

Singapore

Quarterly construction cost review





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Singapore Market Overview

The Ministry of Trade and Industry (MTI) has announced that the Singapore economy expanded by 14.7% on a year-on-year basis in 2Q2021, a reversal from the 13.3% contraction in the same period a year ago. MTI has upgraded Singapore's GDP growth forecast for 2021 to "6.0% to 7.0%", from "4.0% to 6.0%".

The construction sector grew by 106.2% on a year-on-year basis in 2Q2021, a rebound from the 65.6% contraction in 2Q2020. The outstanding performance was attributed to the low base in 2020 as almost all construction activities came to a halt during the Circuit Breaker period from 7 April to 1 June last year. In absolute terms, the value-added of the construction sector remained 29% below its pre-COVID level in 2Q2019.

Whilst the construction sector is projected to see some recovery from the low base in 2020, labour shortage remains the key challenge for the construction sector. The continuing tighter border restrictions on the entry of migrant workers especially from South Asia are likely to add pressure on the sector's recovery. Construction output is expected to remain below pre-COVID levels even at the end of 2021.

As the recovery in external demand for Singapore remains largely on track for the rest of the year and against the backdrop of a better-than-expected performance of the Singapore economy in the first half of the year, MTI has upgraded the GDP growth forecast for 2021 to "6.0% to 7.0%", from "4.0% to 6.0%".

Based on Arcadis Singapore's data, tender prices for 2Q2021 have increased by approximately 5% as compared to 1Q2021. The increase is mainly driven by increased labour prices due to labour shortages and increased material prices due to higher raw material prices and supply disruptions.

Looking ahead, labour and construction material prices are likely to continue to be on an upward trend. As such, tender prices are likely to remain high for the remaining half of 2021.

MARKET MOVEMENT



ECONOMY

Indicator	Q2/19 - Q2/20	Q1/20 - Q1/21	Q2/20 - Q2/21
GDP Growth per annum	(-)13.3%	(+) 1.5%	(+) 14.7%
Inflation Rate (CPI) per annum	Jun 19 - 20 (-) 0.5%	Mar 20 - 21 (+) 1.3%	Jun 20 - 21 (+) 2.4%

Source: Ministry of Trade and Industry



SUPPLY & DEMAND

Indicator	Q2/20	Q1/21	Q2/21
BCA Construction Demand	S\$5.79 Bn	S\$5.77 Bn	S\$8.73 Bn
BCA Construction Output	S\$3.20 Bn	S\$6.04 Bn	S\$5.86 Bn

Source: Building and Construction Authority



BASIC COSTS

Indicator	Apr 21	May 21	Jun 21
BCA Concrete Price Index	122.5	123.7	129.4
BCA Steel Reinforcement Price Index	125.5	141.6	143.7

Source: Building and Construction Authority



CONSTRUCTION COST TREND

Indicator	Q2/20	Q1/21	Q2/21
BCA Tender Price Index	101.0 [^]	110.8	116.1
Arcadis Singapore Tender Price Index	100.2 [#]	113.5	119.2

Source: Building and Construction Authority

[^] The TPI sub-indices for 2Q20 (all categories) are assumed unchanged from 1Q20 in view of a lack of representative data due to insufficient tenders for new works awarded during this period

[#] Arcadis Singapore TPI for 2Q20 is assumed unchanged from 1Q20 in view of a lack of representative data due to insufficient tenders



1 Market Analysis

Singapore's Construction Demand

According to the Building and Construction Authority (BCA)'s preliminary data, total construction demand (based on actual contracts awarded) increased by 51% on a year-on-year basis to \$8.7 billion in 2Q2021, a reversal from the 12% decline in 1Q2021. On a quarter-on-quarter basis, it has increased 51% as compared to 1Q2021. The strong demand is attributed to improved investment sentiments due to a gradual recovery of the Singapore economy.

Public sector construction demand increased by 50% on a year-on-year basis to \$5.6 billion in 2Q2021. The increase was mainly driven by new public residential construction projects and expansions in civil engineering construction demand from the award of various Land Transport Authority's contracts such as the Cross Island MRT Line and Jurong Region MRT Line. On a quarter-on-quarter basis, it increased 61% as compared to 1Q2021, with most development types expanding except for industrial and institutional & others building developments.

Similarly, private sector construction demand increased by 52% on a year-on-year basis to \$3.1 billion in 2Q2021. The strong demand was fuelled by commercial, industrial and residential building developments. On a quarter-on-quarter basis, it increased by 36% as compared to 1Q2021, mainly driven by expansions in commercial and industrial construction demand.

Key Construction Material Prices

Based on BCA's data, the average market prices of cement, steel bars, granite, concreting sand and ready-mixed concrete have increased in 2Q2021 on a quarter-on-quarter basis as compared to 1Q2021.

The average price of steel bars (16-32mm high tensile) in 2Q21 continues to be on the upward trend since September 2020. According to BCA's data, the average market price of steel bars in June 2021 increased by approximately 18% to \$1,101 per tonne compared to \$933 per tonne in March 2021. It has increased by approximately 54% compared to \$716.50 per tonne a year ago in June 2020.

Likewise, according to data from London Metal Exchange, prices of copper and aluminium continued to be on an upward trend rising to 67% and 56% to US\$9,612 per tonne and US\$2,439 per tonne in June 2021 compared to US\$5,742 per tonne and US\$1,564 per tonne respectively a year ago in June 2020.

Looking ahead, material prices are likely to remain high due to a combination of supply chain disruptions as well as increased global demand as many countries have plans to ramp up infrastructure spending to stimulate economic growth.

Additional Measures to Support the Construction Sector

Construction Labour

The construction, marine and process (CMP) sectors have jointly led a pilot programme which aims to integrate the overseas training, testing and on-boarding process with Singapore's on-arrival testing and Stay-Home-Notice requirements to bring in migrant workers in a small scale and calibrated manner.

Following zero incidences of COVID-19 cases in the first few batches of workers from Malaysia in June 2021 for the marine sector, the CMP sectors have announced on 7 July 2021 that they will continue to carry out the pilot programme to bring in migrant workers from India. If successful, it will be used to facilitate a steady inflow of migrant workers to meet manpower needs.

However, the slow inflow of migrant workers is still unable to replace those who had left since the onset of COVID-19 in 2020. As such, until the COVID-19 transmission situation is brought under control in South Asia and Southeast Asia, it is anticipated that labour supply is unlikely to return to pre-COVID levels.

To help the CMP sectors curb manpower shortage caused by tightened border restrictions, the Government has announced new measures on 13 August 2021 to help them retain their existing Work Permit Holders (WPHs) and facilitate the inflow of new WPHs through the following:

- WPHs whose work permit are expiring between July and December 2021 will be allowed to renew their permits up to 2 years, even if they do not meet the renewal criteria. This includes those who are reaching the maximum period of employment or maximum employment age cap. In addition, companies are not required to maintain a minimum 10% of their WPHs as higher skilled workers.
- From July 2021, the validity of In-Principle Approvals (IPAs) of all WPHs including Employment Passes, S Passes and Work Permits, who are unable to enter Singapore due to border restrictions, will be granted up to one year of extension.
- To collaborate with Singapore Contractors Association Limited (SCAL) to introduce a 6-month retention scheme (1 September 2021 to 28 February 2022) for experienced construction WPHs whose previous employment has been terminated but is willing to continue working in Singapore. They will be granted a 30-day stay during which SCAL will provide them with the necessities such as accommodation and food, while a job match is facilitated.

- From 1 October 2021 to 31 March 2022, the minimum period of employment requirements for WPHs to qualify for man-year entitlement waiver will be removed for new and renewal WPHs from non-traditional sources (India, Sri Lanka, Thailand, Bangladesh, Myanmar and Philippines and the People's Republic of China for companies in construction and process sectors.

The above new measures are introduced to ensure that the CMP sectors will continue to meet manpower needs for their businesses, preserve its core capabilities, and emerge stronger from this unprecedented COVID-19 crisis. The Government has been working closely with the built environment sector to help companies navigate the COVID-19 crisis by supporting business transformation initiatives to reduce the reliance on foreign manpower through innovation and digitalisation.

Commencement of COTMA Part 10A - Relief for Construction Contracts Affected by Increased in Foreign Manpower Salary Costs

On 11 May 2021, the Singapore parliament introduced the COVID-19 (Temporary Measures) (Amendment No. 3) Act 2021 - Part 10A ("Part 10A") to provide for a more equitable sharing amongst the stakeholders for the increased foreign manpower costs arising from COVID-19.

On 6 August 2021, Part 10A and the subsidiary legislation in the COVID-19 (Temporary Measures) (Part 10A Relief) Regulations 2021 ("Part 10A Relief Regulations") came into operation.

Part 10A provides a relief framework to allow contractors to seek monetary reliefs from their contracting partners for adjustments to the construction contract sum to take into account an increase in foreign manpower salary costs incurred by the contractor at any time between 1 October 2020 and 30 September 2021 or such other later date as maybe prescribed due to the COVID-19 pandemic.

Parties must first engaged in good faith negotiation for a mutually agreeable cost-sharing arrangement to address the increase in foreign manpower salary costs in respect of WPHs performing the project before seeking Assessor's determination under Part 10A. This will be applicable to every tier of eligible construction contract (e.g. main contractors to negotiate with developers, subcontractors to negotiate with main contractors, etc.). Should discussion be unsuccessful, contractors can seek a determination by a Part 10A Assessor.

Part 10A is applicable to construction contracts which meets the following criteria:

- construction contracts entered into before 1 October 2020, including construction contract that was automatically renewed on or after 1 October 2020; and
- where as at 10 May 2021, any works to be performed under the contract have not been certified as completed

Part 10A shall not apply to:

- construction contracts for works carried out at residential property that do not require the approval of the Commissioner of Building Control under the Building Control Act;
- any construction contract terminated before 10 May 2021, or where a notice for termination under the construction contract was given before 10 May 2021; and
- any other contract that may be prescribed by Regulations

Separately, BCA has also informed the industry via a circular dated 18 August 2021 on the Government's approach in adopting a simplified assessment methodology in dealing with the adjustment to the foreign manpower salary costs increase for public sector construction contracts and encourages private sector contracting parties to adopt a similar method to minimise the potential time and resources spent on negotiation.

The common public sector approach is as follows:

- For the period of 1 October 2020 to 30 April 2021
The public sector will take a proactive stance by offering a base 1.3% of monthly progress payment to address foreign manpower salary costs increase for eligible construction contracts under Part 10A. Contractors that have incurred foreign manpower salary costs increase more than the industry average of 1.3% monthly progress payment can still put up their proposed adjustment to the Contract Sum to the respective Government Procurement Entities (GPE) for negotiation.
- For the period of 1 May 2021 to 30 September 2021
As the Government has provided an additional \$160 of foreign worker levy rebate to all construction workers for every month from May 2021 to December 2021, based on the latest data, the levy rebate provided would cover more than 50% of the average increase in the wages of construction foreign workers from May 2021 onwards as compared to pre-COVID level. GPEs would not increase the progress payment from 1 May 2021 to 30 September 2021 to address the increase in foreign manpower salary costs for the time being. BCA will continue to monitor and review the impact of increased foreign manpower salary cost.



2 Approximate Building Costs

Singapore

BUILDING TYPE	S\$/m ² CFA
RESIDENTIAL	
Terraced Houses	2,850 - 3,150
Semi-Detached Houses	3,100 - 3,550
Detached Houses	3,600 - 4,800
Average Standard Condominium	2,200 - 2,400
Above Average Standard Condominium	2,500 - 3,300
Luxury Condominium	3,400 - 5,000
OFFICE	
Average Standard Offices	2,850 - 3,150
Prestige Offices	3,200 - 3,450
COMMERCIAL	
Shopping Centres, Average Quality	3,200 - 3,300
Shopping Centres, High Quality	3,400 - 3,700
CAR PARKS	
Multi-Storey Car Parks	1,100 - 1,550
Basement Car Parks	1,550 - 2,100
INDUSTRIAL	
Flatted Light Industrial Buildings	1,500 - 1,650
Flatted Heavy Industrial Buildings	1,700 - 2,300
Single Storey Industrial Buildings	1,400 - 1,550
Flatted Warehouses	1,400 - 1,550
Single Storey Warehouses	1,300 - 1,550
HOTEL (INCLUDING FURNITURE AND FITTINGS)	
3-Star Hotels	3,550 - 3,900
4-Star Hotels	3,850 - 4,450
5-Star Hotels	4,550 - 5,100
HEALTH	
Private Hospitals	4,550 - 4,800
Polyclinics, Non Air-conditioned	1,950 - 2,150
Nursing Homes, Non Air-conditioned	1,950 - 2,250
Medical Centres	3,500 - 3,700

The above costs are at 2nd Quarter 2021 levels.

Notes:

The construction costs above serve only as a guide for preliminary cost appraisals and budgeting. It must be understood that the actual cost of a building will depend upon the design, site conditions and many other factors and may vary from the figures shown. The costs per square metre are based on **Construction Floor Areas (CFA)** measured to the outside face of the external walls / external perimeter including lift shafts, stairwells, plant rooms, water tanks and the like.

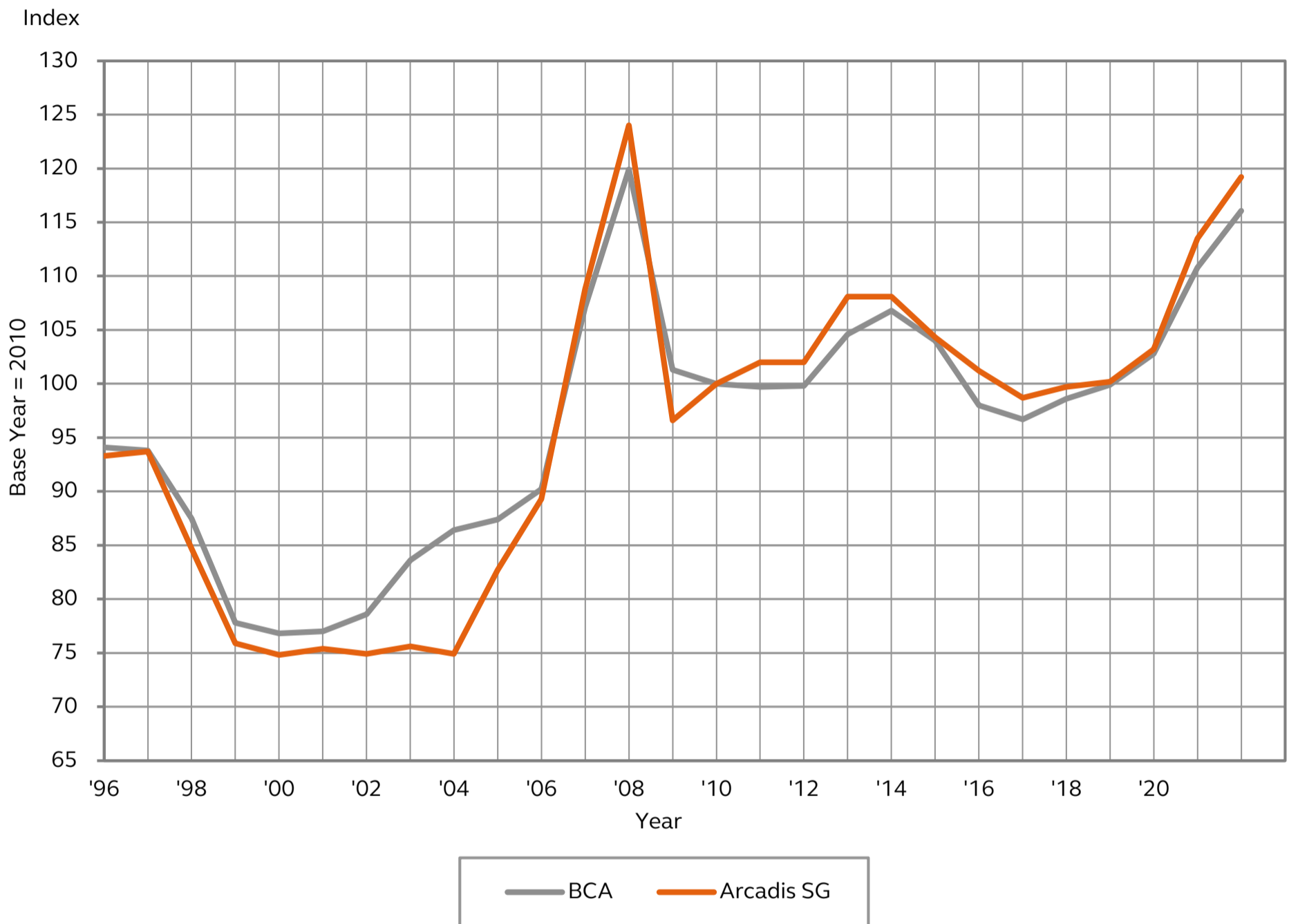
All buildings are assumed to have no basements (unless otherwise stated) and are built on flat ground with normal soil conditions. The costs exclude the following:

- Professional fees
- Authorities' plan processing charges
- Land cost
- Financing charges
- Site inspectorate
- Administrative expenses
- Legal cost & disbursements
- Demolition of existing building(s)
- Furniture and fittings (unless otherwise stated)
- Operating equipment
- External works
- Prefabricated Prefinished Volumetric Construction (PPVC) / Prefabricated Bathroom Units (PBUs) / Structural steel structure
- Cross Laminated Timber (CLT) / Glued Laminated Timber (Glulam)
- BCA Green Mark Gold and above
- Cost escalation
- Goods and Services Tax



3 Tender Price Index Singapore

Arcadis Singapore TPI is a measure of the comparative tender price movements based on the projects handled by Arcadis Singapore Pte Ltd. The TPI reflects the tender price level of contracts let out over the years. Other than material and labour costs, it takes into account the elements of competition, risk and profits.



Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
BCA*	100.0	99.7	99.8	104.6	106.8	104.0	98.0	96.7	98.6	99.9
Arcadis SG^	100.0	102.0	102.0	108.1	108.1	104.3	101.2	98.7	99.7	100.2

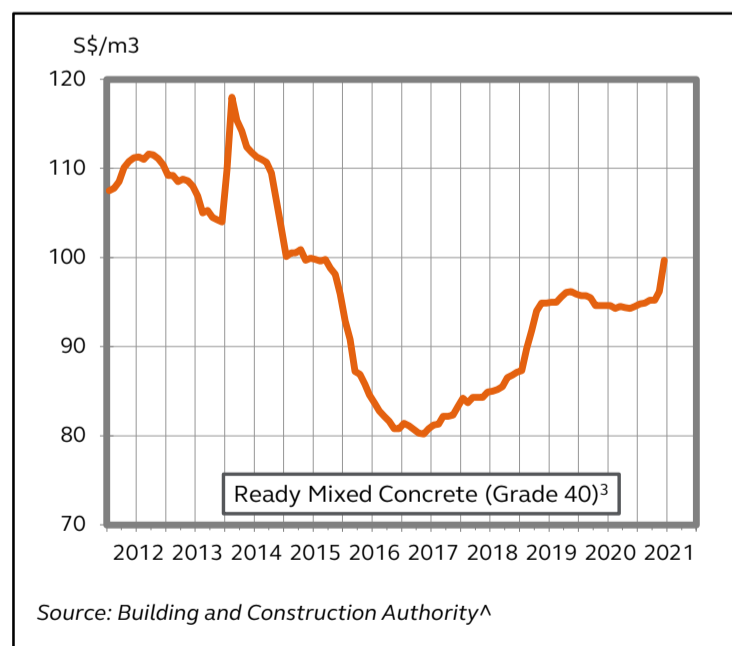
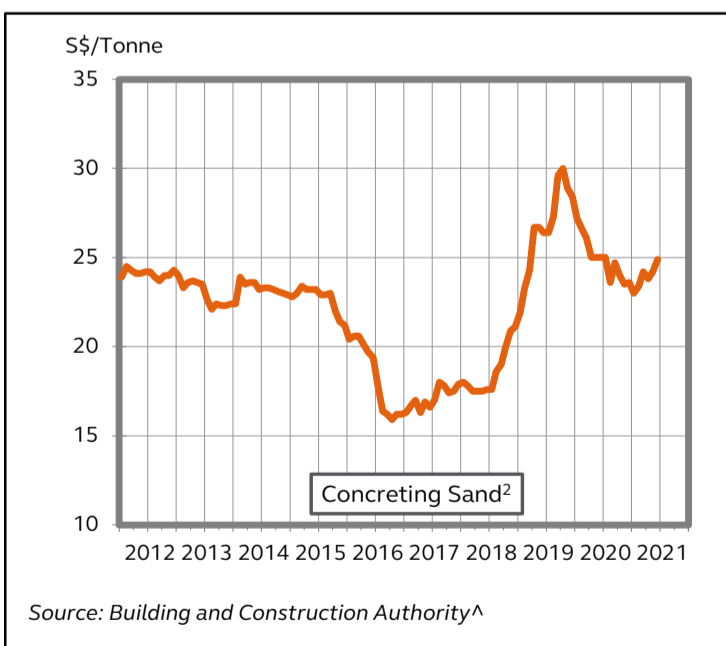
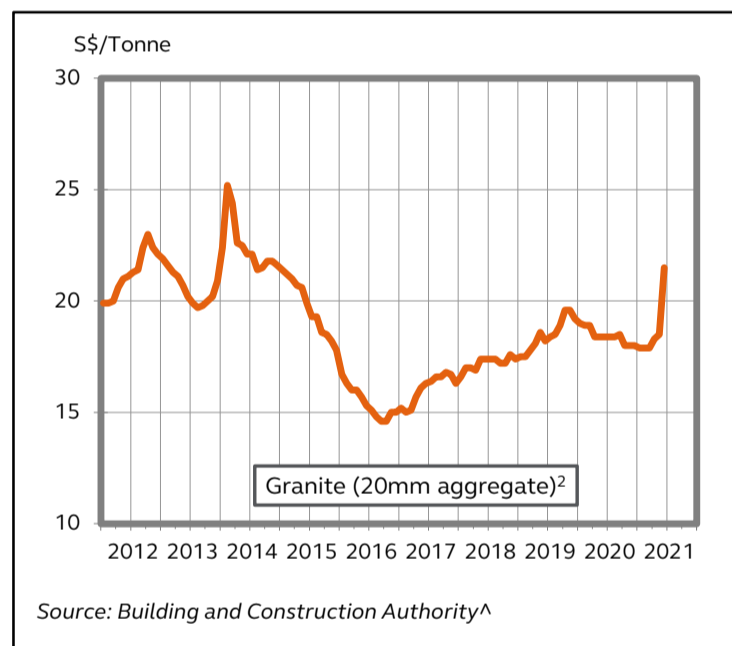
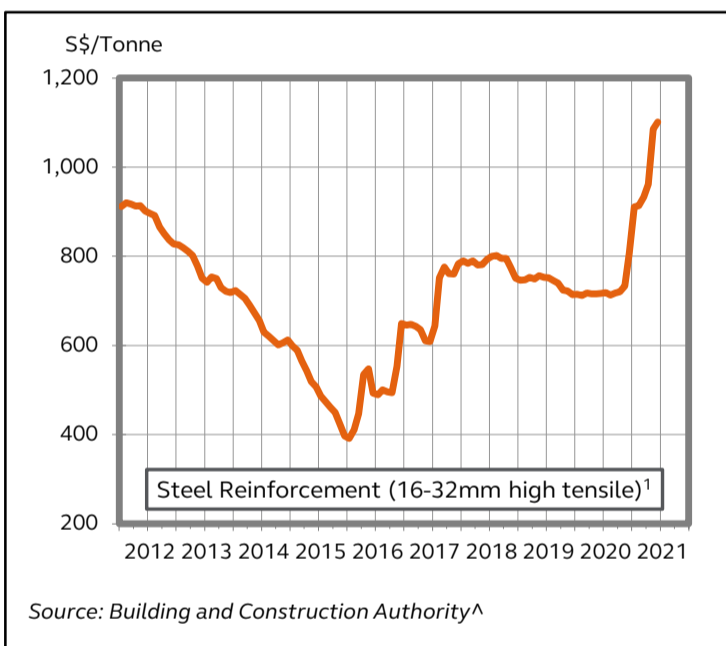
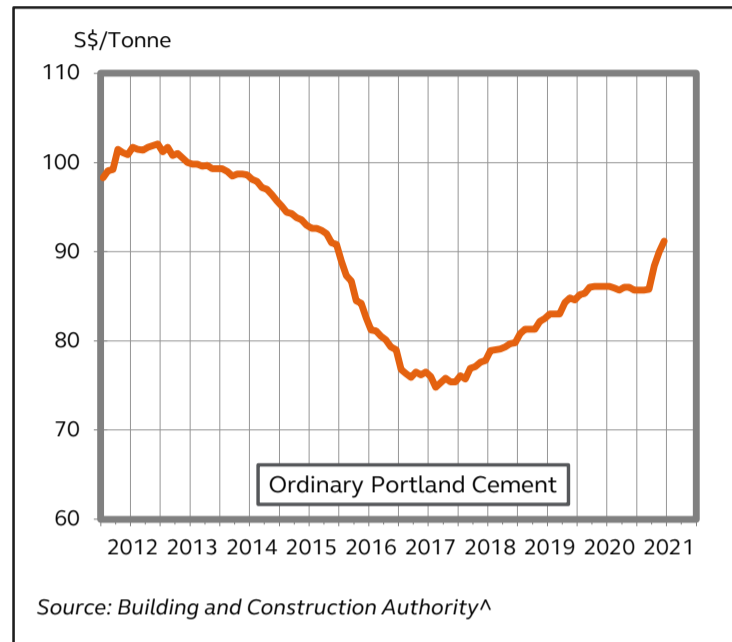
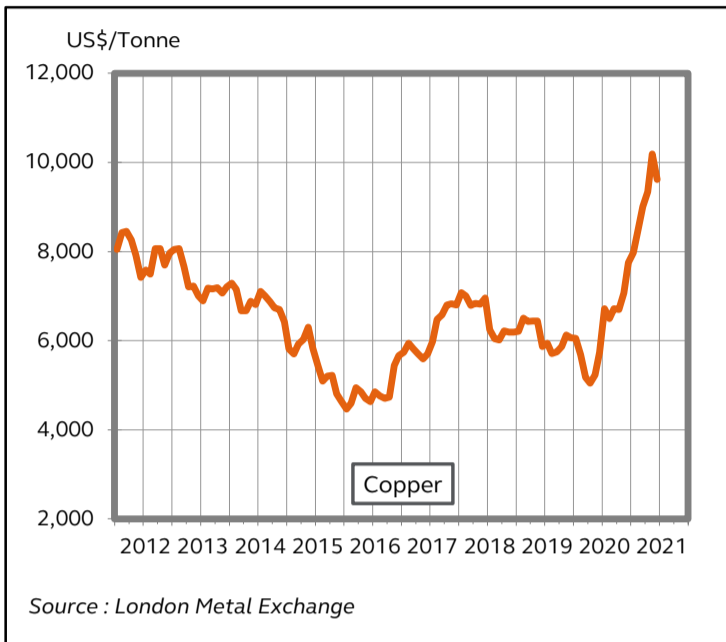
Year	2020	1Q21	2Q21
BCA*	102.8	110.8	116.1
Arcadis SG^	103.2	113.5	119.2

Source: * Building and Construction Authority (BCA TPI based on average for the whole year)
^ From 2009 onwards, Arcadis Singapore TPI based on 4th Quarter Index



4 Materials Singapore

Basic Construction Materials



Notes:

¹ Prices of rebar other than 16-32mm dimensions may subject to surcharge

¹ With effect from Jan 2015, the market prices of rebar (without cut & bend) are based on fixed price supply contracts with contract period 1 year or less

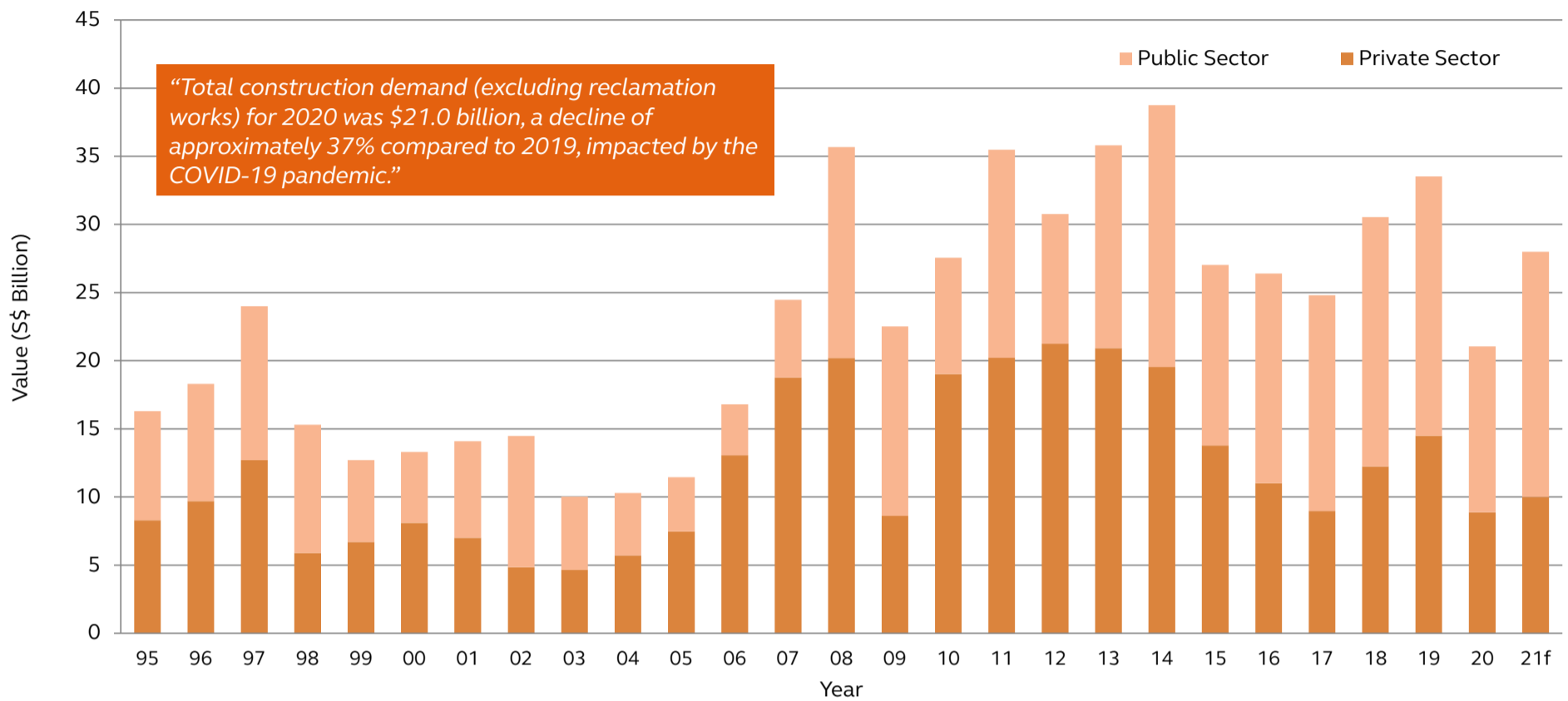
² Prices of granite and concreting sand exclude local delivery charges to concrete batching plants

³ The market prices of ready mixed concrete are based on contracts with non-fixed price, fixed price and market retail price for Grade 40 pump

[^] In view of the lack of business transactions for materials due to a stoppage/slowdown of most construction activities on the back of the Covid-19 fallout, the BCA construction material market prices in May, Jun and Jul 2020 (except for rebar prices in Jun and Jul 2020) are assumed unchanged from those of Apr 2020



5 Construction Demand Singapore



BCA Construction Demand (Excludes Reclamation Works) (S\$ Billion)												
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Private Sector	8.3	9.7	12.7	5.9	6.7	8.1	7.0	4.8	4.6	5.7	7.5	13.1
Public Sector	8.0	8.6	11.3	9.4	6.0	5.2	7.1	9.6	5.4	4.6	4.0	3.7
Total Value	16.3	18.3	24.0	15.3	12.7	13.3	14.1	14.5	10.0	10.3	11.5	16.8

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Private Sector	18.8	20.2	8.6	19.0	20.2	21.2	20.9	19.5	13.8	11.0	9.0	12.2
Public Sector	5.7	15.5	13.9	8.6	15.3	9.5	14.9	19.2	13.3	15.4	15.8	18.3
Total Value	24.5	35.7	22.5	27.6	35.5	30.8	35.8	38.8	27.0	26.4	24.8	30.5

	2019	2020	2021f	1Q21	2Q21p
Private Sector	14.5	8.9	8.0-10.0	2.3	3.1
Public Sector	19.0	12.2	15.0-18.0	3.5	5.6
Total Value	33.5	21.0	23.0-28.0	5.8	8.7

Source: Building and Construction Authority as at 23 August 2021

Notes:

1. Construction demand refers to the total value of construction contracts awarded. It is a leading market indicator for the construction industry.
2. p - denotes preliminary; f - denotes forecast



6 Approximate Building Costs For Major Cities

Asia

BUILDING TYPE	Shanghai	Beijing	Guangzhou/ Shenzhen	Chongqing/ Chengdu
	RMB/ m ² CFA			
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	3,171 - 3,615	2,885 - 3,327	2,868 - 3,162	2,816 - 3,261
- Full fit	5,185 - 5,714	4,565 - 5,014	4,475 - 4,925	4,305 - 5,084
Apartments, high rise, high end				
- Shell and core	3,812 - 4,129	3,437 - 4,986	2,993 - 3,896	3,481 - 4,509
- Full fit	11,707 - 12,759	11,056 - 12,590	7,202 - 7,880	6,951 - 8,681
Terraced houses, average standard				
- Shell and core	3,550 - 3,851	3,330 - 3,889	2,982 - 3,285	3,507 - 4,194
- Full fit	7,163 - 7,800	6,533 - 7,079	6,582 - 7,632	5,934 - 6,968
Detached houses, high end				
- Shell and core	5,220 - 5,769	5,015 - 5,581	4,151 - 4,572	4,596 - 5,246
- Full fit	12,596 - 13,360	12,555 - 13,101	12,625 - 14,347	7,551 - 8,577
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	6,650 - 8,790	6,510 - 8,766	6,193 - 6,900	6,854 - 7,877
High rise offices, prestige quality	8,544 - 11,688	10,578 - 14,397	9,137 - 11,021	8,643 - 11,488
Out-of-town shopping centre, average standard	N/A	4,866 - 6,504	5,967 - 6,547	5,543 - 7,015
Retail malls, high end	8,544 - 11,688	8,801 - 12,113	8,668 - 12,118	8,233 - 11,364
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	2,051 - 2,507	2,009 - 2,451	2,290 - 2,731	3,402 - 4,231
Owner operated factories, low rise, light weight industry	3,170 - 3,965	3,886 - 4,454	N/A	N/A
HOTELS				
Budget hotels - 3-star, mid market	7,276 - 8,873	7,198 - 8,871	7,923 - 8,715	7,421 - 9,072
Business hotels - 4/5-star	11,722 - 15,874	12,270 - 16,196	12,805 - 18,280	13,301 - 16,454
Luxury hotels - 5-star	15,852 - 18,952	15,618 - 20,100	17,409 - 19,187	16,372 - 19,467
OTHERS				
Underground/basement car parks (<3 levels)	5,436 - 7,578	5,560 - 6,113	4,054 - 6,470	3,266 - 4,524
Multi storey car parks, above ground (<4 levels)	2,786 - 3,889	3,347 - 3,382	2,892 - 3,193	2,604 - 3,183
Schools (primary and secondary)	4,154 - 5,244*	3,872 - 4,999*	3,245 - 3,570*	3,453 - 3,803*
Students' residences	3,042 - 4,147	2,738 - 3,872	2,050 - 2,262	2,417 - 3,457
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	7,008 - 8,606	6,631 - 6,687	5,656 - 6,222	5,447 - 5,971
General hospitals - public sector	10,707 - 13,805	8,717 - 10,916	8,569 - 10,711	8,705 - 10,778

The above costs are at 2nd Quarter 2021 levels.



6 Approximate Building Costs For Major Cities

Asia

BUILDING TYPE	Hong Kong	Macau	Singapore	Kuala Lumpur
	USD/ m ² CFA (See also exchange rates per U.S. dollar below)			
	HK\$ 7.79	MOP 7.98	S\$ 1.33	RM 4.15
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	N/A	1,842 - 2,729	N/A	N/A
- Full fit	2,990 - 3,460	2,371 - 2,901	1,655 - 1,805	315 - 615 \$
Apartments, high rise, high end				
- Shell and core	N/A	2,729 - 4,093	N/A	N/A
- Full fit	3,870 - 4,520	3,313 - 5,060	2,555 - 3,760	715 - 1,460
Terraced houses, average standard				
- Shell and core	N/A	3,232 - 4,013	N/A	N/A
- Full fit	4,080 - 4,720	4,041 - 4,822	2,145 - 2,370	225 - 360 \$
Detached houses, high end				
- Shell and core	N/A	3,907 - 5,629	N/A	N/A
- Full fit	5,970 up	4,929 - 6,412	2,705 - 3,610	755 - 1,025
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	2,950 - 3,390&	2,729 - 3,523	2,145 - 2,370@	595 - 785 \$\$\$
High rise offices, prestige quality	3,540 - 4,080	3,523 - 3,856	2,405 - 2,595@	930 - 1,330 \$\$\$\$
Out-of-town shopping centre, average standard	2,930 - 3,430	2,570 - 3,856	2,405 - 2,480	550 - 750
Retail malls, high end	3,790 - 4,520	4,041 - 4,875	2,555 - 2,780	695 - 1,050
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	N/A	N/A	975 - 1,165	325 - 450
Owner operated factories, low rise, light weight industry	2,270 - 2,850	N/A	N/A	440 - 540
HOTELS				
Budget hotels - 3-star, mid market	3,750 - 4,000	3,590 - 4,067	2,670 - 2,930	1,035 - 1,465
Business hotels - 4/5-star	3,880 - 4,530	4,875 - 5,828	3,420 - 3,835	1,350 - 2,270
Luxury hotels - 5-star	4,530 - 5,210	5,828 - 6,889	3,420 - 3,835	1,975 - 2,560
OTHERS				
Underground/basement car parks (<3 levels)	3,200 - 3,830	2,133 - 3,126	1,165 - 1,580	320 - 555
Multi storey car parks, above ground (<4 levels)	1,910 - 2,270	1,179 - 1,550	825 - 1,165@@	220 - 360
Schools (primary and secondary)	2,490 - 2,680*	2,358 - 2,729	N/A	250 - 320 \$\$\$\$
Students' residences	2,850 - 3,210	1,868 - 2,172	1,990 - 2,105	300 - 380 \$\$\$\$\$
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	3,740 - 4,270	N/A	2,445 - 2,595	600 - 760
General hospitals - public sector	4,750 - 5,280	N/A	3,420 - 3,610	850 - 1,215

Singapore: Rates are nett of GST
The above costs are at 2nd Quarter 2021 levels.



6 Approximate Building Costs For Major Cities

Asia

BUILDING TYPE	Bangkok	Bangalore	Manila	Ho Chi Minh
	USD/ m ² CFA (See also exchange rates per U.S. dollar below)			
	BAHT 33.41	INR 74.39	PHP 48.54	VND 23,450
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	527 - 673	535 - 595	N/A	N/A
- Full fit	724 - 858	614 - 684	1,020 - 1,438	663 - 822
Apartments, high rise, high end				
- Shell and core	614 - 796	785 - 935	N/A	N/A
- Full fit	966 - 1,189	924 - 1,110	1,417 - 2,614	843 - 967
Terraced houses, average standard				
- Shell and core	299 - 389	355 - 386	N/A	N/A
- Full fit	453 - 557	425 - 445	991 - 1,213	447 - 525
Detached houses, high end				
- Shell and core	524 - 748	468 - 500	N/A	N/A
- Full fit	785 - 949	557 - 588	1,924 - 3,264	510 - 622
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	801 - 951	474 - 525	1,009 - 1,259	775 - 897
High rise offices, prestige quality	1,002 - 1,285	597 - 641	1,460 - 1,841	894 - 1,218
Out-of-town shopping centre, average standard	684 - 885	464 - 515	858 - 1,069	N/A
Retail malls, high end	918 - 968	649 - 709	1,172 - 1,642	724 - 948
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	534 - 668	383 - 441	572 - 737	318 - 401
Owner operated factories, low rise, light weight industry	N/A	404 - 473	769 - 963	360 - 475
HOTELS				
Budget hotels - 3-star, mid market	1,252 - 1,385	865 - 950	1,281 - 1,429	1,438 - 1,760
Business hotels - 4/5-star	1,602 - 1,836	1,350 - 1,600	1,451 - 2,412	N/A
Luxury hotels - 5-star	1,869 - 2,170	1,705 - 1,870	1,992 - 3,835	1,816 - 2,179
OTHERS				
Underground/basement car parks (<3 levels)	601 - 801	304 - 330	601 - 792	658 - 785
Multi storey car parks, above ground (<4 levels)	200 - 327	252 - 273	510 - 735	423 - 464
Schools (primary and secondary)	N/A	314 - 350	752 - 1,037	556 - 607
Students' residences	N/A	352 - 388	795 - 1,021	556 - 714
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	N/A	638 - 670	1,270 - 1,848	822 - 879
General hospitals - public sector	N/A	689 - 755	1,527 - 1,771	N/A

Bangkok: Rates are nett of VAT.
 Bangalore: Rates are nett of GST.
 Manila: Rates include 12% VAT.
 Ho Chi Minh: Rates are nett of VAT.
 The above costs are at 2nd Quarter 2021 levels.



6 Approximate Building Costs For Major Cities

Asia

BUILDING TYPE	OUTLINE SPECIFICATION
DOMESTIC	
Apartments, high rise, average standard	<u>Shell and core</u> , including finishes to public area, but <u>excluding</u> finishes to apartment units <u>Full fit</u> , with air-conditioning, kitchen cabinets and home appliances, but <u>excluding</u> decorative light fittings and loose furniture
Apartments, high rise, high end	<u>Shell and core</u> , including finishes to public area, but <u>excluding</u> finishes to apartment units <u>Full fit</u> , good quality provisions, with air-conditioning, kitchen cabinets and home appliances, but <u>excluding</u> decorative light fittings and loose furniture
Terraced houses, average standard	<u>Shell and core</u> , joined houses in row(s), <u>excluding</u> garden, parking, finishes and fittings to house interior <u>Full fit</u> , joined houses in row(s), with air-conditioning, kitchen cabinets and home appliances, but <u>excluding</u> decorative light fittings, loose furniture, garden and parking
Detached houses, high end	<u>Shell and core</u> , good quality facade, <u>excluding</u> garden, parking, finishes and fittings to house interior <u>Full fit</u> , good quality provisions, with air-conditioning, kitchen cabinets and home appliances, but <u>excluding</u> decorative light fittings, loose furniture, garden and parking
OFFICE / COMMERCIAL	
Medium/high rise offices, average standard	RC structure, curtain wall, including public area fit-out, tenant area with raised floor/ carpet, painted wall and false ceiling
High rise offices, prestige quality	
Out-of-town shopping centre, average standard	Including public area fit-out and M&E, but <u>excluding</u> shop fit-out
Retail malls, high end	
INDUSTRIAL	
Industrial units, shell only (Conventional single storey framed unit)	RC structure with steel roof and M&E to main distribution, but <u>excluding</u> a/c, heating and lighting
Owner operated factories, low rise, light weight industry	RC structure, including small office with simple fit-out and M&E, but <u>excluding</u> a/c and heating
HOTELS	
Budget hotels - 3-star, mid market	1) Interior decoration
Business hotels - 4/5-star	2) Furniture (fixed and movable)
Luxury hotels - 5-star	3) Special light fittings (chandeliers, etc.)
	4) Operating Supplies and Equipment (OS&E) <u>excluded</u>
OTHERS	
Underground/basement car parks (<3 levels)	RC structure
Multi storey car parks, above ground (<4 levels)	RC structure, natural ventilation, no facade enclosure
Schools (primary and secondary)	Including fit-out and a/c, but <u>excluding</u> educational equipment
Students' residences	Including fit-out, loose furniture and a/c
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	Dry sports (no swimming pool) and are for 'leisure centre' type schemes including main sports hall, ancillary sports facilities, changing and showers, restaurant / cafe, bar, etc. Costs include a/c, Furniture, Fittings and Equipment (FF&E)
General hospitals - public sector	<u>Excluding</u> medical and operating equipment

Notes :

- The costs for the respective categories given above are averages based on fixed price competitive tenders. It must be understood that the actual cost of a building will depend upon the design and many other factors and may vary from the figures shown.
- The costs per square metre are based on Construction Floor Areas (CFA) measured to the outside face of the external walls / external perimeter including lift shafts, stairwells, balconies, plant rooms, water tanks and the like.
- All buildings are assumed to have no basements (except otherwise stated) and are built on flat ground, with normal soil and site conditions. The cost excludes site formation works, external works, land cost, professional fees, finance and legal expenses.
- The standard for each category of building varies from region to region and do not necessarily follow that of each other.
- "Shell and core" generally covers ONLY base building elements. "Shell" refers to overall structure and foundations, exterior walls, floors and roof, completing with common areas, staircases, lift shafts, service ducts and fire services systems to local statutory requirements. "Core" refers to fully-fitted public areas (like lobbies, corridors and lavatories) and M&E main plant and upfeed, with tenant or occupant areas unfurnished.
- "Full fit" buildings should complete with all elements that allow the buildings to be ready for operation, including public and tenants' (or occupants') areas (i.e. with ALL finishes, fittings and M&E distributions).
- Fluctuation in exchange rates may lead to changes in construction costs expressed in U.S. dollars.
- Shanghai, Beijing, Guangzhou/Shenzhen, Chongqing/Chengdu: * Public authority standard, no a/c and complete with basic external works.
- Hong Kong: & Excluding raised floor/ carpet and false ceiling but including screeded floor and painted ceiling * Public authority standard, no a/c and complete with basic external works.
- Singapore: @ Excluding carpet @@ Open on all sides with parapet.
- Kuala Lumpur: \$ 6-12 units per floor, 46m² - 83m² per unit; excluding air-conditioning equipment, kitchen cabinets and home appliances \$\$ Excluding air-conditioning, kitchen cabinets and home appliances \$\$\$ Exclude Tenant fit-out and raised floor \$\$\$\$ Exclude Tenant fit-out \$\$\$\$\$ Standard government provisions \$\$\$\$\$\$ University standard.
- The data for Bangalore / India is provided by Arkind LS Private Limited, an Arcadis Alliance Partner.



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