	456.18	851.82	651.19
1.19	25 mm	Tonne	1,194,182	437.67	817.26	624.77
1.20	40 mm	Tonne	1,151,649	422.08	788.15	602.52
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	11,175	4.10	7.65	5.85
2.02	150 mm solid blocks	m ²	12,690	4.65	8.68	6.64
2.03	200 mm solid blocks	m ²	15,126	5.54	10.35	7.91

Ref. No.	Description	Unit	Price			
			IQD	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	2,419,269	886.67	1,655.67	1,265.71
3.02	610 × 305 mm × 238 kg/m	Tonne	2,475,625	907.32	1,694.24	1,295.19
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	2,503,104	917.39	1,713.05	1,309.57
3.04	254 × 76 mm × 28.89 kg/m	Tonne	2,466,681	904.04	1,688.12	1,290.51
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	3,757	1.38	2.57	1.97
4.02	50 × 100 mm	m	5,728	2.10	3.92	3.00
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	22,793	8.35	15.60	11.92
4.04	18 mm thick	m ²	34,801	12.75	23.82	18.21
4.05	25 mm thick	m ²	48,565	17.80	33.24	25.41
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	87,328	32.01	59.76	45.69
5.02	380 × 260 mm clay pantile, red	m ²	42,863	15.71	29.33	22.42

Ref. No.	Description	Unit	Price			
			IQD	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	6,739	2.47	4.61	3.53
6.02	38 mm thick	m ²	8,500	3.12	5.82	4.45
6.03	65 mm thick	m ²	13,298	4.87	9.10	6.96
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	56,873	20.84	38.92	29.75
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	2,707	0.99	1.85	1.42
6.06	rendered backgrounds	m ²	3,133	1.15	2.14	1.64
6.07	concrete backgrounds	m ²	2,760	1.01	1.89	1.44
6.08	blockwork backgrounds	m ²	4,140	1.52	2.83	2.17
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	2,867	1.05	1.96	1.50
6.10	rendered backgrounds	m ²	3,399	1.25	2.33	1.78
6.11	concrete backgrounds	m ²	3,080	1.13	2.11	1.61
6.12	textured plastic coating backgrounds	m ²	3,293	1.21	2.25	1.72

Ref. No.	Description	Unit	Price			
			IQD	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	3,441,461	1,261.30	2,355.23	1,800.49
7.02	5.0 kw cooling unit	Nr	3,893,187	1,426.86	2,664.38	2,036.82
7.03	7.5 kw cooling unit	Nr	6,722,963	2,463.98	4,600.99	3,517.30
7.04	10.0 kw cooling unit	Nr	7,875,836	2,886.51	5,389.98	4,120.45
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	1,909,554	699.85	1,306.84	999.03
7.06	1000 gallon	Nr	3,912,010	1,433.76	2,677.26	2,046.67
7.07	2000 gallon	Nr	5,723,218	2,097.57	3,916.79	2,994.25
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	58,278	21.36	39.88	30.49
7.09	182 litre	Nr	100,739	36.92	68.94	52.70
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	485,415	177.91	332.20	253.96
	Basins:					
7.11	vitreous china	Nr	246,277	90.26	168.54	128.85
	Sinks:					
7.12	stainless steel	Nr	312,059	114.37	213.56	163.26
	WC suites:					
7.13	low level washdown	Nr	445,464	163.26	304.86	233.06
7.14	low level syphonic	Nr	908,298	332.89	621.61	475.20
	Bidets:					
7.15	vitreous china	Nr	445,464	163.26	304.86	233.06

Ref. No.	Description	Unit	Price			
			IQD	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	9,980	3.66	6.83	5.22
	Standard cable trays;					
	1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	17,978	6.59	12.30	9.41
8.03	100 mm	m	21,730	7.96	14.87	11.37
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	18,534	6.79	12.68	9.70
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	55,212	20.24	37.79	28.89
8.06	12-way	Nr	100,590	36.87	68.84	52.63

Ref. No.	Description	Unit	Price			
			IQD	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	6,923	2.54	4.74	3.62
8.08	2 gang, 2 way	Nr	12,082	4.43	8.27	6.32
8.09	3 gang, 2 way	Nr	16,469	6.04	11.27	8.62
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	8,929	3.27	6.11	4.67
8.11	2 gang	Nr	25,525	9.35	17.47	13.35
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	13,897	5.09	9.51	7.27
8.13	1 gang, with neon indicator	Nr	16,534	6.06	11.32	8.65
8.14	1 gang, with neon indicator, metalplate	Nr	22,587	8.28	15.46	11.82

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current at a pre-war date of fourth quarter 2002.

<i>Facility type</i>	<i>IQD/ft²</i>	<i>IQD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	49,767	535,687	196	367	280
Petrol Stations	294,620	3,171,292	1,162	2,170	1,659
Airport Terminal Buildings	291,164	3,134,085	1,149	2,145	1,640
Sorting Offices	134,553	1,448,327	531	991	758
Refuse Depots	83,523	899,045	330	615	470
Stables and the like	131,053	1,410,660	517	965	738
Factories	90,461	973,727	357	666	509
Advanced Factories	79,469	855,400	314	585	448
Purpose Built Workshops	116,363	1,252,536	459	857	655
Warehouses	85,586	921,247	338	630	482
Town Halls	198,751	2,139,357	784	1,464	1,119
Law Courts	243,881	2,625,131	962	1,797	1,373
Offices	191,340	2,059,582	755	1,410	1,078
Banks/Building Societies	251,187	2,703,778	991	1,850	1,415
Retail Warehouses	81,166	873,674	320	598	457

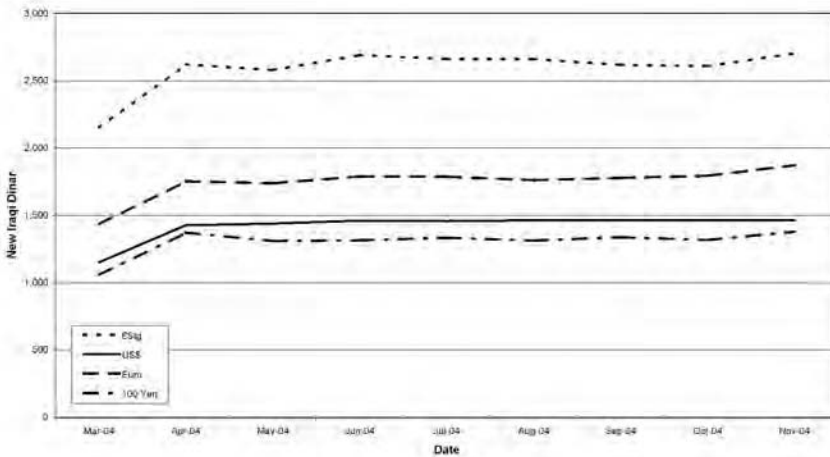
<i>Facility type</i>	<i>IQD/ft²</i>	<i>IQD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	124,263	1,337,567	490	915	700
Department Stores	154,191	1,659,711	608	1,136	868
Hypermarkets / Supermarkets	147,165	1,584,079	581	1,084	829
Shops	116,381	1,252,723	459	857	655
Stadia	179,436	1,931,446	708	1,322	1,010
Pavilions and Sports Club Houses	172,541	1,857,235	681	1,271	972
Religious Buildings	203,077	2,185,917	801	1,496	1,144
Schools	173,496	1,867,510	684	1,278	977
Sixth Form Colleges	168,707	1,815,965	666	1,243	950
Universities	206,418	2,221,879	814	1,521	1,162
Colleges	167,723	1,805,372	662	1,236	945
Research Facilities	244,676	2,633,694	965	1,802	1,378
Laboratories	239,567	2,578,700	945	1,765	1,349
Exhibition Buildings	258,460	2,782,064	1,020	1,904	1,456
Public Libraries	194,130	2,089,613	766	1,430	1,093
Flats	128,577	1,383,998	507	947	724
Housing Detached	188,929	2,033,628	745	1,392	1,064
Hotels	183,989	1,980,456	726	1,355	1,036
Halls of Residence	184,781	1,988,987	729	1,361	1,041
Fire Stations	220,541	2,373,904	870	1,625	1,242
Police Stations	229,945	2,475,123	907	1,694	1,295
Closed Prisons	259,970	2,798,320	1,026	1,915	1,464
Hospitals	246,203	2,650,132	971	1,814	1,386
Intensive Care / Acute Wards	240,476	2,588,485	949	1,771	1,354
Health Centres	163,085	1,755,445	643	1,201	918
Nursing Homes	180,149	1,939,122	711	1,327	1,015
Homes for the Elderly	157,317	1,693,361	621	1,159	886
Day Centres	191,123	2,057,245	754	1,408	1,076
Veterinary Hospitals	213,669	2,299,936	843	1,574	1,203
Restaurants	245,616	2,643,815	969	1,809	1,383
Theatres	176,357	1,898,309	696	1,299	993
Cinemas	207,400	2,232,455	818	1,528	1,168
Clubs	159,521	1,717,086	629	1,175	898
Covered Swimming Pools	303,349	3,265,247	1,197	2,235	1,708
Sports Centres exc. Pools	154,624	1,664,369	610	1,139	871
Sports Centres inc. Pools	236,155	2,541,970	932	1,740	1,330
Sports Halls	144,650	1,557,015	571	1,066	815
Gymnasia	214,588	2,309,820	847	1,581	1,208

Exchange rates

The following graph indicates the exchange rate movement over 2004 of the New Iraqi Dinar against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the New Iraqi Dinar with each of them and the relative value to each other.

Exchange Rates



Consumer price inflation

The table below highlights the inflation index for consumer prices since 1990. The indices have been rebased to 1990=100.

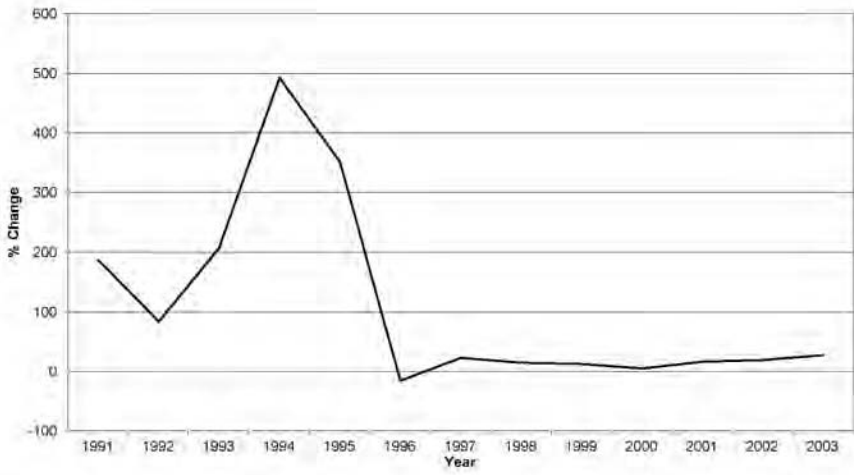
Iraq has historically experienced a high level of consumer price inflation (CPI) over the years, particularly between 1991–1995 where average inflation for the period was a staggering 265%. The CPI level peaked at the end of 1994, during which the average inflation figure for the year was an astonishing 492%. During 1995 the level remained very high, although slightly down on the previous year, with a figure of 351% recorded. The subsequent year, 1996, witnessed a dramatic decline as the rate of inflation fell to a yearly average figure of –15.4%. In 1998 inflation rebounded to 23% and during the next five years to 2003, inflation levels remained at a relatively modest level of 13.6%. The forecast for the current year appears to indicate another upward trend in the inflation level with an anticipated average figure for 2004 of 27.3% from figures provided by the Iraqi authorities.

The graph, which follows the table below, plots the annual percentage change in consumer price inflation since 1991.

Consumer Prices		
Year	annual average	change %
1990	100	–
1991	287	187.0
1992	527	83.8
1993	1,622	207.5
1994	9,604	492.2
1995	43,310	351.0
1996	36,659	–15.4
1997	45,099	23.0
1998	51,761	14.8
1999	58,271	12.6
2000	61,171	5.0
2001	71,188	16.4
2002	84,945	19.3
2003	108,175	27.3

Source: Central Bank of Iraq

Consumer Price Inflation for Years 1991 through 2004



Useful addresses

Public organisations

Ministry of Construction and
Housing
Email: moch@mochiraq.com
Website: <http://www.mochiraq.com>

Foreign Embassies

British Embassy Baghdad
c/o Iraq Policy Unit
Foreign & Commonwealth Office
London
SW1A 2AH
Tel: (00964) 790 192 6280
Email: britembBaghdad@fco.gov.uk
Website: www.britishembassy.gov.uk

Embassy of the United States
APO AE 09316
Baghdad
Iraq
Tel: (001) 703 343 7604
Website: <http://iraq.usembassy.gov>

Industrial Organisations

Contrack International Inc.
Transportation Sector in Iraq
1001 North 19th Street
Suite 1220
Arlington
VA 22209
USA
Tel: (001) 703 358 8800
Fax: (001) 703 358 8808
Email: frontdesk@contract.com
Website: www.contract.com

Iraqi American Chamber of
Commerce and Industry
Arasat Al-Hendlyya Street
Building 128/3
Quarter 929, Street 21
Baghdad
Iraq
Tel: (00964) 1 776 1601
Fax: (00964) 1 776 1603
Email: baghdad@I-acci.org
Website: <http://iraqiamericancchi.org>

Construction Consultants

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Jordan

ECONOMIC INDICATORS AND KEY DATA

Population

Population	5.61 million
Urban Population	79%
Population under 15	35%
Population 65 and over	4%
Population growth rate	2.7%

Geography

Land area	91,971 sq km
Agricultural area	4.5%
Capital city	Amman
Population of capital city	2.13 million

Transportation

Railways	505 km
Highways:	
paved	7,245 km
unpaved	0 km
Waterways	n.a.
Pipelines:	
crude oil	743 km
petroleum products	n.a.
natural gas	10 km
Ports and Harbours	1
Merchant Marine	9 ships
International Airport	Queen Alia, Amman

Economy

Monetary unit	Jordanian Dinar
Exchange rate	
£ Stg	1.264
US \$	0.709
Euro	0.869
Yen (×100)	0.638
Average annual inflation (1998 to 2003)	1.72%
Inflation rate	2.30%
Gross Domestic Product (GDP) at market prices	JD6,074 million
GDP PPP basis	US\$23.6 billion
GDP per capita	JD1,297
GDP per capita PPP basis	US\$4,300
Average annual real change in GDP (1998 to 2003)	3.77%
Private consumption as a proportion of GDP	69.5%
General government consumption as a proportion of GDP	25.0%
Gross domestic investment as a proportion of GDP	22.3%

Construction

Gross value of construction output	JD265 million
Gross value of construction output as a proportion of GDP	3.80%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
Department of Statistics for Jordan

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Jordan is located in the Middle East, bordering Israel to the west and including the Dead Sea, Syria to the north, Iraq to the east and Saudi Arabia to the east and south, with a short coastline to Aqaba. Most of the country has an arid terrain of hills and mountains although the southern part of the Jordan river with the Great Rift Valley separating the east and west of the country. The fertile regions are located within the rift valley through which the River Jordan runs and these are entirely dependent on irrigation and the highlands to the east support an agricultural population.

The climate is one of hot and dry summers, very hot in areas below sea level, with warm and wet winters. The rainy season is from November to April, generally in the west.

The Hashemite Kingdom of Jordan is a constitutional monarchy and legislative power is vested in the King and the National Assembly. This assembly consists of the Senate and the House of Representatives. The Senate, also called the House of Notables, consists of 55 members appointed by the King and the House of Representatives, also called the House of Deputies, is composed of 110 members, elected by popular vote on the basis of proportional representation.

Jordan is a member of several associations including the United Nations, the International Monetary Fund and the World Health Organisation along with others. In 2000 Jordan joined the World Trade Organisation and began to participate in the European Free Trade Association in 2001. Approximately 79% of the population lives in urban areas with over two million people residing in the capital of Amman. Ethnic Arabs form 98% of the population with 1% Circassian and 1% Armenian making up the balance. Its religions comprise Sunni Muslim (more than 90%), Christian and others. The main and official language is Arabic although English is widely used amongst the upper and middle classes.

The Jordanian construction industry employs 6.4% (2003 est.) of the country's total work force, and more than 87% of construction output comes from residential buildings with less than 13% from non-residential projects.

Construction cost data

Labour resources

The figures below are typical labour costs for a construction project within a large rural area of Jordan and are taken at the third quarter 2003. The labour resources are a combination of the employee's basic pay and the financial cost to the employer of that labour. The cost of labour is based on the employee's basic pay and includes those allowances for employer and employee expenses such as holidays, insurance and other mandatory and voluntary contributions.

Article 2 of the 1996 Labour Law Number 8 governs labour in Jordan. Maximum working hours state that forty-eight hours can be worked during a six-day week. The seventh day is classified as a paid weekly holiday. Any additional hours will be considered for overtime and subject to twenty-five per cent additional compensation.

The working week runs from Saturday to Thursday as workers are entitled to one day off per week. Working hours generally run from 8.00 to 13.00 and 15.30 to 19.30 although this varies depending on the working sector.

Employees are entitled to fourteen days fully paid annual sick leave that can be extended by another fourteen days if the employee was hospitalised.

Any worker employed by a company for five years is also entitled to a one off fourteen-day leave to make the pilgrimage to the Islamic holy shrines in Mecca.

Female employees are entitled to ten paid weeks maternity leave and any employer with twenty or more female employees must provide day-care for all children less than four years of age.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>JD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	12.00	9.17	16.81	13.17
Groundworks Labourer	17.00	12.99	23.81	18.66
Bricklayer	30.00	22.92	42.02	32.93
Shuttering Carpenter	20.00	15.28	28.01	21.95
Carpenter	30.00	22.92	42.02	32.93
Steel Fixer	20.00	15.28	28.01	21.95
Metalworker Craftsman	30.00	22.92	42.02	32.93
Roof Tiler	30.00	22.92	42.02	32.93
Sheet Metal Roofer	30.00	22.92	42.02	32.93
Glazier	25.00	19.10	35.01	27.44
Plasterer	30.00	22.92	42.02	32.93
Plasterers Labourer	20.00	15.28	28.01	21.95
Suspended Ceiling Installer	30.00	22.92	42.02	32.93
Painter	25.00	19.10	35.01	27.44
Floor/Wall Tiler	30.00	22.92	42.02	32.93
Plumber	35.00	26.74	49.02	38.42
Electrician	35.00	26.74	49.02	38.42

Plant resources

The figures below indicate the hire costs of construction plant, delivered to a building site within an urban area of Jordan, and are current at the third quarter 2004. The rates do not include for any fuel or maintenance and exclude operator costs and charges.

<i>Plant resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>JD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Hymac 580 (360 deg tracked excavator)	Hour	20.00	15.28	28.01	21.95
JCB 3C (180 deg wheeled excavator)	Hour	15.00	11.46	21.01	16.47
Vibrating Roller 6–8 Tonne	Hour	5.00	3.82	7.00	5.49
Dumper 4WD Hydraulic Tip 1270	Hour	8.00	6.11	11.20	8.78
Poker Vibrator 48 mm	Day	6.50	4.97	9.10	7.14
Beam Vibrator 6.2 m	Day	10.00	7.64	14.01	10.98
Reinforcement bending machine	Hour	1.00	0.76	1.40	1.10
25 Tonne Mobile Crane	Hour	20.00	15.28	28.01	21.95
13 Tonne Mobile Crane	Hour	15.00	11.46	21.01	16.47
10 Tonne Mobile Crane	Hour	12.00	9.17	16.81	13.17
Wacker Plate	Hour	0.65	0.50	0.91	0.71
2.5 Tonne Block and Tackle	Hour	1.00	0.76	1.40	1.10
Craneage/lifting equipment	Hour	20.00	15.28	28.01	21.95

Construction cost data

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Material resources

The figures below indicate the costs of main building materials, delivered to a construction site within an urban area of Jordan, and are taken at the third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material costs					
<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>JD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	8.00	6.11	11.20	8.78
Clean brick rubble hardcore	m ³	7.49	5.72	10.49	8.22
As-raised hoggin	m ³	8.30	6.34	11.63	9.11
Washed sand	m ³	8.00	6.11	11.20	8.78
Drainage					
100 mm clay drain pipes	m	2.38	1.82	3.34	2.61
150 mm clay drain pipes	m	7.57	5.78	10.60	8.30
225 mm clay drain pipes	m	16.69	12.75	23.38	18.32
150 mm concrete pipe class L	m	3.57	2.73	5.00	3.92
300 mm concrete pipe class L	m	8.35	6.38	11.69	9.16
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	34.00	25.97	47.62	37.32
Readymix concrete 30 N/mm ²	m ³	36.00	27.50	50.42	39.52
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	450.00	343.77	630.25	493.96
Mild steel bars BS4449 10 mm	Tonne	450.00	343.77	630.25	493.96
Mild steel bars BS4449 16 mm	Tonne	450.00	343.77	630.25	493.96
Mild steel bars BS4449 25 mm	Tonne	450.00	343.77	630.25	493.96
Mild steel bars BS4449 40 mm	Tonne	450.00	343.77	630.25	493.96
High yield bars BS4449 8 mm	Tonne	500.00	381.97	700.28	548.85
High yield bars BS4449 10 mm	Tonne	500.00	381.97	700.28	548.85
High yield bars BS4449 16 mm	Tonne	500.00	381.97	700.28	548.85
High yield bars BS4449 25 mm	Tonne	500.00	381.97	700.28	548.85
High yield bars BS4449 40 mm	Tonne	500.00	381.97	700.28	548.85
Tying wire mild steel	Tonne	490.00	374.33	686.27	537.87
Reinforcement spacer blocks	100	4.19	3.20	5.87	4.60

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>JD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	260.00	198.62	364.15	285.40
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	2.00	1.53	2.80	2.20
150 mm concrete blocks 3.5N (solid)	m ²	2.50	1.91	3.50	2.74
200 mm concrete blocks 3.5N (solid)	m ²	3.25	2.48	4.55	3.57
100 mm concrete blocks 3.5N (hollow)	m ²	1.86	1.42	2.61	2.04
150 mm concrete blocks 3.5N (hollow)	m ²	2.33	1.78	3.26	2.55
200 mm concrete blocks 3.5N (hollow)	m ²	3.02	2.31	4.23	3.32
Cement and Sand					
Portland cement in bags	Tonne	55.00	42.02	77.03	60.37
Soft sand for mortar	Tonne	8.00	6.11	11.20	8.78
Cement mortar (1:3)	m ³	65.00	49.66	91.04	71.35
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289 kg	Tonne	1,053.29	804.65	1,475.19	1,156.19
UB BS4360 610 × 305 mm × 238 kg	Tonne	1,053.29	804.65	1,475.19	1,156.19
UB BS4360 457 × 191 mm × 98 kg	Tonne	1,018.17	777.82	1,426.01	1,117.64
RSJ BS4360 254 × 203 mm × 81.85 kg	Tonne	983.06	751.00	1,376.83	1,079.09
RSJ BS4360 203 × 152 mm × 52.09 kg	Tonne	983.06	751.00	1,376.83	1,079.09
RSC BS4360 432 × 102 mm × 65.54 kg	Tonne	1,070.84	818.06	1,499.77	1,175.45
RSC BS4360 254 × 76 mm × 28.89 kg	Tonne	1,053.29	804.65	1,475.19	1,156.19
RHS BS4360 450 × 250 mm × 167 kg	Tonne	1,088.28	831.38	1,524.20	1,194.60
RHS BS4360 300 × 200 mm × 92.6 kg	Tonne	1,053.29	804.65	1,475.19	1,156.19
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	2.33	1.78	3.26	2.56
50 × 100 mm sawn softwood	m	3.98	3.04	5.58	4.37
38 × 25 mm tanalised batten	m	1.01	0.77	1.42	1.11
Boarding to Flooring					
12 mm WBP ply	m ²	8.79	6.72	12.31	9.65
18 mm WBP ply	m ²	13.59	10.38	19.03	14.92
25 mm WBP ply	m ²	19.38	14.81	27.14	21.27

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>JD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Nails					
Galvanised nails 75 mm	kg	4.62	3.53	6.47	5.07
Alloy nails 65 mm × 10g	kg	5.84	4.46	8.18	6.41
50 mm Oval wire nails	kg	3.30	2.52	4.62	3.62
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	40.44	30.89	56.64	44.39
Sheet zinc BS849 0.60 mm	m ²	32.42	24.76	45.40	35.58
Sheet copper BS2870 0.45 mm	m ²	52.01	39.73	72.84	57.09
Felts					
Underslating felt Type 1F	m ²	0.75	0.57	1.05	0.82
Clay roofing products					
265 × 165 mm plain tile, red	1000	469.00	358.29	656.86	514.82
380 × 260 mm pantile, red	1000	860.00	656.99	1,204.48	944.02
Damp-proof membranes					
1000g polythene d.p.m.	m ²	0.73	0.56	1.02	0.80
Insulation					
100 mm thick fibreglass quilt	m ²	4.20	3.21	5.88	4.61
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	28.28	21.60	39.61	31.04
Corrugated galv sheet 1830 mm	Nr	19.80	15.13	27.73	21.73
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	175.95	134.42	246.43	193.14
UPVC s/casement 1000 × 900 glazed	Nr	208.60	159.36	292.16	228.98
UPVC s/casement 1000 × 1200 glazed	Nr	249.92	190.92	350.03	274.34
Glass and glazing					
4 mm clear sheet glass	m ²	6.00	4.58	8.40	6.59
6 mm Georgian wired polished plate	m ²	42.00	32.09	58.82	46.10
5 mm toughened safety glass	m ²	6.18	4.72	8.66	6.78
5.4 mm laminated safety glass	m ²	8.00	6.11	11.20	8.78

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>JD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	2.23	1.70	3.12	2.45
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	21.46	16.39	30.06	23.56
9mm × 150 × 150 mm ceramic floor tile	m ²	18.85	14.40	26.40	20.69
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	11.55	8.82	16.18	12.68
Masonry textured paint white	5 Litre	20.83	15.91	29.17	22.86
Oil/Alkyd paint undercoat	5 Litre	19.70	15.05	27.59	21.62
Oil/Alkyd paint gloss white	5 Litre	19.70	15.05	27.59	21.62

Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			JD	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	1.26	0.96	1.76	1.38
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	6.03	4.60	8.44	6.62
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	3.60	2.75	5.04	3.95
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	16.93	12.93	23.71	18.58
0.05	hardcore	m ³	19.42	14.83	27.19	21.31

Ref. No.	Description	Unit	Price			
			JD	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	3.57	2.73	5.00	3.92
0.07	150 mm dia.	m	10.19	7.78	14.27	11.18
0.08	225 mm dia.	m	21.87	16.70	30.63	24.00
Concrete:						
0.09	150 mm dia.	m	6.07	4.64	8.51	6.67
0.10	300 mm dia.	m	21.33	16.30	29.88	23.42
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	46.25	35.33	64.77	50.77
1.02	over 300 mm thick	m ³	44.11	33.70	61.77	48.42
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	47.89	36.58	67.07	52.57
1.04	0.05–0.20 m ²	m ³	47.31	36.14	66.27	51.94
1.05	over 0.20 m ²	m ³	45.07	34.43	63.13	49.48
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	50.30	38.42	70.44	55.21
1.07	150–300 mm thick	m ³	49.91	38.13	69.90	54.78
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	58.87	44.97	82.44	64.62
1.09	0.05–0.10 m ²	m ³	55.80	42.63	78.15	61.25
1.10	over 0.10 m ²	m ³	53.79	41.10	75.34	59.05

Ref. No.	Description	Unit	Price			
			JD	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	735.88	562.17	1,030.65	807.78
1.12	10 mm	Tonne	697.99	533.23	977.58	766.18
1.13	16 mm	Tonne	653.48	499.22	915.24	717.32
1.14	25 mm	Tonne	624.94	477.41	875.26	685.99
1.15	40 mm	Tonne	600.90	459.05	841.60	659.61
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	795.88	608.01	1,114.68	873.64
1.17	10 mm	Tonne	757.99	579.06	1,061.61	832.04
1.18	16 mm	Tonne	713.48	545.06	999.27	783.18
1.19	25 mm	Tonne	684.94	523.25	959.29	751.85
1.20	40 mm	Tonne	660.90	504.89	925.63	725.47
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	6.37	4.86	8.92	6.99
2.02	150 mm solid blocks	m ²	7.30	5.58	10.22	8.01
2.03	200 mm solid blocks	m ²	8.68	6.63	12.15	9.52

Ref. No.	Description	Unit	Price			
			JD	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289kg/m	Tonne	1,396.74	1,067.03	1,956.22	1,533.20
3.02	610 × 305 mm × 238kg/m	Tonne	1,429.00	1,091.67	2,001.40	1,568.60
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54kg/m	Tonne	1,402.68	1,071.57	1,964.54	1,539.72
3.04	254 × 76 mm × 28.89kg/m	Tonne	1,424.12	1,087.95	1,994.57	1,563.25
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	3.59	2.74	5.02	3.94
4.02	50 × 100 mm	m	5.75	4.39	8.05	6.31
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	12.92	9.87	18.10	14.19
4.04	18 mm thick	m ²	19.60	14.98	27.46	21.52
4.05	25 mm thick	m ²	27.65	21.13	38.73	30.36
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	56.42	43.10	79.02	61.93
5.02	380 × 260 mm clay pantile, red	m ²	26.74	20.43	37.45	29.35

Ref. No.	Description	Unit	Price			
			JD	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	3.92	3.00	5.50	4.31
6.02	38 mm thick	m ²	4.94	3.78	6.92	5.43
6.03	65 mm thick	m ²	7.72	5.89	10.81	8.47
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	32.54	24.86	45.57	35.71
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	1.52	1.16	2.13	1.67
6.06	rendered backgrounds	m ²	1.76	1.35	2.47	1.93
6.07	concrete backgrounds	m ²	1.55	1.19	2.17	1.70
6.08	blockwork backgrounds	m ²	2.33	1.78	3.26	2.55
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	1.61	1.23	2.26	1.77
6.10	rendered backgrounds	m ²	1.91	1.46	2.68	2.10
6.11	concrete backgrounds	m ²	1.73	1.32	2.43	1.90
6.12	textured plastic coating backgrounds	m ²	1.85	1.41	2.59	2.03

Ref. No.	Description	Unit	Price			
			JD	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	1,886.50	1,441.17	2,642.15	2,070.80
7.02	5.0 kw cooling unit	Nr	2,216.71	1,693.44	3,104.64	2,433.27
7.03	7.5 kw cooling unit	Nr	3,772.99	2,882.35	5,284.31	4,141.60
7.04	10.0 kw cooling unit	Nr	4,409.72	3,368.77	6,176.08	4,840.53
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	1,092.45	834.57	1,530.04	1,199.17
7.06	1000 gallon	Nr	2,219.49	1,695.56	3,108.53	2,436.32
7.07	2000 gallon	Nr	3,339.18	2,550.94	4,676.73	3,665.41
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	32.68	24.97	45.77	35.88
7.09	182 litre	Nr	58.74	44.87	82.27	64.48
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	268.90	205.43	376.62	295.17
	Basins:					
7.11	vitreous china	Nr	140.37	107.24	196.60	154.09
	Sinks:					
7.12	stainless steel	Nr	175.32	133.94	245.55	192.45
	WC suites:					
7.13	low level washdown	Nr	261.01	199.40	365.56	286.51
7.14	low level syphonic	Nr	508.20	388.23	711.76	557.85
	Bidets:					
7.15	vitreous china	Nr	261.01	199.40	365.56	286.51

Ref. No.	Description	Unit	Price			
			JD	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	5.73	4.37	8.02	6.29
	Standard cable trays; 1.5 mm/ 2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	10.22	7.81	14.32	11.22
8.03	100 mm	m	12.39	9.46	17.35	13.60
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	10.36	7.91	14.51	11.37
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	31.36	23.96	43.93	34.43
8.06	12-way	Nr	55.81	42.64	78.17	61.27

Ref. No.	Description	Unit	Price			
			JD	£ Stg	US \$	Euro
Electrical engineering						
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	3.90	2.98	5.46	4.28
8.08	2 gang, 2 way	Nr	6.86	5.24	9.61	7.53
8.09	3 gang, 2 way	Nr	9.22	7.04	12.92	10.12
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	5.09	3.89	7.13	5.59
8.11	2 gang	Nr	14.44	11.03	20.22	15.85
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	7.95	6.07	11.14	8.73
8.13	1 gang, with neon indicator	Nr	9.18	7.01	12.86	10.08
8.14	1 gang, with neon indicator, metalplate	Nr	12.84	9.81	17.98	14.09

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004

<i>Facility type</i>	<i>JD/ft²</i>	<i>JD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	28	305	233	428	335
Petrol Stations	165	1,781	1,361	2,494	1,955
Airport Terminal Buildings	164	1,769	1,351	2,477	1,942
Sorting Offices	76	815	623	1,142	895
Refuse Depots	46	500	382	700	549
Stables and the like	74	792	605	1,110	870
Factories	51	552	422	774	606
Advanced Factories	45	483	369	676	530
Purpose Built Workshops	65	695	531	974	763
Warehouses	47	511	390	716	561
Town Halls	113	1,214	927	1,700	1,332
Law Courts	138	1,482	1,132	2,075	1,626
Offices	107	1,156	883	1,619	1,269
Banks/Building Societies	139	1,500	1,146	2,101	1,646
Retail Warehouses	45	482	368	675	529

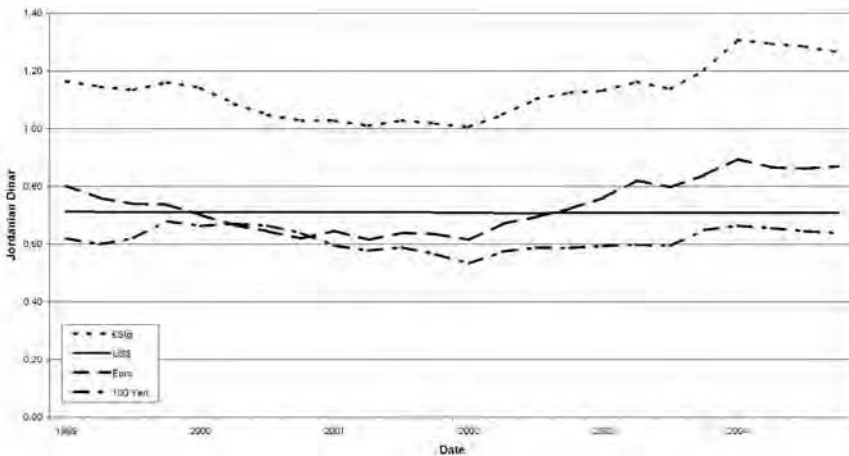
<i>Facility type</i>	<i>JD/ft²</i>	<i>JD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	70	755	577	1,057	829
Department Stores	87	935	715	1,310	1,027
Hypermarkets / Supermarkets	84	903	690	1,265	991
Shops	65	704	537	985	772
Stadia	100	1,072	819	1,502	1,177
Pavilions and Sports Club Houses	97	1,048	801	1,468	1,151
Religious Buildings	113	1,213	926	1,698	1,331
Schools	97	1,047	800	1,467	1,150
Sixth Form Colleges	96	1,030	787	1,443	1,131
Universities	116	1,248	953	1,748	1,370
Colleges	95	1,022	781	1,431	1,122
Research Facilities	136	1,465	1,119	2,051	1,608
Laboratories	135	1,455	1,112	2,038	1,598
Exhibition Buildings	146	1,573	1,202	2,204	1,727
Public Libraries	108	1,159	886	1,623	1,272
Flats	73	781	597	1,094	857
Housing Detached	104	1,120	855	1,568	1,229
Hotels	104	1,118	854	1,566	1,227
Halls of Residence	104	1,120	855	1,568	1,229
Fire Stations	125	1,347	1,029	1,886	1,478
Police Stations	130	1,397	1,067	1,957	1,533
Closed Prisons	144	1,546	1,181	2,165	1,697
Hospitals	139	1,496	1,143	2,095	1,642
Intensive Care / Acute Wards	134	1,444	1,103	2,023	1,585
Health Centres	92	991	757	1,388	1,088
Nursing Homes	100	1,071	819	1,501	1,176
Homes for the Elderly	89	961	734	1,345	1,054
Day Centres	108	1,161	887	1,626	1,275
Veterinary Hospitals	119	1,282	979	1,796	1,407
Restaurants	136	1,467	1,120	2,054	1,610
Theatres	100	1,071	819	1,501	1,176
Cinemas	115	1,235	943	1,729	1,355
Clubs	89	960	733	1,344	1,053
Covered Swimming Pools	168	1,811	1,384	2,537	1,988
Sports Centres exc. Pools	87	939	718	1,316	1,031
Sports Centres inc. Pools	134	1,438	1,099	2,014	1,579
Sports Halls	80	866	661	1,213	950
Gymnasia	121	1,297	991	1,817	1,424

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Jordanian Dinar, against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Jordanian Dinar with each of them and the relative value to each other.

Exchange Rates



Price inflation

The following tables present indices for consumer prices and wholesale prices for construction related items since 1998. The indices have been rebased to 1998=100.

Consumer Price Inflation

From a relatively low level of CPI inflation through the years up to the end of 1995, during which year the average inflation figure was 2.4%, the annual rate of inflation increased to 6.5% in 1996. The subsequent two years, 1997 and 1998, witnessed a significant decline in the inflation rate and, as such, returned to an average rate of 3% and 3.1% respectively. The years 1999 and 2000 found inflation levels at their lowest for some time, with figures of 0.6% and 0.7% reported. Since 2000, however, CPI has increased nearly every year and the prediction for the current year appears to indicate another rise in the inflation level with an average figure for 2004 of 3% from figures provided by the Jordanian authorities.

The graph, which follows the tables below, plots the annual percentage change in consumer price inflation since 1993.

Consumer Prices

Year	annual average	change %
1993	83.4	3.2
1994	86.4	3.6
1995	88.5	2.4
1996	94.2	6.5
1997	97.0	3.0
1998	100.0	3.1
1999	100.6	0.6
2000	101.3	0.7
2001	103.1	1.8
2002	105.0	1.8
2003	107.4	2.3
2004	110.6	3.0

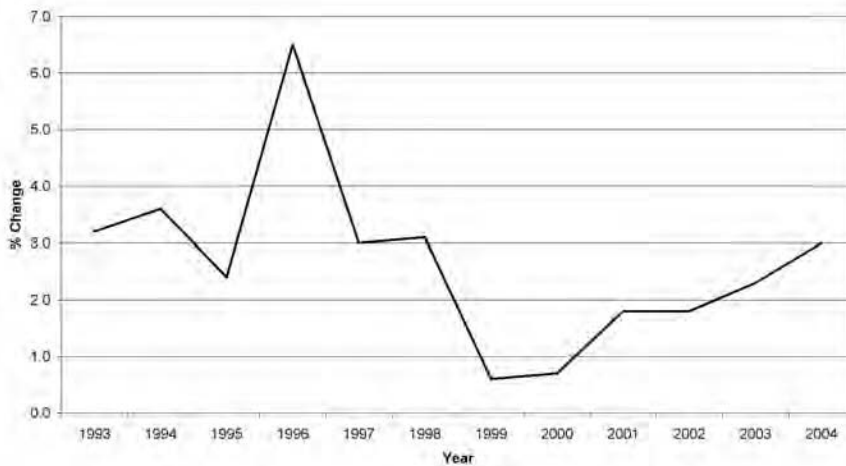
Source: International Monetary Fund, Supplements 2004

Wholesale Price Indices

Year	Wood, Construction & Light Materials		Construction Materials		Equipment & Industrial Construction Instruments	
	annual average	change %	annual average	change %	annual average	change %
1998	100.0	-	100.0	-	100.0	-
1999	102.5	2.5	121.4	21.4	104.1	4.1
2000	95.6	-6.7	109.3	-9.9	105.1	1.0
2001	86.5	-9.5	103.9	-5.0	110.0	4.7
2002	83.6	-3.4	98.9	-4.8	108.3	-1.5
2003	83.1	-0.6	87.5	-11.5	107.8	-0.5
2004	-	-	-	-	-	-

Source: Department of Statistics for Jordan

Consumer Price Inflation for Years 1993 through 2004



Useful addresses

Public organisations

Department of Statistics
PO Box 2015
Amman
Jordan
Tel: (00962) (6) 530 0700
Fax: (00962) (6) 530 0710
Email: stat@dos.gov.jo
Website: www.dos.gov.jo

Housing & Urban Development
Corporation
Jabal Amman 3rd Circle Amman
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Tel: (00962) (6) 464 4307
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Ministry of Industry and Trade
PO Box 2019
Amman 11181
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Website: www.mit.gov.jo

Water Authority of Jordan (WAJ)
PO Box 2412
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National Electric Power Company
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Construction cost data

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Construction companies

Arab Technical Construction Co.

Contact: Eng. Zeid Bdeir

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Email: Nigel.Thomas@MottMac.com



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FRANKLIN  ANDREWS
CONSTRUCTION ECONOMISTS

Kuwait

ECONOMIC INDICATORS AND KEY DATA

Population

Population	2.3 million
Urban Population	96%
Population under 15	28%
Population 65 and over	3%
Population growth rate	3.4%

Geography

Land area	17,820 sq km
Agricultural area	1%
Capital city	Kuwait City
Population of capital city (2004 est.)	1.7 million

Transportation

Railways	0 km
Highways (1999):	
paved	3,587 km
unpaved	863 km
Waterways	n.a.
Pipelines (2003):	
crude oil	540 km
petroleum products	57 km
natural gas	169 km
Ports and Harbours	6
Merchant Marine	38 ships
International Airport	Kuwait City

Economy

Monetary unit	Kuwaiti Dinar
Exchange rate	
£ Stg	0.5350
US \$	0.2947
Euro	0.3693
Yen (×100)	0.2714
Average annual inflation (1998 to 2003)	1.5%
Inflation rate (2004 est.)	1.2%
Gross Domestic Product (GDP) at market prices (2003) million	KWD12,441
GDP PPP basis (2003)	US\$41.5 billion
GDP per capita	KWD5,385
GDP per capita PPP basis (2003)	US\$19,000
Average annual real change in GDP (1998 to 2003)	3.8%
Private consumption as a proportion of GDP (2003)	49.6%
General government consumption as a proportion of GDP (2003)	25.9%
Gross domestic investment as a proportion of GDP (2003)	8.0%

Construction

Gross value of construction output	KWD285.3 million
Net value of construction output as a proportion of GDP	2.3%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
Central Bank of Kuwait

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Kuwait lies at the north-west extreme of the Arabian Gulf and has land borders with Saudi Arabia to the south and Iraq to the west. The low-lying terrain is mostly desert, sandy and barren, and flat to slightly undulating. There is limited natural fresh water and sophisticated desalination plants provide much of the country's water requirements to compensate for the lack of this resource.

Kuwait has a dry desert climate with hot summers and short, cool winters. Inland temperatures can reach up to 40°C when hot winds blow, temperatures are slightly lower in coastal regions. Kuwait is a low-lying desert country where annual average rainfall is 125 mm. Rainfall can be sudden and devastating from October to April and there can be violent sand-storms in early summer.

The State of Kuwait has been a nominal constitutional monarchy since its independence from the UK in 1961. The Amir, as the chief of state, appoints the head of government – the Prime Minister. The Prime Minister heads the Council of Ministers, its executive authority, which will be approved by the Amir. The legislative power lies in the unicameral National Assembly, or Majlis, comprising 50 seats whose members are elected to serve for a term of four years. The legal system is a civil law system with Islamic law significant in personal matters.

Kuwait is a member of a number of major international organisations including the United Nations, the World Trade Organisation, the Organisation of Petroleum Exporting Countries and others. More than half of the population are non-nationals, comprising Arabs, South Asians, Iranians and others. The principal religion is Islam including Sunni and Shi'a Muslims and the rest Christians, Hindus, Parsi and others. Arabic is the official language although English is widely understood in business.

The Kuwaiti construction industry has limited activities in property related sectors where a total of KD200 million per annum for government-provided housing is allocated and has seen priorities related to the oil and defence sectors. Almost all construction labour is non-Kuwaiti coming from Pakistan, India and other neighbouring countries.

Construction cost data

Labour resources

The figures below are typical labour costs for an urban area of Kuwait and are taken at the third quarter 2004. The labour resources are a combination of the employee's basic pay and the financial cost of that labour to the employer. The cost of labour is based on the employee's basic pay and includes those allowances for employer and employee expenses such as holidays, insurance and other mandatory and voluntary contributions.

Law No. 38 of 1964 governs labour in the Private Sector. The working week is limited to forty-eight hours with one day of rest per week. As in other countries in the Middle East this day can be changed with both employer and employee consent.

Overtime is available where essential and additional compensation levels range from twenty-five to fifty per cent of the basic wage.

Kuwaiti workers have the right to establish unions and to bargain collectively. The right to strike is allowed but under Kuwaiti law the strike requires compulsory negotiations followed by arbitration.

Foreigners wishing to work in Kuwait need to obtain a permit from the Ministry of Labour. Permits will generally be restricted to areas where local skills are not available and expatriate skills are essential.

Minimum age for employment, both full and part time, is eighteen.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>KWD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	7.18	13.09	24.24	18.69
Groundworks Labourer	8.96	16.33	30.24	23.32
Bricklayer	18.88	34.42	63.74	49.16
Shuttering Carpenter	12.30	22.43	41.52	32.02
Carpenter	18.88	34.42	63.74	49.16
Steel Fixer	12.30	22.43	41.52	32.02
Metalworker Craftsman	18.88	34.42	63.74	49.16
Roof Tiler	18.88	34.42	63.74	49.16
Sheet Metal Roofer	18.88	34.42	63.74	49.16
Glazier	15.16	27.63	51.17	39.46
Plasterer	18.88	34.42	63.74	49.16
Plasterers Labourer	8.96	16.33	30.24	23.32
Suspended Ceiling Installer	18.88	34.42	63.74	49.16
Painter	15.16	27.63	51.17	39.46
Floor/Wall Tiler	18.88	34.42	63.74	49.16
Plumber	23.88	43.54	80.61	62.17
Electrician	23.88	43.54	80.61	62.17

Plant resources

The figures below indicate the hire costs of construction plant, delivered to a construction site within an urban location in Kuwait and are current at the third quarter 2004. The rates do not include for any fuel or maintenance expenses and exclude operator costs and charges.

Plant resources	Unit	Employer's cost of labour (per day)			
		KWD	£ Stg	US \$	Euro
Hymac 580 (360 deg tracked excavator)	Hour	12.10	22.06	40.84	31.49
JCB 3C (180 deg wheeled excavator)	Hour	9.01	16.42	30.41	23.45
Vibrating Roller 6–8 Tonne	Hour	3.06	5.57	10.32	7.96
Dumper 4WD Hydraulic Tip 1270	Hour	4.78	8.71	16.13	12.44
Poker Vibrator 48 mm	Day	3.97	7.24	13.41	10.34
Beam Vibrator 6.2 m	Day	6.10	11.13	20.61	15.89
Reinforcement bending machine	Hour	0.60	1.09	2.02	1.55
25 Tonne Mobile Crane	Hour	12.37	22.55	41.75	32.19
13 Tonne Mobile Crane	Hour	8.96	16.34	30.25	23.33
10 Tonne Mobile Crane	Hour	7.41	13.51	25.02	19.29
Wacker Plate	Hour	0.39	0.71	1.31	1.01
2.5 Tonne Block and Tackle	Hour	0.62	1.13	2.08	1.61
Craneage/lifting equipment	Hour	12.07	22.00	40.74	31.42

Construction cost data

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Material resources

The figures below indicate the costs of main construction materials, delivered to a building site within an urban environment in Kuwait, and are taken at the third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material resources	Unit	Material costs			
		Price			
		KWD	£ Stg	US \$	Euro
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	4.78	8.71	16.13	12.44
Clean brick rubble hardcore	m ³	4.57	8.33	15.42	11.89
As-raised hoggin	m ³	5.01	9.13	16.91	13.04
Washed sand	m ³	4.78	8.71	16.13	12.44
Drainage					
100 mm clay drain pipes	m	2.56	4.67	8.65	6.67
150 mm clay drain pipes	m	5.43	9.90	18.33	14.13
225 mm clay drain pipes	m	17.13	31.24	57.84	44.61
150 mm concrete pipe class L	m	3.02	5.51	10.20	7.86
300 mm concrete pipe class L	m	6.25	11.39	21.10	16.27
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	20.63	37.61	69.63	53.70
Readymix concrete 30 N/mm ²	m ³	22.06	40.21	74.46	57.42
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	276.77	504.59	934.34	720.57
Mild steel bars BS4449 10 mm	Tonne	276.77	504.59	934.34	720.57
Mild steel bars BS4449 16 mm	Tonne	276.77	504.59	934.34	720.57
Mild steel bars BS4449 25 mm	Tonne	276.77	504.59	934.34	720.57
Mild steel bars BS4449 40 mm	Tonne	276.77	504.59	934.34	720.57
High yield bars BS4449 8 mm	Tonne	298.71	544.59	1,008.40	777.69
High yield bars BS4449 10 mm	Tonne	298.71	544.59	1,008.40	777.69
High yield bars BS4449 16 mm	Tonne	298.71	544.59	1,008.40	777.69
High yield bars BS4449 25 mm	Tonne	298.71	544.59	1,008.40	777.69
High yield bars BS4449 40 mm	Tonne	298.71	544.59	1,008.40	777.69
Tying wire mild steel	Tonne	293.17	534.50	989.72	763.28
Reinforcement spacer blocks	100	2.60	4.73	8.77	6.76

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>KWD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	157.12	286.45	530.40	409.05
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	1.22	2.23	4.12	3.18
150 mm concrete blocks 3.5N (solid)	m ²	1.52	2.76	5.12	3.95
200 mm concrete blocks 3.5N (solid)	m ²	2.01	3.66	6.78	5.23
100 mm concrete blocks 3.5N (hollow)	m ²	1.11	2.03	3.75	2.89
150 mm concrete blocks 3.5N (hollow)	m ²	1.45	2.65	4.90	3.78
200 mm concrete blocks 3.5N (hollow)	m ²	1.92	3.51	6.49	5.01
Cement and Sand					
Portland cement in bags	Tonne	33.68	61.40	113.70	87.68
Soft sand for mortar	Tonne	4.94	9.01	16.67	12.86
Cement mortar (1:3)	m ³	38.83	70.80	131.09	101.10
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	676.45	1,233.26	2,283.59	1,761.12
UB BS4360 610 × 305 mm × 238kg	Tonne	676.45	1,233.26	2,283.59	1,761.12
UB BS4360 457 × 191 mm × 98kg	Tonne	614.36	1,120.07	2,073.99	1,599.47
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	587.30	1,070.73	1,982.63	1,529.02
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	587.30	1,070.73	1,982.63	1,529.02
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	657.33	1,198.41	2,219.06	1,711.35
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	667.01	1,216.06	2,251.73	1,736.55
RHS BS4360 450 × 250 mm × 167kg	Tonne	663.16	1,209.05	2,238.75	1,726.53
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	667.01	1,216.06	2,251.73	1,736.55
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	0.73	1.32	2.45	1.89
50 × 100 mm sawn softwood	m	1.24	2.26	4.18	3.22
38 × 25 mm tanalised batten	m	0.28	0.51	0.95	0.73
Boarding to Flooring					
12 mm WBP ply	m ²	5.33	9.72	18.00	13.88
18 mm WBP ply	m ²	8.30	15.13	28.02	21.61
25 mm WBP ply	m ²	12.01	21.90	40.55	31.27
Nails					
Galvanised nails 75 mm	kg	2.77	5.06	9.36	7.22
Alloy nails 65 mm × 10g	kg	3.55	6.47	11.98	9.24
50 mm Oval wire nails	kg	2.01	3.67	6.79	5.24

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>KWD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	24.61	44.86	83.06	64.06
Sheet zinc BS849 0.60 mm	m ²	19.37	35.31	65.37	50.42
Sheet copper BS2870 0.45 mm	m ²	32.36	59.00	109.25	84.25
Felts					
Underslating felt Type 1F	m ²	0.46	0.84	1.55	1.20
Clay roofing products					
265 × 165 mm plain tile, red	1000	284.39	518.49	960.07	740.41
380 × 260 mm pantile, red	1000	520.20	948.41	1,756.13	1,354.34
Damp-proof membranes					
1000g polythene d.p.m.	m ²	0.45	0.81	1.51	1.16
Insulation					
100 mm thick fibreglass quilt	m ²	2.57	4.68	8.66	6.68
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	17.06	31.11	57.61	44.43
Corrugated galv sheet 1830 mm	Nr	12.24	22.32	41.33	31.87
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	109.85	200.27	370.83	285.98
UPVC s/casement 1000 × 900 glazed	Nr	127.74	232.88	431.22	332.56
UPVC s/casement 1000 × 1200 glazed	Nr	154.53	281.74	521.68	402.32
Glass and glazing					
4 mm clear sheet glass	m ²	27.05	49.32	91.33	70.44
6 mm Georgian wired polished plate	m ²	73.12	133.31	246.85	190.37
5 mm toughened safety glass	m ²	64.65	117.86	218.24	168.31
5.4 mm laminated safety glass	m ²	64.02	116.71	216.12	166.67

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>KWD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	1.37	2.49	4.61	3.56
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	13.21	24.08	44.58	34.38
9mm × 150 × 150 mm ceramic floor tile	m ²	11.54	21.04	38.97	30.05
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	7.07	12.89	23.88	18.41
Masonry textured paint white	5 Litre	12.57	22.91	42.43	32.72
Oil/Alkyd paint undercoat	5 Litre	11.77	21.46	39.73	30.64
Oil/Alkyd paint gloss white	5 Litre	11.77	21.46	39.73	30.64

Construction cost data

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Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			KWD	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	0.76	1.38	2.55	1.97
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	3.62	6.60	12.21	9.42
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	2.14	3.91	7.23	5.58
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	10.08	18.38	34.03	26.24
0.05	hardcore	m ³	11.72	21.37	39.58	30.52

Ref. No.	Description	Unit	Price			
			KWD	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	3.53	6.43	11.91	9.19
0.07	150 mm dia.	m	7.18	13.10	24.25	18.70
0.08	225 mm dia.	m	22.03	40.16	74.37	57.35
Concrete:						
0.09	150 mm dia.	m	4.63	8.45	15.64	12.06
0.10	300 mm dia.	m	14.22	25.93	48.02	37.03
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	28.05	51.13	94.68	73.02
1.02	over 300 mm thick	m ³	26.75	48.77	90.30	69.64
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	29.03	52.92	98.00	75.58
1.04	0.05–0.20 m ²	m ³	28.68	52.30	96.83	74.68
1.05	over 0.20 m ²	m ³	27.33	49.82	92.25	71.14
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	30.78	56.12	103.92	80.14
1.07	150–300 mm thick	m ³	30.55	55.70	103.13	79.53
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	35.93	65.51	121.30	93.55
1.09	0.05–0.10 m ²	m ³	34.08	62.12	115.03	88.71
1.10	over 0.10 m ²	m ³	32.86	59.91	110.93	85.55

Ref. No.	Description	Unit	Price			
			KWD	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	452.50	824.98	1,527.59	1,178.09
1.12	10 mm	Tonne	429.29	782.66	1,449.22	1,117.65
1.13	16 mm	Tonne	401.90	732.73	1,356.76	1,046.34
1.14	25 mm	Tonne	384.31	700.66	1,297.38	1,000.55
1.15	40 mm	Tonne	369.50	673.66	1,247.38	961.99
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	478.83	872.99	1,616.48	1,246.63
1.17	10 mm	Tonne	455.62	830.66	1,538.10	1,186.19
1.18	16 mm	Tonne	428.23	780.73	1,445.64	1,114.89
1.19	25 mm	Tonne	410.64	748.66	1,386.26	1,069.09
1.20	40 mm	Tonne	395.83	721.66	1,336.26	1,030.53
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	3.92	7.15	13.23	10.21
2.02	150 mm solid blocks	m ²	4.48	8.17	15.12	11.66
2.03	200 mm solid blocks	m ²	5.37	9.79	18.13	13.98

Ref. No.	Description	Unit	Price			
			KWD	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	894.84	1,631.42	3,020.85	2,329.70
3.02	610 × 305 mm × 238 kg/m	Tonne	914.90	1,668.00	3,088.57	2,381.92
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	862.07	1,571.69	2,910.24	2,244.40
3.04	254 × 76 mm × 28.89 kg/m	Tonne	900.75	1,642.21	3,040.82	2,345.10
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	1.31	2.38	4.41	3.40
4.02	50 × 100 mm	m	1.98	3.62	6.70	5.17
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	7.87	14.36	26.58	20.50
4.04	18 mm thick	m ²	12.01	21.90	40.56	31.28
4.05	25 mm thick	m ²	17.17	31.30	57.95	44.69
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	30.16	54.99	101.83	78.53
5.02	380 × 260 mm clay pantile, red	m ²	15.05	27.45	50.82	39.19

Ref. No.	Description	Unit	Price			
			KWD	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	2.32	4.24	7.84	6.05
6.02	38 mm thick	m ²	2.93	5.34	9.89	7.63
6.03	65 mm thick	m ²	4.58	8.35	15.46	11.92
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	20.07	36.60	67.76	52.26
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	0.93	1.69	3.13	2.41
6.06	rendered backgrounds	m ²	1.07	1.96	3.62	2.79
6.07	concrete backgrounds	m ²	0.95	1.72	3.19	2.46
6.08	blockwork backgrounds	m ²	1.42	2.59	4.79	3.69
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	0.98	1.79	3.32	2.56
6.10	rendered backgrounds	m ²	1.16	2.12	3.93	3.03
6.11	concrete backgrounds	m ²	1.05	1.92	3.56	2.75
6.12	textured plastic coating backgrounds	m ²	1.13	2.06	3.81	2.94

Ref. No.	Description	Unit	Price			
			KWD	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	1,184.97	2,160.38	4,000.30	3,085.05
7.02	5.0 kw cooling unit	Nr	1,341.63	2,446.00	4,529.17	3,492.92
7.03	7.5 kw cooling unit	Nr	2,315.00	4,220.61	7,815.15	6,027.08
7.04	10.0 kw cooling unit	Nr	2,712.46	4,945.24	9,156.92	7,061.87
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	656.68	1,197.23	2,216.87	1,709.66
7.06	1000 gallon	Nr	1,344.69	2,451.58	4,539.49	3,500.88
7.07	2000 gallon	Nr	2,045.73	3,729.67	6,906.10	5,326.02
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	20.19	36.81	68.17	52.57
7.09	182 litre	Nr	36.57	66.67	123.45	95.21
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	168.23	306.71	567.92	437.99
	Basins:					
7.11	vitreous china	Nr	85.72	156.28	289.38	223.17
	Sinks:					
7.12	stainless steel	Nr	107.93	196.78	364.37	281.00
	WC suites:					
7.13	low level washdown	Nr	163.01	297.20	550.31	424.40
7.14	low level syphonic	Nr	313.08	570.80	1,056.93	815.11
	Bidets:					
7.15	vitreous china	Nr	163.01	297.20	550.31	424.40

Ref. No.	Description	Unit	Price			
			KWD	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	3.45	6.29	11.66	8.99
	Standard cable trays;					
	1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	6.31	11.50	21.29	16.42
8.03	100 mm	m	7.60	13.85	25.65	19.78
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	6.42	11.71	21.68	16.72
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	19.12	34.86	64.54	49.78
8.06	12-way	Nr	34.71	63.29	117.19	90.38

Ref. No.	Description	Unit	Price			
			KWD	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	2.43	4.43	8.20	6.32
8.08	2 gang, 2 way	Nr	4.23	7.71	14.28	11.02
8.09	3 gang, 2 way	Nr	5.77	10.53	19.49	15.03
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	3.11	5.66	10.48	8.08
8.11	2 gang	Nr	8.84	16.12	29.85	23.02
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	4.94	9.00	16.66	12.85
8.13	1 gang, with neon indicator	Nr	5.74	10.46	19.37	14.94
8.14	1 gang, with neon indicator, metalplate	Nr	7.82	14.25	26.39	20.35

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>KWD/ft²</i>	<i>KWD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	14	148	270	501	386
Petrol Stations	81	872	1,590	2,945	2,271
Airport Terminal Buildings	82	878	1,601	2,965	2,287
Sorting Offices	37	403	735	1,360	1,049
Refuse Depots	23	245	447	828	638
Stables and the like	36	383	698	1,292	997
Factories	26	276	504	933	719
Advanced Factories	23	243	442	819	632
Purpose Built Workshops	32	342	623	1,153	889
Warehouses	23	251	458	848	654
Town Halls	56	598	1,091	2,019	1,557
Law Courts	68	734	1,338	2,478	1,911
Offices	52	562	1,024	1,896	1,462
Banks/Building Societies	69	737	1,344	2,490	1,920
Retail Warehouses	22	238	434	804	620

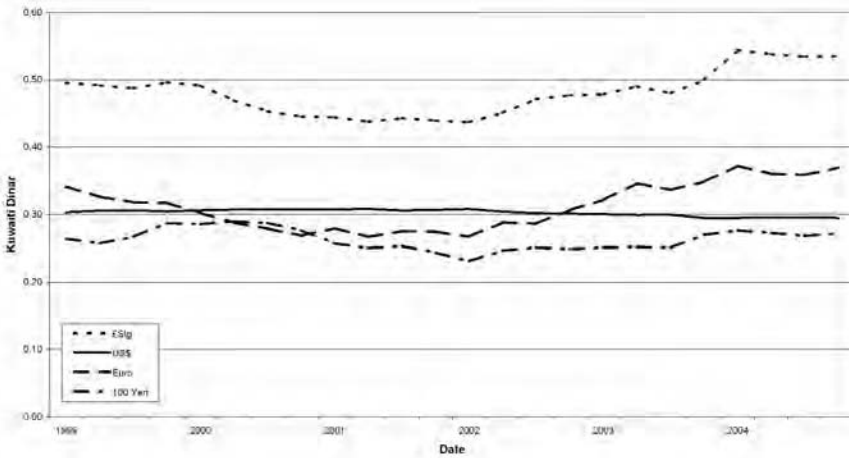
<i>Facility type</i>	<i>KWD/ft²</i>	<i>KWD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	35	373	680	1,259	971
Department Stores	42	454	828	1,534	1,183
Hypermarkets / Supermarkets	41	436	796	1,473	1,136
Shops	33	354	645	1,194	921
Stadia	49	527	960	1,778	1,371
Pavilions and Sports Club Houses	49	528	962	1,781	1,374
Religious Buildings	55	596	1,087	2,013	1,552
Schools	47	509	929	1,720	1,326
Sixth Form Colleges	47	509	928	1,718	1,325
Universities	56	606	1,105	2,046	1,578
Colleges	47	510	931	1,723	1,329
Research Facilities	67	718	1,310	2,425	1,870
Laboratories	65	703	1,282	2,374	1,831
Exhibition Buildings	73	787	1,435	2,657	2,049
Public Libraries	53	570	1,039	1,924	1,484
Flats	37	401	731	1,353	1,043
Housing Detached	52	555	1,011	1,872	1,444
Hotels	52	557	1,016	1,881	1,451
Halls of Residence	52	564	1,028	1,903	1,467
Fire Stations	64	687	1,253	2,319	1,789
Police Stations	64	685	1,249	2,313	1,784
Closed Prisons	71	768	1,400	2,592	1,999
Hospitals	67	723	1,318	2,440	1,882
Intensive Care / Acute Wards	66	706	1,287	2,383	1,838
Health Centres	44	479	873	1,616	1,247
Nursing Homes	49	532	970	1,796	1,385
Homes for the Elderly	45	480	876	1,622	1,251
Day Centres	54	584	1,064	1,970	1,519
Veterinary Hospitals	58	627	1,144	2,118	1,633
Restaurants	67	721	1,315	2,434	1,877
Theatres	48	518	944	1,748	1,348
Cinemas	57	612	1,115	2,065	1,592
Clubs	44	478	872	1,615	1,245
Covered Swimming Pools	83	891	1,624	3,006	2,319
Sports Centres exc. Pools	43	465	847	1,568	1,210
Sports Centres inc. Pools	65	699	1,274	2,358	1,819
Sports Halls	39	425	774	1,434	1,106
Gymnasia	58	627	1,143	2,116	1,632

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Kuwaiti Dinar, against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Kuwaiti Dinar with each of them and the relative value to each other.

Exchange Rates



Price inflation

The following tables present indices for consumer prices and wholesale prices for construction related items since 1997. The indices are rebased to 1997=100.

Consumer Price Inflation

Kuwait has historically experienced a relatively minimal level of consumer price inflation (CPI). The CPI level peaked at the end of 1999, during which the average inflation figure for the year was 4.6%. The subsequent years witnessed a dramatic decline, by Kuwaiti economy standards, as the rate of inflation fell to 0.8% in 2000 and in 2001 no change was recorded. Since 2001 the CPI has been up and down with average inflation bordering the 1.6% mark. The prediction for the current year appears to indicate another downward trend in the inflation level with an anticipated average figure for 2004 of 1.2% from figures provided by the Kuwaiti authorities.

The graph, which follows the tables below, plots the annual percentage change in consumer price inflation since 1997.

Consumer Prices

Year	annual average	change %
1997	100.0	0.7
1998	100.2	0.2
1999	104.8	4.6
2000	105.6	0.8
2001	105.6	0.0
2002	107.0	1.3
2003	109.5	2.4
2004	110.9	1.2

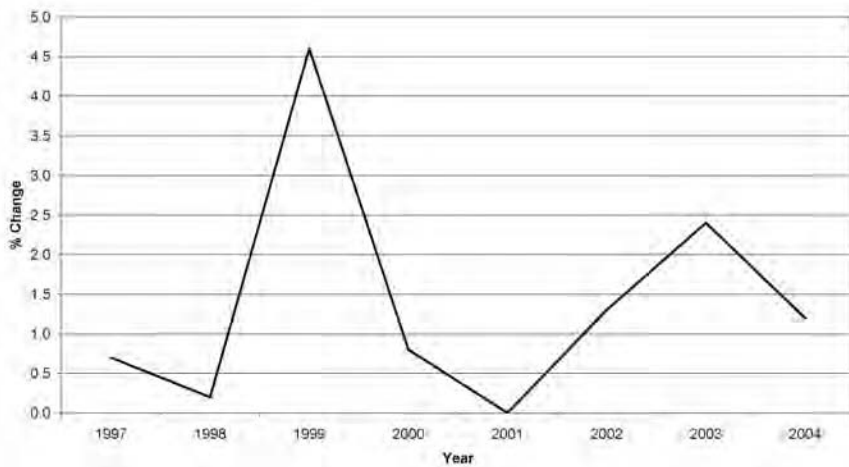
Source: Central Bank of Kuwait
International Monetary Fund

Wholesale Price Indices

Year	General Index		Wood and Wood Products		Basic Metal Products	
	annual average	change %	annual average	change %	annual average	change %
1997	100.0	–	100.0	–	100.0	–
1998	98.4	–1.6	100.1	0.1	97.4	–2.6
1999	97.2	–1.2	98.1	–2.0	96.5	–0.9
2000	97.6	0.4	95.8	–2.4	95.0	–1.6
2001	99.5	2.0	95.1	–0.7	92.5	–2.6
2002	102.8	3.3	94.8	–0.4	82.1	–11.2
2003	104.5	1.7	94.8	0.0	82.1	0.0

Source: Central Bank of Kuwait
International Monetary Fund

Consumer Price Inflation for Years 1997 through 2004



Useful addresses

Public organisations

Ministry of Oil
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Ministry of Finance
Offset Program Department
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Fax: (00965) 242 5965
Email: offset@mof.gov.kw
Website: www.mof.gov.kw/offset

Ministry of Public Works
PO Box 8
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Fax: (00965) 242 8362
Email: webmaster@mpw.gov.kw
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Central Bank of Kuwait (CBK)
PO Box 526
Safat 13006
Kuwait
Tel: (00965) 244 9200
Fax: (00965) 244 0887
Email: cbk@cbk.gov.kw
Website: www.cbk.gov.kw

Foreign Embassies

Embassy of the United States of
America
Area 14
Al-Masjad al-Aqsa Street
Bayan
PO Box 77
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Kuwait
Tel: (00965) 539 5307
Fax: (00965) 538 0282
Email: paskuwaitm@state.gov
Website: [http://usembassy.state.gov/
kuwait](http://usembassy.state.gov/kuwait)

British Embassy
Arabian Gulf Street
Dasman
PO Box 2
Safat 13001
Kuwait
Tel: (00965) 240 3335
Fax: (00965) 242 6799
Email: [kuwaitinfo/ppa.Kuwait@fco.
gov.uk](mailto:kuwaitinfo/ppa.Kuwait@fco.gov.uk)
Website: [www.britishembassy-
kuwait.org](http://www.britishembassy-kuwait.org)

Construction cost data**163***Industrial Organisations*

Kuwait Chamber of Commerce
and Industry

Commercial Area # 9

Al-Shuhadaa St

Kuwait City

PO Box 775

Safat 13008

Kuwait

Tel: (00965) 242 3555

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Website: www.kcci.org.com

Kuwait Foreign Petroleum
Exploration Company

Essa Al-Saleh Commercial
Building

Fahad Al-Salem Street

Salhiya Block 3

Kuwait City

PO Box 5291

Safat 13053

Kuwait

Tel: (00965) 836 0000

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Email: webmaster@kufpec.com

Website: www.kufpec.com

Kuwait Petroleum Corporation

Media Department

PO Box 26565

Safat 13126

Kuwait

Tel: (00965) 240 0960

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Email: info@kpc.com.kw

Website: www.kpc.com.kw

Kuwait Oil Company (K.S.C.)

PO Box 9758

Ahmadi 61008

Kuwait

Tel: (00965) 398 9111

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Email: kocinfo@kockw.com

Website: www.kockw.com

Construction Consultants

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Lebanon

ECONOMIC INDICATORS AND KEY DATA

Population

Population	3.8 million
Urban Population	87%
Population under 15	27%
Population 65 and over	7%
Population growth rate	1.3%

Geography

Land area	10,230 sq km
Agricultural area	31%
Capital city	Beirut
Population of capital city (2000)	2 million

Transportation

Railways	401 km
Highways:	
paved	6,198 km
unpaved (1999)	1,102 km
Waterways	n.a.
Pipelines:	
crude oil (2003)	209 km
petroleum products	n.a.
natural gas	n.a.
Ports and Harbours	12
Merchant Marine	49 ships
International Airport	Beirut International, Khaldeh

Economy

Monetary unit	Lebanese Pound
Exchange rate	
£ Stg	2,750
US \$	1,515
Euro	1,898
Yen (×100)	1,395
Average annual inflation (1998 to 2003)	3.0%
Inflation rate (2004 est.)	2.5%
Gross Domestic Product (GDP) at market prices (2001)	LP25,188 billion
GDP PPP basis (2003)	US\$17.8 billion
GDP per capita	LP6,628,421
GDP per capita PPP basis (2003)	US\$4,800
Average annual real change in GDP (1998 to 2003)	2.3%
Private consumption as a proportion of GDP (2003)	96.1%
General government consumption as a proportion of GDP (2003)	12.8%
Gross domestic investment as a proportion of GDP (2003)	24.8%

Construction

Gross value of construction output	LP580 billion
Net value of construction output as a proportion of GDP (1995)	2.3%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
United Nations World Statistics Pocketbook
The Lebanese Republic, Ministry of Finance

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Lebanon is located at the eastern shore of the Mediterranean Sea with a border to Israel in the south and Syria in the east and north. There are four main regions in Lebanon, differentiated by geography and climate, the coastal plain, the Mount Lebanon Range, the Bekaa Valley, and the Anti-Lebanon Range on the border with Syria. The principal agricultural area, the Bekaa Valley, or Al Biqa', lies between these two mountain ranges. The fertile area also includes the coastal plain where most of the population live.

Lebanon has a Mediterranean climate with hot, dry summers and mild, wet winters. Humidity is high along the coast in summer and daytime temperatures can reach 30°C on average in summer and 15°C in winter. There can be heavy winter snows in the Lebanon Mountains region.

The Republic of Lebanon has been an independent state from French administration since 1943. The president, as chief of state, is elected by an unicameral National Assembly, or Majlis Alnuwab, which comprises 128 seats with members being elected by popular vote to serve for a term of four years. The president in consultation with the National Assembly appoints the head of government, the prime minister, who organises the Cabinet. The legal system is a mixture of Napoleonic code, Ottoman law, canon law and civil law.

Lebanon is a member of the United Nations, an Observer of the World Trade Organisations and a member of some other major international organisations. More than 90% of the population are Arabs with a small minority of Armenian and other ethnic groups. The principal religion is Islam including five Muslim groups with Christians and others forming the rest. Arabic is the official language although French, English and Armenian are widely understood.

The Lebanese construction industry has been largely involved with rebuilding the country's infrastructure following the 17-year Civil war. The total value of contracts signed by the Council for Development and Reconstruction between 1992 and 2003 was about US\$ 7.1 billion, of which 70% in value of the related projects have been completed.

Construction cost data

Labour resources

The figures below are typical labour costs in the Lebanese construction industry generally in an urban environment and are taken at the third quarter 2004. The labour resources are a combination of the employee's basic pay and the financial cost to the employer of that labour. The cost of labour is based on the employee's basic pay and includes those allowances for employer and employee expenses such as holidays, insurance and other mandatory and voluntary contributions.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>LBP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	29,478	10.49	19.42	14.98
Groundworks Labourer	42,177	15.01	27.79	21.44
Bricklayer	73,329	26.10	48.32	37.27
Shuttering Carpenter	50,328	17.91	33.16	25.58
Carpenter	73,329	26.10	48.32	37.27
Steel Fixer	50,328	17.91	33.16	25.58
Metalworker Craftsman	73,329	26.10	48.32	37.27
Roof Tiler	73,329	26.10	48.32	37.27
Sheet Metal Roofer	73,329	26.10	48.32	37.27
Glazier	62,422	22.21	41.13	31.73
Plasterer	73,329	26.10	48.32	37.27
Plasterers Labourer	42,177	15.01	27.79	21.44
Suspended Ceiling Installer	73,329	26.10	48.32	37.27
Painter	62,422	22.21	41.13	31.73
Floor/Wall Tiler	73,329	26.10	48.32	37.27
Plumber	87,476	31.13	57.64	44.46
Electrician	87,476	31.13	57.64	44.46

Construction cost data

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Plant resources

The figures below indicate the hire costs of construction plant, delivered to the site in major urban locations in the Lebanon and are current at the third quarter 2004. The rates do not include for any fuel or maintenance expenses and exclude operator costs and charges.

<i>Plant resources</i>	<i>Unit</i>	<i>Employer's cost of labour (per day)</i>			
		<i>LBP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Hymac 580 (360 deg tracked excavator)	Hour	49,644	17.67	32.71	25.23
JCB 3C (180 deg wheeled excavator)	Hour	36,665	13.05	24.16	18.63
Vibrating Roller 6–8 Tonne	Hour	12,497	4.45	8.23	6.35
Dumper 4WD Hydraulic Tip 1270	Hour	19,799	7.05	13.05	10.06
Poker Vibrator 48 mm	Day	16,357	5.82	10.78	8.31
Beam Vibrator 6.2 m	Day	25,262	8.99	16.65	12.84
Reinforcement bending machine	Hour	2,497	0.89	1.65	1.27
25 Tonne Mobile Crane	Hour	48,886	17.40	32.21	24.85
13 Tonne Mobile Crane	Hour	38,315	13.64	25.25	19.47
10 Tonne Mobile Crane	Hour	30,256	10.77	19.94	15.38
Wacker Plate	Hour	1,589	0.57	1.05	0.81
2.5 Tonne Block and Tackle	Hour	2,521	0.90	1.66	1.28
Craneage/lifting equipment	Hour	49,375	17.57	32.54	25.09

Material resources

The figures below indicate the costs of main construction materials, delivered to the site at an urban location within the Lebanon, and are taken at the third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material costs					
<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>LBP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	19,916	7.09	13.12	10.12
Clean brick rubble hardcore	m ³	18,940	6.74	12.48	9.63
As-raised hoggin	m ³	20,295	7.22	13.37	10.31
Washed sand	m ³	19,916	7.09	13.12	10.12
Drainage					
100 mm clay drain pipes	m	10,291	3.66	6.78	5.23
150 mm clay drain pipes	m	22,212	7.90	14.64	11.29
225 mm clay drain pipes	m	71,680	25.51	47.23	36.43
150 mm concrete pipe class L	m	12,359	4.40	8.14	6.28
300 mm concrete pipe class L	m	26,143	9.30	17.23	13.29
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	84,395	30.03	55.61	42.89
Readymix concrete 30 N/mm ²	m ³	90,239	32.11	59.46	45.86
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	1,105,441	393.40	728.41	561.83
Mild steel bars BS4449 10 mm	Tonne	1,105,441	393.40	728.41	561.83
Mild steel bars BS4449 16 mm	Tonne	1,105,441	393.40	728.41	561.83
Mild steel bars BS4449 25 mm	Tonne	1,105,441	393.40	728.41	561.83
Mild steel bars BS4449 40 mm	Tonne	1,105,441	393.40	728.41	561.83
High yield bars BS4449 8 mm	Tonne	1,234,378	439.28	813.38	627.36
High yield bars BS4449 10 mm	Tonne	1,234,378	439.28	813.38	627.36
High yield bars BS4449 16 mm	Tonne	1,234,378	439.28	813.38	627.36
High yield bars BS4449 25 mm	Tonne	1,234,378	439.28	813.38	627.36
High yield bars BS4449 40 mm	Tonne	1,234,378	439.28	813.38	627.36
Tying wire mild steel	Tonne	1,199,510	426.87	790.40	609.64
Reinforcement spacer blocks	100	10,242	3.64	6.75	5.21

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>LBP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	642,830	228.77	423.58	326.71
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	4,979	1.77	3.28	2.53
150 mm concrete blocks 3.5N (solid)	m ²	6,080	2.16	4.01	3.09
200 mm concrete blocks 3.5N (solid)	m ²	7,956	2.83	5.24	4.04
100 mm concrete blocks 3.5N (hollow)	m ²	4,546	1.62	3.00	2.31
150 mm concrete blocks 3.5N (hollow)	m ²	5,939	2.11	3.91	3.02
200 mm concrete blocks 3.5N (hollow)	m ²	7,868	2.80	5.18	4.00
Cement and Sand					
Portland cement in bags	Tonne	137,798	49.04	90.80	70.03
Soft sand for mortar	Tonne	20,210	7.19	13.32	10.27
Cement mortar (1:3)	m ³	158,880	56.54	104.69	80.75
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	2,561,686	911.64	1,687.99	1,301.95
UB BS4360 610 × 305 mm × 238kg	Tonne	2,561,686	911.64	1,687.99	1,301.95
UB BS4360 457 × 191 mm × 98kg	Tonne	2,513,614	894.53	1,656.31	1,277.52
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	2,406,499	856.41	1,585.73	1,223.08
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	2,406,499	856.41	1,585.73	1,223.08
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	2,689,437	957.10	1,772.16	1,366.88
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	2,561,686	911.64	1,687.99	1,301.95
RHS BS4360 450 × 250 mm × 167kg	Tonne	2,713,300	965.59	1,787.89	1,379.01
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	2,561,686	911.64	1,687.99	1,301.95
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	2,972	1.06	1.96	1.51
50 × 100 mm sawn softwood	m	5,061	1.80	3.33	2.57
38 × 25 mm tanalised batten	m	1,149	0.41	0.76	0.58
Boarding to Flooring					
12 mm WBP ply	m ²	21,810	7.76	14.37	11.08
18 mm WBP ply	m ²	33,963	12.09	22.38	17.26
25 mm WBP ply	m ²	49,149	17.49	32.39	24.98
Nails					
Galvanised nails 75 mm	kg	11,349	4.04	7.48	5.77
Alloy nails 65 mm × 10g	kg	14,525	5.17	9.57	7.38
50 mm Oval wire nails	kg	8,228	2.93	5.42	4.18

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>LBP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	98,844	35.18	65.13	50.24
Sheet zinc BS849 0.60 mm	m ²	79,351	28.24	52.29	40.33
Sheet copper BS2870 0.45 mm	m ²	132,403	47.12	87.24	67.29
Felts					
Underslating felt Type 1F	m ²	1,880	0.67	1.24	0.96
Clay roofing products					
265 × 165 mm plain tile, red	1000	1,163,579	414.09	766.72	591.38
380 × 260 mm pantile, red	1000	2,128,386	757.44	1,402.47	1,081.73
Damp-proof membranes					
1000g polythene d.p.m.	m ²	1,829	0.65	1.21	0.93
Insulation					
100 mm thick fibreglass quilt	m ²	10,266	3.65	6.76	5.22
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	69,816	24.85	46.00	35.48
Corrugated galv sheet 1830 mm	Nr	51,059	18.17	33.64	25.95
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	449,430	159.94	296.15	228.42
UPVC s/casement 1000 × 900 glazed	Nr	522,631	185.99	344.38	265.62
UPVC s/casement 1000 × 1200 glazed	Nr	632,264	225.01	416.62	321.34
Glass and glazing					
4 mm clear sheet glass	m ²	110,691	39.39	72.94	56.26
6 mm Georgian wired polished plate	m ²	299,172	106.47	197.14	152.05
5 mm toughened safety glass	m ²	264,497	94.13	174.29	134.43
5.4 mm laminated safety glass	m ²	261,928	93.21	172.59	133.12

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>LBP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	5,587	1.99	3.68	2.84
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	54,029	19.23	35.60	27.46
9mm × 150 × 150 mm ceramic floor tile	m ²	47,227	16.81	31.12	24.00
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	28,938	10.30	19.07	14.71
Masonry textured paint white	5 Litre	51,424	18.30	33.89	26.14
Oil/Alkyd paint undercoat	5 Litre	49,236	17.52	32.44	25.02
Oil/Alkyd paint gloss white	5 Litre	49,236	17.52	32.44	25.02

Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			LBP	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	3,080	1.10	2.03	1.57
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	14,736	5.24	9.71	7.49
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	8,811	3.14	5.81	4.48
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	41,959	14.93	27.65	21.33
0.05	hardcore	m ³	48,521	17.27	31.97	24.66

Ref. No.	Description	Unit	Price			
			LBP	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	14,383	5.12	9.48	7.31
0.07	150 mm dia.	m	29,607	10.54	19.51	15.05
0.08	225 mm dia.	m	92,392	32.88	60.88	46.96
Concrete:						
0.09	150 mm dia.	m	19,469	6.93	12.83	9.90
0.10	300 mm dia.	m	59,459	21.16	39.18	30.22
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	114,762	40.84	75.62	58.33
1.02	over 300 mm thick	m ³	109,450	38.95	72.12	55.63
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	118,794	42.28	78.28	60.38
1.04	0.05–0.20 m ²	m ³	117,379	41.77	77.35	59.66
1.05	over 0.20 m ²	m ³	111,820	39.79	73.68	56.83
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	125,971	44.83	83.01	64.02
1.07	150–300 mm thick	m ³	125,013	44.49	82.38	63.54
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	147,128	52.36	96.95	74.78
1.09	0.05–0.10 m ²	m ³	139,512	49.65	91.93	70.91
1.10	over 0.10 m ²	m ³	134,526	47.87	88.64	68.37

Ref. No.	Description	Unit	Price			
			LBP	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	1,817,054	646.64	1,197.32	923.50
1.12	10 mm	Tonne	1,722,251	612.90	1,134.85	875.32
1.13	16 mm	Tonne	1,610,416	573.10	1,061.16	818.48
1.14	25 mm	Tonne	1,539,136	547.74	1,014.19	782.25
1.15	40 mm	Tonne	1,479,093	526.37	974.63	751.74
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	1,971,779	701.70	1,299.27	1,002.14
1.17	10 mm	Tonne	1,876,976	667.97	1,236.81	953.96
1.18	16 mm	Tonne	1,765,141	628.17	1,163.11	897.12
1.19	25 mm	Tonne	1,693,861	602.80	1,116.14	860.89
1.20	40 mm	Tonne	1,633,818	581.43	1,076.58	830.37
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	15,684	5.58	10.33	7.97
2.02	150 mm solid blocks	m ²	17,811	6.34	11.74	9.05
2.03	200 mm solid blocks	m ²	21,231	7.56	13.99	10.79

Ref. No.	Description	Unit	Price			
			LBP	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	3,402,279	1,210.78	2,241.88	1,729.18
3.02	610 × 305 mm × 238 kg/m	Tonne	3,482,312	1,239.26	2,294.62	1,769.85
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	3,517,307	1,251.72	2,317.68	1,787.64
3.04	254 × 76 mm × 28.89 kg/m	Tonne	3,466,144	1,233.51	2,283.96	1,761.64
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	5,273	1.88	3.47	2.68
4.02	50 × 100 mm	m	8,042	2.86	5.30	4.09
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	32,009	11.39	21.09	16.27
4.04	18 mm thick	m ²	48,875	17.39	32.21	24.84
4.05	25 mm thick	m ²	69,864	24.86	46.04	35.51
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	122,638	43.64	80.81	62.33
5.02	380 × 260 mm clay pantile, red	m ²	60,819	21.64	40.08	30.91

Ref. No.	Description	Unit	Price			
			LBP	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	9,459	3.37	6.23	4.81
6.02	38 mm thick	m ²	11,932	4.25	7.86	6.06
6.03	65 mm thick	m ²	18,671	6.64	12.30	9.49
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	81,510	29.01	53.71	41.43
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	3,806	1.35	2.51	1.93
6.06	rendered backgrounds	m ²	4,406	1.57	2.90	2.24
6.07	concrete backgrounds	m ²	3,881	1.38	2.56	1.97
6.08	blockwork backgrounds	m ²	5,822	2.07	3.84	2.96
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	4,031	1.43	2.66	2.05
6.10	rendered backgrounds	m ²	4,780	1.70	3.15	2.43
6.11	concrete backgrounds	m ²	4,331	1.54	2.85	2.20
6.12	textured plastic coating backgrounds	m ²	4,630	1.65	3.05	2.35

Ref. No.	Description	Unit	Price			
			LBP	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	4,838,049	1,721.73	3,187.96	2,458.90
7.02	5.0 kw cooling unit	Nr	5,473,915	1,948.02	3,606.95	2,782.07
7.03	7.5 kw cooling unit	Nr	9,451,328	3,363.47	6,227.81	4,803.55
7.04	10.0 kw cooling unit	Nr	11,072,420	3,940.38	7,296.01	5,627.46
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	2,684,233	955.25	1,768.74	1,364.24
7.06	1000 gallon	Nr	5,498,342	1,956.71	3,623.05	2,794.48
7.07	2000 gallon	Nr	8,364,055	2,976.54	5,511.37	4,250.96
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	82,021	29.19	54.05	41.69
7.09	182 litre	Nr	148,772	52.94	98.03	75.61
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	683,205	243.13	450.19	347.23
	Basins:					
7.11	vitreous china	Nr	346,898	123.45	228.58	176.31
	Sinks:					
7.12	stainless steel	Nr	439,052	156.25	289.31	223.14
	WC suites:					
7.13	low level washdown	Nr	663,556	236.14	437.24	337.25
7.14	low level syphonic	Nr	1,277,144	454.50	841.56	649.10
	Bidets:					
7.15	vitreous china	Nr	663,556	236.14	437.24	337.25

Ref. No.	Description	Unit	Price			
			LBP	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	14,040	5.00	9.25	7.14
	Standard cable trays; 1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	25,369	9.03	16.72	12.89
8.03	100 mm	m	30,644	10.91	20.19	15.57
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	26,086	9.28	17.19	13.26
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	77,683	27.65	51.19	39.48
8.06	12-way	Nr	141,454	50.34	93.21	71.89

Ref. No.	Description	Unit	Price			
			LBP	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	9,761	3.47	6.43	4.96
8.08	2 gang, 2 way	Nr	17,030	6.06	11.22	8.66
8.09	3 gang, 2 way	Nr	23,218	8.26	15.30	11.80
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	12,574	4.47	8.29	6.39
8.11	2 gang	Nr	35,915	12.78	23.67	18.25
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	19,564	6.96	12.89	9.94
8.13	1 gang, with neon indicator	Nr	23,273	8.28	15.34	11.83
8.14	1 gang, with neon indicator, metalplate	Nr	31,777	11.31	20.94	16.15

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>LBP/ft²</i>	<i>LBP/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	70,043	753,939	268	497	383
Petrol Stations	413,981	4,456,087	1,586	2,936	2,265
Airport Terminal Buildings	405,692	4,366,872	1,554	2,877	2,219
Sorting Offices	191,219	2,058,283	732	1,356	1,046
Refuse Depots	116,377	1,252,683	446	825	637
Stables and the like	182,603	1,965,540	699	1,295	999
Factories	131,111	1,411,283	502	930	717
Advanced Factories	115,157	1,239,545	441	817	630
Purpose Built Workshops	162,135	1,745,219	621	1,150	887
Warehouses	119,251	1,283,618	457	846	652
Town Halls	283,888	3,055,765	1,087	2,014	1,553
Law Courts	339,811	3,657,722	1,302	2,410	1,859
Offices	266,603	2,869,715	1,021	1,891	1,459
Banks/Building Societies	349,991	3,767,304	1,341	2,482	1,915
Retail Warehouses	113,093	1,217,332	433	802	619

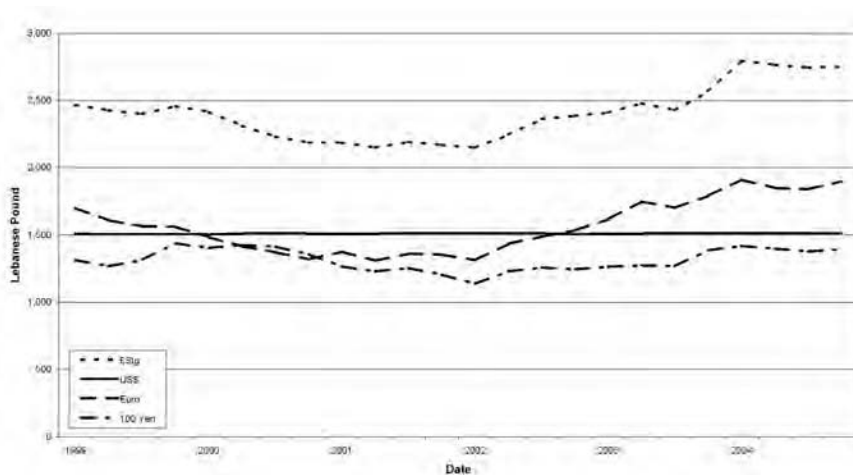
<i>Facility type</i>	<i>LBP/ft²</i>	<i>LBP/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	177,037	1,905,630	678	1,256	969
Department Stores	215,593	2,320,638	826	1,529	1,179
Hypermarkets / Supermarkets	207,123	2,229,469	793	1,469	1,133
Shops	167,806	1,806,268	643	1,190	918
Stadia	250,016	2,691,178	958	1,773	1,368
Pavilions and Sports Club Houses	250,387	2,695,169	959	1,776	1,370
Religious Buildings	282,957	3,045,744	1,084	2,007	1,548
Schools	241,740	2,602,092	926	1,715	1,322
Sixth Form Colleges	241,565	2,600,205	925	1,713	1,322
Universities	287,612	3,095,851	1,102	2,040	1,573
Colleges	242,252	2,607,605	928	1,718	1,325
Research Facilities	340,919	3,669,653	1,306	2,418	1,865
Laboratories	333,800	3,593,027	1,279	2,368	1,826
Exhibition Buildings	373,476	4,020,098	1,431	2,649	2,043
Public Libraries	270,490	2,911,559	1,036	1,919	1,480
Flats	190,170	2,046,987	728	1,349	1,040
Housing Detached	263,243	2,833,553	1,008	1,867	1,440
Hotels	264,436	2,846,388	1,013	1,876	1,447
Halls of Residence	267,481	2,879,166	1,025	1,897	1,463
Fire Stations	326,078	3,509,903	1,249	2,313	1,784
Police Stations	320,393	3,448,709	1,227	2,272	1,753
Closed Prisons	364,357	3,921,936	1,396	2,584	1,993
Hospitals	343,047	3,692,557	1,314	2,433	1,877
Intensive Care / Acute Wards	335,067	3,606,662	1,284	2,377	1,833
Health Centres	227,234	2,445,946	870	1,612	1,243
Nursing Homes	252,485	2,717,743	967	1,791	1,381
Homes for the Elderly	228,009	2,454,294	873	1,617	1,247
Day Centres	276,953	2,981,118	1,061	1,964	1,515
Veterinary Hospitals	297,716	3,204,612	1,140	2,112	1,629
Restaurants	342,229	3,683,755	1,311	2,427	1,872
Theatres	245,727	2,645,006	941	1,743	1,344
Cinemas	290,397	3,125,828	1,112	2,060	1,589
Clubs	227,000	2,443,428	870	1,610	1,242
Covered Swimming Pools	422,671	4,549,627	1,619	2,998	2,312
Sports Centres exc. Pools	215,445	2,319,045	825	1,528	1,179
Sports Centres inc. Pools	336,963	3,627,068	1,291	2,390	1,843
Sports Halls	201,548	2,169,464	772	1,430	1,103
Gymnasias	298,995	3,218,385	1,145	2,121	1,636

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Lebanese Pound, against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Lebanese Pound with each of them and the relative value to each other.

Exchange Rates



Consumer price inflation

The table below highlights the inflation index for consumer prices since 1996. The indices have been rebased to 1996=100.

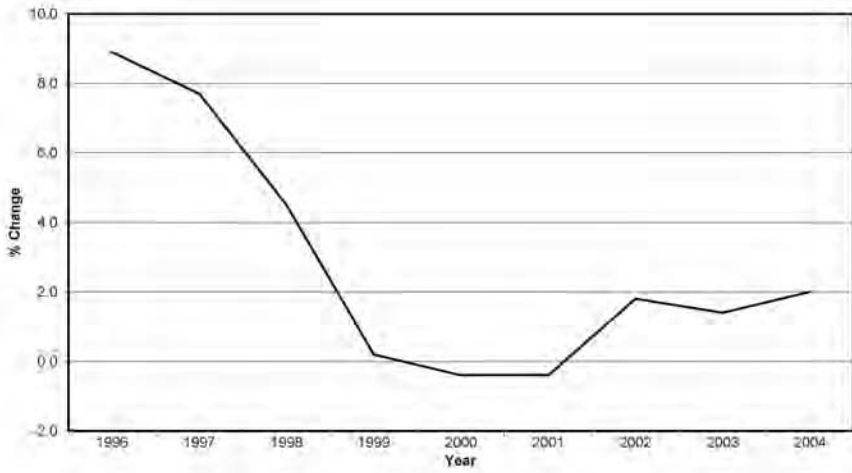
From a high level of consumer price inflation (CPI) at the end of 1996 there has been a gradual and sustained drop in the rate over the last four years. By the end of 1999 the average inflation figure had dropped from 8.9%, in 1996, to 0.2%. The subsequent years, 2000 and 2001, witnessed a period of deflation with average annual inflation recorded at -0.4%. Since the end of 2001 inflation has rebounded to an upward trend with average annual inflation at 1.6% between 2002 and 2003. The forecast for the current year appears to indicate a continuation of the upward trend in the inflation level with an anticipated average figure for 2004 of 2% from figures provided by the Lebanese authorities.

The graph, which follows the table below, plots the annual percentage change in consumer price inflation since 1996.

Consumer Prices		
Year	annual average	change %
1996	100.0	8.9
1997	107.7	7.7
1998	112.6	4.5
1999	112.8	0.2
2000	112.4	-0.4
2001	112.0	-0.4
2002	114.0	1.8
2003	115.6	1.4
2004	117.9	2.0

Source: *International Monetary Fund*

Consumer Price Inflation for Years 1996 through 2004



Useful addresses

Public organisations

Ministry of Economy & Trade
Artois Street
Hamra
Beirut
Lebanon
Tel: (00961) 1 345 178
Fax: (00961) 1 347 800
Email: webmaster@economy.gov.lb
Website: www.economy.gov.lb

Ministry of Finance
Riyad El Solh Square
MOF Building
Beirut
Lebanon
Tel: (00961) 1 981 001
Fax: (00961) 1 397 789
Email: infocenter@finance.gov.lb
Website: www.finance.gov.lb

Ministry of Telecommunications
Riad el Soloh Square
Beirut
Lebanon
Tel: (00961) 1 979 161
Fax: (00961) 1 979 164
Email: webmaster@mpt.gov.lb
Website: www.mpt.gov.lb

Council for Development &
Reconstruction
Tallet Al-Serail
Beirut
PO Box 116-5351
Lebanon
Tel: (00961) 1 981 431
Fax: (00961) 1 981 252
Email: general@cdr.gov.lb
Website: www.cdr.gov.lb

Ministry of Industry
Ministry of Industry & Petroleum
Building
Sami Solh Avenue
Facing Adlieh
Badaro, Beirut
Lebanon
Tel: (00961) 1 427 006
Fax: (00961) 1 427 112
Email: ministry@industry.gov.lb
Website: www.industry.gov.lb

Central Bank of Lebanon
Banque du Liban
Masraf Lubnan street
PO Box 11-5544
Beirut
Lebanon
Tel: (00961) 1 750 000
Fax: (00961) 1 782 740
Email: bdlit@bdl.gov.lb
Website: www.bdl.gov.lb

Minister of Public Works
 Tel: (00961) 5 456 482
 Fax: (00961) 5 455 840
 Email: ministry@public-works.gov.lb
 Website: www.public-works.gov.lb

Central Administration of Statistics
 Tel: (00961) 1 373 167
 Fax: (00961) 1 373 161
 Email: cas@sodetel.net.lb
 Website: www.cas.gov.lb

Foreign Embassies

British Embassy
 Embassies Complex
 Army Street Zkak Al-Blat
 Serail Hill
 Beirut
 PO Box 11-471
 Lebanon
 Tel: (00961) 1 990 400
 Fax: (00961) 1 990 420
 Email: consularemb@britishembassy.org.lb
 Website: www.britishembassy.org.lb

Embassy of the United States of America
 PO Box 70-840
 Antelias
 Beirut
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 Tel: (00961) 4 542 600
 Fax: (00961) 4 544 136
 Email: usvisas@inco.com.lb
 Website: www.usembassy.gov.lb

Embassy of Canada
 43 Jal Al-Dib Highway
 1st Floor
 Coolrite Building
 Jal Al-Dib
 Beirut
 PO Box 60163
 Lebanon
 Tel: (00961) 4 713 900
 Fax: (00961) 4 710 595
 Email: berut.webmaster@dfait-maeci.gc.ca
 Website: www.dfait-maeci.gc.ca

Industrial Organisations

Beirut Chamber of Commerce and Industry
 PO Box 11801
 Beirut
 Lebanon
 Tel: (00961) 1 353 390
 Fax: (00961) 1 865 802
 Email: anasr@ccib.org.lb
 Website: www.ccib.org

Association of Lebanese Industrialists Beirut
 PO Box 11-1520
 Riad El-Solh 1107 2080
 Beirut
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 Tel: (00961) 1 350 280
 Fax: (00961) 1 355 012
 Email: ali@ali.org.lb
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Construction cost data

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Libya

ECONOMIC INDICATORS AND KEY DATA

Population

Population	5.6 million
Urban Population	88%
Population under 15	34%
Population 65 and over	4%
Population growth rate	2.4%

Geography

Land area	1,759,540 sq km
Agricultural area	1.2%
Capital city	Tripoli
Population of capital city (2000)	1.8 million

Transportation

Railways (2004 est.)	191 km
Highways:	
paved	47,590 km
unpaved	35,610 km
Waterways	n.a.
Pipelines:	
crude oil	6,872 km
condensate	225 km
natural gas	3,196 km
Ports and Harbours	9
Merchant Marine	20 ships
International Airport	Tripoli International Airport, Tripoli

Economy

Monetary unit	Libyan Dinar
Exchange rate	
£ Stg	2.387
US \$	1.292
Euro	1.653
Yen (×100)	1.217
Average annual inflation (1998 to 2003)	-1.6%
Inflation rate (2004 est.)	2.8%
Gross Domestic Product (GDP) at market prices (2002) million	LD24,309
GDP PPP basis (2003)	US\$35 billion
GDP per capita (2002)	LD4,341
GDP per capita PPP basis (2003)	US\$6,400
Average annual real change in GDP (1999 to 2003)	1.4%
Private consumption as a proportion of GDP (2002)	57.3%
General government consumption as a proportion of GDP (2002)	16.8%
Gross domestic investment as a proportion of GDP (2003)	15%

Construction

Gross value of construction output (2003)	LD1,327 million
Net value of construction output as a proportion of GDP	5.5%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
United Nations World Statistics Pocketbook
Central Bank of Libya

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Libya is situated in northern Africa, bounded by the Mediterranean Sea to the north. Libya shares borders with Tunisia and Algeria in the west, Egypt in the east, while the Sahara extends across the southern frontiers with Niger, Chad and the Sudan.

Libya consists mostly of huge areas of desert and barren rocks. The coastal region has a Mediterranean climate, with average temperatures ranging from 30°C in summer to 8°C in winter. The western and eastern provinces are comparatively fertile and contain the bulk of the cultivable area, although only 1.4% of the total land area is considered arable, with a further 0.1% having been irrigated. Southern Libya has a desert climate with daytime winter temperatures ranging between 15°C and 20°C, falling below zero at night. The Ghibli, a type of warm and dry sandstorm, occurs mainly in the summer months.

The Great Socialist People's Libyan Arab Jamahiriya, declares that the country is a socialist state and ruled by the people through a network of committees. The most important committee is the General People's Congress, controlling over all government activities. The Government is based strictly on the laws of Islam, the Quran and the Sharia with Colonel Al-Qaddafi as the head of state and the 'revolutionary leader', who came into power in 1969 as a result of his leadership of a military coup and remains the de facto head of state, not occupying any official position.

Libya is a member of the United Nations, the Organisation of African Unity (OAU), Arab League, Organisation of Petroleum Exporting Countries (OPEC), Union of the Arab Maghreb and Organisation of the Islamic Conference. Islam is the principal religion, about 97% of Libyans are Sunni Muslim with a small number of Roman Catholics. Arabic is the official language, although Berber is sometimes spoken and English and Italian are used in trade. Arabic must be used for all official purposes.

The main areas of the Libyan construction sector are associated with oil and gas field development both onshore and offshore. The provisional value of contracts for the Western Libya Gas Development Project is estimated at US\$4 billion.

Construction cost data

Labour resources

The figures below are typical costs for labour employed on a construction site located within an urban area of Libya and taken at third quarter 2004. The labour resources combine the employee's basic and the cost to the employer of that labour. The displayed cost of labour is the cost to the employer of employing that operative, it is based on the employee's basic pay and includes certain allowances for employee's expenses, holidays, insurance, and other mandatory and voluntary contributions.

Labour legislation in Libya is governed by the Great Green Charter of Human Rights of the Jamahiriyan Era, which was inspired both by the first Declaration of the Great Revolution of Al Fateh in 1969 and the historical Declaration of the Establishment of the Power of the People in 1977.

The charter is complex but relates to democracy (governance by the power of the people) and, more prominently, the sacredness of the individual. The members of the Jamahiriyan society are free to form unions, trade unions and leagues to defend their professional interests.

In the charter everyone is given the right to work and also to exercise the work of his or her choice. All workers are considered equal and therefore no Libyan would ever be the servant of another. This has led to problems in acquiring manual or unskilled workers for construction projects, as Libyans are not able or willing to take on these roles. Unskilled construction labour is normally therefore acquired from other Arab countries, Africa or even from South East Asia, India and Pakistan.

This has led to problems in maintaining construction standards in Libya as verification of an employee's experience of working with construction plant and equipment is less vigorous than witnessed elsewhere in the world.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>LYD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	26.93	11.07	20.56	15.83
Groundworks Labourer	31.68	13.03	24.18	18.62
Bricklayer	42.90	17.64	32.75	25.22
Shuttering Carpenter	34.32	14.11	26.20	20.18
Carpenter	42.90	17.64	32.75	25.22
Steel Fixer	34.32	14.11	26.20	20.18
Metalworker Craftsman	42.90	17.64	32.75	25.22
Roof Tiler	42.90	17.64	32.75	25.22
Sheet Metal Roofer	42.90	17.64	32.75	25.22
Glazier	38.00	15.63	29.01	22.34
Plasterer	42.90	17.64	32.75	25.22
Plasterers Labourer	31.68	13.03	24.18	18.62
Suspended Ceiling Installer	42.90	17.64	32.75	25.22
Painter	38.00	15.63	29.01	22.34
Floor/Wall Tiler	42.90	17.64	32.75	25.22
Plumber	55.77	22.93	42.57	32.79
Electrician	55.77	22.93	42.57	32.79

Plant resources

The figures below indicate the hire costs of construction plant delivered to a building site in an urban region within Libya and are current at the third quarter 2004. The rates do not include for any fuel or maintenance and also exclude operator costs and charges.

Plant costs					
<i>Plant resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>LYD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Hymac 580 (360 deg tracked excavator)	Hour	36.43	14.98	27.81	21.42
JCB 3C (180 deg wheeled excavator)	Hour	27.72	11.40	21.16	16.30
Vibrating Roller 6–8 Tonne	Hour	10.30	4.23	7.86	6.05
Dumper 4WD Hydraulic Tip 1270	Hour	11.88	4.88	9.07	6.98
Poker Vibrator 48 mm	Day	21.45	8.82	16.37	12.61
Beam Vibrator 6.2 m	Day	42.90	17.64	32.75	25.22
Reinforcement bending machine	Hour	6.44	2.65	4.91	3.78
25 Tonne Mobile Crane	Hour	49.50	20.35	37.79	29.10
13 Tonne Mobile Crane	Hour	35.64	14.65	27.21	20.95
10 Tonne Mobile Crane	Hour	29.70	12.21	22.67	17.46
Wacker Plate	Hour	1.58	0.65	1.21	0.93
2.5 Tonne Block and Tackle	Hour	2.64	1.09	2.02	1.55
Craneage/lifting equipment	Hour	49.10	20.19	37.48	28.87

Material resources

The figures below indicate the costs of main building materials, delivered to a construction site within an urban area of Libya and are taken at the third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material costs					
<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>LYD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	14.95	6.15	11.41	8.79
Clean brick rubble hardcore	m ³	13.46	5.53	10.27	7.91
As-raised hoggin	m ³	11.40	4.69	8.71	6.70
Washed sand	m ³	9.50	3.91	7.25	5.59
Drainage					
100 mm clay drain pipes	m	6.60	2.71	5.04	3.88
150 mm clay drain pipes	m	20.95	8.61	15.99	12.32
225 mm clay drain pipes	m	46.20	19.00	35.27	27.16
150 mm concrete pipe class L	m	9.90	4.07	7.56	5.82
300 mm concrete pipe class L	m	23.10	9.50	17.63	13.58
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	85.25	35.05	65.08	50.12
Readymix concrete 30 N/mm ²	m ³	88.55	36.41	67.60	52.06
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	603.92	248.32	461.01	355.04
Mild steel bars BS4449 10 mm	Tonne	580.16	238.55	442.87	341.07
Mild steel bars BS4449 16 mm	Tonne	540.56	222.27	412.64	317.79
Mild steel bars BS4449 25 mm	Tonne	530.00	217.93	404.58	311.58
Mild steel bars BS4449 40 mm	Tonne	520.76	214.13	397.53	306.15
High yield bars BS4449 8 mm	Tonne	603.92	248.32	461.01	355.04
High yield bars BS4449 10 mm	Tonne	580.16	238.55	442.87	341.07
High yield bars BS4449 16 mm	Tonne	540.56	222.27	412.64	317.79
High yield bars BS4449 25 mm	Tonne	528.68	217.38	403.57	310.81
High yield bars BS4449 40 mm	Tonne	520.76	214.13	397.53	306.15
Tying wire mild steel	Tonne	588.08	241.81	448.92	345.73
Reinforcement spacer blocks	100	9.50	3.91	7.25	5.59

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>LYD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	411.84	169.34	314.38	242.12
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	12.87	5.29	9.82	7.57
150 mm concrete blocks 3.5N (solid)	m ²	15.56	6.40	11.88	9.15
200 mm concrete blocks 3.5N (solid)	m ²	18.98	7.80	14.49	11.16
100 mm concrete blocks 3.5N (hollow)	m ²	11.55	4.75	8.82	6.79
150 mm concrete blocks 3.5N (hollow)	m ²	14.35	5.90	10.95	8.44
200 mm concrete blocks 3.5N (hollow)	m ²	15.51	6.38	11.84	9.12
Cement and Sand					
Portland cement in bags	Tonne	129.00	53.04	98.47	75.84
Soft sand for mortar	Tonne	25.34	10.42	19.35	14.90
Cement mortar (1:3)	m ³	152.06	62.53	116.08	89.40
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	1,900.80	781.58	1,450.99	1,117.46
UB BS4360 610 × 305 mm × 238kg	Tonne	1,900.80	781.58	1,450.99	1,117.46
UB BS4360 457 × 191 mm × 98kg	Tonne	1,837.44	755.53	1,402.63	1,080.21
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	1,774.08	729.47	1,354.26	1,042.96
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	1,774.08	729.47	1,354.26	1,042.96
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	1,932.48	794.61	1,475.18	1,136.08
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	1,900.80	781.58	1,450.99	1,117.46
RHS BS4360 450 × 250 mm × 167kg	Tonne	1,964.16	807.63	1,499.36	1,154.71
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	1,900.80	781.58	1,450.99	1,117.46
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	3.72	1.53	2.84	2.19
50 × 100 mm sawn softwood	m	4.26	1.75	3.25	2.50
38 × 25 mm tanalised batten	m	0.98	0.40	0.75	0.57
Boarding to Flooring					
12 mm WBP ply	m ²	19.01	7.82	14.51	11.17
18 mm WBP ply	m ²	29.53	12.14	22.54	17.36
25 mm WBP ply	m ²	42.23	17.37	32.24	24.83
Nails					
Galvanised nails 75 mm	kg	6.66	2.74	5.08	3.91
Alloy nails 65 mm × 10g	kg	15.21	6.25	11.61	8.94
50 mm Oval wire nails	kg	7.45	3.06	5.69	4.38

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>LYD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	51.74	21.27	39.49	30.42
Sheet zinc BS849 0.60 mm	m ²	38.02	15.63	29.02	22.35
Sheet copper BS2870 0.45 mm	m ²	66.53	27.36	50.78	39.11
Felts					
Underslating felt Type 1F	m ²	1.65	0.68	1.26	0.97
Clay roofing products					
265 × 165 mm plain tile, red	1000	1,061.28	436.38	810.14	623.92
380 × 260 mm pantile, red	1000	2,011.68	827.17	1,535.63	1,182.65
Damp-proof membranes					
1000g polythene d.p.m.	m ²	1.14	0.47	0.87	0.67
Insulation					
100 mm thick fibreglass quilt	m ²	9.18	3.78	7.01	5.40
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	46.19	18.99	35.26	27.15
Corrugated galv sheet 1830 mm	Nr	42.41	17.44	32.37	24.93
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	338.05	139.00	258.05	198.74
UPVC s/casement 1000 × 900 glazed	Nr	400.78	164.79	305.94	235.61
UPVC s/casement 1000 × 1200 glazed	Nr	480.17	197.44	366.54	282.28
Glass and glazing					
4 mm clear sheet glass	m ²	57.02	23.45	43.53	33.52
6 mm Georgian wired polished plate	m ²	171.07	70.34	130.59	100.57
5 mm toughened safety glass	m ²	116.16	47.76	88.67	68.29
5.4 mm laminated safety glass	m ²	137.28	56.45	104.79	80.71

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>LYD</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	5.15	2.12	3.93	3.03
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	48.58	19.97	37.08	28.56
9mm × 150 × 150 mm ceramic floor tile	m ²	39.60	16.28	30.23	23.28
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	26.14	10.75	19.95	15.37
Masonry textured paint white	5 Litre	29.04	11.94	22.17	17.07
Oil/Alkyd paint undercoat	5 Litre	33.00	13.57	25.19	19.40
Oil/Alkyd paint gloss white	5 Litre	33.00	13.57	25.19	19.40

Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			LYD	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	2.33	0.96	1.78	1.37
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	11.31	4.65	8.64	6.65
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	6.79	2.79	5.18	3.99
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	23.19	9.54	17.70	13.63
0.05	hardcore	m ³	35.44	14.57	27.05	20.83

Ref. No.	Description	Unit	Price			
			LYD	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	9.38	3.86	7.16	5.51
0.07	150 mm dia.	m	27.61	11.35	21.08	16.23
0.08	225 mm dia.	m	59.77	24.58	45.63	35.14
Concrete:						
0.09	150 mm dia.	m	15.40	6.33	11.76	9.05
0.10	300 mm dia.	m	49.13	20.20	37.50	28.88
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	115.60	47.53	88.24	67.96
1.02	over 300 mm thick	m ³	110.26	45.34	84.17	64.82
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	119.28	49.05	91.06	70.13
1.04	0.05–0.20 m ²	m ³	117.99	48.52	90.07	69.37
1.05	over 0.20 m ²	m ³	112.42	46.23	85.82	66.09
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	123.73	50.87	94.45	72.74
1.07	150–300 mm thick	m ³	122.77	50.48	93.72	72.18
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	144.85	59.56	110.57	85.16
1.09	0.05–0.10 m ²	m ³	137.30	56.46	104.81	80.72
1.10	over 0.10 m ²	m ³	132.36	54.42	101.04	77.81

Ref. No.	Description	Unit	Price			
			LYD	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	1,066.99	438.73	814.50	627.27
1.12	10 mm	Tonne	975.38	401.06	744.57	573.42
1.13	16 mm	Tonne	850.09	349.54	648.92	499.76
1.14	25 mm	Tonne	784.27	322.48	598.68	461.06
1.15	40 mm	Tonne	728.61	299.59	556.19	428.34
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	1,066.99	438.73	814.50	627.27
1.17	10 mm	Tonne	975.38	401.06	744.57	573.42
1.18	16 mm	Tonne	850.09	349.54	648.92	499.76
1.19	25 mm	Tonne	782.69	321.83	597.47	460.13
1.20	40 mm	Tonne	728.61	299.59	556.19	428.34
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	23.05	9.48	17.59	13.55
2.02	150 mm solid blocks	m ²	26.93	11.07	20.56	15.83
2.03	200 mm solid blocks	m ²	31.94	13.13	24.38	18.78

Ref. No.	Description	Unit	Price			
			LYD	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	2,538.47	1,043.78	1,937.76	1,492.34
3.02	610 × 305 mm × 238 kg/m	Tonne	2,602.04	1,069.92	1,986.29	1,529.71
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	2,512.72	1,033.19	1,918.10	1,477.20
3.04	254 × 76 mm × 28.89 kg/m	Tonne	2,542.71	1,045.52	1,941.00	1,494.83
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	5.63	2.31	4.30	3.31
4.02	50 × 100 mm	m	6.37	2.62	4.87	3.75
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	26.80	11.02	20.46	15.76
4.04	18 mm thick	m ²	41.01	16.86	31.30	24.11
4.05	25 mm thick	m ²	58.14	23.91	44.38	34.18
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	105.56	43.41	80.58	62.06
5.02	380 × 260 mm clay pantile, red	m ²	51.47	21.16	39.29	30.26

Ref. No.	Description	Unit	Price			
			LYD	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	7.80	3.21	5.95	4.59
6.02	38 mm thick	m ²	9.98	4.10	7.62	5.87
6.03	65 mm thick	m ²	16.09	6.61	12.28	9.46
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	69.77	28.69	53.26	41.02
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	2.93	1.21	2.24	1.72
6.06	rendered backgrounds	m ²	3.30	1.36	2.52	1.94
6.07	concrete backgrounds	m ²	2.98	1.22	2.27	1.75
6.08	blockwork backgrounds	m ²	4.46	1.84	3.41	2.62
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	3.07	1.26	2.34	1.80
6.10	rendered backgrounds	m ²	3.52	1.45	2.69	2.07
6.11	concrete backgrounds	m ²	3.25	1.34	2.48	1.91
6.12	textured plastic coating backgrounds	m ²	3.43	1.41	2.62	2.02

Ref. No.	Description	Unit	Price			
			LYD	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	4,364.95	1,794.80	3,332.02	2,566.11
7.02	5.0 kw cooling unit	Nr	5,121.82	2,106.01	3,909.79	3,011.07
7.03	7.5 kw cooling unit	Nr	8,729.90	3,589.60	6,664.05	5,132.22
7.04	10.0 kw cooling unit	Nr	10,199.57	4,193.90	7,785.93	5,996.22
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	2,537.27	1,043.29	1,936.85	1,491.63
7.06	1000 gallon	Nr	5,157.11	2,120.52	3,936.72	3,031.81
7.07	2000 gallon	Nr	9,975.34	4,101.70	7,614.76	5,864.40
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	74.72	30.72	57.04	43.93
7.09	182 litre	Nr	134.77	55.41	102.88	79.23
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	908.07	373.39	693.19	533.85
	Basins:					
7.11	vitreous china	Nr	465.06	191.22	355.00	273.40
	Sinks:					
7.12	stainless steel	Nr	598.04	245.90	456.52	351.58
	WC suites:					
7.13	low level washdown	Nr	893.38	367.35	681.97	525.21
7.14	low level syphonic	Nr	1,761.06	724.12	1,344.32	1,035.31
	Bidets:					
7.15	vitreous china	Nr	893.38	367.35	681.97	525.21

Ref. No.	Description	Unit	Price			
			LYD	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	12.39	5.10	9.46	7.29
	Standard cable trays;					
	1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	21.73	8.94	16.59	12.78
8.03	100 mm	m	26.57	10.93	20.28	15.62
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	22.74	9.35	17.36	13.37
	Consumer units;					
	prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	73.82	30.35	56.35	43.40
8.06	12-way	Nr	105.10	43.22	80.23	61.79

Ref. No.	Description	Unit	Price			
			LYD	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	8.66	3.56	6.61	5.09
8.08	2 gang, 2 way	Nr	15.22	6.26	11.62	8.95
8.09	3 gang, 2 way	Nr	20.42	8.40	15.59	12.00
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	11.36	4.67	8.67	6.68
8.11	2 gang	Nr	32.39	13.32	24.73	19.04
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	17.72	7.29	13.53	10.42
8.13	1 gang, with neon indicator	Nr	20.45	8.41	15.61	12.02
8.14	1 gang, with neon indicator, metalplate	Nr	28.74	11.82	21.94	16.89

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are at third quarter 2004.

<i>Facility type</i>	<i>LYD/ft²</i>	<i>LYD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	54	582	239	444	342
Petrol Stations	315	3,395	1,396	2,592	1,996
Airport Terminal Buildings	313	3,372	1,386	2,574	1,982
Sorting Offices	144	1,554	639	1,187	914
Refuse Depots	89	953	392	727	560
Stables and the like	140	1,510	621	1,153	888
Factories	98	1,053	433	804	619
Advanced Factories	85	920	378	703	541
Purpose Built Workshops	123	1,326	545	1,012	779
Warehouses	90	974	401	744	573
Town Halls	215	2,313	951	1,766	1,360
Law Courts	262	2,824	1,161	2,156	1,660
Offices	205	2,204	906	1,682	1,296
Banks/Building Societies	266	2,859	1,176	2,182	1,681
Retail Warehouses	85	918	378	701	540

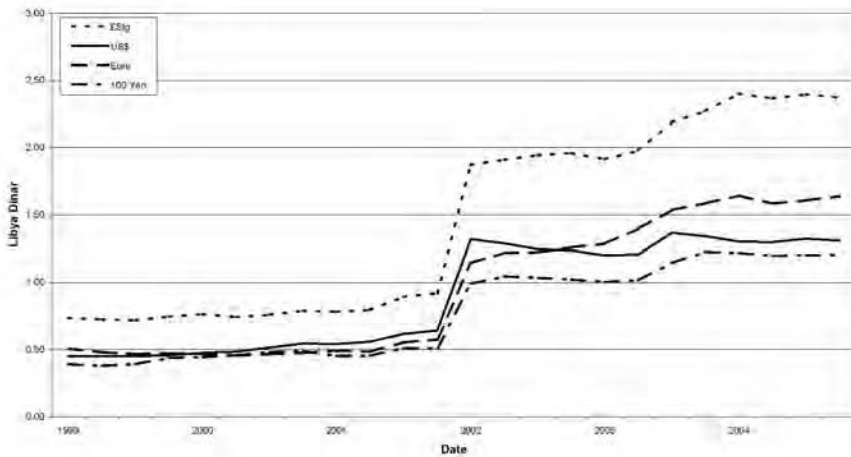
<i>Facility type</i>	<i>LYD/ft²</i>	<i>LYD/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	134	1,439	592	1,099	846
Department Stores	166	1,783	733	1,361	1,048
Hypermarkets / Supermarkets	160	1,721	708	1,314	1,012
Shops	125	1,341	551	1,024	788
Stadia	190	2,044	841	1,560	1,202
Pavilions and Sports Club Houses	186	1,998	822	1,525	1,175
Religious Buildings	215	2,311	950	1,764	1,359
Schools	185	1,996	821	1,524	1,174
Sixth Form Colleges	182	1,964	807	1,499	1,154
Universities	221	2,379	978	1,816	1,398
Colleges	181	1,948	801	1,487	1,145
Research Facilities	259	2,792	1,148	2,131	1,641
Laboratories	258	2,774	1,141	2,118	1,631
Exhibition Buildings	279	2,999	1,233	2,289	1,763
Public Libraries	205	2,209	909	1,687	1,299
Flats	138	1,489	612	1,137	875
Housing Detached	198	2,135	878	1,629	1,255
Hotels	198	2,131	876	1,626	1,253
Halls of Residence	198	2,135	878	1,629	1,255
Fire Stations	238	2,567	1,055	1,959	1,509
Police Stations	247	2,663	1,095	2,033	1,565
Closed Prisons	274	2,947	1,212	2,250	1,733
Hospitals	265	2,851	1,172	2,176	1,676
Intensive Care / Acute Wards	256	2,753	1,132	2,102	1,619
Health Centres	175	1,889	777	1,442	1,110
Nursing Homes	190	2,042	840	1,559	1,201
Homes for the Elderly	170	1,831	753	1,398	1,076
Day Centres	206	2,213	910	1,690	1,301
Veterinary Hospitals	227	2,444	1,005	1,866	1,437
Restaurants	260	2,795	1,149	2,134	1,643
Theatres	190	2,042	840	1,559	1,201
Cinemas	219	2,354	968	1,797	1,384
Clubs	170	1,829	752	1,396	1,075
Covered Swimming Pools	321	3,453	1,420	2,636	2,030
Sports Centres exc. Pools	166	1,791	736	1,367	1,053
Sports Centres inc. Pools	255	2,742	1,127	2,093	1,612
Sports Halls	153	1,650	679	1,260	970
Gymnasia	230	2,473	1,017	1,888	1,454

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Libyan Dinar, against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Libyan Dinar with each of them and the relative value to each other.

Exchange Rates



Consumer Price Inflation

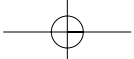
The table below highlights the inflation index for consumer prices since 1996. The indices have been rebased to 1996=100.

Libya has historically experienced a moderate level of consumer price inflation (CPI) during the mid-to-late nineties where the average inflation figure for the period 1996 to 1999 was recorded at 3.5%. The subsequent period, 2000 through to 2002, witnessed a dramatic period of deflation with average annual inflation recorded at -9.8% by 2002. Since the end of 2002, however, CPI has shown an upturn with average annual inflation at 1% for 2003. The forecast for the current year appears to indicate a continuation of the upward trend in the inflation level with an anticipated average figure for 2004 of 3% from figures provided by the Libyan authorities.

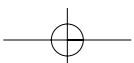
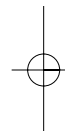
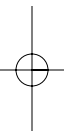
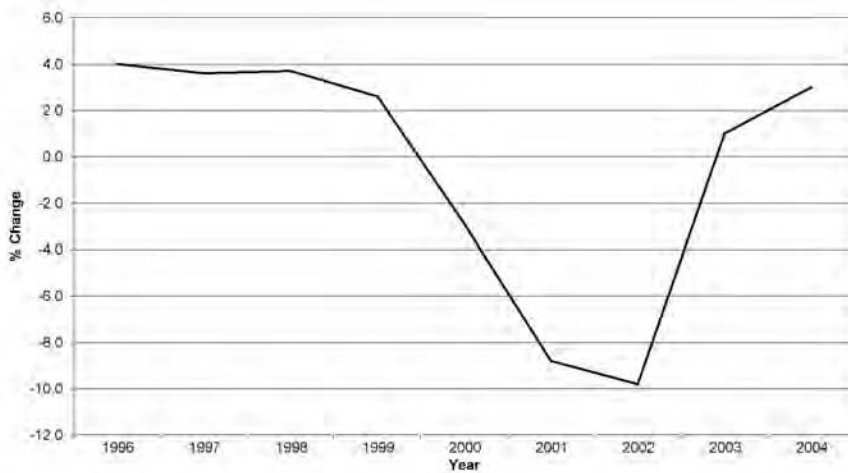
The graph, which follows the table below, plots the annual percentage change in consumer price inflation since 1996.

Consumer Prices		
Year	annual average	change %
1996	100.0	4.0
1997	103.6	3.6
1998	107.4	3.7
1999	110.2	2.6
2000	107.0	-2.9
2001	97.6	-8.8
2002	88.0	-9.8
2003	88.9	1.0
2004	91.6	3.0

Source: *International Monetary Fund*



Consumer Price Inflation for Years 1996 through 2004



Useful addresses*Public organisations*

National Oil Corporation (NOC)
Tripoli - Bashir Saadawi Street
PO Box 2655
Tripoli
Libya
Tel: (00218) 21 333 7141
Fax: (00218) 21 333 1930

National Oil Well Drilling &
Workover Co.
Tripoli
PO Box 1106
Tripoli
Libya
Tel: (00218) 21 360 9830
Fax: (00218) 21 444 6743

Foreign embassies

British Embassy
Commercial Section
PO Box 4206
Tripoli
Libya
Tel: (00218) 21 335 1084
Fax: (00218) 21 335 1082
Email: trade.libya@fco.gov.uk
Website: <http://www.britain-in-libya.org>

Industrial organisations

Mott MacDonald Ltd
c/o National Consulting Bureau
14 Jamahiriya Street
PO Box 12795
Tripoli
Libya
Tel: (00218) 21 360 3135
Fax: (00218) 21 360 3135

Waha Oil Company
PO Box 395
Tripoli
Libya
Tel: (00218) 21 333 7161
Fax: (00218) 21 333 0985

Zuetina Oil Company
PO Box 2134
Tripoli
Libya
Tel: (00218) 21 444 0956
Fax: (00218) 21 333 9109

Brega Petroleum Marketing Co.
PO Box 16649
Zawia
Libya
Tel: (00218) 21 621 162
Fax: (00218) 21 622 008

Construction cost data

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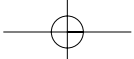
The Arabian Gulf Oil Company
PO Box 263
Benghazi
Libya
Tel: (00218) 21 228 8931
Fax: (00218) 21 222 9006

International Petroleum Libya Ltd
PO Box 3285-99
Tripoli
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Petroleum Research Centre
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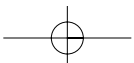
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Oman

ECONOMIC INDICATORS AND KEY DATA

Population

Population	2.9 million
Urban Population	78%
Population under 15	42%
Population 65 and over	3%
Population growth rate	3.4%

Geography

Land area	212,460 sq km
Agricultural area	0.3%
Capital city	Muscat
Population of capital city (2003)	632,073

Transportation

Railways	n.a.
Highways:	
paved	9,673 km
unpaved	25,292 km
Waterways	n.a.
Pipelines:	
crude oil	3,187 km
petroleum products	n.a.
natural gas	3,599 km
Ports and Harbours	3
Merchant Marine	2 ships
International Airport	Seeb, Muscat

Economy

	Omani Rial
Monetary unit	
Exchange rate	
£ Stg	0.711
US \$	0.385
Euro	0.493
Yen (×100)	0.363
Average annual inflation (1998 to 2003)	-0.3%
Inflation rate (2003)	1.0%
Gross Domestic Product (GDP) at market prices (2003)	OR8,302.4 million
GDP PPP basis (2003)	US\$36.7 billion
GDP per capita (2003)	OR2,863
GDP per capita PPP basis (2003)	US\$13,100
Average annual real change in GDP (1998 to 2003)	3.6%
Private consumption as a proportion of GDP (2003)	43.1%
General government consumption as a proportion of GDP (2003)	23.1%
Gross domestic investment as a proportion of GDP (2003)	13.0%

Construction

Gross value of construction output (2003)	OR189 million
Net value of construction output as a proportion of GDP	2.3%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
Ministry of National Economy
Central Bank of Oman

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Oman is situated at the south-eastern tip of the Arabian peninsular and bordered by Saudi Arabia and the United Arab Emirates to the west and Yemen to the south-west with a coastal line along the Arabian Sea and the Gulf of Oman. The interior and the Musandam Peninsula have many mountainous areas while the southern coast is more tropical. Rugged mountain regions are to the north and the south.

The climate of the country is predominately hot and dry in the desert regions of the interior, hot and humid along the coast. Temperatures in the coastal area can rise to 47°C and humidity reaches 90% in summer. May to September sees a strong south-westly summer monsoon in the far south.

The Sultanate of Oman is an absolute monarchy and the administrative system of the state is conducted through six regions, or *mintaqat*, and two governorates, or *muhafazat*. The cabinet is appointed by the hereditary monarch who is both the chief of state and head of government. The bicameral *Majlis Oman* consists of an upper chamber of 48 seats whose members, appointed by the monarch, act as an advisory power only, and a lower chamber which comprises 83 seats and whose members are elected by limited suffrage.

Oman is a member of the United Nations, the World Trade Organisation, the Gulf Co-operation Council (GCC) amongst others. The population of Oman comprises several ethnic groups including Arab, Baluchi, South Asian and African. The principal religion is Islam, mainly Ibadhi and Sunni Muslims, with other minorities. The official language is Arabic with Swahili, Farsi, Urdu and other various Indian dialects commonly used. English is also widely spoken in business.

The Omani construction industry shares 2–4% of its GDP. Tendering in general is very competitive and straightforward. Oman has an ongoing agenda for infrastructure development with proposed spending up to RO250 million in its current five-year plan.

Construction cost data

Labour resources

The figures below are typical labour costs for Oman at an urban location and are taken at the third quarter 2004. The labour resource costs given are a compilation of the employee's basic pay and the financial cost to the employer of that labour. The cost of construction labour is based on the employee's basic pay and includes those allowances for employer and employee expenses such as holidays, insurance and other mandatory and voluntary contributions.

The Oman Labour Law of 1973 governs labour in Oman. Under the law a worker is not permitted to work more than eight hours a day or forty-eight hours a week. During Ramadan the hours of work will be reduced to six hours a day or thirty-six hours a week.

When a worker is asked to work longer, the employer must compensate by giving an additional minimum of twenty-five per cent of the basic salary or give time off in lieu.

Employees are entitled to fifteen days annual leave, which increases, to thirty days after three years of continuous service. In addition to annual leave, public holidays are also given for special days.

An employer can ask an employee to work during an official holiday but must offer overtime compensation. If the official holiday falls on the workers day of rest they are entitled to a day off in lieu.

Special paid leave of 15 days is also allowed once in a term of service for pilgrimage.

Foreign nationals may not be employed where a national is willing and able to complete the work. Foreign employees need to obtain a labour permit that is subject to entrance requirements. Employees may also pay additional taxes to employ a foreign national.

At the time of writing the Law of 1973 is to be superseded with the Oman Labour Code of 26 April 2003. An English translation of the Arabic text was not available.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>OMR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	7.61	10.64	19.71	15.20
Groundworks Labourer	9.73	13.61	25.20	19.44
Bricklayer	20.17	28.23	52.26	40.30
Shuttering Carpenter	13.16	18.41	34.09	26.29
Carpenter	20.17	28.23	52.26	40.30
Steel Fixer	13.16	18.41	34.09	26.29
Metalworker Craftsman	20.17	28.23	52.26	40.30
Roof Tiler	20.17	28.23	52.26	40.30
Sheet Metal Roofer	20.17	28.23	52.26	40.30
Glazier	16.32	22.84	42.28	32.61
Plasterer	20.17	28.23	52.26	40.30
Plasterers Labourer	9.73	13.61	25.20	19.44
Suspended Ceiling Installer	20.17	28.23	52.26	40.30
Painter	16.32	22.84	42.28	32.61
Floor/Wall Tiler	20.17	28.23	52.26	40.30
Plumber	24.72	34.59	64.04	49.39
Electrician	24.72	34.59	64.04	49.39

Plant resources

The figures below indicate the hire costs of construction plant, delivered to a site in an urban location in Oman, and are current at the third quarter 2004. The rates do not include for any fuel or maintenance expenses and exclude operator costs and charges.

Plant resources					
Plant resources	Unit	Price			
		OMR	£ Stg	US \$	Euro
Hymac 580 (360 deg tracked excavator)	Hour	12.98	18.16	33.63	25.94
JCB 3C (180 deg wheeled excavator)	Hour	9.59	13.42	24.84	19.16
Vibrating Roller 6–8 Tonne	Hour	3.27	4.57	8.46	6.53
Dumper 4WD Hydraulic Tip 1270	Hour	5.18	7.24	13.41	10.34
Poker Vibrator 48 mm	Day	4.28	5.98	11.08	8.54
Beam Vibrator 6.2 m	Day	6.38	8.92	16.52	12.74
Reinforcement bending machine	Hour	0.65	0.91	1.69	1.30
25 Tonne Mobile Crane	Hour	12.53	17.53	32.46	25.03
13 Tonne Mobile Crane	Hour	10.02	14.02	25.96	20.02
10 Tonne Mobile Crane	Hour	7.91	11.07	20.50	15.81
Wacker Plate	Hour	0.40	0.57	1.05	0.81
2.5 Tonne Block and Tackle	Hour	0.63	0.88	1.63	1.26
Craneage/lifting equipment	Hour	12.78	17.89	33.12	25.54

Material resources

The figures below indicate the costs of main construction materials, delivered to a building site within an urban location in Oman, and are taken at the third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material resources					
<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>OMR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	5.06	7.08	13.12	10.11
Clean brick rubble hardcore	m ³	4.95	6.93	12.83	9.90
As-raised hoggin	m ³	5.31	7.43	13.75	10.60
Washed sand	m ³	5.21	7.29	13.49	10.41
Drainage					
100 mm clay drain pipes	m	2.69	3.77	6.97	5.38
150 mm clay drain pipes	m	5.81	8.13	15.05	11.61
225 mm clay drain pipes	m	18.74	26.23	48.56	37.45
150 mm concrete pipe class L	m	3.07	4.29	7.95	6.13
300 mm concrete pipe class L	m	6.84	9.57	17.71	13.66
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	22.07	30.88	57.18	44.10
Readymix concrete 30 N/mm ²	m ³	23.60	33.02	61.13	47.15
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	281.89	394.42	730.28	563.21
Mild steel bars BS4449 10 mm	Tonne	281.89	394.42	730.28	563.21
Mild steel bars BS4449 16 mm	Tonne	281.89	394.42	730.28	563.21
Mild steel bars BS4449 25 mm	Tonne	281.89	394.42	730.28	563.21
Mild steel bars BS4449 40 mm	Tonne	281.89	394.42	730.28	563.21
High yield bars BS4449 8 mm	Tonne	319.60	447.18	827.98	638.56
High yield bars BS4449 10 mm	Tonne	319.60	447.18	827.98	638.56
High yield bars BS4449 16 mm	Tonne	319.60	447.18	827.98	638.56
High yield bars BS4449 25 mm	Tonne	319.60	447.18	827.98	638.56
High yield bars BS4449 40 mm	Tonne	319.60	447.18	827.98	638.56
Tying wire mild steel	Tonne	314.78	440.43	815.48	628.92
Reinforcement spacer blocks	100	2.69	3.77	6.97	5.38

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>OMR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	168.10	235.21	435.50	335.87
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	1.30	1.82	3.37	2.60
150 mm concrete blocks 3.5N (solid)	m ²	1.59	2.22	4.12	3.18
200 mm concrete blocks 3.5N (solid)	m ²	2.08	2.91	5.39	4.16
100 mm concrete blocks 3.5N (hollow)	m ²	1.19	1.66	3.08	2.38
150 mm concrete blocks 3.5N (hollow)	m ²	1.55	2.17	4.02	3.10
200 mm concrete blocks 3.5N (hollow)	m ²	2.06	2.88	5.33	4.11
Cement and Sand					
Portland cement in bags	Tonne	36.04	50.42	93.36	72.00
Soft sand for mortar	Tonne	5.14	7.19	13.31	10.27
Cement mortar (1:3)	m ³	41.55	58.13	107.64	83.01
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	669.90	937.31	1,735.48	1,338.45
UB BS4360 610 × 305 mm × 238kg	Tonne	669.90	937.31	1,735.48	1,338.45
UB BS4360 457 × 191 mm × 98kg	Tonne	657.33	919.72	1,702.92	1,313.34
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	629.31	880.53	1,630.35	1,257.37
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	629.31	880.53	1,630.35	1,257.37
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	703.30	984.06	1,822.03	1,405.20
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	669.90	937.31	1,735.48	1,338.45
RHS BS4360 450 × 250 mm × 167kg	Tonne	709.54	992.79	1,838.20	1,417.67
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	669.90	937.31	1,735.48	1,338.45
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	0.78	1.09	2.01	1.55
50 × 100 mm sawn softwood	m	1.32	1.85	3.43	2.64
38 × 25 mm tanalised batten	m	0.30	0.42	0.78	0.60
Boarding to Flooring					
12 mm WBP ply	m ²	5.70	7.98	14.78	11.40
18 mm WBP ply	m ²	8.88	12.43	23.01	17.75
25 mm WBP ply	m ²	12.51	17.51	32.41	25.00
Nails					
Galvanised nails 75 mm	kg	2.97	4.15	7.69	5.93
Alloy nails 65 mm × 10g	kg	3.80	5.31	9.84	7.59
50 mm Oval wire nails	kg	2.15	3.01	5.57	4.30

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>OMR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	25.85	36.17	66.96	51.64
Sheet zinc BS849 0.60 mm	m ²	20.75	29.03	53.76	41.46
Sheet copper BS2870 0.45 mm	m ²	33.41	46.75	86.56	66.75
Felts					
Underslating felt Type 1F	m ²	0.49	0.69	1.27	0.98
Clay roofing products					
265 × 165 mm plain tile, red	1000	304.28	425.75	788.30	607.96
380 × 260 mm pantile, red	1000	546.97	765.31	1,417.01	1,092.84
Damp-proof membranes					
1000g polythene d.p.m.	m ²	0.48	0.67	1.24	0.96
Insulation					
100 mm thick fibreglass quilt	m ²	2.68	3.76	6.96	5.36
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	18.26	25.55	47.30	36.48
Corrugated galv sheet 1830 mm	Nr	13.35	18.68	34.59	26.68
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	109.66	153.43	284.08	219.09
UPVC s/casement 1000 × 900 glazed	Nr	136.67	191.23	354.07	273.07
UPVC s/casement 1000 × 1200 glazed	Nr	165.34	231.34	428.34	330.35
Glass and glazing					
4 mm clear sheet glass	m ²	28.95	40.50	74.99	57.84
6 mm Georgian wired polished plate	m ²	78.24	109.47	202.68	156.31
5 mm toughened safety glass	m ²	69.17	96.78	179.19	138.20
5.4 mm laminated safety glass	m ²	66.99	93.73	173.55	133.84

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>OMR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	1.46	2.04	3.79	2.92
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	13.79	19.29	35.71	27.54
9mm × 150 × 150 mm ceramic floor tile	m ²	12.35	17.28	32.00	24.68
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	7.57	10.59	19.60	15.12
Masonry textured paint white	5 Litre	13.45	18.82	34.84	26.87
Oil/Alkyd paint undercoat	5 Litre	12.53	17.53	32.46	25.03
Oil/Alkyd paint gloss white	5 Litre	12.53	17.53	32.46	25.03

Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			OMR	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	0.81	1.13	2.09	1.61
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	3.85	5.39	9.97	7.69
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	2.28	3.19	5.91	4.56
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	10.92	15.28	28.30	21.82
0.05	hardcore	m ³	12.63	17.67	32.72	25.23

Ref. No.	Description	Unit	Price			
			OMR	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	3.72	5.20	9.63	7.43
0.07	150 mm dia.	m	7.69	10.76	19.93	15.37
0.08	225 mm dia.	m	24.10	33.72	62.43	48.15
Concrete:						
0.09	150 mm dia.	m	4.77	6.67	12.35	9.52
0.10	300 mm dia.	m	15.40	21.54	39.89	30.76
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	30.00	41.97	77.72	59.94
1.02	over 300 mm thick	m ³	28.61	40.03	74.12	57.17
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	31.04	43.43	80.41	62.02
1.04	0.05–0.20 m ²	m ³	30.67	42.92	79.47	61.29
1.05	over 0.20 m ²	m ³	29.22	40.89	75.71	58.39
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	32.92	46.07	85.29	65.78
1.07	150–300 mm thick	m ³	32.68	45.72	84.65	65.29
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	38.40	53.73	99.48	76.72
1.09	0.05–0.10 m ²	m ³	36.42	50.96	94.35	72.76
1.10	over 0.10 m ²	m ³	35.12	49.14	90.99	70.17

Ref. No.	Description	Unit	Price			
			OMR	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	466.63	652.91	1,208.90	932.34
1.12	10 mm	Tonne	441.82	618.19	1,144.62	882.76
1.13	16 mm	Tonne	412.57	577.26	1,068.84	824.32
1.14	25 mm	Tonne	393.91	551.15	1,020.49	787.03
1.15	40 mm	Tonne	378.19	529.16	979.76	755.62
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	511.89	716.23	1,326.14	1,022.76
1.17	10 mm	Tonne	487.08	681.52	1,261.86	973.19
1.18	16 mm	Tonne	457.83	640.59	1,186.08	914.74
1.19	25 mm	Tonne	439.16	614.47	1,137.73	877.45
1.20	40 mm	Tonne	423.44	592.48	1,097.00	846.04
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	4.18	5.85	10.83	8.36
2.02	150 mm solid blocks	m ²	4.75	6.64	12.30	9.48
2.03	200 mm solid blocks	m ²	5.65	7.91	14.64	11.29

Ref. No.	Description	Unit	Price			
			OMR	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	891.34	1,247.15	2,309.17	1,780.90
3.02	610 × 305 mm × 238 kg/m	Tonne	912.76	1,277.12	2,364.65	1,823.69
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	922.03	1,290.10	2,388.69	1,842.22
3.04	254 × 76 mm × 28.89 kg/m	Tonne	909.70	1,272.84	2,356.73	1,817.58
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	1.40	1.95	3.62	2.79
4.02	50 × 100 mm	m	2.12	2.97	5.50	4.24
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	8.42	11.79	21.82	16.83
4.04	18 mm thick	m ²	12.85	17.98	33.30	25.68
4.05	25 mm thick	m ²	17.93	25.09	46.45	35.83
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	32.27	45.15	83.59	64.47
5.02	380 × 260 mm clay pantile, red	m ²	15.93	22.29	41.26	31.82

Ref. No.	Description	Unit	Price			
			OMR	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	2.49	3.48	6.44	4.97
6.02	38 mm thick	m ²	3.14	4.39	8.12	6.27
6.03	65 mm thick	m ²	4.90	6.86	12.70	9.79
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	21.04	29.44	54.51	42.04
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	1.00	1.39	2.58	1.99
6.06	rendered backgrounds	m ²	1.15	1.61	2.98	2.30
6.07	concrete backgrounds	m ²	1.01	1.42	2.63	2.03
6.08	blockwork backgrounds	m ²	1.52	2.13	3.94	3.04
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	1.05	1.47	2.73	2.11
6.10	rendered backgrounds	m ²	1.25	1.75	3.24	2.50
6.11	concrete backgrounds	m ²	1.13	1.58	2.93	2.26
6.12	textured plastic coating backgrounds	m ²	1.21	1.69	3.14	2.42

Ref. No.	Description	Unit	Price			
			OMR	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	1,266.94	1,772.68	3,282.22	2,531.34
7.02	5.0 kw cooling unit	Nr	1,434.10	2,006.57	3,715.28	2,865.33
7.03	7.5 kw cooling unit	Nr	2,475.09	3,463.12	6,412.16	4,945.24
7.04	10.0 kw cooling unit	Nr	2,899.90	4,057.51	7,512.69	5,794.00
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	702.27	982.60	1,819.34	1,403.13
7.06	1000 gallon	Nr	1,438.28	2,012.43	3,726.12	2,873.69
7.07	2000 gallon	Nr	2,104.41	2,944.47	5,451.84	4,204.62
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	21.55	30.15	55.83	43.06
7.09	182 litre	Nr	37.21	52.07	96.41	74.35
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	179.54	251.21	465.13	358.72
	Basins:					
7.11	vitreous china	Nr	91.38	127.85	236.72	182.57
	Sinks:					
7.12	stainless steel	Nr	115.25	161.26	298.59	230.28
	WC suites:					
7.13	low level washdown	Nr	164.47	230.12	426.09	328.61
7.14	low level syphonic	Nr	334.64	468.22	866.94	668.61
	Bidets:					
7.15	vitreous china	Nr	164.47	230.12	426.09	328.61

Ref. No.	Description	Unit	Price			
			OMR	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	3.69	5.16	9.55	7.37
	Standard cable trays; 1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	6.70	9.37	17.35	13.38
8.03	100 mm	m	8.08	11.30	20.93	16.14
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	6.85	9.59	17.75	13.69
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	20.41	28.56	52.88	40.78
8.06	12-way	Nr	37.10	51.90	96.10	74.12

Ref. No.	Description	Unit	Price			
			OMR	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	2.58	3.61	6.69	5.16
8.08	2 gang, 2 way	Nr	4.50	6.30	11.67	9.00
8.09	3 gang, 2 way	Nr	6.14	8.60	15.92	12.28
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	3.31	4.64	8.59	6.62
8.11	2 gang	Nr	9.44	13.21	24.45	18.86
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	5.15	7.21	13.35	10.29
8.13	1 gang, with neon indicator	Nr	6.12	8.57	15.86	12.23
8.14	1 gang, with neon indicator, metalplate	Nr	8.35	11.68	21.63	16.68

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>OMR/ft²</i>	<i>OMR/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	15	156	219	405	312
Petrol Stations	86	925	1,295	2,397	1,849
Airport Terminal Buildings	85	915	1,280	2,369	1,827
Sorting Offices	39	423	591	1,095	844
Refuse Depots	24	262	367	680	524
Stables and the like	38	412	576	1,066	822
Factories	26	284	398	736	568
Advanced Factories	23	250	350	648	500
Purpose Built Workshops	34	365	511	947	730
Warehouses	25	269	376	696	537
Town Halls	58	624	873	1,617	1,247
Law Courts	71	766	1,072	1,985	1,531
Offices	56	601	841	1,557	1,201
Banks/Building Societies	73	789	1,104	2,044	1,576
Retail Warehouses	24	255	357	660	509

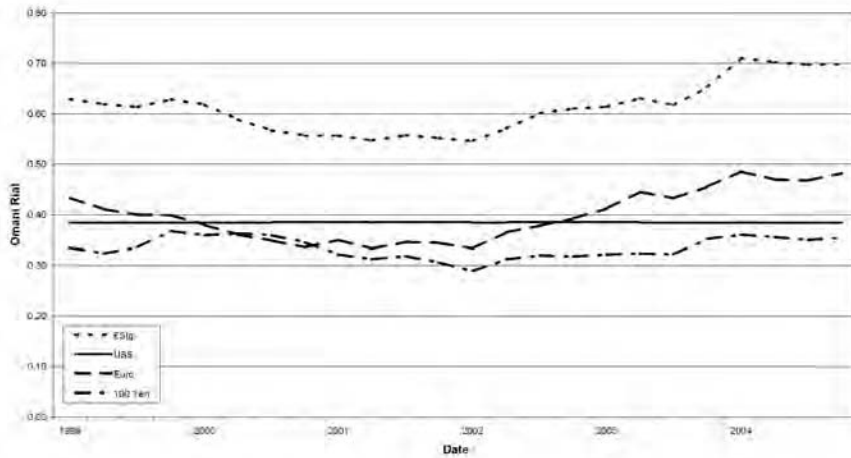
<i>Facility type</i>	<i>OMR/ft²</i>	<i>OMR/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	36	391	547	1,014	782
Department Stores	45	484	678	1,255	968
Hypermarkets / Supermarkets	43	462	647	1,198	924
Shops	34	366	511	947	730
Stadia	52	564	789	1,460	1,126
Pavilions and Sports Club Houses	50	542	758	1,404	1,083
Religious Buildings	59	638	892	1,652	1,274
Schools	51	545	762	1,412	1,089
Sixth Form Colleges	49	530	741	1,373	1,059
Universities	60	648	907	1,680	1,295
Colleges	49	527	737	1,365	1,053
Research Facilities	71	769	1,075	1,991	1,536
Laboratories	70	752	1,053	1,949	1,503
Exhibition Buildings	75	812	1,136	2,103	1,622
Public Libraries	57	610	853	1,580	1,218
Flats	38	404	565	1,046	807
Housing Detached	55	593	830	1,537	1,186
Hotels	54	578	809	1,497	1,155
Halls of Residence	54	580	812	1,504	1,160
Fire Stations	64	693	969	1,795	1,384
Police Stations	67	722	1,011	1,871	1,443
Closed Prisons	76	817	1,143	2,115	1,631
Hospitals	72	773	1,082	2,003	1,545
Intensive Care / Acute Wards	70	755	1,057	1,957	1,509
Health Centres	48	512	717	1,327	1,023
Nursing Homes	53	566	792	1,466	1,131
Homes for the Elderly	46	494	691	1,280	987
Day Centres	56	600	840	1,555	1,199
Veterinary Hospitals	62	671	939	1,739	1,341
Restaurants	72	771	1,079	1,999	1,541
Theatres	51	554	775	1,435	1,107
Cinemas	61	651	911	1,688	1,302
Clubs	47	501	701	1,298	1,001
Covered Swimming Pools	89	953	1,333	2,468	1,904
Sports Centres exc. Pools	45	486	680	1,258	970
Sports Centres inc. Pools	69	742	1,038	1,922	1,482
Sports Halls	42	454	636	1,177	908
Gymnasia	63	674	943	1,746	1,347

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Omani Rial against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Rial with each of them and the relative value to each other.

Exchange Rates



Cost and Price Indices

The following table presents indices for consumer prices, construction costs and building material costs since 1998.

Consumer Price Inflation

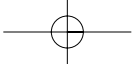
Oman has historically experienced sustained periods of deflation in their level of consumer prices. The CPI level peaked at the end of 2000, during which the average inflation figure for the year was -1.2% . The next year saw consumer price inflation recorded at 1.0% . The prediction for the current year appears to indicate a continuation in the upward trend in the inflation level with an anticipated average figure for 2004 of 2.6% from figures provided by the Omani authorities.

The graph, which follows the tables below, plots the annual percentage change in consumer price inflation since 1998.

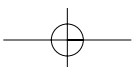
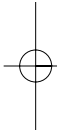
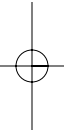
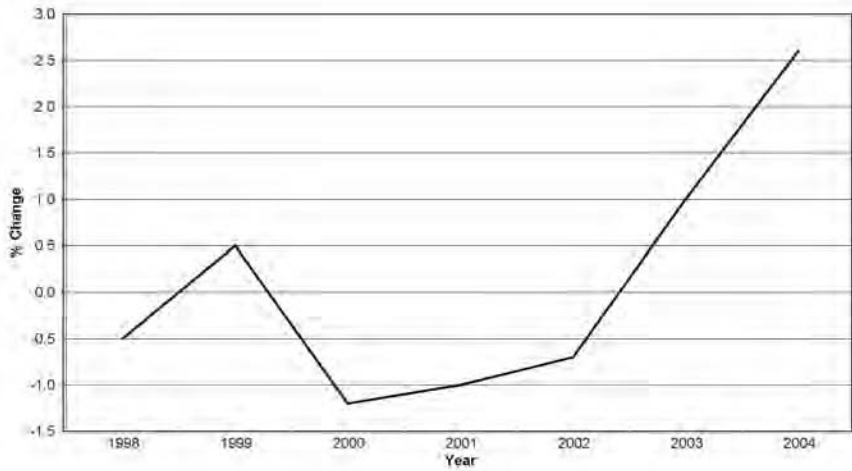
Wholesale Price Indices

Year	Consumer Prices		Construction Costs		Building Material Costs	
	annual average	change %	annual average	change %	annual average	change %
1998	100.0	–	100.0	–	100.0	–
1999	102.5	2.5	121.4	21.4	104.1	4.1
2000	95.6	–6.7	109.3	–9.9	105.1	1.0
2001	86.5	–9.5	103.9	–5.0	110.0	4.7
2002	83.6	–3.4	98.9	–4.8	108.3	–1.5
2003	83.1	–0.6	87.5	–11.5	107.8	–0.5
2004	–	–	–	–	–	–

Source: Central Bank of Oman
Ministry of National Economy
International Monetary Fund



Consumer Price Inflation for Years 1998 through 2004



Useful addresses

Public organisations

The Oman Tender Board
Muscat
PO Box 787/133
Al Khuwair
Sultanate of Oman
Tel: (00968) 602 612
Fax: (00968) 602 063
Email: Tenderom@Omantel.net.om
Website: www.tenderboard.gov.om

The Omani Centre for Investment
Promotion and Export
Development (OCIPED)
PO Box 25
Wadi Kabir
Postal Code 117
Sultanate of Oman
Tel: (00968) 771 2344
Fax: (00968) 771 0890
Email: info@ociped.com
Website: www.ociped.com

Ministry of National Economy
PO Box 881
Muscat 113
Sultanate of Oman
Tel: (00968) 604 285
Fax: (00968) 698 467
Email: mone@omantel.net.om
Website: www.moneoman.gov.om

Ministry of Information
PO Box 600
Muscat 113
Sultanate of Oman
Tel: (00968) 603 222
Fax: (00968) 693 770
Email: webmaster@omanet.com
Website: www.omanet.om

Central Bank of Oman
PO Box 1161
Postal Code 112
Ruwi
Sultanate of Oman
Tel: (00968) 702 222
Website: www.cbo-oman.org

Ministry of Commerce and
Industry
PO Box 550
Muscat 113
Sultanate of Oman
Tel: (00968) 771 3500
Fax: (00968) 771 7239
Email: comm_affairs@mocioman.
gov.om
Website: www.mocioman.gov.com

Foreign embassies

British Embassy
 Jameat A'Duwal Al Arabia Street
 Shatti Al Qurum
 PO Box 185
 Postal Code 116
 Mina Al Fahal
 Sultanate of Oman
 Tel: (00968) 609 002
 Fax: (00968) 609 012
 E-mail: becomu@omantel.net.om
 Website: www.britishembassy.gov.uk

Embassy of the United States of
 America
 Commercial Section
 PO Box 202
 Code 115
 Madinat Al-Sultan Qaboos
 Sultanate of Oman
 Tel: (00968) 698 989
 Fax: (00968) 604 316
 Email: aemcteco@omantel.net.om
 Website: www.usa.gov.om

Industrial Organisations

Oman Chamber of Commerce and
 Industry
 PO Box 1400
 Ruwi 112
 Sultanate of Oman
 Tel: (00968) 707 674
 Fax: (00968) 708 497
 Email: occi@chamberoman.com
 Website: www.chamberoman.com

Petroleum Development Oman
 Muscat 113
 Sultanate of Oman
 Tel: (00968) 678 111
 Fax: (00968) 677 106
 Email: Commercial@pdo.co.om
 Website: www.pdo.co.om

Mott MacDonald (Oman)
 PO Box 587
 Al Barani Building
 Wadi Kabir
 Ruwi
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 Website: www.mottmac.com

Construction Consultants

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Qatar

ECONOMIC INDICATORS AND KEY DATA

Population

Population	840,290
Urban Population	92%
Population under 15	24%
Population 65 and over	3%
Population growth rate	2.7%

Geography

Land area	11,437 sq km
Agricultural area	2%
Capital city	Doha
Population of capital city (2000)	391,000

Transportation

Railways	0km
Highways:	
paved	1,107 km
unpaved	123 km
Waterways	n.a.
Pipelines:	
crude oil	763 km
petroleum products	87 km
natural gas	1,111 km
Ports and Harbours	3
Merchant Marine	22 ships
International Airport	Doha

Economy

Monetary unit	Qatari Riyal
Exchange rate	
£ Stg	6.609
US \$	3.640
Euro	4.561
Yen (×100)	3.352
Average annual inflation (1998 to 2003)	2.3%
Inflation rate	2.5%
Gross Domestic Product (GDP) at market prices	QR74,351 million
GDP PPP basis	US\$17.5 billion
GDP per capita	QR116.9 million
GDP per capita PPP basis	US\$21,500
Average annual real change in GDP (1998 to 2003)	6.2%
Private consumption as a proportion of GDP	27.0%
General government consumption as a proportion of GDP	33.0%
Gross domestic investment as a proportion of GDP	23.2%

Construction

Gross value of construction output	QR3,600 million
Net value of construction output as a proportion of GDP	4.8%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
United Nations World Statistics Pocketbook
Qatar Central Bank

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Qatar is a peninsula situated halfway along the West Coast of the Arabian Gulf. It borders Saudi Arabia to the south with the remainder of the physical land boundaries to the coast of the Arabian Gulf. Its topography consists of a rocky flat surface with some limestone outcrops in Dukhan area in the west and Fuwairit area in the north. There are limited natural fresh water resources and there is an increasing dependence on large-scale desalination plants.

Qatar has a moderate desert climate with short mild winters and extremely hot summers, temperatures during July to September reaching above 40°C. The rainfall is predominately during the months of January, February and March and sandstorms are common throughout the year.

The State of Qatar is ruled by an Islamic monarchy and the Emir dominates both legislative and executive powers with the assistance of the Council of Ministers and the Advisory Council. The unicameral Advisory Council, or Majlis al-Shura, comprises 35 seats, with all such members appointed by the monarch, representing one of the two wings of the country's legislative power. The Islamic Law, or Shariah, is the principal source of legislation

Qatar is a member of the World Trade Organisation and a member of the United Nations and its affiliate organisations and authorities and joined the Organisation of Petroleum Exporting Countries (OPEC) in 1961. The capital of Qatar, Doha, is situated on the east coast of the peninsular and is a deepwater port. Around 83% of the population reside in Doha and its main suburb Al-Rayyan. It is a well-planned city with modern buildings and has an international airport. Ethnic groups include Arab, Pakistani, Indian and Iranian and the predominant religion is Islam. The official language is Arabic and English is widely spoken in business.

The Qatari construction industry employs a labour force of more than 61,000 (2002 est.) and covers a wide range of projects mainly in the field of the infrastructure including roads, drainage, ports and buildings that are underway all over the country. Road projects totalled QR3.85 billion in 2003/2004.

Construction cost data

Labour resources

The figures below are typical labour costs for construction within an urban location in Qatar and are taken at the third quarter 2004. The labour resource costs given are a compilation of the employee's basic pay and the financial cost to the employer of that labour. The cost of construction labour is based on the employee's basic pay and includes those allowances for employer and employee expenses such as holidays, insurance and other mandatory and voluntary contributions.

There is not a minimum wage system currently in force in Qatar and no labour unions as strikes and the like are prohibited.

The working week runs from Saturday to Wednesday in the public and banking sectors. The commercial sector also works Thursdays as workers are entitled to one day off per week. Working hours generally run from 7.00 to 13.00 and 16.00 to 18.00 although this varies depending on the working sector.

Under the Labour Law No. 3 of 1962, employment priority is given firstly to Qatari's, then to nationals of other Arab countries and lastly to any other nationalities. Other nationalities have to obtain a valid work-permit from the Department of Labour in the Ministry of Labour and Social Affairs. Permits are generally valid for two years and can only be gained if application is backed with a valid passport, a resident permit and a good and clean reputation.

Workers are entitled to fourteen days paid annual leave, illness pay and severance pay plus additional holiday entitlement on the occasion of Ramadan.

At the time of writing, the Labour Law of 1962 is about to be superseded by a new Labour Law. The Law No. 14 of 2004 will come into effect in November 2004 and gives Qatari workers the right to form associations with legal status that will work under the umbrella of a Qatar General Union of Workers. This is the first time that a GCC country has taken the step of giving labour sanctity to labour associations.

Under article 73 of the new law the maximum working hours are 48 hours per week or eight hours a day during all months of the year except during Ramadan when working time is reduced to 36 hours per week or 6 hours a day. Work hours include one or more intervals for prayers and meals and rest times will not be less than one hour or more than three hours. Additional hours can be worked at a minimum twenty-five per cent additional earnings but must not exceed ten hours per day unless deemed critical.

Employees are entitled to one fully paid days holiday a week of not less than twenty-four hours. Friday is the normal day off for most employees. If work requires that the employee work during the holiday they shall be compensated at a time and half rate. No employee shall work on two Fridays consecutively.

Employees working between 21:00 and 03:00 hours will be paid the basic salary plus an additional fifty per cent except in the case of shift workers.

Holiday entitlement is also stipulated in Article 78 as the following:

- 1) Three days for Eid Al Fitr
- 2) Three days for Eid Al Adha
- 3) One day for Qatar Independence Day
- 4) Three more casual days decided by the employees

Employees that complete between one and five years service shall be entitled to paid annual leave of not less than three weeks. Any employee that has completed more than five years is entitled to four weeks. Payment of the employee during annual leave is calculated using the employee's basic last drawn salary.

Muslim employees are entitled to an unpaid one-off special leave of twenty days to perform the Haj pilgrimage.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>QAR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	72.82	10.85	20.00	15.54
Groundworks Labourer	91.75	13.67	25.20	19.58
Bricklayer	189.33	28.20	52.00	40.40
Shuttering Carpenter	122.38	18.23	33.61	26.11
Carpenter	189.33	28.20	52.00	40.40
Steel Fixer	122.38	18.23	33.61	26.11
Metalworker Craftsman	189.33	28.20	52.00	40.40
Roof Tiler	189.33	28.20	52.00	40.40
Sheet Metal Roofer	189.33	28.20	52.00	40.40
Glazier	152.97	22.78	42.01	32.64
Plasterer	189.33	28.20	52.00	40.40
Plasterers Labourer	91.75	13.67	25.20	19.58
Suspended Ceiling Installer	189.33	28.20	52.00	40.40
Painter	152.97	22.78	42.01	32.64
Floor/Wall Tiler	189.33	28.20	52.00	40.40
Plumber	236.67	35.25	65.00	50.49
Electrician	236.67	35.25	65.00	50.49

Plant resources

The figures below indicate the hire costs of construction plant, delivered to a building site location in an urban location in Qatar, and are current at the third quarter 2004. The rates do not include for any fuel or maintenance expenses and exclude operator costs and charges.

Plant resources					
Plant resources	Unit	Price			
		QAR	£ Stg	US \$	Euro
Hymac 580 (360 deg tracked excavator)	Hour	122.38	18.23	33.61	26.11
JCB 3C (180 deg wheeled excavator)	Hour	91.80	13.67	25.21	19.59
Vibrating Roller 6–8 Tonne	Hour	30.58	4.56	8.40	6.53
Dumper 4WD Hydraulic Tip 1270	Hour	48.94	7.29	13.44	10.44
Poker Vibrator 48 mm	Day	39.76	5.92	10.92	8.48
Beam Vibrator 6.2 m	Day	61.21	9.12	16.81	13.06
Reinforcement bending machine	Hour	6.12	0.91	1.68	1.31
25 Tonne Mobile Crane	Hour	122.38	18.23	33.61	26.11
13 Tonne Mobile Crane	Hour	91.80	13.67	25.21	19.59
10 Tonne Mobile Crane	Hour	73.45	10.94	20.17	15.67
Wacker Plate	Hour	3.98	0.59	1.09	0.85
2.5 Tonne Block and Tackle	Hour	6.12	0.91	1.68	1.31
Craneage/lifting equipment	Hour	122.38	18.23	33.61	26.11

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Qatar

Material resources

The figures below indicate the costs of main construction materials, delivered to site in an urban environment in Qatar, and are taken at the third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material resources					
<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>QAR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	48.95	7.29	13.45	10.44
Clean brick rubble hardcore	m ³	45.81	6.82	12.58	9.77
As-raised hoggin	m ³	50.81	7.57	13.95	10.84
Washed sand	m ³	48.95	7.29	13.45	10.44
Drainage					
100 mm clay drain pipes	m	25.76	3.84	7.08	5.50
150 mm clay drain pipes	m	53.73	8.00	14.76	11.46
225 mm clay drain pipes	m	175.50	26.14	48.20	37.44
150 mm concrete pipe class L	m	29.68	4.42	8.15	6.33
300 mm concrete pipe class L	m	64.01	9.53	17.58	13.66
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	208.06	30.99	57.14	44.39
Readymix concrete 30 N/mm ²	m ³	220.30	32.81	60.50	47.00
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	2,753.70	410.14	756.30	587.52
Mild steel bars BS4449 10 mm	Tonne	2,753.70	410.14	756.30	587.52
Mild steel bars BS4449 16 mm	Tonne	2,753.70	410.14	756.30	587.52
Mild steel bars BS4449 25 mm	Tonne	2,753.70	410.14	756.30	587.52
Mild steel bars BS4449 40 mm	Tonne	2,753.70	410.14	756.30	587.52
High yield bars BS4449 8 mm	Tonne	3,059.66	455.71	840.34	652.80
High yield bars BS4449 10 mm	Tonne	3,059.66	455.71	840.34	652.80
High yield bars BS4449 16 mm	Tonne	3,059.66	455.71	840.34	652.80
High yield bars BS4449 25 mm	Tonne	3,059.66	455.71	840.34	652.80
High yield bars BS4449 40 mm	Tonne	3,059.66	455.71	840.34	652.80
Tying wire mild steel	Tonne	2,998.47	446.60	823.53	639.74
Reinforcement spacer blocks	100	25.64	3.82	7.04	5.47

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>QAR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	1,591.03	236.97	436.97	339.45
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	12.24	1.82	3.36	2.61
150 mm concrete blocks 3.5N (solid)	m ²	15.30	2.28	4.20	3.26
200 mm concrete blocks 3.5N (solid)	m ²	19.89	2.96	5.46	4.24
100 mm concrete blocks 3.5N (hollow)	m ²	11.38	1.70	3.13	2.43
150 mm concrete blocks 3.5N (hollow)	m ²	14.23	2.12	3.91	3.04
200 mm concrete blocks 3.5N (hollow)	m ²	18.50	2.75	5.08	3.95
Cement and Sand					
Portland cement in bags	Tonne	336.56	50.13	92.44	71.81
Soft sand for mortar	Tonne	48.95	7.29	13.45	10.44
Cement mortar (1:3)	m ³	397.76	59.24	109.24	84.86
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	6,445.40	959.99	1,770.23	1,375.16
UB BS4360 610 × 305 mm × 238kg	Tonne	6,445.40	959.99	1,770.23	1,375.16
UB BS4360 457 × 191 mm × 98kg	Tonne	6,230.52	927.99	1,711.21	1,329.32
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	6,015.64	895.98	1,652.19	1,283.47
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	6,015.64	895.98	1,652.19	1,283.47
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	6,552.79	975.99	1,799.72	1,398.08
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	6,445.40	959.99	1,770.23	1,375.16
RHS BS4360 450 × 250 mm × 167kg	Tonne	6,659.54	991.89	1,829.04	1,420.85
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	6,445.40	959.99	1,770.23	1,375.16
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	7.40	1.10	2.03	1.58
50 × 100 mm sawn softwood	m	12.36	1.84	3.39	2.64
38 × 25 mm tanalised batten	m	2.75	0.41	0.76	0.59
Boarding to Flooring					
12 mm WBP ply	m ²	53.79	8.01	14.77	11.48
18 mm WBP ply	m ²	83.15	12.39	22.84	17.74
25 mm WBP ply	m ²	118.60	17.66	32.57	25.30
Nails					
Galvanised nails 75 mm	kg	28.27	4.21	7.76	6.03
Alloy nails 65 mm × 10g	kg	35.74	5.32	9.82	7.62
50 mm Oval wire nails	kg	20.19	3.01	5.55	4.31

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>QAR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	247.45	36.86	67.96	52.80
Sheet zinc BS849 0.60 mm	m ²	198.36	29.54	54.48	42.32
Sheet copper BS2870 0.45 mm	m ²	318.26	47.40	87.41	67.90
Felts					
Underslating felt Type 1F	m ²	4.59	0.68	1.26	0.98
Clay roofing products					
265 × 165 mm plain tile, red	1000	2,869.96	427.46	788.24	612.32
380 × 260 mm pantile, red	1000	5,262.62	783.83	1,445.38	1,122.81
Damp-proof membranes					
1000g polythene d.p.m.	m ²	4.47	0.67	1.23	0.95
Insulation					
100 mm thick fibreglass quilt	m ²	25.70	3.83	7.06	5.48
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	173.05	25.78	47.53	36.92
Corrugated galv sheet 1830 mm	Nr	121.16	18.05	33.28	25.85
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	1,076.70	160.37	295.71	229.72
UPVC s/casement 1000 × 900 glazed	Nr	1,276.49	190.12	350.59	272.35
UPVC s/casement 1000 × 1200 glazed	Nr	1,529.34	227.78	420.03	326.29
Glass and glazing					
4 mm clear sheet glass	m ²	275.74	41.07	75.73	58.83
6 mm Georgian wired polished plate	m ²	730.71	108.83	200.69	155.90
5 mm toughened safety glass	m ²	652.38	97.17	179.18	139.19
5.4 mm laminated safety glass	m ²	641.31	95.52	176.13	136.83

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>QAR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	13.65	2.03	3.75	2.91
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	131.32	19.56	36.07	28.02
9mm × 150 × 150 mm ceramic floor tile	m ²	115.35	17.18	31.68	24.61
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	70.68	10.53	19.41	15.08
Masonry textured paint white	5 Litre	127.47	18.99	35.01	27.20
Oil/Alkyd paint undercoat	5 Litre	120.55	17.96	33.11	25.72
Oil/Alkyd paint gloss white	5 Litre	120.55	17.96	33.11	25.72

Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			QAR	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	7.71	1.15	2.12	1.65
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	36.86	5.49	10.12	7.86
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	21.84	3.25	6.00	4.66
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	103.13	15.36	28.33	22.00
0.05	hardcore	m ³	118.30	17.62	32.49	25.24

Ref. No.	Description	Unit	Price			
			QAR	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	35.54	5.29	9.76	7.58
0.07	150 mm dia.	m	71.22	10.61	19.56	15.20
0.08	225 mm dia.	m	225.65	33.61	61.97	48.14
Concrete:						
0.09	150 mm dia.	m	45.87	6.83	12.60	9.79
0.10	300 mm dia.	m	145.42	21.66	39.94	31.03
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	282.94	42.14	77.71	60.37
1.02	over 300 mm thick	m ³	269.84	40.19	74.11	57.57
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	292.90	43.63	80.44	62.49
1.04	0.05–0.20 m ²	m ³	289.40	43.10	79.48	61.75
1.05	over 0.20 m ²	m ³	275.70	41.06	75.72	58.82
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	307.67	45.82	84.50	65.64
1.07	150–300 mm thick	m ³	305.31	45.47	83.85	65.14
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	359.75	53.58	98.81	76.76
1.09	0.05–0.10 m ²	m ³	341.07	50.80	93.67	72.77
1.10	over 0.10 m ²	m ³	328.84	48.98	90.32	70.16

Ref. No.	Description	Unit	Price			
			QAR	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	4,503.07	670.70	1,236.77	960.76
1.12	10 mm	Tonne	4,271.21	636.16	1,173.09	911.29
1.13	16 mm	Tonne	3,998.82	595.59	1,098.28	853.17
1.14	25 mm	Tonne	3,824.17	569.58	1,050.31	815.91
1.15	40 mm	Tonne	3,677.11	547.68	1,009.92	784.53
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	4,870.23	725.38	1,337.61	1,039.09
1.17	10 mm	Tonne	4,638.37	690.85	1,273.93	989.62
1.18	16 mm	Tonne	4,365.98	650.28	1,199.12	931.51
1.19	25 mm	Tonne	4,191.33	624.27	1,151.15	894.25
1.20	40 mm	Tonne	4,044.26	602.36	1,110.76	862.87
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	39.43	5.87	10.83	8.41
2.02	150 mm solid blocks	m ²	45.18	6.73	12.41	9.64
2.03	200 mm solid blocks	m ²	53.67	7.99	14.74	11.45

Ref. No.	Description	Unit	Price			
			QAR	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	8,556.50	1,274.43	2,350.04	1,825.58
3.02	610 × 305 mm × 238 kg/m	Tonne	8,756.70	1,304.24	2,405.02	1,868.29
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	8,597.44	1,280.52	2,361.28	1,834.32
3.04	254 × 76 mm × 28.89 kg/m	Tonne	8,735.17	1,301.04	2,399.11	1,863.70
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	13.25	1.97	3.64	2.83
4.02	50 × 100 mm	m	19.85	2.96	5.45	4.23
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	79.39	11.82	21.80	16.94
4.04	18 mm thick	m ²	120.37	17.93	33.06	25.68
4.05	25 mm thick	m ²	169.77	25.29	46.63	36.22
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 x 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	303.11	45.15	83.25	64.67
5.02	380 × 260 mm clay pantile, red	m ²	151.54	22.57	41.62	32.33

Ref. No.	Description	Unit	Price			
			QAR	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	23.63	3.52	6.49	5.04
6.02	38 mm thick	m ²	29.82	4.44	8.19	6.36
6.03	65 mm thick	m ²	46.68	6.95	12.82	9.96
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	200.00	29.79	54.93	42.67
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	9.31	1.39	2.56	1.99
6.06	rendered backgrounds	m ²	10.78	1.61	2.96	2.30
6.07	concrete backgrounds	m ²	9.49	1.41	2.61	2.03
6.08	blockwork backgrounds	m ²	14.24	2.12	3.91	3.04
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	9.86	1.47	2.71	2.10
6.10	rendered backgrounds	m ²	11.70	1.74	3.21	2.50
6.11	concrete backgrounds	m ²	10.60	1.58	2.91	2.26
6.12	textured plastic coating backgrounds	m ²	11.33	1.69	3.11	2.42

Ref. No.	Description	Unit	Price			
			QAR	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	11,566.15	1,722.69	3,176.64	2,467.71
7.02	5.0 kw cooling unit	Nr	13,597.86	2,025.30	3,734.65	2,901.19
7.03	7.5 kw cooling unit	Nr	23,132.29	3,445.38	6,353.28	4,935.42
7.04	10.0 kw cooling unit	Nr	27,039.67	4,027.36	7,426.44	5,769.08
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	6,690.55	996.51	1,837.56	1,427.47
7.06	1000 gallon	Nr	13,589.14	2,024.00	3,732.25	2,899.33
7.07	2000 gallon	Nr	20,446.42	3,045.34	5,615.61	4,362.37
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	201.28	29.98	55.28	42.95
7.09	182 litre	Nr	361.28	53.81	99.23	77.08
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	1,656.54	246.73	454.97	353.43
	Basins:					
7.11	vitreous china	Nr	867.26	129.17	238.19	185.04
	Sinks:					
7.12	stainless steel	Nr	1,078.36	160.61	296.17	230.08
	WC suites:					
7.13	low level washdown	Nr	1,604.55	238.98	440.69	342.34
7.14	low level syphonic	Nr	3,118.10	464.42	856.39	665.27
	Bidets:					
7.15	vitreous china	Nr	1,604.55	238.98	440.69	342.34

Ref. No.	Description	Unit	Price			
			QAR	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	35.23	5.25	9.68	7.52
	Standard cable trays; 1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	63.43	9.45	17.42	13.53
8.03	100 mm	m	76.68	11.42	21.06	16.36
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	63.78	9.50	17.52	13.61
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	193.11	28.76	53.04	41.20
8.06	12-way	Nr	342.81	51.06	94.15	73.14

Ref. No.	Description	Unit	Price			
			QAR	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	24.25	3.61	6.66	5.17
8.08	2 gang, 2 way	Nr	42.61	6.35	11.70	9.09
8.09	3 gang, 2 way	Nr	57.32	8.54	15.74	12.23
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	31.47	4.69	8.64	6.71
8.11	2 gang	Nr	88.93	13.25	24.42	18.97
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	49.09	7.31	13.48	10.47
8.13	1 gang, with neon indicator	Nr	56.64	8.44	15.56	12.08
8.14	1 gang, with neon indicator, metalplate	Nr	79.03	11.77	21.70	16.86

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>QAR/ft²</i>	<i>QAR/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	140	1,505	224	413	321
Petrol Stations	816	8,779	1,308	2,411	1,873
Airport Terminal Buildings	810	8,719	1,299	2,395	1,860
Sorting Offices	373	4,019	599	1,104	858
Refuse Depots	229	2,464	367	677	526
Stables and the like	363	3,905	582	1,073	833
Factories	253	2,723	406	748	581
Advanced Factories	221	2,380	354	654	508
Purpose Built Workshops	318	3,428	511	942	731
Warehouses	234	2,519	375	692	537
Town Halls	556	5,982	891	1,643	1,276
Law Courts	679	7,303	1,088	2,006	1,558
Offices	529	5,699	849	1,565	1,216
Banks/Building Societies	687	7,393	1,101	2,030	1,577
Retail Warehouses	221	2,375	354	652	507

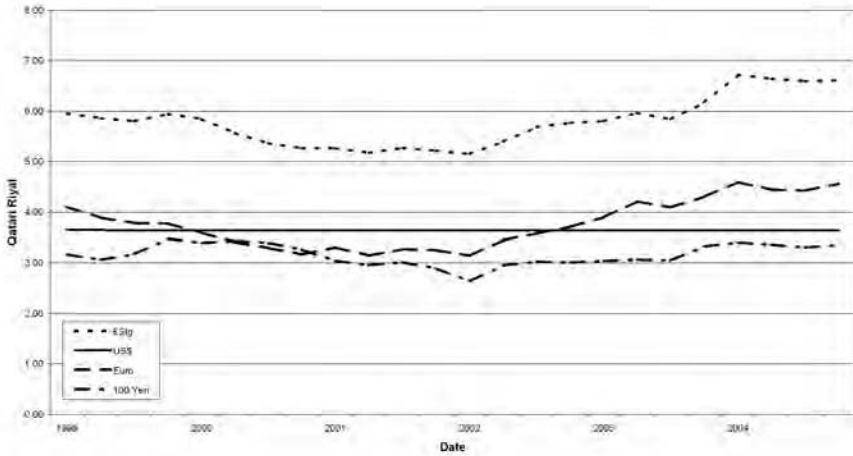
<i>Facility type</i>	<i>QAR/ft²</i>	<i>QAR/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	346	3,721	554	1,022	794
Department Stores	428	4,611	687	1,266	984
Hypermarkets / Supermarkets	414	4,452	663	1,223	950
Shops	322	3,468	517	952	740
Stadia	491	5,286	787	1,452	1,128
Pavilions and Sports Club Houses	480	5,167	770	1,419	1,102
Religious Buildings	555	5,977	890	1,642	1,275
Schools	480	5,162	769	1,418	1,101
Sixth Form Colleges	472	5,078	756	1,395	1,083
Universities	571	6,151	916	1,689	1,312
Colleges	468	5,038	750	1,384	1,075
Research Facilities	671	7,219	1,075	1,983	1,540
Laboratories	667	7,174	1,069	1,970	1,531
Exhibition Buildings	721	7,756	1,155	2,130	1,655
Public Libraries	531	5,714	851	1,569	1,219
Flats	358	3,850	574	1,058	822
Housing Detached	513	5,520	822	1,516	1,178
Hotels	512	5,510	821	1,513	1,176
Halls of Residence	513	5,520	822	1,516	1,178
Fire Stations	617	6,638	989	1,823	1,416
Police Stations	640	6,886	1,026	1,891	1,469
Closed Prisons	708	7,621	1,135	2,093	1,626
Hospitals	685	7,373	1,098	2,025	1,573
Intensive Care / Acute Wards	661	7,120	1,060	1,955	1,519
Health Centres	454	4,884	727	1,341	1,042
Nursing Homes	491	5,281	787	1,451	1,127
Homes for the Elderly	440	4,735	705	1,300	1,010
Day Centres	532	5,724	852	1,572	1,221
Veterinary Hospitals	587	6,320	941	1,736	1,348
Restaurants	672	7,229	1,077	1,985	1,542
Theatres	491	5,281	787	1,451	1,127
Cinemas	565	6,086	907	1,672	1,299
Clubs	439	4,730	704	1,299	1,009
Covered Swimming Pools	829	8,928	1,330	2,452	1,905
Sports Centres exc. Pools	430	4,631	690	1,272	988
Sports Centres inc. Pools	659	7,090	1,056	1,947	1,513
Sports Halls	396	4,268	636	1,172	911
Gymnasia	594	6,394	952	1,756	1,364

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Qatari Riyal against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen (×100).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Riyal with each of them and the relative value to each other.

Exchange Rates



Consumer price inflation

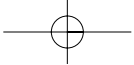
The following table presents indices for consumer prices since 1996. Qatar has experienced a relatively low level of CPI inflation through the years up to the end of 2002, during which time the average inflation figure was 1.7%. In 2003, however, the annual rate of inflation increased to 4.3%. The prediction for the current year appears to indicate a return to normal inflationary levels with an average figure for 2004 of 2.8% from figures provided by the Qatari authorities.

The graph, which follows the table below, plots the annual percentage change in consumer price inflation since 1997.

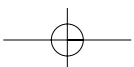
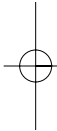
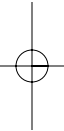
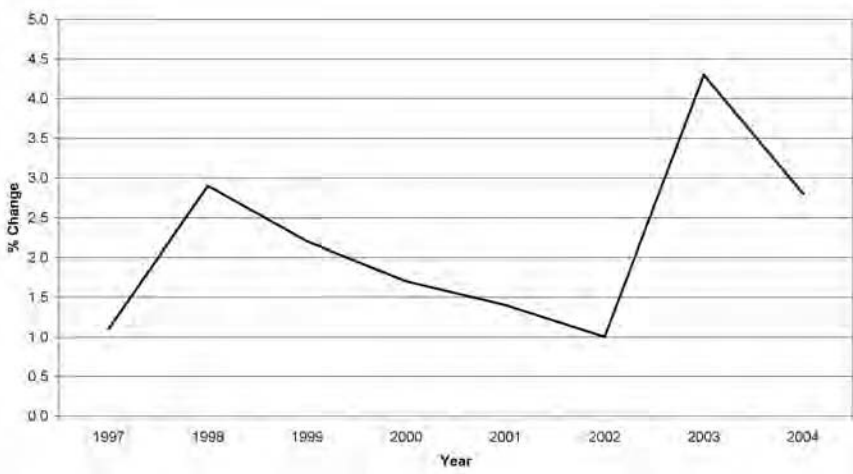
Consumer Prices

Year	annual average	change %
1996	108.8	–
1997	110.0	1.1
1998	113.2	2.9
1999	115.7	2.2
2000	117.6	1.7
2001	119.3	1.4
2002	120.5	1.0
2003	125.7	4.3
2004	129.2	2.8

Source: *International Monetary Fund, Supplements 2004*



Consumer Price Inflation for Years 1997 through 2004



Useful addresses

Public organisations

Qatar Planning Council
PO Box 1855
Doha
Qatar
Tel: (00974) 438 1227
Fax: (00974) 438 1298
Email: webmaster@planning.gov.qa
Website: www.planning.gov.qa

Ministry of Municipal Affairs &
Agriculture
PO Box 44556
Doha
Qatar
Tel: (00974) 433 7577
Fax: (00974) 441 1464
Website: www.mmaa.gov.qa

Qatar Central Bank
PO Box 1234
Qatar
Tel: (00974) 445 6456
Email: webmaster@qcb.gov.qa
Website: www.qcb.gov.qa

Qatar Chamber of Commerce &
Industry
PO Box 402
Doha
Tel: (00974) 455 9111
Fax: (00974) 466 1693
Email: info@qcci.org
Website: www.qcci.org

Foreign Embassies

British Embassy
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Website: www.britishembassy.gov.uk

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Doha
Qatar
Tel: (00974) 488 4101
Fax: (00974) 488 4298
Email: PASDoha@state.gov
Website: <http://qatar.usembassy.gov>

Industrial organisations

Qatar Liquefied Gas Company Ltd.
(Qatargas)
PO Box 22666
Ras Laffan Industrial City
Qatar
Tel: (00974) 473 6000
Fax: (00974) 473 6666
Website: www.qatargas.com.qa

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Qatar

RasGas Company Limited
PO Box 24200
Doha
Qatar
Tel: (00974) 485 7400
Fax: (00974) 485 7386
Website: www.rasgas.com

Qatar Petrochemical Company Ltd
PO Box 756
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Qatar
Tel: (00974) 424 2444
Fax: (00974) 432 4700
Website: www.qapco.com

Qatar Steel Company (QASCO)
Head Office:
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Mesaieed
Qatar
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Fax: (00974) 477 1424
Email: qasco@qasco.com.qa
Website: www.qasco.co.qa

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Fax: +971 (0) 4 343 4281
Email: Nigel.Thomas@MottMac.com

Saudi Arabia

ECONOMIC INDICATORS AND KEY DATA

Population

Population	22.7 million
Urban Population	88%
Population under 15	38%
Population 65 and over	2%
Population growth rate	2.4%

Geography

Land area	1,960,582 sq km
Agricultural area	1.8%
Capital city	Riyadh
Population of capital city (2000)	4.7 million

Transportation

Railways	1,392 km
Highways:	
paved	45,592 km
unpaved	105,878 km
Waterways	n.a.
Pipelines:	
crude oil	5,062 km
refined products	69 km
condensate	212 km
liquid petroleum gas	1,187 km
natural gas	837 km
Ports and Harbours	11
Merchant Marine	66 ships
International Airport	King Khalid International Airport, Riyadh

Economy

	Saudi Riyal
Monetary unit	
Exchange rate	
£ Stg	6.930
US \$	3.750
Euro	4.801
Yen (×100)	3.534
Average annual inflation (1998 to 2003)	-0.5%
Inflation rate	1.0%
Gross Domestic Product (GDP) at market prices (2003)	SR804.2 billion
GDP PPP basis (2003)	US\$287.8 billion
GDP per capita (2003)	SR35,476
GDP per capita PPP basis (2003)	US\$11,800
Average annual real change in GDP (1998 to 2003)	2.6%
Private consumption as a proportion of GDP (2003)	33.1%
General government consumption as a proportion of GDP (2003)	24.6%
Gross domestic investment as a proportion of GDP (2003)	18.0%

Construction

Gross value of construction output (2003)	SR46.3 billion
Net value of construction output as a proportion of GDP	5.8%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
Central Department of Statistics – Ministry of Economy and Planning
Saudi Arabian Monetary Agency

All data relates to latest as at 3Q 2004

PPP – Purchasing Power Parity

Country profile

Saudi Arabia is located in the Middle East occupying the majority of the Arabian Peninsular. It has land borders with Jordan to the north-west, Iraq and Kuwait to the north, UAE, Qatar, Bahrain to the east, Oman to the south-east and the Yemen to the south. Most of the country is uninhabited and is a harsh sandy desert terrain. In the south, the Rub Al-Khali or Empty Quarter, the largest continuous sand desert in the world, occupies about half the country. The Arabian platform slopes gradually down from the west – mainly bold and mountainous along the Red Sea coast, to the east – mainly flat and low-lying along the Arabian Gulf coast where vast oil reserves exist.

The climate is extremely harsh with hot, dry summers and cold winters. Temperatures can reach 45°C during daytime in summers with high humidity in the coastal regions and may fall to freezing at night, particularly in the central deserts. There are frequent sand and dust storms.

The Kingdom of Saudi Arabia has been an independent state since its unification in 1932. The country is ruled by a hereditary monarchy and the King is both the chief of state and head of government. The Council of Ministers, the Cabinet, is appointed by the monarch and includes many royal family members. Legislative powers lie with the Consultative Council, or Majlis al-Shura, consisting of 120 members also appointed by the monarch for four-year terms.

Saudi Arabia is a member of the United Nations, the Organisation of Petroleum Exporting Countries, the Arab Gulf Cooperation Council (AGCC), an observer of the World Trade Organisations and a member of other major international organisations. The principal religion is Islam, consisting mostly of Sunni Muslims with a minority of Shi'a Muslims. Arabic is the official language with English commonly spoken in business.

The Saudi construction industry shares about 7% of its GDP and is the largest construction market in the Middle East. Construction activities have a direct correlation with oil prices as the oil and gas sector dominates the country's economy.

Construction cost data

Labour resources

The figures below are typical labour costs for urban located construction sites in Saudi Arabia and are taken at the third quarter 2004. The labour resource costs given are a compilation of the employee's basic pay and the financial cost to the employer of that labour. The cost of construction labour is based on the employee's basic pay and includes those allowances for employer and employee expenses such as holidays, insurance and other mandatory and voluntary contributions.

The Labour Law of 1969 governs labour in Saudi Arabia. Under the law a worker is not permitted to work more than eight hours a day or forty-eight hours a week. During Ramadan the hours of work will be reduced to six hours a day or thirty-six hours a week.

Saudi Labour laws ensure the hiring of nationals above foreign nationals and stipulate that three quarters of every employer's work force must consist of Saudi Nationals and no less than fifty-one per cent of the employer's payroll be paid to Saudis.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>SAR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	70.89	10.21	18.91	14.58
Groundworks Labourer	90.67	13.06	24.18	18.65
Bricklayer	186.18	26.81	49.65	38.29
Shuttering Carpenter	122.32	17.61	32.62	25.16
Carpenter	186.18	26.81	49.65	38.29
Steel Fixer	122.32	17.61	32.62	25.16
Metalworker Craftsman	186.18	26.81	49.65	38.29
Roof Tiler	186.18	26.81	49.65	38.29
Sheet Metal Roofer	186.18	26.81	49.65	38.29
Glazier	152.66	21.98	40.71	31.40
Plasterer	186.18	26.81	49.65	38.29
Plasterers Labourer	90.67	13.06	24.18	18.65
Suspended Ceiling Installer	186.18	26.81	49.65	38.29
Painter	152.66	21.98	40.71	31.40
Floor/Wall Tiler	186.18	26.81	49.65	38.29
Plumber	231.33	33.31	61.69	47.58
Electrician	231.33	33.31	61.69	47.58

Plant resources

The figures below indicate the hire costs of construction plant, delivered to a building site located within an urban area within Saudi Arabia, and are current at the third quarter 2004. The rates do not include for any fuel or maintenance expenses and also exclude operator costs and charges.

Plant costs					
Plant resources	Unit	Price			
		SAR	£ Stg	US \$	Euro
Hymac 580 (360 deg tracked excavator)	Hour	121.60	17.51	32.43	25.01
JCB 3C (180 deg wheeled excavator)	Hour	89.82	12.93	23.95	18.47
Vibrating Roller 6-8 Tonne	Hour	30.42	4.38	8.11	6.26
Dumper 4WD Hydraulic Tip 1270	Hour	48.48	6.98	12.93	9.97
Poker Vibrator 48 mm	Day	39.68	5.71	10.58	8.16
Beam Vibrator 6.2 m	Day	59.74	8.60	15.93	12.29
Reinforcement bending machine	Hour	6.11	0.88	1.63	1.26
25 Tonne Mobile Crane	Hour	117.35	16.90	31.29	24.13
13 Tonne Mobile Crane	Hour	89.82	12.93	23.95	18.47
10 Tonne Mobile Crane	Hour	72.22	10.40	19.26	14.85
Wacker Plate	Hour	3.79	0.55	1.01	0.78
2.5 Tonne Block and Tackle	Hour	5.90	0.85	1.57	1.21
Craneage/lifting equipment	Hour	119.74	17.24	31.93	24.63

Construction cost data

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Material resources

The figures below indicate the costs of main construction materials, delivered to a building site located within an urban area in Saudi Arabia, and are taken at third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material resources	Unit	Material costs			
		Price			
		SAR	£ Stg	US \$	Euro
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	47.90	6.90	12.77	9.85
Clean brick rubble hardcore	m ³	45.05	6.49	12.01	9.26
As-raised hoggin	m ³	49.84	7.18	13.29	10.25
Washed sand	m ³	47.90	6.90	12.77	9.85
Drainage					
100 mm clay drain pipes	m	25.33	3.65	6.76	5.21
150 mm clay drain pipes	m	52.52	7.56	14.00	10.80
225 mm clay drain pipes	m	171.72	24.73	45.79	35.32
150 mm concrete pipe class L	m	28.75	4.14	7.67	5.91
300 mm concrete pipe class L	m	62.94	9.06	16.78	12.94
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	203.57	29.32	54.29	41.87
Readymix concrete 30 N/mm ²	m ³	215.55	31.04	57.48	44.33
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	2,694.33	388.01	718.49	554.11
Mild steel bars BS4449 10 mm	Tonne	2,694.33	388.01	718.49	554.11
Mild steel bars BS4449 16 mm	Tonne	2,694.33	388.01	718.49	554.11
Mild steel bars BS4449 25 mm	Tonne	2,694.33	388.01	718.49	554.11
Mild steel bars BS4449 40 mm	Tonne	2,694.33	388.01	718.49	554.11
High yield bars BS4449 8 mm	Tonne	2,993.70	431.12	798.32	615.68
High yield bars BS4449 10 mm	Tonne	2,993.70	431.12	798.32	615.68
High yield bars BS4449 16 mm	Tonne	2,993.70	431.12	798.32	615.68
High yield bars BS4449 25 mm	Tonne	2,993.70	431.12	798.32	615.68
High yield bars BS4449 40 mm	Tonne	2,993.70	431.12	798.32	615.68
Tying wire mild steel	Tonne	2,933.82	422.50	782.35	603.37
Reinforcement spacer blocks	100	25.09	3.61	6.69	5.16

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>SAR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	1,556.72	224.18	415.13	320.16
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	11.97	1.72	3.19	2.46
150 mm concrete blocks 3.5N (solid)	m ²	14.97	2.16	3.99	3.08
200 mm concrete blocks 3.5N (solid)	m ²	19.46	2.80	5.19	4.00
100 mm concrete blocks 3.5N (hollow)	m ²	11.14	1.60	2.97	2.29
150 mm concrete blocks 3.5N (hollow)	m ²	13.92	2.00	3.71	2.86
200 mm concrete blocks 3.5N (hollow)	m ²	18.10	2.61	4.83	3.72
Cement and Sand					
Portland cement in bags	Tonne	329.31	47.42	87.82	67.73
Soft sand for mortar	Tonne	47.90	6.90	12.77	9.85
Cement mortar (1:3)	m ³	389.18	56.05	103.78	80.04
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	6,306.43	908.18	1,681.72	1,296.98
UB BS4360 610 × 305 mm × 238kg	Tonne	6,306.43	908.18	1,681.72	1,296.98
UB BS4360 457 × 191 mm × 98kg	Tonne	6,096.19	877.91	1,625.65	1,253.74
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	5,885.94	847.63	1,569.58	1,210.50
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	5,885.94	847.63	1,569.58	1,210.50
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	6,411.51	923.32	1,709.74	1,318.59
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	6,306.43	908.18	1,681.72	1,296.98
RHS BS4360 450 × 250 mm × 167kg	Tonne	6,515.96	938.36	1,737.59	1,340.07
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	6,306.43	908.18	1,681.72	1,296.98
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	7.24	1.04	1.93	1.49
50 × 100 mm sawn softwood	m	12.09	1.74	3.23	2.49
38 × 25 mm tanalised batten	m	2.69	0.39	0.72	0.55
Boarding to Flooring					
12 mm WBP ply	m ²	52.63	7.58	14.04	10.82
18 mm WBP ply	m ²	81.36	11.72	21.70	16.73
25 mm WBP ply	m ²	116.04	16.71	30.94	23.86
Nails					
Galvanised nails 75 mm	kg	27.66	3.98	7.38	5.69
Alloy nails 65 mm × 10g	kg	34.97	5.04	9.32	7.19
50 mm Oval wire nails	kg	19.76	2.85	5.27	4.06

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>SAR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	242.12	34.87	64.57	49.79
Sheet zinc BS849 0.60 mm	m ²	194.08	27.95	51.76	39.91
Sheet copper BS2870 0.45 mm	m ²	311.40	44.84	83.04	64.04
Felts					
Underslating felt Type 1F	m ²	4.49	0.65	1.20	0.92
Clay roofing products					
265 × 165 mm plain tile, red	1000	2,808.09	404.39	748.82	577.51
380 × 260 mm pantile, red	1000	5,149.16	741.53	1,373.11	1,058.97
Damp-proof membranes					
1000g polythene d.p.m.	m ²	4.37	0.63	1.17	0.90
Insulation					
100 mm thick fibreglass quilt	m ²	25.15	3.62	6.71	5.17
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	169.32	24.38	45.15	34.82
Corrugated galv sheet 1830 mm	Nr	118.55	17.07	31.61	24.38
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	1,053.48	151.71	280.93	216.66
UPVC s/casement 1000 × 900 glazed	Nr	1,248.97	179.86	333.06	256.86
UPVC s/casement 1000 × 1200 glazed	Nr	1,496.37	215.49	399.03	307.74
Glass and glazing					
4 mm clear sheet glass	m ²	269.79	38.85	71.94	55.49
6 mm Georgian wired polished plate	m ²	714.95	102.96	190.65	147.04
5 mm toughened safety glass	m ²	638.32	91.92	170.22	131.28
5.4 mm laminated safety glass	m ²	627.48	90.36	167.33	129.05

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>SAR</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	13.35	1.92	3.56	2.75
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	128.49	18.50	34.26	26.43
9mm × 150 × 150 mm ceramic floor tile	m ²	112.86	16.25	30.10	23.21
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	69.15	9.96	18.44	14.22
Masonry textured paint white	5 Litre	124.72	17.96	33.26	25.65
Oil/Alkyd paint undercoat	5 Litre	117.95	16.99	31.45	24.26
Oil/Alkyd paint gloss white	5 Litre	117.95	16.99	31.45	24.26

Construction cost data

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Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			SAR	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	7.54	1.09	2.01	1.55
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	36.05	5.19	9.61	7.41
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	21.37	3.08	5.70	4.39
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	100.91	14.53	26.91	20.75
0.05	hardcore	m ³	116.10	16.72	30.96	23.88

Ref. No.	Description	Unit	Price			
			SAR	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	34.97	5.04	9.32	7.19
0.07	150 mm dia.	m	69.65	10.03	18.57	14.32
0.08	225 mm dia.	m	220.83	31.80	58.89	45.42
Concrete:						
0.09	150 mm dia.	m	44.60	6.42	11.89	9.17
0.10	300 mm dia.	m	142.78	20.56	38.08	29.36
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	276.80	39.86	73.81	56.93
1.02	over 300 mm thick	m ³	263.99	38.02	70.40	54.29
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	286.49	41.26	76.40	58.92
1.04	0.05–0.20 m ²	m ³	283.09	40.77	75.49	58.22
1.05	over 0.20 m ²	m ³	269.69	38.84	71.92	55.46
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	301.04	43.35	80.28	61.91
1.07	150–300 mm thick	m ³	298.73	43.02	79.66	61.44
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	352.01	50.69	93.87	72.40
1.09	0.05–0.10 m ²	m ³	333.73	48.06	89.00	68.64
1.10	over 0.10 m ²	m ³	321.76	46.34	85.80	66.17

Ref. No.	Description	Unit	Price			
			SAR	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	4,426.83	637.51	1,180.49	910.42
1.12	10 mm	Tonne	4,196.11	604.28	1,118.96	862.97
1.13	16 mm	Tonne	3,924.19	565.12	1,046.45	807.05
1.14	25 mm	Tonne	3,750.60	540.12	1,000.16	771.35
1.15	40 mm	Tonne	3,604.39	519.07	961.17	741.28
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	4,786.08	689.24	1,276.29	984.30
1.17	10 mm	Tonne	4,555.35	656.01	1,214.76	936.85
1.18	16 mm	Tonne	4,283.44	616.85	1,142.25	880.93
1.19	25 mm	Tonne	4,109.85	591.86	1,095.96	845.23
1.20	40 mm	Tonne	3,963.64	570.80	1,056.97	815.16
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	38.64	5.56	10.30	7.95
2.02	150 mm solid blocks	m ²	44.27	6.38	11.81	9.11
2.03	200 mm solid blocks	m ²	52.59	7.57	14.02	10.82

Ref. No.	Description	Unit	Price			
			SAR	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	8,374.88	1,206.06	2,233.30	1,722.38
3.02	610 × 305 mm × 238 kg/m	Tonne	8,571.63	1,234.39	2,285.77	1,762.84
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	8,413.55	1,211.63	2,243.61	1,730.33
3.04	254 × 76 mm × 28.89 kg/m	Tonne	8,548.99	1,231.13	2,279.73	1,758.18
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	12.99	1.87	3.46	2.67
4.02	50 × 100 mm	m	19.44	2.80	5.18	4.00
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	77.73	11.19	20.73	15.99
4.04	18 mm thick	m ²	117.85	16.97	31.43	24.24
4.05	25 mm thick	m ²	166.20	23.93	44.32	34.18
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	296.75	42.74	79.13	61.03
5.02	380 × 260 mm clay pantile, red	m ²	148.46	21.38	39.59	30.53

Ref. No.	Description	Unit	Price			
			SAR	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	23.18	3.34	6.18	4.77
6.02	38 mm thick	m ²	29.24	4.21	7.80	6.01
6.03	65 mm thick	m ²	45.75	6.59	12.20	9.41
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	195.83	28.20	52.22	40.28
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	9.19	1.32	2.45	1.89
6.06	rendered backgrounds	m ²	10.66	1.53	2.84	2.19
6.07	concrete backgrounds	m ²	9.38	1.35	2.50	1.93
6.08	blockwork backgrounds	m ²	14.06	2.03	3.75	2.89
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	9.74	1.40	2.60	2.00
6.10	rendered backgrounds	m ²	11.57	1.67	3.09	2.38
6.11	concrete backgrounds	m ²	10.47	1.51	2.79	2.15
6.12	textured plastic coating backgrounds	m ²	11.21	1.61	2.99	2.30

Ref. No.	Description	Unit	Price			
			SAR	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	11,316.19	1,629.64	3,017.65	2,327.28
7.02	5.0 kw cooling unit	Nr	13,303.80	1,915.87	3,547.68	2,736.06
7.03	7.5 kw cooling unit	Nr	22,632.37	3,259.27	6,035.30	4,654.57
7.04	10.0 kw cooling unit	Nr	26,455.21	3,809.79	7,054.72	5,440.77
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	6,546.16	942.71	1,745.64	1,346.28
7.06	1000 gallon	Nr	13,295.96	1,914.74	3,545.59	2,734.44
7.07	2000 gallon	Nr	20,005.25	2,880.94	5,334.73	4,114.27
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	196.91	28.36	52.51	40.50
7.09	182 litre	Nr	353.44	50.90	94.25	72.69
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	1,620.53	233.37	432.14	333.28
	Basins:					
7.11	vitreous china	Nr	848.34	122.17	226.23	174.47
	Sinks:					
7.12	stainless steel	Nr	1,054.96	151.92	281.32	216.96
	WC suites:					
7.13	low level washdown	Nr	1,569.75	226.06	418.60	322.84
7.14	low level syphonic	Nr	3,050.65	439.32	813.51	627.40
	Bidets:					
7.15	vitreous china	Nr	1,569.75	226.06	418.60	322.84

Ref. No.	Description	Unit	Price			
			SAR	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	34.47	4.96	9.19	7.09
	Standard cable trays;					
	1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	62.08	8.94	16.55	12.77
8.03	100 mm	m	75.04	10.81	20.01	15.43
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	62.41	8.99	16.64	12.83
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	188.94	27.21	50.38	38.86
8.06	12-way	Nr	335.41	48.30	89.44	68.98

Ref. No.	Description	Unit	Price			
			SAR	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	23.72	3.42	6.33	4.88
8.08	2 gang, 2 way	Nr	41.68	6.00	11.11	8.57
8.09	3 gang, 2 way	Nr	56.08	8.08	14.95	11.53
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	30.79	4.43	8.21	6.33
8.11	2 gang	Nr	87.01	12.53	23.20	17.89
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	48.03	6.92	12.81	9.88
8.13	1 gang, with neon indicator	Nr	55.41	7.98	14.78	11.40
8.14	1 gang, with neon indicator, metalplate	Nr	77.32	11.13	20.62	15.90

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>SAR/ft²</i>	<i>SAR/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	136	1,464	211	390	301
Petrol Stations	805	8,669	1,248	2,312	1,783
Airport Terminal Buildings	796	8,567	1,234	2,285	1,762
Sorting Offices	368	3,959	570	1,056	814
Refuse Depots	228	2,458	354	655	505
Stables and the like	358	3,856	555	1,028	793
Factories	247	2,662	383	710	547
Advanced Factories	218	2,344	338	625	482
Purpose Built Workshops	318	3,424	493	913	704
Warehouses	234	2,518	363	672	518
Town Halls	543	5,848	842	1,559	1,203
Law Courts	667	7,176	1,033	1,914	1,476
Offices	523	5,630	811	1,501	1,158
Banks/Building Societies	687	7,391	1,064	1,971	1,520
Retail Warehouses	222	2,388	344	637	491

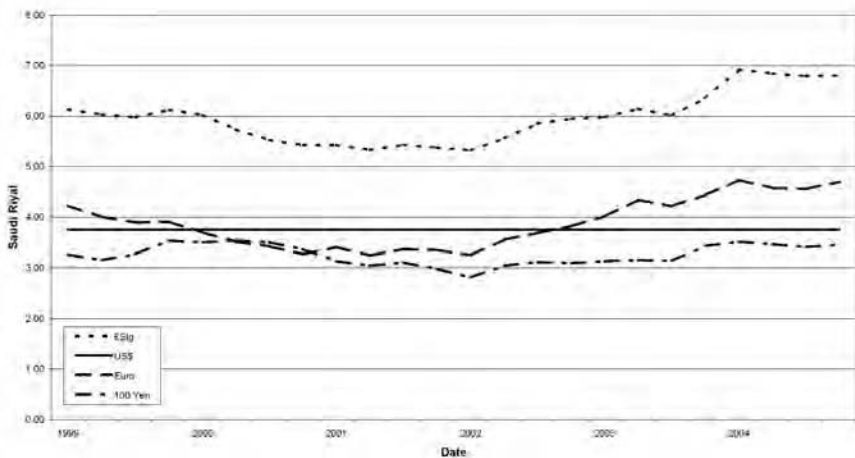
<i>Facility type</i>	<i>SAR/ft²</i>	<i>SAR/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	341	3,665	528	977	754
Department Stores	421	4,537	653	1,210	933
Hypermarkets / Supermarkets	402	4,330	624	1,155	891
Shops	318	3,424	493	913	704
Stadia	491	5,280	760	1,408	1,086
Pavilions and Sports Club Houses	472	5,077	731	1,354	1,044
Religious Buildings	555	5,975	861	1,593	1,229
Schools	474	5,105	735	1,361	1,050
Sixth Form Colleges	461	4,964	715	1,324	1,021
Universities	564	6,074	875	1,620	1,249
Colleges	458	4,935	711	1,316	1,015
Research Facilities	669	7,199	1,037	1,920	1,481
Laboratories	655	7,049	1,015	1,880	1,450
Exhibition Buildings	707	7,605	1,095	2,028	1,564
Public Libraries	531	5,712	823	1,523	1,175
Flats	351	3,783	545	1,009	778
Housing Detached	516	5,559	801	1,482	1,143
Hotels	503	5,414	780	1,444	1,113
Halls of Residence	505	5,437	783	1,450	1,118
Fire Stations	603	6,489	935	1,730	1,335
Police Stations	629	6,766	974	1,804	1,391
Closed Prisons	711	7,649	1,102	2,040	1,573
Hospitals	673	7,244	1,043	1,932	1,490
Intensive Care / Acute Wards	657	7,076	1,019	1,887	1,455
Health Centres	446	4,799	691	1,280	987
Nursing Homes	492	5,301	763	1,414	1,090
Homes for the Elderly	430	4,629	667	1,234	952
Day Centres	522	5,624	810	1,500	1,157
Veterinary Hospitals	584	6,287	905	1,677	1,293
Restaurants	671	7,227	1,041	1,927	1,486
Theatres	482	5,189	747	1,384	1,067
Cinemas	567	6,103	879	1,627	1,255
Clubs	436	4,694	676	1,252	965
Covered Swimming Pools	829	8,926	1,285	2,380	1,836
Sports Centres exc. Pools	423	4,550	655	1,213	936
Sports Centres inc. Pools	646	6,949	1,001	1,853	1,429
Sports Halls	395	4,256	613	1,135	875
Gymnasia	587	6,314	909	1,684	1,299

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Saudi Riyal, against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen ($\times 100$).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Saudi Riyal with each of them and the relative value to each other.

Exchange Rates



Price inflation

The following tables present indices for consumer prices and wholesale prices for construction related items since 1996 and 1985 respectively.

Consumer Price Inflation

Saudi Arabia has historically experienced sustained periods of deflation in consumer prices since the mid-nineties. The average figure recorded over the period 1997 to 2002 was -0.7% . The subsequent year, 2003, witnessed consumer price inflation for the first time since 1996 with an average yearly figure of 0.5% recorded. The forecast for the current year appears to indicate a continuation in the period of inflation with an anticipated average figure for 2004 of 1.0% from figures provided by the Saudi Arabian authorities.

The graph, which follows the tables below, plots the annual percentage change in consumer price inflation since 1996.

Consumer Prices

Year	annual average	change %
1996	100.0	0.9
1997	99.6	-0.4
1998	99.4	-0.2
1999	98.1	-1.3
2000	97.5	-0.6
2001	96.7	-0.8
2002	96.1	-0.6
2003	96.6	0.5
2004	97.6	1.0

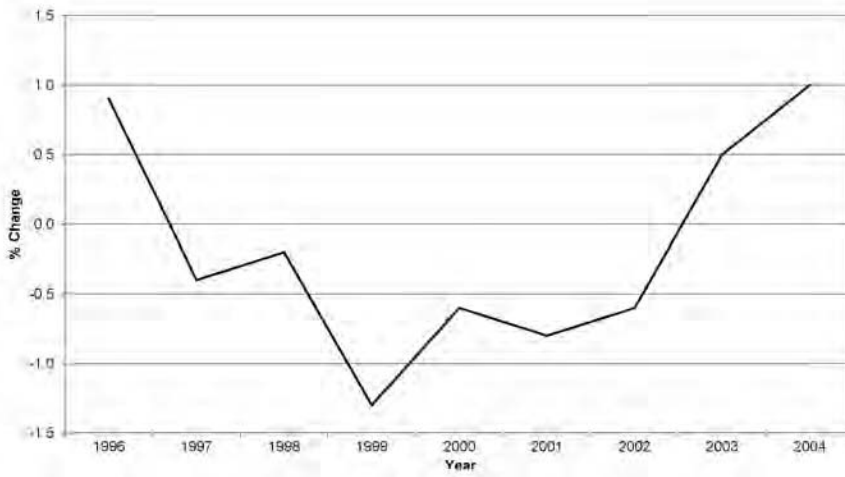
Source: *International Monetary Fund*

Wholesale Price Indices

Year	General Index		Manufactured Goods		Machinery & Transport Equipment	
	annual average	change %	annual average	change %	annual average	change %
1985	79.3	-	83.1	-	74.2	-
1986	82.3	3.8	80.9	-2.6	81.6	10.0
1987	88.2	7.2	85.0	5.1	89.2	9.3
1988	100.0	13.4	100.0	17.6	100.0	12.1
1989	101.1	1.1	102.6	2.6	101.6	1.6
1990	102.9	1.8	104.8	2.1	102.1	0.5
1991	106.0	3.0	110.2	5.2	107.1	4.9
1992	107.4	1.3	116.0	5.3	110.3	3.0
1993	108.0	0.6	118.2	1.9	111.3	0.9
1994	109.9	1.8	116.9	-1.1	111.5	0.2
1995	117.9	7.3	112.0	-4.2	114.0	2.2
1996	117.6	-0.3	111.0	-0.9	113.7	-0.3
1997	117.6	0.0	111.0	0.0	110.5	-2.8
1998	115.4	-1.9	110.0	-0.9	106.7	-3.4
1999	115.9	0.4	108.7	-1.2	106.3	-0.4
2000	116.3	0.3	107.7	-0.9	107.0	0.7
2001	116.2	-0.1	107.9	0.2	107.8	0.7
2002	116.2	0.0	108.0	0.1	107.1	-0.6
2003	117.2	0.9	107.9	-0.1	106.2	-0.8

Source: Central Department of Statistics – Ministry of Economy and Planning

Consumer Price Inflation for Years 1996 through 2004



Useful addresses

Public Organisations

Ministry of Public Works and
Housing

Mather Street
PO Box 56095
Riyadh 11554
Kingdom of Saudi Arabia
Tel: (00966) 1 403 8888
Email: info@mpwh.gov.sa
Website: www.mpwh.gov.sa

Saudi Ports Authority

PO Box 5162
Riyadh 11422
Kingdom of Saudi Arabia
Tel: (00966) 1 405 0005
Fax: (00966) 1 405 3508
Email: info@ports.gov.sa
Website: www.ports.gov.sa

Ministry of Petroleum & Mineral

Resources
PO Box 247
Riyadh 11191
Kingdom of Saudi Arabia
Email: info@mopm.gov.sa
Website: www.mopm.gov.sa

Ministry of Planning

PO Box 358
Riyadh 11182
Tel: (00966) 1 401 1444
Fax: (00966) 1 405 2051
Email: info@planning.gov.sa
Website: www.planning.gov.sa

Ministry of Foreign Affairs

PO Box 55937
Riyadh 11544
Kingdom of Saudi Arabia
Tel: (00966) 1 406 7777
Fax: (00966) 1 403 0645
Website: www.mofa.gov.sa

Saudi Arabian Monetary Agency

PO Box 2992
Riyadh 11169
Kingdom of Saudi Arabia
Tel: (00966) 1 463 3000
Fax: (00966) 1 466 2936
Email: webmaster@sama.gov.sa
Website: www.sama.gov.sa

Saudi Arabian Standards

Organisation (SASO)
PO Box 3437
Riyadh 11471
Kingdom of Saudi Arabia
Tel: (00966) 1 452 0000
Fax: (00966) 1 452 0086
Email: webmaster@saso.org.sa
Website: www.saso.org.sa

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Email: Commercial.Riyadh@fco.
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Website: <http://www.britishembassy.gov.uk>

American Embassy

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Riyadh 11693

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Tel: (00966) 1 488 3800

Fax: (00966) 1 488 3989

Email: USEmbRiyadhWebSite@
State.gov

Website: <http://riyadh.usembassy.gov>

Industrial Organisations

Council of Saudi Chambers of
Commerce & Industry

PO Box 16683

Riyadh 11474

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Fax: (00966) 1 402 4747

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Website: www.saudichambers.org.sa

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Fax: (00966) 3 667 1044

Email: shc@alsuwaidi.com.sa

Website: www.suwaidi.com

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Email: Nigel.Thomas@MottMac.com

Syria

ECONOMIC INDICATORS AND KEY DATA

Population

Population	18 million
Urban Population	50%
Population under 15	38%
Population 65 and over	3%
Population growth rate	2.4%

Geography

Land area	184,050 sq km
Agricultural area	30%
Capital city	Damascus
Population of capital city (2000)	2.3 million

Transportation

Railways	2,711 km
Highways:	
paved	10,021 km
unpaved	33,360 km
Waterways	900 km
Pipelines:	
crude oil	2,183 km
natural gas	2,300 km
Ports and Harbours	4
Merchant Marine	122 ships
International Airport	Damascus International Airport, Damascus

Economy

Monetary unit	Syrian Pound
Exchange rate	
£ Stg	96.53
US \$	52.24
Euro	66.86
Yen (×100)	49.22
Average annual inflation (1998 to 2003)	-0.1%
Inflation rate	4.0%
Gross Domestic Product (GDP) at market prices (2000)	SP896.6 billion
GDP PPP basis (2003)	US\$58 billion
GDP per capita (2000)	SP49,811
GDP per capita PPP basis (2003)	US\$3,300
Average annual real change in GDP (1998 to 2003)	2.2%
Private consumption as a proportion of GDP (2003)	58.5%
General government consumption as a proportion of GDP (2003)	10.7%
Gross domestic investment as a proportion of GDP (2003)	13.6%

Construction

Gross value of construction output (2000)	SP26.9 billion
Net value of construction output as a proportion of GDP	3.0%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
United Nations World Statistics Pocketbook
Damascus Chamber of Commerce
Arab Development Center for Syria

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

Syria lies at the eastern end of the Mediterranean and is bordered by Lebanon and Israel on the west, Turkey in the north, Iraq to the east and south-east with Jordan to the south. The Syrian Desert is to the east of the country with the Jebel Druze Range to the south. Coastal Syria is a narrow plain and is backed by a range of mountains whilst further inland there is a steppe region. The highest point is Mount Hermon on the Lebanese border which rises to 2,814 m. The country covers an area of approximately 184,000 sq km.

The climate is variable throughout the various regions with mild, wet winters and hot, dry summers in the coastal areas. Snow and sleet is common in the mountain regions and periodically hits Damascus.

The Syrian Arab Republic gained independence from the League of Nations mandate under French administration on 17 April 1946 and has been governed by a military regime since March 1963. The president is elected by popular vote to serve for a seven-year term and he appoints the vice president, prime minister, deputy prime minister and the Council of Ministers. The unicameral People's Council, or Majlis al-shaab, is composed of 250 seats with members being elected by popular vote to serve for a term of four years. The legal system is based on Islamic law and a civil law system and there are special religious courts.

The population of around 17 million is mostly Arab with Kurds, Armenians and other ethnic groups. The main religion is Sunni Muslim which is practised by approximately 74% of the country's inhabitants, together with Alawite (11%), Druze and other Muslim sects, Christians and Jews. The capital of Syria is Damascus which lies in the south-west at the eastern edge of the country, on the margins of the Syrian Desert. It is bisected by the Barada River and is served by a railroad, highways and an international airport.

The construction market in Syria currently contributes less than 5% to the GDP. There is a lack of skilled labour available for building activities and most general operatives and unskilled labour are employed in the agricultural industry.

Construction cost data

Labour resources

The figures below are typical labour costs in Syria taken at the third quarter 2004. The labour resources combine the employee's basic pay and the cost to the employer of that labour. The displayed cost of labour is the cost to the employer of employing that operative. It is based on the employee's basic pay with an inclusion of additional allowances for employer and employee expenses such as holidays, insurance and other mandatory and voluntary contributions.

Labour Law No. 24 of 2000 (amending Labour Law No. 91 of 1959) governs labour in Syria. Under the law a worker is not permitted to work more than eight hours a day or forty-eight hours a week.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>SYP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	852	8.58	15.89	12.25
Groundworks Labourer	1,226	12.34	22.85	17.62
Bricklayer	2,152	21.67	40.12	30.94
Shuttering Carpenter	1,458	14.68	27.18	20.97
Carpenter	2,152	21.67	40.12	30.94
Steel Fixer	1,458	14.68	27.18	20.97
Metalworker Craftsman	2,152	21.67	40.12	30.94
Roof Tiler	2,152	21.67	40.12	30.94
Sheet Metal Roofer	2,152	21.67	40.12	30.94
Glazier	1,820	18.32	33.93	26.17
Plasterer	2,152	21.67	40.12	30.94
Plasterers Labourer	1,226	12.34	22.85	17.62
Suspended Ceiling Installer	2,152	21.67	40.12	30.94
Painter	1,820	18.32	33.93	26.17
Floor/Wall Tiler	2,152	21.67	40.12	30.94
Plumber	2,496	25.13	46.52	35.88
Electrician	2,496	25.13	46.52	35.88

Plant resources

The figures below indicate the hire costs of construction plant, delivered to an average site location in Syria and are current at the third quarter 2004. The rates do not include for any fuel or maintenance expenses and exclude operator costs and charges.

Plant resources					
Plant resources	Unit	Price			
		SYP	£ Stg	US \$	Euro
Hymac 580 (360 deg tracked excavator)	Hour	1,428	14.37	26.61	20.52
JCB 3C (180 deg wheeled excavator)	Hour	1,076	10.83	20.06	15.47
Vibrating Roller 6-8 Tonne	Hour	357	3.59	6.65	5.13
Dumper 4WD Hydraulic Tip 1270	Hour	574	5.78	10.70	8.25
Poker Vibrator 48 mm	Day	473	4.76	8.82	6.80
Beam Vibrator 6.2 m	Day	712	7.17	13.27	10.24
Reinforcement bending machine	Hour	73	0.73	1.36	1.05
25 Tonne Mobile Crane	Hour	1,399	14.08	26.08	20.11
13 Tonne Mobile Crane	Hour	1,071	10.78	19.96	15.39
10 Tonne Mobile Crane	Hour	861	8.67	16.05	12.38
Wacker Plate	Hour	45	0.46	0.84	0.65
2.5 Tonne Block and Tackle	Hour	70	0.71	1.31	1.01
Craneage/lifting equipment	Hour	1,428	14.37	26.61	20.52

Material resources

The figures below indicate the costs of main construction materials, delivered to a building site located within an urban area in Syria, and are taken at third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material resources					
Material resources	Unit	Price			
		SYP	£ Stg	US \$	Euro
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	571	5.75	10.64	8.21
Clean brick rubble hardcore	m ³	537	5.41	10.01	7.72
As-raised hoggin	m ³	594	5.98	11.07	8.54
Washed sand	m ³	571	5.75	10.64	8.21
Drainage					
100 mm clay drain pipes	m	302	3.04	5.63	4.34
150 mm clay drain pipes	m	626	6.30	11.67	9.00
225 mm clay drain pipes	m	2,047	20.61	38.16	29.43
150 mm concrete pipe class L	m	343	3.45	6.39	4.93
300 mm concrete pipe class L	m	750	7.55	13.99	10.79
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	2,465	24.81	45.94	35.43
Readymix concrete 30 N/mm ²	m ³	2,635	26.53	49.12	37.89
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	31,482	316.90	586.76	452.58
Mild steel bars BS4449 10 mm	Tonne	31,482	316.90	586.76	452.58
Mild steel bars BS4449 16 mm	Tonne	31,482	316.90	586.76	452.58
Mild steel bars BS4449 25 mm	Tonne	31,482	316.90	586.76	452.58
Mild steel bars BS4449 40 mm	Tonne	31,482	316.90	586.76	452.58
High yield bars BS4449 8 mm	Tonne	35,694	359.29	665.27	513.12
High yield bars BS4449 10 mm	Tonne	35,694	359.29	665.27	513.12
High yield bars BS4449 16 mm	Tonne	35,694	359.29	665.27	513.12
High yield bars BS4449 25 mm	Tonne	35,694	359.29	665.27	513.12
High yield bars BS4449 40 mm	Tonne	35,694	359.29	665.27	513.12
Tying wire mild steel	Tonne	35,155	353.87	655.22	505.38
Reinforcement spacer blocks	100	301	3.03	5.60	4.32

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>SYP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	18,774	188.98	349.92	269.89
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	145	1.46	2.71	2.09
150 mm concrete blocks 3.5N (solid)	m ²	178	1.79	3.31	2.55
200 mm concrete blocks 3.5N (solid)	m ²	232	2.34	4.33	3.34
100 mm concrete blocks 3.5N (hollow)	m ²	133	1.34	2.47	1.91
150 mm concrete blocks 3.5N (hollow)	m ²	173	1.75	3.23	2.49
200 mm concrete blocks 3.5N (hollow)	m ²	230	2.31	4.28	3.30
Cement and Sand					
Portland cement in bags	Tonne	4,024	40.51	75.01	57.85
Soft sand for mortar	Tonne	574	5.78	10.70	8.25
Cement mortar (1:3)	m ³	4,640	46.71	86.48	66.71
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	74,815	753.09	1,394.42	1,075.53
UB BS4360 610 × 305 mm × 238kg	Tonne	74,815	753.09	1,394.42	1,075.53
UB BS4360 457 × 191 mm × 98kg	Tonne	73,411	738.96	1,368.26	1,055.35
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	70,283	707.47	1,309.95	1,010.37
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	70,283	707.47	1,309.95	1,010.37
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	78,546	790.65	1,463.96	1,129.16
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	74,815	753.09	1,394.42	1,075.53
RHS BS4360 450 × 250 mm × 167kg	Tonne	79,243	797.66	1,476.95	1,139.18
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	74,815	753.09	1,394.42	1,075.53
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	87	0.87	1.62	1.25
50 × 100 mm sawn softwood	m	148	1.49	2.75	2.12
38 × 25 mm tanalised batten	m	34	0.34	0.63	0.48
Boarding to Flooring					
12 mm WBP ply	m ²	637	6.41	11.87	9.16
18 mm WBP ply	m ²	992	9.98	18.49	14.26
25 mm WBP ply	m ²	1,397	14.07	26.04	20.09
Nails					
Galvanised nails 75 mm	kg	331	3.34	6.18	4.76
Alloy nails 65 mm × 10g	kg	424	4.27	7.91	6.10
50 mm Oval wire nails	kg	240	2.42	4.48	3.4550
mm Oval wire nails	kg	19.76	2.85	5.27	4.06

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>SYP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	2,887	29.06	53.80	41.50
Sheet zinc BS849 0.60 mm	m ²	2,317	23.33	43.19	33.32
Sheet copper BS2870 0.45 mm	m ²	3,731	37.56	69.55	53.64
Felts					
Underslating felt Type 1F	m ²	55	0.55	1.02	0.79
Clay roofing products					
265 × 165 mm plain tile, red	1000	33,983	342.07	633.38	488.53
380 × 260 mm pantile, red	1000	61,086	614.89	1,138.54	878.16
Damp-proof membranes					
1000g polythene d.p.m.	m ²	53	0.54	1.00	0.77
Insulation					
100 mm thick fibreglass quilt	m ²	300	3.02	5.59	4.31
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	2,039	20.52	38.00	29.31
Corrugated galv sheet 1830 mm	Nr	1,491	15.01	27.79	21.44
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	12,247	123.27	228.25	176.05
UPVC s/casement 1000 × 900 glazed	Nr	15,264	153.64	284.49	219.43
UPVC s/casement 1000 × 1200 glazed	Nr	18,465	185.87	344.17	265.46
Glass and glazing					
4 mm clear sheet glass	m ²	3,233	32.54	60.25	46.47
6 mm Georgian wired polished plate	m ²	8,737	87.95	162.85	125.61
5 mm toughened safety glass	m ²	7,725	77.76	143.98	111.05
5.4 mm laminated safety glass	m ²	7,481	75.31	139.44	107.55

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>SYP</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	163	1.64	3.04	2.35
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	1,540	15.50	28.70	22.13
9mm × 150 × 150 mm ceramic floor tile	m ²	1,379	13.88	25.71	19.83
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	845	8.51	15.75	12.15
Masonry textured paint white	5 Litre	1,502	15.12	27.99	21.59
Oil/Alkyd paint undercoat	5 Litre	1,399	14.09	26.08	20.12
Oil/Alkyd paint gloss white	5 Litre	1,399	14.09	26.08	20.12

Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			SYP	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	90	0.91	1.68	1.30
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	432	4.35	8.05	6.21
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	258	2.60	4.81	3.71
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	1,210	12.18	22.54	17.39
0.05	hardcore	m ³	1,393	14.02	25.96	20.02

Ref. No.	Description	Unit	Price			
			SYP	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	422	4.25	7.86	6.06
0.07	150 mm dia.	m	836	8.42	15.58	12.02
0.08	225 mm dia.	m	2,640	26.57	49.21	37.95
Concrete:						
0.09	150 mm dia.	m	545	5.49	10.16	7.84
0.10	300 mm dia.	m	1,722	17.34	32.10	24.76
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	3,351	33.73	62.45	48.17
1.02	over 300 mm thick	m ³	3,196	32.17	59.56	45.94
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	3,467	34.90	64.62	49.85
1.04	0.05–0.20 m ²	m ³	3,426	34.49	63.86	49.26
1.05	over 0.20 m ²	m ³	3,264	32.86	60.84	46.93
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	3,677	37.01	68.53	52.86
1.07	150–300 mm thick	m ³	3,649	36.73	68.02	52.46
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	4,289	43.17	79.94	61.66
1.09	0.05–0.10 m ²	m ³	4,068	40.95	75.82	58.48
1.10	over 0.10 m ²	m ³	3,923	39.49	73.12	56.40

Ref. No.	Description	Unit	Price			
			SYP	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	52,022	523.66	969.61	747.86
1.12	10 mm	Tonne	49,268	495.94	918.28	708.28
1.13	16 mm	Tonne	46,025	463.29	857.83	661.65
1.14	25 mm	Tonne	43,953	442.43	819.21	631.86
1.15	40 mm	Tonne	42,207	424.86	786.68	606.77
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	57,076	574.53	1,063.81	820.52
1.17	10 mm	Tonne	54,323	546.81	1,012.48	780.93
1.18	16 mm	Tonne	51,080	514.17	952.04	734.31
1.19	25 mm	Tonne	49,007	493.31	913.41	704.52
1.20	40 mm	Tonne	47,262	475.74	880.88	679.43
2	Masonry					
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	459	4.62	8.55	6.59
2.02	150 mm solid blocks	m ²	521	5.24	9.71	7.49
2.03	200 mm solid blocks	m ²	621	6.25	11.57	8.92

Ref. No.	Description	Unit	Price			
			SYP	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	99,283	999.38	1,850.46	1,427.27
3.02	610 × 305 mm × 238 kg/m	Tonne	101,595	1,022.66	1,893.56	1,460.52
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	102,723	1,034.01	1,914.58	1,476.73
3.04	254 × 76 mm × 28.89 kg/m	Tonne	101,228	1,018.97	1,886.72	1,455.24
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	154	1.55	2.87	2.22
4.02	50 × 100 mm	m	235	2.37	4.38	3.38
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	935	9.42	17.43	13.45
4.04	18 mm thick	m ²	1,428	14.38	26.62	20.53
4.05	25 mm thick	m ²	1,993	20.06	37.15	28.65
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	3,584	36.07	66.80	51.52
5.02	380 × 260 mm clay pantile, red	m ²	1,759	17.71	32.79	25.29

Ref. No.	Description	Unit	Price			
			SYP	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	277	2.78	5.15	3.98
6.02	38 mm thick	m ²	349	3.51	6.50	5.01
6.03	65 mm thick	m ²	546	5.49	10.17	7.85
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	2,334	23.49	43.50	33.55
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	111	1.12	2.07	1.60
6.06	rendered backgrounds	m ²	129	1.29	2.40	1.85
6.07	concrete backgrounds	m ²	113	1.14	2.11	1.63
6.08	blockwork backgrounds	m ²	170	1.71	3.17	2.44
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	118	1.18	2.19	1.69
6.10	rendered backgrounds	m ²	139	1.40	2.60	2.01
6.11	concrete backgrounds	m ²	126	1.27	2.36	1.82
6.12	textured plastic coating backgrounds	m ²	135	1.36	2.52	1.94

Ref. No.	Description	Unit	Price			
			SYP	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	141,229	1,421.62	2,632.27	2,030.29
7.02	5.0 kw cooling unit	Nr	159,766	1,608.21	2,977.76	2,296.77
7.03	7.5 kw cooling unit	Nr	275,894	2,777.16	5,142.19	3,966.21
7.04	10.0 kw cooling unit	Nr	323,204	3,253.39	6,023.98	4,646.34
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	78,364	788.82	1,460.57	1,126.55
7.06	1000 gallon	Nr	160,541	1,616.01	2,992.21	2,307.92
7.07	2000 gallon	Nr	234,869	2,364.20	4,377.57	3,376.45
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	2,391	24.07	44.57	34.38
7.09	182 litre	Nr	4,134	41.61	77.05	59.43
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	19,919	200.51	371.26	286.36
	Basins:					
7.11	vitreous china	Nr	10,106	101.73	188.36	145.28
	Sinks:					
7.12	stainless steel	Nr	12,806	128.90	238.68	184.09
	WC suites:					
7.13	low level washdown	Nr	18,280	184.01	340.71	262.79
7.14	low level syphonic	Nr	37,274	375.20	694.72	535.85
	Bidets:					
7.15	vitreous china	Nr	18,280	184.01	340.71	262.79

Ref. No.	Description	Unit	Price			
			SYP	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	410	4.12	7.63	5.89
	Standard cable trays; 1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	738	7.43	13.75	10.60
8.03	100 mm	m	892	8.98	16.62	12.82
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	761	7.66	14.18	10.93
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	2,266	22.81	42.23	32.57
8.06	12-way	Nr	4,128	41.55	76.94	59.34

Ref. No.	Description	Unit	Price			
			SYP	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	284	2.86	5.29	4.08
8.08	2 gang, 2 way	Nr	496	4.99	9.24	7.13
8.09	3 gang, 2 way	Nr	676	6.80	12.59	9.71
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	366	3.69	6.83	5.27
8.11	2 gang	Nr	1,047	10.54	19.52	15.06
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	570	5.74	10.63	8.20
8.13	1 gang, with neon indicator	Nr	678	6.83	12.65	9.75
8.14	1 gang, with neon indicator, metalplate	Nr	927	9.33	17.28	13.32

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>SYP/ft²</i>	<i>SYP/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	2,025	21,799	219	406	313
Petrol Stations	11,989	129,050	1,299	2,405	1,855
Airport Terminal Buildings	11,848	127,536	1,284	2,377	1,833
Sorting Offices	5,475	58,937	593	1,098	847
Refuse Depots	3,399	36,585	368	682	526
Stables and the like	5,333	57,404	578	1,070	825
Factories	3,681	39,624	399	739	570
Advanced Factories	3,242	34,896	351	650	502
Purpose Built Workshops	4,735	50,970	513	950	733
Warehouses	3,483	37,489	377	699	539
Town Halls	8,088	87,057	876	1,623	1,252
Law Courts	9,924	106,825	1,075	1,991	1,536
Offices	7,786	83,811	844	1,562	1,205
Banks/Building Societies	10,222	110,025	1,108	2,051	1,582
Retail Warehouses	3,303	35,553	358	663	511

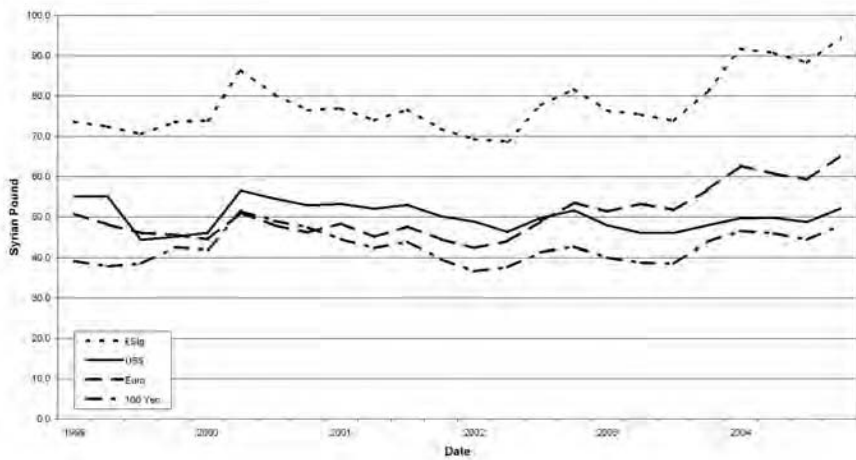
<i>Facility type</i>	<i>SYP/ft²</i>	<i>SYP/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	5,069	54,566	549	1,017	784
Department Stores	6,275	67,539	680	1,259	971
Hypermarkets / Supermarkets	5,989	64,461	649	1,201	927
Shops	4,736	50,977	513	950	733
Stadia	7,302	78,597	791	1,465	1,130
Pavilions and Sports Club Houses	7,021	75,577	761	1,409	1,086
Religious Buildings	8,264	88,952	895	1,658	1,279
Schools	7,060	75,995	765	1,416	1,092
Sixth Form Colleges	6,865	73,898	744	1,377	1,062
Universities	8,400	90,415	910	1,685	1,300
Colleges	6,825	73,466	740	1,369	1,056
Research Facilities	9,957	107,174	1,079	1,998	1,541
Laboratories	9,749	104,936	1,056	1,956	1,509
Exhibition Buildings	10,518	113,211	1,140	2,110	1,628
Public Libraries	7,900	85,033	856	1,585	1,222
Flats	5,232	56,319	567	1,050	810
Housing Detached	7,688	82,755	833	1,542	1,190
Hotels	7,487	80,591	811	1,502	1,159
Halls of Residence	7,519	80,938	815	1,509	1,164
Fire Stations	8,975	96,602	972	1,800	1,389
Police Stations	9,357	100,721	1,014	1,877	1,448
Closed Prisons	10,579	113,873	1,146	2,122	1,637
Hospitals	10,019	107,842	1,086	2,010	1,550
Intensive Care / Acute Wards	9,786	105,334	1,060	1,963	1,514
Health Centres	6,636	71,435	719	1,331	1,027
Nursing Homes	7,331	78,909	794	1,471	1,134
Homes for the Elderly	6,402	68,908	694	1,284	991
Day Centres	7,777	83,716	843	1,560	1,203
Veterinary Hospitals	8,695	93,592	942	1,744	1,345
Restaurants	9,995	107,585	1,083	2,005	1,547
Theatres	7,177	77,248	778	1,440	1,111
Cinemas	8,440	90,846	914	1,693	1,306
Clubs	6,491	69,874	703	1,302	1,004
Covered Swimming Pools	12,344	132,874	1,338	2,477	1,910
Sports Centres exc. Pools	6,292	67,729	682	1,262	974
Sports Centres inc. Pools	9,610	103,441	1,041	1,928	1,487
Sports Halls	5,886	63,360	638	1,181	911
Gymnasia	8,732	93,994	946	1,752	1,351

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Syrian Pound, against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen (× 100).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Syrian Pound with each of them and the relative value to each other.

Exchange Rates



Consumer price inflation

The following table presents indices for consumer prices 1996.

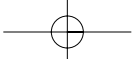
Syria experienced sustained periods of deflation in consumer prices during the mid-nineties. The average figure recorded over the period 1998 to 2000 was -2.9% . The subsequent year, 2001, witnessed consumer price inflation for the first time since 1997 with an average yearly figure of 3.0% recorded. Since 2001, consumer price inflation has been up and down. The forecast for the current year appears to indicate a continuation in the period of inflation with an anticipated average figure for 2004 of 4.0% from figures provided by the Syrian authorities.

The graph, which follows the tables below, plots the annual percentage change in consumer price inflation since 1996.

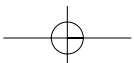
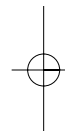
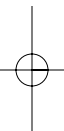
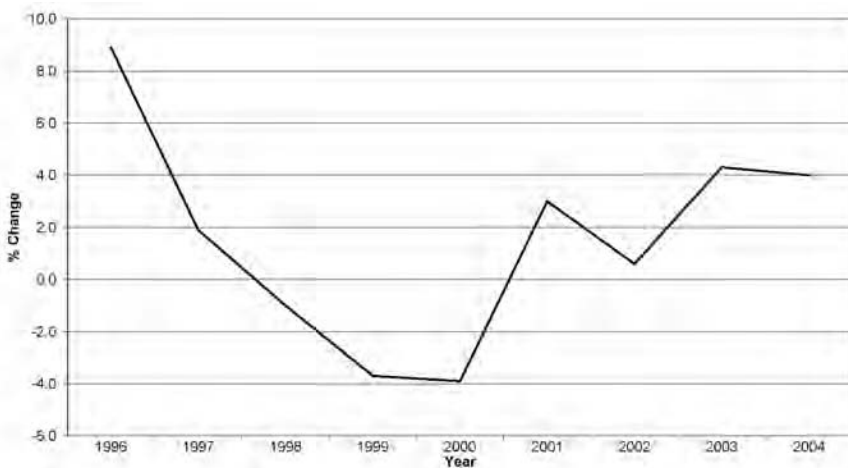
Consumer Prices

Year	annual average	change %
1996	100.0	8.9
1997	101.9	1.9
1998	100.9	-1.0
1999	97.2	-3.7
2000	93.4	-3.9
2001	96.2	3.0
2002	96.8	0.6
2003	101.0	4.3
2004	105.0	4.0

Source: *International Monetary Fund*



Consumer Price Inflation for Years 1996 through 2004



Useful addresses

Public Organisations

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Ministry of Construction and
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Foreign Embassies

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United Arab Emirates

ECONOMIC INDICATORS AND KEY DATA

Population

Population	4.3 million
Urban Population	85%
Population under 15	30%
Population 65 and over	3%
Population growth rate	1.6%

Geography

Land area	82,880 sq km
Agricultural area	3%
Capital city	Abu Dhabi
Population of capital city (2003)	1.5 million

Transportation

Railways	n.a.
Highways:	
paved	1,088 km
unpaved	0 km
Waterways	n.a.
Pipelines:	
crude oil	1,266 km
petroleum products	186 km
condensate gas	383 km
natural gas	1,765 km
Ports and Harbours	10
Merchant Marine	59 ships
International Airport	Abu Dhabi International Airport

Economy

Monetary unit	Emirati Dirham
Exchange rate	
£ Stg	6.787
US \$	3.673
Euro	4.702
Yen (×100)	3.461
Average annual inflation (1998 to 2003)	2.4%
Inflation rate	2.6%
Gross Domestic Product (GDP) at market prices	Dh312.4 billion
GDP PPP basis (2003)	US\$57.7 billion
GDP per capita (2003)	Dh72,537
GDP per capita PPP basis (2003)	US\$23,200
Average annual real change in GDP (1998 to 2003)	5.1%
Private consumption as a proportion of GDP (2003)	48.5%
General government consumption as a proportion of GDP (2003)	14.7%
Gross domestic investment as a proportion of GDP (2003)	22.0%

Construction

Gross value of construction output	Dh20.0 billion
Net value of construction output as a proportion of GDP	6.4%

Source: *The Financial Times*
Central Intelligence Agency World Factbook
International Monetary Fund World Economic Outlook
The World Bank
United Arab Emirates Ministry of Planning
Central Bank of the United Arab Emirates

All data relates to latest as at 3Q 2004

PPP Purchasing Power Parity

Country profile

The United Arab Emirates (UAE) is located in the Middle East along the coasts of the Arabian Gulf and the Gulf of Oman. It is bordered by Saudi Arabia to the south and west and Oman to the east. The country consists of seven Emirates; Abu Dhabi, Dubai, Sharjah, Ajman, Umm AlQaiwain, Ras AlKhaimah and Fujairah. Abu Dhabi, the capital and the oil, gas and petrochemicals centre, is the largest Emirate. The terrain includes stretches of gravel plain and sandy desert in the inland region, a range of mountains to the east lying close to the Gulf of Oman and the Mussandam Peninsula and mainly desert interspersed with oases in the western interior of the country.

The climate is sub-tropical with exceptionally hot summers, May to October, and mild winters (November to April). Temperatures can reach 45°C in summers and become more pleasant at 10–30°C in winters. Humidity is unpleasantly high, particularly in Dubai and Sharjah, where it can average over 78%.

The United Arab Emirates has been a sovereign state since 1971 when the British withdrew from the Gulf. The state within which each Emirate retains a degree of self-administration is governed by the Supreme Council, the highest government authority which consists of the rulers of the seven Emirates and establishes general policies and sanctions federal legislation. The President, elected by the Supreme Council, appoints the Council of Ministers, the executive authority. The unicameral Federal National Council, or Majlis al-Ittihad al-Watani, comprising 40 seats whose members are drawn proportionately from each Emirate and appointed by the rulers, reviews legislation but is unable to change or veto any aspect of it.

UAE is a member of the United Nations, the Organisation of Petroleum Exporting Countries, the Arab League, the Arab Gulf Cooperation Council (AGCC) and a number of other international organisations. The ethnic groups include the Emirati nationals, other Arab and Iranians, South Asian, East Asians and Westerners. The principal religion is Islam, and more than 90% of the population are Muslims. Arabic is the official language with English, Urdu and Farsi widely spoken.

The UAE construction industry after oil and gas is largely involved in power and water sector-related development. The investment in these sectors is estimated at around US \$30 billion over the next five to ten years.

Construction cost data

Labour resources

The figures below are typical labour costs for building sites within an urban environment in the United Arab Emirates and are taken at the third quarter 2004. The labour resource costs given are a compilation of the employee's basic pay and the financial cost to the employer of that labour. The cost of construction labour is based on the employee's basic pay and includes those allowances for employer and employee expenses such as holidays, insurance and other mandatory and voluntary contributions.

Federal Law No. 8 of 1980 (amended by Law No.12 of 1986) regulates labour relations in the United Arab Emirates. Under the law a worker is not permitted to work more than eight hours a day or forty-eight hours a week. During Ramadan the hours of work will be reduced to six hours a day or thirty-six hours a week. Friday is the default weekly day of rest.

Overtime is available where essential and additional compensation levels range from twenty-five to fifty per cent of the basic wage.

There are ten paid annual public holidays per year. Annual leave is thirty days per year if the employee has been in service more than one year.

Labour resources	<i>Employer's cost of labour (per day)</i>			
	<i>Dirham</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Operatives				
General Labourer	76.61	11.27	20.86	16.09
Groundworks Labourer	97.10	14.28	26.44	20.39
Bricklayer	200.18	29.43	54.50	42.04
Shuttering Carpenter	127.18	18.70	34.62	26.71
Carpenter	200.18	29.43	54.50	42.04
Steel Fixer	127.18	18.70	34.62	26.71
Metalworker Craftsman	200.18	29.43	54.50	42.04
Roof Tiler	200.18	29.43	54.50	42.04
Sheet Metal Roofer	200.18	29.43	54.50	42.04
Glazier	163.02	23.97	44.38	34.23
Plasterer	200.18	29.43	54.50	42.04
Plasterers Labourer	97.10	14.28	26.44	20.39
Suspended Ceiling Installer	200.18	29.43	54.50	42.04
Painter	163.02	23.97	44.38	34.23
Floor/Wall Tiler	200.18	29.43	54.50	42.04
Plumber	252.18	37.08	68.66	52.96
Electrician	252.18	37.08	68.66	52.96

Plant resources

The figures below indicate the hire costs of construction plant, delivered to the site location in an urbanised region within the United Arab Emirates, and are current at the third quarter 2004. The rates do not include for any fuel or maintenance expenses and also exclude operator costs and charges.

Plant costs					
Plant resources	Unit	Price			
		Dirham	£ Stg	US \$	Euro
Hymac 580 (360 deg tracked excavator)	Hour	128.76	18.93	35.06	27.04
JCB 3C (180 deg wheeled excavator)	Hour	96.82	14.24	26.36	20.33
Vibrating Roller 6 - 8 Tonne	Hour	32.42	4.77	8.83	6.81
Dumper 4WD Hydraulic Tip 1270	Hour	52.19	7.67	14.21	10.96
Poker Vibrator 48 mm	Day	42.08	6.19	11.46	8.84
Beam Vibrator 6.2 m	Day	63.61	9.35	17.32	13.36
Reinforcement bending machine	Hour	6.55	0.96	1.78	1.37
25 Tonne Mobile Crane	Hour	128.44	18.89	34.97	26.97
13 Tonne Mobile Crane	Hour	97.05	14.27	26.42	20.38
10 Tonne Mobile Crane	Hour	78.79	11.59	21.45	16.55
Wacker Plate	Hour	4.17	0.61	1.14	0.88
2.5 Tonne Block and Tackle	Hour	6.50	0.96	1.77	1.36
Craneage / lifting equipment	Hour	130.97	19.26	35.66	27.50

Material resources

The figures below indicate the costs of main construction materials, delivered to a building site located within an urban area in United Arab Emirates, and are taken at third quarter 2004 prices. The costs allow for large supplies in full loads and include any mechanical off-loading required at the site.

Material resources	Unit	Material costs			
		Dirham	£ Stg	US \$	Euro
Groundworks					
Aggregates					
Crushed stone hardcore	m ³	51.88	7.63	14.13	10.90
Clean brick rubble hardcore	m ³	48.08	7.07	13.09	10.10
As-raised hoggin	m ³	54.37	8.00	14.80	11.42
Washed sand	m ³	52.64	7.74	14.33	11.06
Drainage					
100 mm clay drain pipes	m	39.96	5.88	10.88	8.39
150 mm clay drain pipes	m	63.89	9.39	17.39	13.42
225 mm clay drain pipes	m	199.62	29.35	54.35	41.92
150 mm concrete pipe class L	m	30.69	4.51	8.36	6.44
300 mm concrete pipe class L	m	66.18	9.73	18.02	13.90
Concrete work					
Concrete					
Readymix concrete 20 N/mm ²	m ³	219.44	32.27	59.74	46.08
Readymix concrete 30 N/mm ²	m ³	231.77	34.08	63.10	48.67
Reinforcement					
Mild steel bars BS4449 8 mm	Tonne	2,897.18	425.99	788.78	608.39
Mild steel bars BS4449 10 mm	Tonne	2,904.29	427.04	790.71	609.89
Mild steel bars BS4449 16 mm	Tonne	2,918.53	429.13	794.59	612.88
Mild steel bars BS4449 25 mm	Tonne	2,937.04	431.85	799.63	616.77
Mild steel bars BS4449 40 mm	Tonne	2,961.24	435.41	806.22	621.85
High yield bars BS4449 8 mm	Tonne	3,215.92	472.86	875.56	675.33
High yield bars BS4449 10 mm	Tonne	3,242.81	476.81	882.88	680.98
High yield bars BS4449 16 mm	Tonne	3,274.45	481.47	891.49	687.62
High yield bars BS4449 25 mm	Tonne	3,295.01	484.49	897.09	691.94
High yield bars BS4449 40 mm	Tonne	3,314.00	487.28	902.26	695.93
Tying wire mild steel	Tonne	3,170.20	466.14	863.11	665.73
Reinforcement spacer blocks	100	27.31	4.02	7.43	5.73

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>Dirham</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Masonry					
Bricks					
Clay common bricks	1000	1,690.37	248.55	460.22	354.97
Blocks					
100 mm concrete blocks 3.5N (solid)	m ²	12.84	1.89	3.50	2.70
150 mm concrete blocks 3.5N (solid)	m ²	16.06	2.36	4.37	3.37
200 mm concrete blocks 3.5N (solid)	m ²	21.24	3.12	5.78	4.46
100 mm concrete blocks 3.5N (hollow)	m ²	14.12	2.08	3.85	2.97
150 mm concrete blocks 3.5N (hollow)	m ²	15.29	2.25	4.16	3.21
200 mm concrete blocks 3.5N (hollow)	m ²	20.35	2.99	5.54	4.27
Cement and Sand					
Portland cement in bags	Tonne	257.11	37.80	70.00	53.99
Soft sand for mortar	Tonne	51.88	7.63	14.13	10.90
Cement mortar (1:3)	m ³	312.21	45.91	85.00	65.56
Metalwork					
Structural steel					
UB BS4360 914 × 305 mm × 289kg	Tonne	6,781.22	997.09	1,846.24	1,424.03
UB BS4360 610 × 305 mm × 238kg	Tonne	6,831.21	1,004.44	1,859.84	1,434.53
UB BS4360 457 × 191 mm × 98kg	Tonne	6,506.83	956.75	1,771.53	1,366.41
RSJ BS4360 254 × 203 mm × 81.85kg	Tonne	6,313.52	928.32	1,718.90	1,325.81
RSJ BS4360 203 × 152 mm × 52.09kg	Tonne	6,313.52	928.32	1,718.90	1,325.81
RSC BS4360 432 × 102 mm × 65.54kg	Tonne	6,961.97	1,023.67	1,895.45	1,461.98
RSC BS4360 254 × 76 mm × 28.89kg	Tonne	6,881.19	1,011.79	1,873.45	1,445.02
RHS BS4360 450 × 250 mm × 167kg	Tonne	7,023.74	1,032.75	1,912.26	1,474.96
RHS BS4360 300 × 200 mm × 92.6kg	Tonne	6,797.89	999.54	1,850.77	1,427.53
Woodwork					
Floors and flat roofs					
38 × 100 mm sawn softwood	m	7.73	1.14	2.11	1.62
50 × 100 mm sawn softwood	m	13.10	1.93	3.57	2.75
38 × 25 mm tanalised batten	m	2.95	0.43	0.80	0.62
Boarding to Flooring					
12 mm WBP ply	m ²	56.46	8.30	15.37	11.86
18 mm WBP ply	m ²	87.92	12.93	23.94	18.46
25 mm WBP ply	m ²	127.23	18.71	34.64	26.72
Nails					
Galvanised nails 75 mm	kg	29.38	4.32	8.00	6.17
Alloy nails 65 mm × 10g	kg	37.60	5.53	10.24	7.90
50 mm Oval wire nails	kg	21.30	3.13	5.80	4.47

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>Dirham</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Thermal and moisture protection					
Sheet metal					
Sheet lead BS1178 Code 4	m ²	259.71	38.19	70.71	54.54
Sheet zinc BS849 0.60 mm	m ²	211.26	31.06	57.52	44.36
Sheet copper BS2870 0.45 mm	m ²	342.25	50.32	93.18	71.87
Felts					
Underslating felt Type 1F	m ²	4.82	0.71	1.31	1.01
Clay roofing products					
265 × 165 mm plain tile, red	1000	2,982.41	438.52	811.98	626.29
380 × 260 mm pantile, red	1000	5,509.62	810.12	1,500.03	1,157.00
Damp-proof membranes					
1000g polythene d.p.m.	m ²	4.67	0.69	1.27	0.98
Insulation					
100 mm thick fibreglass quilt	m ²	27.17	4.00	7.40	5.71
Roofing sheets and fixings					
Corrugated PVC sheet 1830 mm	Nr	180.73	26.57	49.20	37.95
Corrugated galv sheet 1830 mm	Nr	129.67	19.07	35.30	27.23
Doors and windows					
UPVC window frames					
UPVC s/casement 1000 × 600 glazed	Nr	1,163.41	171.06	316.75	244.31
UPVC s/casement 1000 × 900 glazed	Nr	1,352.90	198.93	368.34	284.10
UPVC s/casement 1000 × 1200 glazed	Nr	1,628.79	239.49	443.45	342.04
Glass and glazing					
4 mm clear sheet glass	m ²	286.54	42.13	78.01	60.17
6 mm Georgian wired polished plate	m ²	766.89	112.76	208.79	161.04
5 mm toughened safety glass	m ²	684.69	100.67	186.41	143.78
5.4 mm laminated safety glass	m ²	678.04	99.70	184.60	142.38

<i>Material resources</i>	<i>Unit</i>	<i>Price</i>			
		<i>Dirham</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Finishes					
Plasterboards					
12.5 mm plasterboard	m ²	14.29	2.10	3.89	3.00
Tiles					
25mm × 225 × 225 mm quarry tile	m ²	139.86	20.56	38.08	29.37
9mm × 150 × 150 mm ceramic floor tile	m ²	122.25	17.98	33.28	25.67
Decorations					
Paints and Sundries					
Emulsion paint matt white	5 Litre	73.45	10.80	20.00	15.42
Masonry textured paint white	5 Litre	133.12	19.57	36.24	27.95
Oil/Alkyd paint undercoat	5 Litre	127.46	18.74	34.70	26.77
Oil/Alkyd paint gloss white	5 Litre	128.08	18.83	34.87	26.90

Unit rates

A selection of unit rates for work items that may be carried out on a typical construction project is provided in the following table. The values of the displayed rates are considered to be fairly representative for work of the specified nature and are at third quarter 2004 levels. Each rate includes for all necessary labour, plant and material costs that would be involved in carrying out the operation described. An allowance of 20% has also been included to cover the contractor's overheads and profit. Any statutory taxes have been excluded.

Ref. No.	Description	Unit	Price			
			Dirham	£ Stg	US \$	Euro
0	Groundworks					
	Excavation					
	To reduce levels; depth not exceeding:					
0.01	1.00 m	m ³	8.13	1.20	2.21	1.71
	To receive foundations, pile caps and ground beams; depth not exceeding:					
0.02	1.00 m	m ³	38.87	5.71	10.58	8.16
	Trenches for service pipes, drain pipes, cables or the like including disposal and filling					
	Trenches to suit pipes not exceeding 200 mm dia.; average depth:					
0.03	1.00 m	m	23.04	3.39	6.27	4.84
	Filling					
	Filled into excavation; by machine; compacting in 250 mm layers:					
0.04	sand	m ³	110.36	16.23	30.05	23.17
0.05	hardcore	m ³	124.39	18.29	33.87	26.12

Ref. No.	Description	Unit	Price			
			Dirham	£ Stg	US \$	Euro
Underground drainage						
Drain pipes and jointing in trenches						
Clay:						
0.06	100 mm dia.	m	53.61	7.88	14.60	11.26
0.07	150 mm dia.	m	84.23	12.38	22.93	17.69
0.08	225 mm dia.	m	256.30	37.69	69.78	53.82
Concrete:						
0.09	150 mm dia.	m	47.64	7.00	12.97	10.00
0.10	300 mm dia.	m	151.74	22.31	41.31	31.86
1	Concrete work					
Poured concrete						
Plain concrete mix 20 N/mm²						
Foundations; combined and isolated bases:						
1.01	150–300 mm thick	m ³	298.39	43.87	81.24	62.66
1.02	over 300 mm thick	m ³	284.58	41.84	77.48	59.76
Pile caps and ground beams; cross-sectional area:						
1.03	not exceeding 0.05 m ²	m ³	308.87	45.42	84.09	64.86
1.04	0.05–0.20 m ²	m ³	305.19	44.87	83.09	64.09
1.05	over 0.20 m ²	m ³	290.74	42.75	79.16	61.05
Reinforced concrete mix 30N/mm²						
Suspended slabs, floors, landings, roofs or the like:						
1.06	not exceeding 150 mm thick	m ³	323.72	47.60	88.13	67.98
1.07	150–300 mm thick	m ³	321.24	47.23	87.46	67.46
Columns and casings to metal stanchions; cross-sectional area:						
1.08	not exceeding 0.05 m ²	m ³	378.59	55.67	103.07	79.50
1.09	0.05–0.10 m ²	m ³	358.92	52.77	97.72	75.37
1.10	over 0.10 m ²	m ³	346.04	50.88	94.21	72.67

Ref. No.	Description	Unit	Price			
			Dirham	£ Stg	US \$	Euro
Reinforcement						
Bar reinforcement						
Mild steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.11	8 mm	Tonne	4,727.00	695.05	1,286.96	992.65
1.12	10 mm	Tonne	4,493.63	660.73	1,223.42	943.64
1.13	16 mm	Tonne	4,227.26	621.56	1,150.90	887.71
1.14	25 mm	Tonne	4,066.78	597.97	1,107.21	854.01
1.15	40 mm	Tonne	3,942.04	579.63	1,073.25	827.81
High yield steel bars, delivered to site cut, bent and labelled						
Bars, fixing with tying wire:						
1.16	8 mm	Tonne	5,109.50	751.29	1,391.10	1,072.97
1.17	10 mm	Tonne	4,899.85	720.46	1,334.02	1,028.95
1.18	16 mm	Tonne	4,654.36	684.36	1,267.18	977.40
1.19	25 mm	Tonne	4,496.35	661.13	1,224.16	944.22
1.20	40 mm	Tonne	4,365.35	641.87	1,188.50	916.71
2 Masonry						
Walls						
Precast concrete blocks, strength 3.5N/mm ² ; in cement mortar (1:3):						
2.01	100 mm solid blocks	m ²	40.25	5.92	10.96	8.45
2.02	150 mm solid blocks	m ²	46.30	6.81	12.61	9.72
2.03	200 mm solid blocks	m ²	55.70	8.19	15.16	11.70

Ref. No.	Description	Unit	Price			
			Dirham	£ Stg	US \$	Euro
3	Structural metalwork					
	Beams					
	Universal beams; shot blasted and primed at works:					
3.01	914 × 305 mm × 289 kg/m	Tonne	9,010.34	1,324.86	2,453.13	1,892.13
3.02	610 × 305 mm × 238 kg/m	Tonne	9,284.56	1,365.18	2,527.79	1,949.72
	Rolled steel channels; shot blasted and primed at works:					
3.03	432 × 102 mm × 65.54 kg/m	Tonne	9,131.19	1,342.63	2,486.03	1,917.51
3.04	254 × 76 mm × 28.89 kg/m	Tonne	9,316.87	1,369.93	2,536.58	1,956.50
4	Woodwork					
	Structural timbers					
	Floors and flat roofs					
	Sawn softwood; basic sizes:					
4.01	38 × 100 mm	m	13.88	2.04	3.78	2.92
4.02	50 × 100 mm	m	21.02	3.09	5.72	4.41
	Boarding to flooring					
	WBP bonding plywood square edged boarding; grade BB:					
4.03	12 mm thick	m ²	83.41	12.26	22.71	17.51
4.04	18 mm thick	m ²	127.27	18.71	34.65	26.73
4.05	25 mm thick	m ²	181.83	26.74	49.51	38.18
5	Coverings and linings					
	Roofing systems					
	Clay tile roofing; alloy nailed every fifth course; 38 × 25 mm tanalised softwood battens; 65 mm lap:					
5.01	265 × 165 mm plain tile, red	m ²	316.83	46.59	86.26	66.53
5.02	380 × 260 mm clay pantile, red	m ²	159.30	23.42	43.37	33.453

Ref. No.	Description	Unit	Price			
			Dirham	£ Stg	US \$	Euro
6	Finishes					
	Cement and sand (1:3) trowelled finish					
	To floors and landings:					
6.01	25 mm thick	m ²	21.09	3.10	5.74	4.43
6.02	38 mm thick	m ²	26.33	3.87	7.17	5.53
6.03	65 mm thick	m ²	40.25	5.92	10.96	8.45
	Quarry tiles bedded, jointed and pointed in cement mortar (1:3)					
	To floors and landings:					
6.04	225 × 225 × 25 mm	m ²	211.44	31.09	57.57	44.40
	Decorations					
	One mist coat and two full coats of emulsion paint					
	Walls, returns, reveals of openings or recesses, attached and unattached columns:					
6.05	plastered backgrounds	m ²	9.79	1.44	2.66	2.06
6.06	rendered backgrounds	m ²	11.35	1.67	3.09	2.38
6.07	concrete backgrounds	m ²	9.98	1.47	2.72	2.10
6.08	blockwork backgrounds	m ²	14.97	2.20	4.08	3.14
	Ceilings, attached and unattached beams and staircase soffits:					
6.09	plastered backgrounds	m ²	10.37	1.53	2.82	2.18
6.10	rendered backgrounds	m ²	12.33	1.81	3.36	2.59
6.11	concrete backgrounds	m ²	11.16	1.64	3.04	2.34
6.12	textured plastic coating backgrounds	m ²	11.94	1.76	3.25	2.51

Ref. No.	Description	Unit	Price			
			Dirham	£ Stg	US \$	Euro
7	Mechanical engineering					
	Equipment					
	Air handling units					
	Externally fitted air conditioning unit; rotary compressor; wall mounted:					
7.01	3.5 kw cooling unit	Nr	12,550.19	1,845.35	3,416.88	2,635.49
7.02	5.0 kw cooling unit	Nr	14,209.34	2,089.30	3,868.59	2,983.90
7.03	7.5 kw cooling unit	Nr	24,518.54	3,605.14	6,675.34	5,148.79
7.04	10.0 kw cooling unit	Nr	28,728.08	4,224.10	7,821.42	6,032.78
	Tanks					
	GRP prefabricated water storage tanks for above ground use; capacity (US) gallons:					
7.05	500 gallon	Nr	6,957.90	1,023.07	1,894.34	1,461.13
7.06	1000 gallon	Nr	14,245.74	2,094.65	3,878.50	2,991.55
7.07	2000 gallon	Nr	21,673.43	3,186.80	5,900.74	4,551.33
	Plastic water storage cisterns with lids:					
7.08	114 litre	Nr	213.85	31.44	58.22	44.91
7.09	182 litre	Nr	387.30	56.95	105.45	81.33
	Sanitaryware; complete with fittings					
	Baths:					
7.10	acrylic	Nr	1,725.06	253.65	469.66	362.26
	Basins:					
7.11	vitreous china	Nr	907.84	133.49	247.16	190.64
	Sinks:					
7.12	stainless steel	Nr	1,143.11	168.08	311.22	240.05
	WC suites:					
7.13	low level washdown	Nr	1,704.73	250.66	464.13	357.99
7.14	low level syphonic	Nr	3,343.83	491.67	910.38	702.19
	Bidets:					
7.15	vitreous china	Nr	1,733.05	254.82	471.83	363.93

Ref. No.	Description	Unit	Price			
			Dirham	£ Stg	US \$	Euro
8	Electrical engineering					
	Sub main circuits					
	PVC insulated and sheathed single core cable; 450/750V; nominal csa:					
8.01	10 mm ²	m	38.10	5.60	10.37	8.00
	Standard cable trays; 1.5 mm/2.0 mm gauge, galvanised; prefabricated, assembled and installed on site, including fixing to structure with hangers and brackets					
	Straight trays with trapeze hangers; width:					
8.02	50 mm	m	66.54	9.78	18.11	13.97
8.03	100 mm	m	80.48	11.83	21.91	16.90
	Steel conduit; heavy gauge; prefabricated, assembled and installed on site, including jointing; fixing to structure and drawing cables					
	Rigid conduit; galvanised; external diameter:					
8.04	16 mm	m	67.91	9.99	18.49	14.26
	Consumer units; prefabricated, assembled and installed on site, fixing to structure; 240V SP & N					
	Standard metal consumer unit with integral 100A main switch; surface mounted; available ways:					
8.05	6-way	Nr	202.45	29.77	55.12	42.51
8.06	12-way	Nr	364.25	53.56	99.17	76.49

Ref. No.	Description	Unit	Price			
			Dirham	£ Stg	US \$	Euro
Accessories						
Switch assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
5A SP; flush mounted:						
8.07	1 gang, 2 way	Nr	25.68	3.78	6.99	5.39
8.08	2 gang, 2 way	Nr	45.38	6.67	12.35	9.53
8.09	3 gang, 2 way	Nr	61.64	9.06	16.78	12.94
Socket assemblies; including installation and fixing to structure; mounting boxes and fixings where required; (mortices measured separately)						
13A SP; flush mounted, unswitched:						
8.10	1 gang	Nr	33.07	4.86	9.00	6.94
8.11	2 gang	Nr	94.40	13.88	25.70	19.82
13A SP; surface mounted, switched:						
8.12	1 gang	Nr	52.16	7.67	14.20	10.95
8.13	1 gang, with neon indicator	Nr	60.63	8.91	16.51	12.73
8.14	1 gang, with neon indicator, metalplate	Nr	85.45	12.56	23.26	17.94

Approximate estimating

A range of rates for construction facility types has been provided in the following table. These generally reflect approximate prices for building costs on a unit area basis and can only be considered as a guide to likely costs for the indicated construction facility. In some cases prices for buildings not commonly available in the country are also given in an attempt to provide the reader with an estimated likely cost of construction.

The rates allow for all base construction costs and also include for typical on-costs, preliminaries and general items. Feasibility studies that make use of these rates should take into account any project specific costs. These considerations would need to address such items as the general condition of the site, site access and general location, availability of resources and the like. Each project would be unique in this respect and any appraisal of likely development costs for the scheme will need to determine any additions that may have an adverse effect on typical anticipated costs.

The unit area values should be applied to the total floor area of all storeys and generally include for average preliminary and on-costs. They do not include professional fees or capital costs, such as land purchase. No allowance has been made for value added tax. All rates should be treated with caution in any projections and professional advice should be sought before predicted cost calculations are concluded.

All prices shown are as current in third quarter 2004.

<i>Facility type</i>	<i>Dirham/ft²</i>	<i>Dirham/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Multi Storey Car Parks	147	1,586	233	432	333
Petrol Stations	870	9,366	1,377	2,550	1,967
Airport Terminal Buildings	871	9,370	1,378	2,551	1,968
Sorting Offices	403	4,340	638	1,182	911
Refuse Depots	242	2,601	382	708	546
Stables and the like	383	4,126	607	1,123	866
Factories	268	2,883	424	785	606
Advanced Factories	235	2,533	372	690	532
Purpose Built Workshops	341	3,672	540	1,000	771
Warehouses	247	2,661	391	725	559
Town Halls	591	6,357	935	1,731	1,335
Law Courts	720	7,754	1,140	2,111	1,628
Offices	552	5,946	874	1,619	1,249
Banks/Building Societies	747	8,037	1,182	2,188	1,688
Retail Warehouses	242	2,603	383	709	547

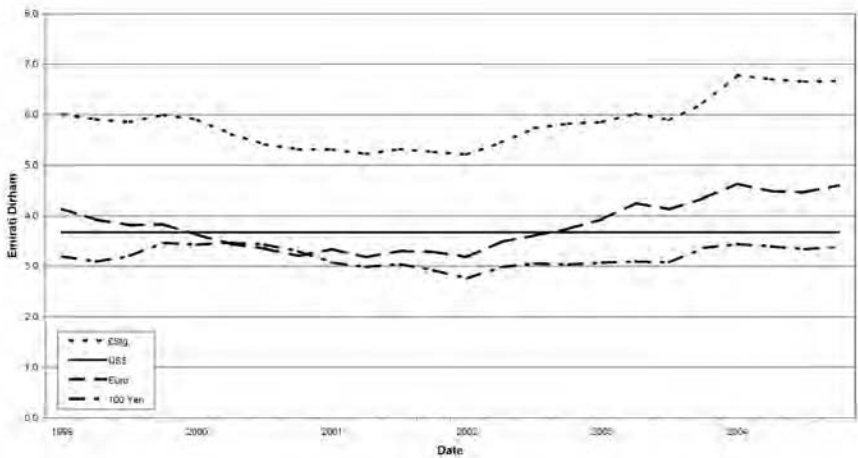
<i>Facility type</i>	<i>Dirham/ft²</i>	<i>Dirham/m²</i>	<i>£ Stg/m²</i>	<i>US \$/m²</i>	<i>Euro/m²</i>
Shopping Centres	364	3,922	577	1,068	824
Department Stores	457	4,919	723	1,339	1,033
Hypermarkets / Supermarkets	444	4,784	703	1,302	1,005
Shops	348	3,745	551	1,020	786
Stadia	518	5,579	820	1,519	1,172
Pavilions and Sports Club Houses	507	5,459	803	1,486	1,146
Religious Buildings	590	6,352	934	1,729	1,334
Schools	509	5,480	806	1,492	1,151
Sixth Form Colleges	492	5,298	779	1,443	1,113
Universities	618	6,651	978	1,811	1,397
Colleges	493	5,309	781	1,445	1,115
Research Facilities	715	7,702	1,132	2,097	1,617
Laboratories	716	7,710	1,134	2,099	1,619
Exhibition Buildings	761	8,193	1,205	2,231	1,721
Public Libraries	562	6,051	890	1,647	1,271
Flats	381	4,098	603	1,116	861
Housing Detached	549	5,912	869	1,609	1,241
Hotels	557	5,990	881	1,631	1,258
Halls of Residence	562	6,051	890	1,647	1,271
Fire Stations	666	7,168	1,054	1,951	1,505
Police Stations	675	7,268	1,069	1,979	1,526
Closed Prisons	746	8,032	1,181	2,187	1,687
Hospitals	731	7,866	1,157	2,142	1,652
Intensive Care / Acute Wards	711	7,651	1,125	2,083	1,607
Health Centres	491	5,281	777	1,438	1,109
Nursing Homes	518	5,580	820	1,519	1,172
Homes for the Elderly	467	5,032	740	1,370	1,057
Day Centres	565	6,076	893	1,654	1,276
Veterinary Hospitals	613	6,594	970	1,795	1,385
Restaurants	721	7,757	1,141	2,112	1,629
Theatres	517	5,566	818	1,515	1,169
Cinemas	603	6,493	955	1,768	1,364
Clubs	472	5,083	747	1,384	1,067
Covered Swimming Pools	876	9,432	1,387	2,568	1,981
Sports Centres exc. Pools	456	4,904	721	1,335	1,030
Sports Centres inc. Pools	701	7,545	1,109	2,054	1,584
Sports Halls	425	4,571	672	1,244	960
Gymnasia	642	6,915	1,017	1,883	1,452

Exchange rates

The following graph indicates the exchange rate movement over the last five years of the Emirati Dirham, against four other international currencies; £ Sterling, US Dollar, the Euro and the Japanese Yen (×100).

The values used to generate the graphic display are at monthly intervals for each of the currencies and the individual line bars show the respective comparison of the Dirham with each of them and the relative value to each other.

Exchange Rates



Consumer price inflation

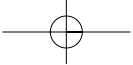
The following table presents indices for consumer prices since 1996.

Consumer price inflation in the United Arab Emirates (UAE) over the past decade has remained fairly stable. The average figure recorded over the period 1998 to 2003 was 2.4%. The forecast for the current year appears to indicate a continuation in the period of inflation with an anticipated average figure for 2004 of 2.6% from figures provided by the UAE authorities.

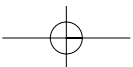
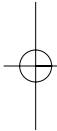
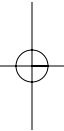
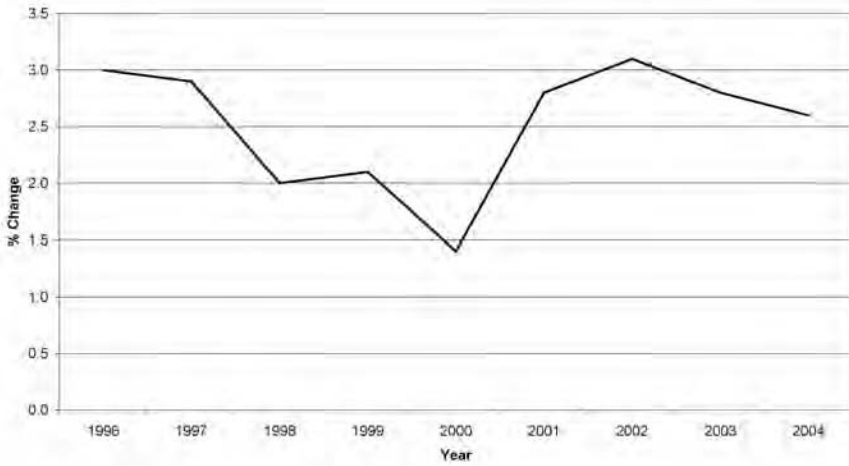
The graph, which follows the tables below, plots the annual percentage change in consumer price inflation since 1996.

Consumer Prices		
Year	annual average	change %
1996	100.0	3.0
1997	102.9	2.9
1998	105.0	2.0
1999	107.2	2.1
2000	108.7	1.4
2001	111.7	2.8
2002	115.2	3.1
2003	118.4	2.8
2004	121.5	2.6

Source: *International Monetary Fund*



Consumer Price Inflation for Years 1996 through 2004



Useful addresses

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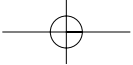
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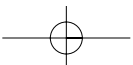
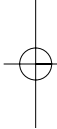
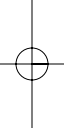
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Construction cost data

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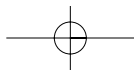
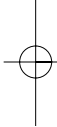
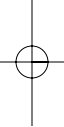
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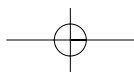
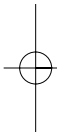
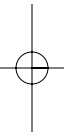
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SECTION THREE COMPARATIVE DATA





Part Three

Introductory notes

This, the third section, gathers together data primarily from Part Two of the publication to present cost information in tabular form in order to allow direct comparison of such data between countries. It permits the placing of the countries in an international context and provides for the statistical data to be assessed in perspective.

The tables are arranged in two sections:

Key national indicators

- Population
- Geography
- The economy

Construction cost data

- Labour cost – Bricklayer and unskilled labour
- Material costs – Cement and concrete aggregates
- Material costs – Ready mixed concrete and steel reinforcement
- Material costs – Solid and hollow concrete blocks
- Material costs – Sheet glass and plasterboard
- Material costs – Emulsion paint and quilt insulation
- Approximate estimating – Car parks and petrol stations
- Approximate estimating – Factories and warehouses
- Approximate estimating – Offices and shops
- Approximate estimating – Hospitals and schools
- Approximate estimating – Sports halls and hotels
- Approximate estimating – Housing

Each of the tables is accompanied by a brief explanation which describes the content of the information provided. A direct comparison between countries is not recommended where the availability of labour, material and plant resources in specific country locations may adversely affect costs. The tables, however, do allow for an initial synopsis of the construction industry. Any use of the data provided in a more precise situation needs to be carefully considered before a full and final projection of costs is made.

Population

The table below summarises population statistics for all thirteen countries included in this publication. The table encompasses data such as a comparison between the total population of all the countries, it also highlights the differences between the percentage of population in relation to age groups, population growth rates and the percentage of the population that live in urban areas.

Kuwait has the greatest level of inhabitants living within an urban location at 96% of the total population closely followed by Bahrain, Qatar and Saudi Arabia, all at around 90% of the total population of those countries. Syria has one of the lowest proportions living in an urban environment with only 50% of its inhabitants settling in the larger towns and cities.

Egypt has the highest population of all the countries, at 76.1 million inhabitants, although only 42% of whom live in urbanised areas. The country with the smallest population is Bahrain, closely followed by Qatar, each of which has a total of less than a million inhabitants.

Population growth rates for the majority of the countries range from 1.1% in Iran to 3.4% in Kuwait and Oman with an average growth rate for the region of 2.3%.

Population

Country	Population				
	Total (m)	Urban %	Under 15 %	Over 65 %	Growth % pa
Bahrain	0.7	90	28	3	1.6
Egypt	76.1	42	33	4	1.8
Iran	69.0	67	28	5	1.1
Iraq	27.1	68	40	3	2.7
Jordan	5.6	79	35	4	2.7
Kuwait	2.3	96	28	3	3.4
Lebanon	3.8	87	27	7	1.3
Libya	5.6	88	34	4	2.4
Oman	2.9	78	42	3	3.4
Qatar	0.8	92	24	3	2.7
Saudi Arabia	25.8	88	38	2	2.4
Syria	18.0	50	38	3	2.4
UAE	4.3	85	30	3	1.6

Geography

The table below shows geographical information for all thirteen countries included in this book. Comparisons are made between countries, data such as size of land area, percentage of land used for agriculture, population density, population of the countries largest city and a percentage of people living in that city in relation to the total population of that country are all shown below.

The country with the largest area of land is Saudi Arabia with a total area 1.96 million square kilometres. Bahrain has by far the smallest land area of around 665 km². The information displayed in the following table highlights Lebanon as having the greatest land area in agricultural use at 31% of the total area for that country. In comparison Oman has the lowest percentage of arable land use at less than 1%.

Bahrain, despite being the smallest country, has the highest population density of all of them with approximately 1,020 inhabitants per square kilometre. Libya, Oman and Saudi Arabia have an extremely low level of population density. The largest cities of Egypt and Iran have the highest population levels of 7.6 million and 12 million respectively. By comparison, Oman has the smallest 'largest city' population of around 203,000, however the percentage of city population against the country's total population is 30%, higher than both Egypt (10%) and Iran (17.4%).

Geography

Country	Land area		Population	Largest city	
	Total '000s km ²	Agriculture area %	per km ²	'000s	% of total
Bahrain	0.7	8.5	1,020	203	29.9
Egypt	995.5	3.4	76	7,600	10.0
Iran	1,636.0	10.1	42	12,000	17.4
Iraq	432.2	14.0	63	4,700	17.3
Jordan	92.0	4.5	61	2,130	40.0
Kuwait	17.8	1.0	129	1,700	73.9
Lebanon	10.2	31.0	371	2,000	52.6
Libya	1,759.5	1.2	3	1,800	32.1
Oman	212.7	0.3	14	632	21.8
Qatar	11.4	2.0	73	391	46.5
Saudi Arabia	1,960.6	1.8	13	4,700	18.2
Syria	184.1	30.0	98	2,300	12.8
UAE	82.9	3.0	52	1,500	34.9

Economy

The table below summarises economic data for all the countries included in this publication. The figures indicated for Gross Domestic Product (GDP) in each of the country profile sections have been shown in national currencies. For the table below, these figures have been converted to US dollars using an average exchange rate for the relevant year, generally in respect of 2004. The table contains comparative economic data for all thirteen countries. It is perhaps more helpful when measuring national wealth to consider the GDP per capita.

The GDP growth rates are possibly more interesting indicators of potential wealth as the rates are real, any inflation effects having been excluded

Economy

Country	1998		1995–1999	
	GDP US\$ bn	GDP per capita US\$	GDP Growth (real) % pa	Inflation average % pa
Bahrain	9.6	14,088	4.8	-1.1
Egypt	58.8	778	4.3	3.2
Iran	128.8	1,866	4.8	15.6
Iraq	31.8	1,173	*5.0	14.0
Jordan	8.6	1,530	3.8	1.7
Kuwait	42.2	18,356	3.8	1.5
Lebanon	16.6	4,378	2.3	3.0
Libya	18.7	3,341	1.4	-1.6
Oman	21.6	7,437	3.6	-0.3
Qatar	20.4	24,315	6.2	2.3
Saudi Arabia	214.4	8,312	2.6	-0.5
Syria	17.3	962	2.2	-0.1
UAE	85.1	19,782	5.1	2.4

* 2000 to 2004 estimate

Labour Costs

The following tables display comparative costs for a bricklayer and for an unskilled labourer. The rates are built up by combining the basic wage and the costs of employing that labour by the employer including any mandatory and other contributions. They are considered to be fairly representative for building construction staff employed on standard specification type projects. The rates do not take into account any enhancements for bonus payments and such like and employment and general site conditions may necessitate the need to increase these rates.

The rates are at third quarter 2004 levels and apply to construction sites located in and around capital and major city locations of each individual country. Where specific projects are in remote and inaccessible locations the rates should be suitably enhanced to reflect any necessary uplifts. All rates are displayed in the local currency and in UK £ Sterling, US Dollar and Euro values to show comparative values between each region.

Bricklayer and unskilled labour costs

The table below summarises daily labour costs for a bricklayer and for unskilled labour in each of the countries as at third quarter 2004.

Country	<i>Bricklayer</i> day				<i>Unskilled labour</i> day			
	<i>National currency</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>	<i>National currency</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Bahrain	21.94	31.43	58.20	44.89	8.48	12.15	22.50	17.35
Egypt	335.88	28.95	53.61	41.35	127.35	10.98	20.33	15.68
Iran	306,954.83	20.98	38.86	29.97	119,495.80	8.17	15.13	11.67
Iraq*	52,446.64	19.22	35.89	27.44	20,769.91	7.61	14.21	10.87
Jordan	30.00	22.92	42.02	32.93	12.00	9.17	16.81	13.17
Kuwait	18.88	34.42	63.74	49.16	7.18	13.09	24.24	18.69
Lebanon	73,329.41	26.10	48.32	37.27	29,478.42	10.49	19.42	14.98
Libya	42.90	17.64	32.75	25.22	26.93	11.07	20.56	15.83
Oman	20.17	28.23	52.26	40.30	7.61	10.64	19.71	15.20
Qatar	189.33	28.20	52.00	40.40	72.82	10.85	20.00	15.54
Saudi Arabia	186.18	26.81	49.65	38.29	70.89	10.21	18.91	14.58
Syria	2,152.32	21.67	40.12	30.94	852.36	8.58	15.89	12.25
UAE	200.18	29.43	54.50	42.04	76.61	11.27	20.86	16.09

* costs are as at fourth quarter 2002.

Material Costs

The following tables display comparative costs for commonly used building materials. The prices indicated are average costs for the individual materials delivered in reasonable quantities to construction sites in and around capital and major city locations and are current as at third quarter 2004. Value added tax and other similar taxes have been excluded.

It has been assumed that there would be no delivery problems and that site access is unrestricted. The item costs have been provided in local currency and in UK £ Sterling, US Dollar and Euro equivalents. Transport of goods to remote locations may well add considerably to the prices shown and site specific considerations will have to be taken in order to recover costs.

Material costs – cement and concrete aggregates

The table below summarises costs per tonne for cement and costs per m³ for concrete aggregates as at third quarter of 2004.

Country	Cement				Aggregate for concrete			
	National currency	£ Stg	US \$	tonne Euro	National currency	£ Stg	US \$	m ³ Euro
Bahrain	38.91	55.74	103.21	79.60	5.77	8.27	15.31	11.81
Egypt	600.29	51.74	95.81	73.90	89.02	7.67	14.21	10.96
Iran	561,381.30	38.38	71.06	54.81	82,332.61	5.63	10.42	8.04
Iraq*	98,065.65	35.94	67.11	51.31	13,916.19	5.10	9.52	7.28
Jordan	55.00	42.02	77.03	60.37	8.00	6.11	11.20	8.78
Kuwait	33.68	61.40	113.70	87.68	4.78	8.71	16.13	12.44
Lebanon	137,798.19	49.04	90.80	70.03	19,916.27	7.09	13.12	10.12
Libya	129.00	53.04	98.47	75.84	14.95	6.15	11.41	8.79
Oman	36.04	50.42	93.36	72.00	5.06	7.08	13.12	10.11
Qatar	336.56	50.13	92.44	71.81	48.95	7.29	13.45	10.44
Saudi Arabia	329.31	47.42	87.82	67.73	47.90	6.90	12.77	9.85
Syria	4,024.44	40.51	75.01	57.85	571.10	5.75	10.64	8.21
UAE	257.11	37.80	70.00	53.99	51.88	7.63	14.13	10.90

* costs are as at fourth quarter 2002.

Material costs – ready mixed concrete and steel reinforcement

The table below summarises costs per m³ for ready mixed concrete and costs per tonne for mild steel reinforcement as at third quarter 2004.

Country	Ready mixed concrete				m ³ Mild steel reinforcement			
	National currency	£ Stg	US \$	Euro	National currency	£ Stg	US \$	Euro
Bahrain	24	34.62	64.11	49.45	319	457.14	846.49	652.88
Egypt	368	31.69	58.68	45.26	4,852	418.20	774.33	597.25
Iran	343,819	23.50	43.52	33.57	4,581,917	313.24	579.99	447.35
Iraq*	60,061	22.01	41.10	31.42	774,958	284.02	530.36	405.44
Jordan	34	25.97	47.62	37.32	450	343.77	630.25	493.96
Kuwait	21	37.61	69.63	53.70	277	504.59	934.34	720.57
Lebanon	84,395	30.03	55.61	42.89	1,105,441	393.40	728.41	561.83
Libya	85	35.05	65.08	50.12	541	222.27	412.64	317.79
Oman	22	30.88	57.18	44.10	282	394.42	730.28	563.21
Qatar	208	30.99	57.14	44.39	2,754	410.14	756.30	587.52
Saudi Arabia	204	29.32	54.29	41.87	2,694	388.01	718.49	554.11
Syria	2,465	24.81	45.94	35.43	31,482	316.90	586.76	452.58
UAE	219	32.27	59.74	46.08	2,919	429.13	794.59	612.88

* costs are as at fourth quarter 2002.

Material costs – solid and hollow concrete blocks

The table below summarises costs per m² for 100mm solid and 150mm hollow blocks as at third quarter 2004.

Country	100mm solid concrete blocks				150mm hollow concrete blocks			
	National currency	£ Stg	US \$	Euro	National currency	£ Stg	US \$	Euro
Bahrain	1.41	2.03	3.75	2.89	1.68	2.41	4.47	3.44
Egypt	21.78	1.88	3.48	2.68	25.87	2.23	4.13	3.18
Iran	20,364.08	1.39	2.58	1.99	24,194.16	1.65	3.06	2.36
Iraq*	3,543.41	1.30	2.43	1.85	4,226.39	1.55	2.89	2.21
Jordan	2.00	1.53	2.80	2.20	2.33	1.78	3.26	2.55
Kuwait	1.22	2.23	4.12	3.18	1.45	2.65	4.90	3.78
Lebanon	4,979.07	1.77	3.28	2.53	5,938.77	2.11	3.91	3.02
Libya	12.87	5.29	9.82	7.57	14.35	5.90	10.95	8.44
Oman	1.30	1.82	3.37	2.60	1.55	2.17	4.02	3.10
Qatar	12.24	1.82	3.36	2.61	14.23	2.12	3.91	3.04
Saudi Arabia	11.97	1.72	3.19	2.46	13.92	2.00	3.71	2.86
Syria	145.42	1.46	2.71	2.09	173.44	1.75	3.23	2.49
UAE	12.84	1.89	3.50	2.70	15.29	2.25	4.16	3.21

* costs are as at fourth quarter 2002.

Material costs – sheet glass and plasterboard

The table below summarises costs per m² for sheet or float glass and for plasterboard as at third quarter 2004.

Country	Sheet/float glass				Plasterboard 12.5mm			
	National currency	£ Stg	US \$	m ² Euro	National currency	£ Stg	US \$	m ² Euro
Bahrain	31.56	45.21	83.72	64.57	1.57	2.25	4.17	3.22
Egypt	482.21	41.57	76.96	59.36	24.04	2.07	3.84	2.96
Iran	450,950.26	30.83	57.08	44.03	22,761.46	1.56	2.88	2.22
Iraq*	78,774.86	28.87	53.91	41.21	3,976.12	1.46	2.72	2.08
Jordan	45.06	34.42	63.11	49.46	2.23	1.70	3.12	2.45
Kuwait	27.05	49.32	91.33	70.44	1.37	2.49	4.61	3.56
Lebanon	110,691.48	39.39	72.94	56.26	5,587.09	1.99	3.68	2.84
Libya	57.02	23.45	43.53	33.52	5.15	2.12	3.93	3.03
Oman	28.95	40.50	74.99	57.84	1.46	2.04	3.79	2.92
Qatar	275.74	41.07	75.73	58.83	13.65	2.03	3.75	2.91
Saudi Arabia	269.79	38.85	71.94	55.49	13.35	1.92	3.56	2.75
Syria	3,232.78	32.54	60.25	46.47	163.17	1.64	3.04	2.35
UAE	286.54	42.13	78.01	60.17	14.29	2.10	3.89	3.00

* costs are as at fourth quarter 2002.

Material costs – emulsion paint and quilt insulation

The table below summarises costs per 5 litres for emulsion paint and costs per m² for 100mm thick quilt insulation as at third quarter 2004.

Country	Emulsion paint				Quilt insulation 100mm			
	National currency	£ Stg	US \$	Euro	National currency	£ Stg	US \$	Euro
Bahrain	8.09	11.59	21.46	16.55	2.99	4.29	7.94	6.12
Egypt	126.06	10.87	20.12	15.52	45.73	3.94	7.30	5.63
Iran	117,890.07	8.06	14.92	11.51	42,764.56	2.92	5.41	4.18
Iraq*	20,593.79	7.55	14.09	10.77	7,306.00	2.68	5.00	3.82
Jordan	11.55	8.82	16.18	12.68	4.20	3.21	5.88	4.61
Kuwait	7.07	12.89	23.88	18.41	2.57	4.68	8.66	6.68
Lebanon	28,937.62	10.30	19.07	14.71	10,266.12	3.65	6.76	5.22
Libya	26.14	10.75	19.95	15.37	9.18	3.78	7.01	5.40
Oman	7.57	10.59	19.60	15.12	2.68	3.76	6.96	5.36
Qatar	70.68	10.53	19.41	15.08	25.70	3.83	7.06	5.48
Saudi Arabia	69.15	9.96	18.44	14.22	25.15	3.62	6.71	5.17
Syria	845.13	8.51	15.75	12.15	299.83	3.02	5.59	4.31
UAE	73.45	10.80	20.00	15.42	27.17	4.00	7.40	5.71

* costs are as at fourth quarter 2002.

Approximate estimating – car parks and petrol stations

The table below summarises approximate estimating costs per m² for multi-storey car parks and petrol stations. The costs are as at third quarter 2004.

Country	Multi-Storey Car Parks				m ²	Petrol Stations				m ²
	National currency	£ Stg	US \$	Euro		National currency	£ Stg	US \$	Euro	
Bahrain	176	252	467	360		1,022	1,464	2,710	2,090	
Egypt	2,682	231	428	330		15,569	1,342	2,485	1,917	
Iran	3,102,204	212	393	303		18,001,509	1,231	2,279	1,758	
Iraq*	535,687	196	367	280		3,171,292	1,162	2,170	1,659	
Jordan	305	233	428	335		1,781	1,361	2,494	1,955	
Kuwait	148	270	501	386		872	1,590	2,945	2,271	
Lebanon	753,939	268	497	383		4,456,087	1,586	2,936	2,265	
Libya	582	239	444	342		3,395	1,396	2,592	1,996	
Oman	156	219	405	312		925	1,295	2,397	1,849	
Qatar	1,505	224	413	321		8,779	1,308	2,411	1,873	
Saudi Arabia	1,464	211	390	301		8,669	1,248	2,312	1,783	
Syria	21,799	219	406	313		129,050	1,299	2,405	1,855	
UAE	1,586	233	432	333		9,366	1,377	2,550	1,967	

* costs are as at fourth quarter 2002.

Approximate estimating – factories and warehouses

The table below summarises approximate estimating costs per m² for factories and warehouses. The costs are as at third quarter 2004.

Country	Factories				Warehouses			
	National currency	£ Stg	US \$	Euro	National currency	£ Stg	US \$	Euro
Bahrain	316	453	838	647	293	420	778	600
Egypt	4,924	424	786	606	4,478	386	715	551
Iran	5,749,462	393	728	561	5,229,362	357	662	511
Iraq*	973,727	357	666	509	921,247	338	630	482
Jordan	552	422	774	606	511	390	716	561
Kuwait	276	504	933	719	251	458	848	654
Lebanon	1,411,283	502	930	717	1,283,618	457	846	652
Libya	1,053	433	804	619	974	401	744	573
Oman	284	398	736	568	269	376	696	537
Qatar	2,723	406	748	581	2,519	375	692	537
Saudi Arabia	2,662	383	710	547	2,518	363	672	518
Syria	39,624	399	739	570	37,489	377	699	539
UAE	2,883	424	785	606	2,661	391	725	559

* costs are as at fourth quarter 2002.

Approximate estimating – offices and shops

The table below summarises approximate estimating costs per m² for offices and shops. The costs are as at third quarter 2004.

Country	<i>Offices, generally</i>				<i>Shops</i>			
	<i>National currency</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>	<i>National currency</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Bahrain	672	963	1,783	1,375	413	591	1,094	844
Egypt	10,271	885	1,639	1,264	6,302	543	1,006	776
Iran	11,627,055	795	1,472	1,135	7,358,598	503	931	718
Iraq*	2,059,582	755	1,410	1,078	1,252,723	459	857	655
Jordan	1,156	883	1,619	1,269	704	537	985	772
Kuwait	562	1,024	1,896	1,462	354	645	1,194	921
Lebanon	2,869,715	1,021	1,891	1,459	1,806,268	643	1,190	918
Libya	2,204	906	1,682	1,296	1,341	551	1,024	788
Oman	601	841	1,557	1,201	366	511	947	730
Qatar	5,699	849	1,565	1,216	3,468	517	952	740
Saudi Arabia	5,630	811	1,501	1,158	3,424	493	913	704
Syria	83,811	844	1,562	1,205	50,977	513	950	733
UAE	5,946	874	1,619	1,249	3,745	551	1,020	786

* costs are as at fourth quarter 2002.

Approximate estimating – hospitals and schools

The table below summarises approximate estimating costs per m² for hospitals and schools. The costs are as at third quarter 2004.

Country	<i>General hospitals</i>				<i>m²</i>	<i>Secondary/middle schools</i>				<i>m²</i>
	<i>National currency</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>		<i>National currency</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>	
Bahrain	866	1,241	2,298	1,773	604	865	1,601	1,235		
Egypt	13,334	1,149	2,128	1,641	9,232	796	1,473	1,136		
Iran	15,569,711	1,064	1,971	1,520	10,532,267	720	1,333	1,028		
Iraq*	2,650,132	971	1,814	1,386	1,867,510	684	1,278	977		
Jordan	1,496	1,143	2,095	1,642	1,047	800	1,467	1,150		
Kuwait	723	1,318	2,440	1,882	509	929	1,720	1,326		
Lebanon	3,692,557	1,314	2,433	1,877	2,602,092	926	1,715	1,322		
Libya	2,851	1,172	2,176	1,676	1,996	821	1,524	1,174		
Oman	773	1,082	2,003	1,545	545	762	1,412	1,089		
Qatar	7,373	1,098	2,025	1,573	5,162	769	1,418	1,101		
Saudi Arabia	7,244	1,043	1,932	1,490	5,105	735	1,361	1,050		
Syria	107,842	1,086	2,010	1,550	75,995	765	1,416	1,092		
UAE	7,866	1,157	2,142	1,652	5,480	806	1,492	1,151		

* costs are as at fourth quarter 2002.

Approximate estimating – sports halls and hotels

The table below summarises approximate estimating costs per m² for sports halls and hotels. The costs are as at third quarter 2004.

Country	Sports halls				Hotels, generally			
	National currency	£ Stg	US \$	Euro	National currency	£ Stg	US \$	Euro
Bahrain	491	703	1,301	1,004	630	903	1,672	1,289
Egypt	7,569	652	1,208	932	9,931	856	1,585	1,222
Iran	8,838,234	604	1,119	863	11,595,970	793	1,468	1,132
Iraq*	1,557,015	571	1,066	815	1,980,456	726	1,355	1,036
Jordan	866	661	1,213	950	1,118	854	1,566	1,227
Kuwait	425	774	1,434	1,106	557	1,016	1,881	1,451
Lebanon	2,169,464	772	1,430	1,103	2,846,388	1,013	1,876	1,447
Libya	1,650	679	1,260	970	2,131	876	1,626	1,253
Oman	454	636	1,177	908	578	809	1,497	1,155
Qatar	4,268	636	1,172	911	5,510	821	1,513	1,176
Saudi Arabia	4,256	613	1,135	875	5,414	780	1,444	1,113
Syria	63,360	638	1,181	911	80,591	811	1,502	1,159
UAE	4,571	672	1,244	960	5,990	881	1,631	1,258

* costs are as at fourth quarter 2002.

Approximate estimating – housing

The table below summarises approximate estimating costs per m² for detached housing and flats. The costs are as at third quarter 2004.

Country	<i>Housing, detached</i>				<i>Flats</i>			
	<i>National currency</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>	<i>National currency</i>	<i>£ Stg</i>	<i>US \$</i>	<i>Euro</i>
Bahrain	651	933	1,727	1,332	451	647	1,197	923
Egypt	9,886	852	1,578	1,217	6,862	592	1,095	845
Iran	11,543,679	789	1,461	1,127	7,856,118	537	994	767
Iraq*	2,033,628	745	1,392	1,064	1,383,998	507	947	724
Jordan	1,120	855	1,568	1,229	781	597	1,094	857
Kuwait	555	1,011	1,872	1,444	401	731	1,353	1,043
Lebanon	2,833,553	1,008	1,867	1,440	2,046,987	728	1,349	1,040
Libya	2,135	878	1,629	1,255	1,489	612	1,137	875
Oman	593	830	1,537	1,186	404	565	1,046	807
Qatar	5,520	822	1,516	1,178	3,850	574	1,058	822
Saudi Arabia	5,559	801	1,482	1,143	3,783	545	1,009	778
Syria	82,755	833	1,542	1,190	56,319	567	1,050	810
UAE	5,912	869	1,609	1,241	4,098	603	1,116	861

* costs are as at fourth quarter 2002.

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