

# SINGAPORE

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## QUARTERLY CONSTRUCTION COST REVIEW







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# SINGAPORE MARKET OVERVIEW

The Ministry of Trade and Industry (MTI) has announced that the Singapore economy has contracted by 5.8% on a year-on-year basis in 3Q2020, moderated from the worst Gross Domestic Product (GDP) year-on-year growth of -13.3% recorded in 2Q2020.

On a quarter-on-quarter basis, the Singapore economy expanded by 9.2% in 3Q2020, rebounded from the 13.2% contraction in 2Q2020. The improved performance was driven by the phase two reopening from 2 June 2020.

The construction sector is significantly impacted by the COVID-19 pandemic. It plummeted 46.6% year-on-year in 3Q2020, continuing from the 60.0% contraction in the preceding quarter mainly due to the slower than expected resumption of construction activities resulting from the COVID-Safe Restart Criteria implemented on 2 June 2020 to ensure compliance and practise Safe Management Measures (SMM) on construction worksites.

Taking into account the weakened global and domestic economic situation, as well as the Singapore economy performance in the first three quarters of the year, the Government has narrowed the GDP forecast for 2020 to “-6.5 to -6.0 per cent”, from “-7.0 to -5.0 per cent”.

According to MTI's press release, the Singapore economy is projected to grow by “4.0 to 6.0 per cent” in the year ahead. However, the recovery is expected to be moderate as it will depend largely on the performance of the global economy as well as whether Singapore is able to continue to maintain the COVID-19 situation under control locally.

In view of the lack of representative data due to insufficient tenders returned in 3Q2020 as many of the private sector projects are put on hold and developers are taking a cautious “wait-and-see” approach on how the COVID-19 situation will evolve. As a result, Arcadis Singapore TPI for 3Q2020 is assumed to remain unchanged from 1Q/2Q2020.

Nonetheless, based on market feedback, there is an upward cost trend from 1Q2020 to 3Q2020 mainly driven by the gradual resumption, new norm including safe distancing measures, impact on loss of productivity and labour availability.

Moving forward, as most of the contractors are still focusing to complete their existing projects and coupled with the reduction of new projects in the pipeline, it is anticipated that the higher cost is likely to remain in 4Q2020 and into 1Q2021.

Construction cost in the next 6 to 12 months is anticipated to increase by an estimated 10% or more where the actual level is dependent on the prevailing market sentiment and COVID-19 situation.

## MARKET MOVEMENT



### ECONOMY

Indicator	Q3/18 - Q3/19	Q2/19 - Q2/20	Q3/19 - Q3/20
GDP Growth per annum	(+) 0.7%	(-) 13.3%	(-) 5.8%
Inflation Rate (CPI) per annum	Sep 18 - 19 (+) 0.4%	Jun 19 - 20 (-) 0.5%	Sep 19 - 20 (-) 0.01%

Source: Ministry of Trade and Industry



### SUPPLY & DEMAND

Indicator	Q3/19	Q2/20	Q3/20
BCA Construction Demand	S\$9.62 Bn	S\$5.98 Bn	S\$2.67 Bn
BCA Construction Output	S\$6.95 Bn	S\$3.40 Bn	S\$3.47 Bn

Source: Building and Construction Authority



### BASIC COSTS

Indicator	Jul 20	Aug 20	Sep 20
BCA Concrete Price Index	121.6*	121.6	121.6
BCA Steel Reinforcement Price Index	93.7	93.0	93.7

Source: Building and Construction Authority

\* 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 concrete price index in Jul 2020 is assumed unchanged from that of Apr 2020.



### CONSTRUCTION COST TREND

Indicator	Q3/19	Q2/20	Q3/20
BCA Tender Price Index	99.8	101.0^	102.7^
Arcadis Singapore Tender Price Index	101.2	100.2#	100.2#

Source: Building and Construction Authority

^ The BCA TPI sub-indices for 2Q20 (all categories) and 3Q20 (all except Public Residential) 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 and 3Q20 are assumed unchanged from 1Q20 in view of a lack of representative data due to insufficient tenders





# 1 MARKET ANALYSIS

## SINGAPORE'S CONSTRUCTION DEMAND

On 17 September 2020, the Building and Construction Authority (BCA) has revised its projected construction demand for 2020 from the earlier forecast of \$28-\$33 billion announced in January 2020 to \$18-\$23 billion.

The public sector construction demand has been revised to \$11-\$14 billion and private sector construction demand to \$7-\$9 billion. The downward revision is due to a decline in private sector construction demand as well as postponements in the award of some public sector projects from 2020 to 2021.

According to BCA's preliminary data, total construction demand (based on actual contracts awarded) in 3Q2020 declined by 55% to \$2.7 billion as compared to \$6.0 billion in 2Q2020.

Private sector construction demand shrank 47% to \$1.1 billion in 3Q2020 as compared to \$2.0 billion in 2Q2020. Similarly, public sector construction demand shrank by 59% to \$1.6 billion in 3Q2020 as compared to \$4.0 billion in 2Q2020.

Source: Building and Construction Authority

## \$20 MILLION ADVANCED DIGITAL SOLUTIONS (ADS) SCHEME

The Infocomm Media Development Authority (IMDA) and BCA are working together to support construction companies' efforts to safely re-start construction works and accelerate digitalisation to improve productivity.

The \$20 million ADS scheme was announced as part of the Resilience Budget 2020 to provide funding support for enterprises that adopt integrated ADS to reduce reliance on manpower, minimise face-to-face contact, enhance productivity and ensure business continuity.

The digital solutions for the construction sector are classified as Category A and Category B. These solutions will be integrated on the BuildSG-COVIDSafe platform (CSP), a single digital platform to facilitate the exchange of data from on-site management platforms and equipment with other government databases to help firms ensure compliance of safe measurement measures. The CSP will also highlight irregularities for early intervention.

Local construction companies can receive funding for up to 80% of the cost of the integrated digital solutions, subject to a cap of \$200,000 per company.

The table below shows the digital solutions for the two categories and respective funding caps:

Category A Safely Re-open	Category B Building Business Resilience
Digital solutions to meet the COVID-Safe Restart Criteria as defined by BCA ( <a href="https://www1.bca.gov.sg/docs/default-source/bca-restart/covid-safe-restart-criteria.PDF">https://www1.bca.gov.sg/docs/default-source/bca-restart/covid-safe-restart-criteria.PDF</a> )	Digital solutions to digitalise workflows and reduce reliance on manpower (e.g. e-Permit-To-Work, Defect Tracking Management and Quality Inspection)
(e.g. visitor management with temperature scanning, smart cameras with video analytics and wearables to monitor safe distancing)	(Note: Only companies applying for Category A solutions can apply for Category B solutions)
Cap of \$20,000 per site, for up to 5 existing construction sites	Cap of \$24,000 per site, for up to the same 5 existing sites where Category A solutions are implemented

To qualify for ADS funding, construction sector companies need to fulfil the following criteria:

- Be registered and operating in Singapore;
- Have a minimum of 30% local shareholding; and
- Be in a financially viable position to start and complete the project.

The duration of solution implementation per construction site must not be longer than 12 months. The digital solutions have to be implemented by 31 December 2021.

For more information, please refer to BCA's media release: <https://www1.bca.gov.sg/about-us/news-and-publications/media-releases/2020/09/01/recovering-stronger-from-covid-19-through-innovation-and-digitalisation> dated 1 September 2020.

## COVID-19 (TEMPORARY MEASURES) ACT 2020 – FURTHER SUPPORT FOR THE CONSTRUCTION SECTOR

The Singapore Government has introduced further reliefs in the COVID-19 (Temporary Measures) Act 2020 ("the Act") to support contractors and suppliers affected by the disruptions and delays to a material extent caused by a COVID-19 event:

### A. Construction Goods Rental Relief [COTMA Part 8 – effective from 30 September 2020]

Part 8 of the Act provides contractors relief from liability to pay additional rental of construction goods under the affected contracts occasioned by COVID-19 related delays. Key provisions are summarised as follows:

<b>Affected Contracts</b>	<ul style="list-style-type: none"> <li>• Construction goods rental contracts that:               <ul style="list-style-type: none"> <li>– entered into before 25 March 2020; and</li> <li>– remains in force at any time between 1 February 2020 and 31 March 2021 (both dates inclusive).</li> </ul> </li> <li>• Construction goods refers to plant or materials for use in connections with the carrying out of construction works, e.g. scaffolding, plant and equipment, etc.</li> </ul>
<b>Relief from Additional Rental Expense</b>	<ul style="list-style-type: none"> <li>• Contractor is entitled to apply for relief from liability to pay additional rental occasioned by COVID-19 related delays.</li> <li>• Such additional rental expenses:               <ul style="list-style-type: none"> <li>– is due to a delay in the construction contract which is materially caused by COVID-19 event occurred between 1 February 2020 and 31 March 2021 (both dates inclusive); and</li> <li>– could not have avoided the additional rental expenses by taking reasonable steps.</li> </ul> </li> </ul>

### Application for Relief under Part 8

- The applicant for relief must be a party to the construction goods rental contract.
- Application for relief must be made before 31 May 2021 and in accordance with the procedures and requirements set out in <https://www.mlaw.gov.sg/covid19-relief/key-steps-in-part8>

### B. Completion Date Extension [COTMA Part 8A – effective from 30 November 2020]

Part 8A of the Act provides for a universal Extension of Time ("EOT") of 122 days for eligible construction contracts:

#### Eligible Construction Contracts

- Construction contracts that:
  - entered into before 25 March 2020;
  - remained in force on 2 November 2020; and
  - where, as at 7 April 2020, any works to be performed under the contract were not certified as completed, and
- **Excludes** construction contracts where:
  - construction works were carried out between 20 April 2020 and 30 June 2020 (both dates inclusive).
- Over and above the provisions under the Act, the Government initiated the following further reliefs for public sector projects:
  - Government Procuring Entities ("GPEs") shall continue to provide reliefs to construction contracts entered into on or after 25 March 2020 but with their tenders closed on or before 1 June 2020.
  - For construction contracts in which it has been assessed that works have been carried out between 20 April 2020 and 30 June 2020 (both dates inclusive), GPEs shall continue to assess and provide appropriate EOT for any delay in works occurring between 7 April 2020 and 6 August 2020 (both dates inclusive).

#### Universal Extension of Time ("EOT") of 122 Days

- Completion date for the eligible construction contracts will automatically be granted 122 days EOT ("Universal EOT") period between 7 April 2020 and 6 August 2020 (both dates inclusive). Contractor is not required to make any application for the Universal EOT.
- The 122 days reflects the suspension of work period arising from the Government's Circuit Breaker order and worker supplies disruption pending clearance of the migrant worker dormitories.
- Such Universal EOT period shall be adjusted for any concurrent contractual EOT period (between 7 April 2020 and 6 August 2020) that has already been granted or agreed between the parties to eliminate any double recovery of EOT.
- The Universal EOT does not apply to construction contracts where:
  - construction works were actually performed at any time between 20 April 2020 and 30 June 2020; or
  - court, arbitral, or tribunal proceedings regarding a failure to comply with the completion date commenced before 2 November 2020; or
  - judgement, arbitral award or settlement entered as a result of such proceeding in relation to failure to comply with the completion date, has been given or made before 2 November 2020.

### C. Temporary Measures for Cost Sharing in Construction Contracts [COTMA Part 8B – effective from 30 November 2020]

Part 8B of the Act requires contracting parties to co-share certain prolongation costs sustained or incurred arising from delays to a material extent caused by a COVID-19 event:

#### Eligible Construction Contracts

- Construction contracts that:
  - entered into before 25 March 2020;
  - remained in force on 2 November 2020;
  - Client/Owner/Employer for whom the construction works are performed under the construction contract is not an individual; and
  - where, as at 7 April 2020, any works to be performed under the contract were not certified as completed.

#### Co-sharing of Qualifying Costs

- Over and above the provisions under the Act, the Government initiated further relief to public sector projects, GPEs shall continue to provide reliefs to construction contracts entered into on or after 25 March 2020 but with their tenders closed on or before 1 June 2020.
- Contractors are entitled to claim 50% of the qualifying costs incurred, up to 0.2% of the awarded contract sum per month, for the prolongation period to a material extent caused by a COVID-19 event.
- Co-sharing will cover qualifying costs incurred for COVID-19 related delays period between 7 April 2020 and 31 March 2021 (both dates inclusive).
- Total amount of co-sharing of the qualifying costs payable is capped at 1.8% of awarded contract sum.
- Qualifying costs items will include:
  - Rental or hire-purchase instalment of plant and equipment;
  - Site maintenance costs;
  - Costs to extend project insurance and performance bond;
  - Storage costs;
  - Any other cost as may be prescribed under the Act, but **exclude**:
    - manpower costs (salaries, accommodation, transport, levies, etc.);
    - acceleration costs;
    - cost of safe management measures;
    - costs for which the contractor has received relief;
    - Any other cost as may be prescribed under the Act.
- Contractor is entitled to include the claim for the co-sharing of the qualifying costs in their regular progress payment claim.
- Over and above the provisions under the Act, the Government initiated further relief to public sector projects by including contractor-owned equipment costs as part of the co-shared cost items.

For more details, information and updates on the reliefs and processes under Part 8, 8A and Part 8B of the COVID-19 (Temporary Measures) Act 2020, please refer to BCA's website.



# 2 APPROXIMATE BUILDING COSTS

## SINGAPORE

BUILDING TYPE	S\$/m <sup>2</sup> CFA
<b>RESIDENTIAL</b>	
Terraced Houses	2,400 - 2,650
Semi-Detached Houses	2,600 - 3,000
Detached Houses	3,050 - 4,000
Average Standard Condominium	1,850 - 2,050
Above Average Standard Condominium	2,100 - 2,800
Luxury Condominium	2,850 - 4,200
<b>OFFICE</b>	
Average Standard Offices	2,400 - 2,650
Prestige Offices	2,700 - 2,900
<b>COMMERCIAL</b>	
Shopping Centres, Average Quality	2,700 - 2,800
Shopping Centres, High Quality	2,850 - 3,100
<b>CAR PARKS</b>	
Multi-Storey Car Parks	900 - 1,280
Basement Car Parks	1,300 - 1,730
<b>INDUSTRIAL</b>	
Flatted Light Industrial Buildings	1,250 - 1,380
Flatted Heavy Industrial Buildings	1,400 - 1,880
Single Storey Industrial Buildings	1,150 - 1,280
Flatted Warehouses	1,150 - 1,280
Single Storey Warehouses	1,050 - 1,280
<b>HOTEL (INCLUDING FURNITURE AND FITTINGS)</b>	
3-Star Hotels	3,000 - 3,250
4-Star Hotels	3,200 - 3,750
5-Star Hotels	3,850 - 4,300
<b>HEALTH</b>	
Private Hospitals	3,850 - 4,000
Polyclinics, Non Air-conditioned	1,650 - 1,800
Nursing Homes, Non Air-conditioned	1,650 - 1,900
Medical Centres	2,950 - 3,100

The above costs are at 3rd Quarter 2020 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
- Cost impact arising from COVID-19 pandemic

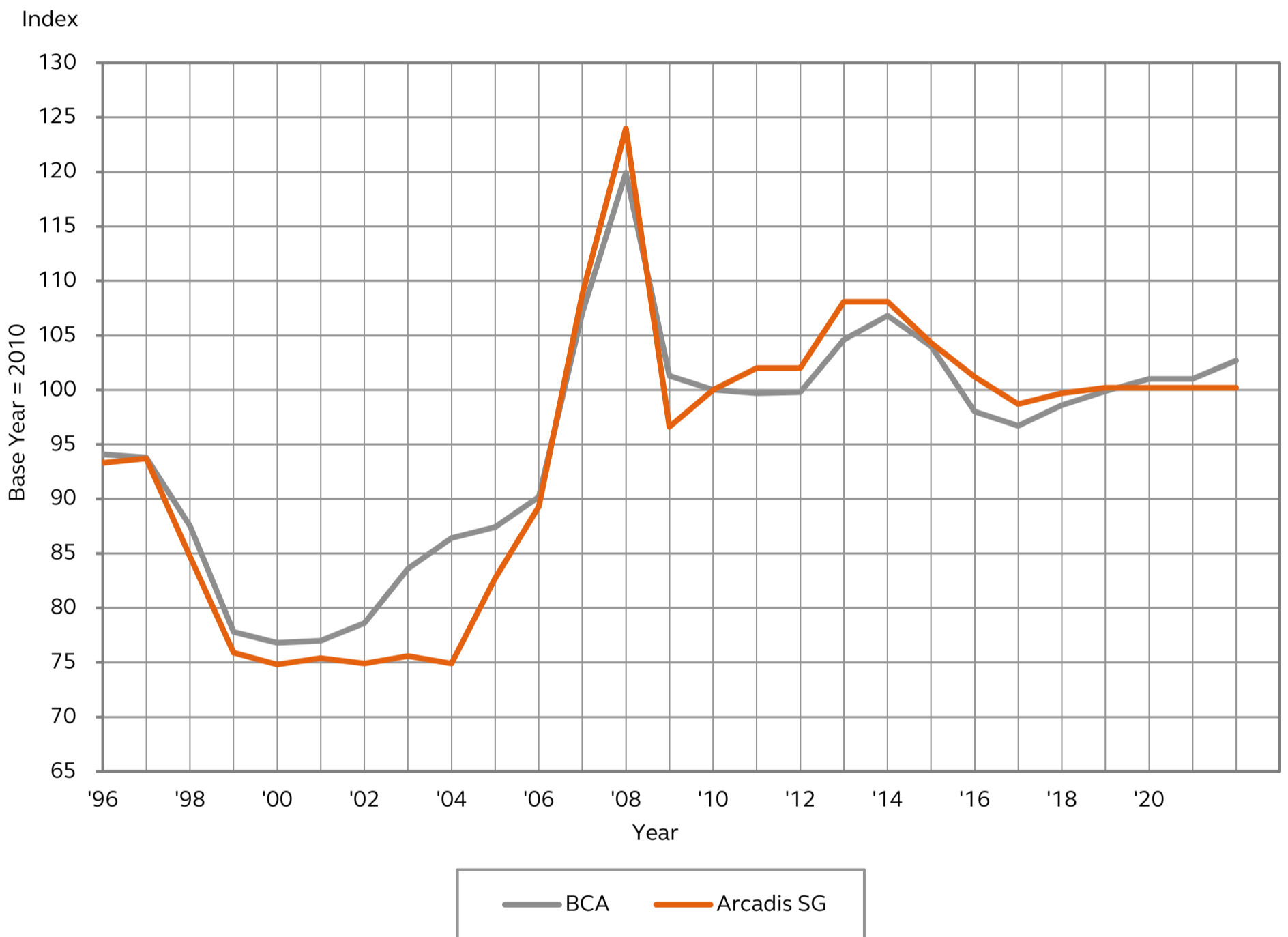
In view of the slowdown in tender activities in 2Q and 3Q 2020 due to Circuit Breaker measures implemented from 7 April to 1 June 2020 as well as the postponement of projects especially from the private sectors as developers are taking a cautious "wait-and-see" approach on how the situation will evolve, have led to insufficient tenders received. As such, we have assumed the unit rates for 2Q and 3Q 2020 are assumed to remain unchanged from 1Q 2020.



# 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	1Q20	2Q20	3Q20
BCA*	101.0	101.0 <sup>#</sup>	102.7 <sup>#</sup>
Arcadis SG^	100.2	100.2 <sup>##</sup>	100.2 <sup>##</sup>

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

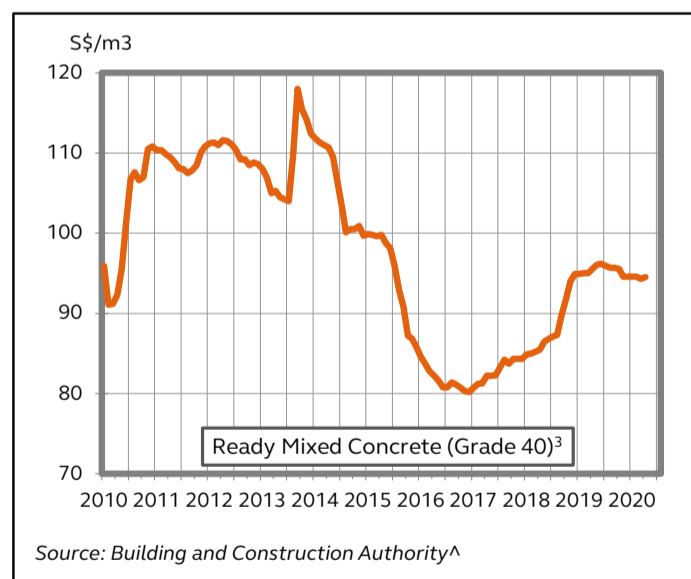
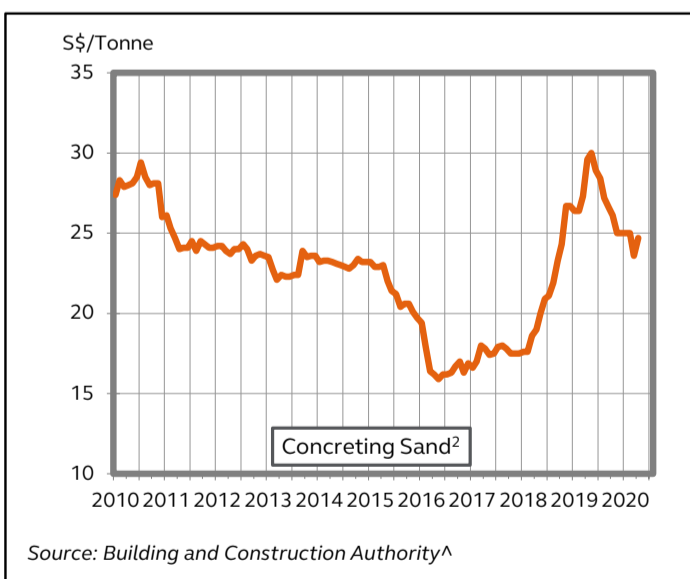
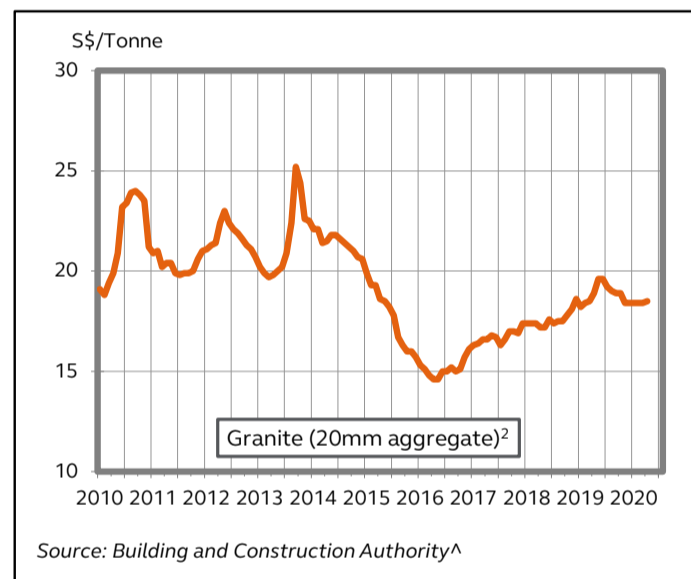
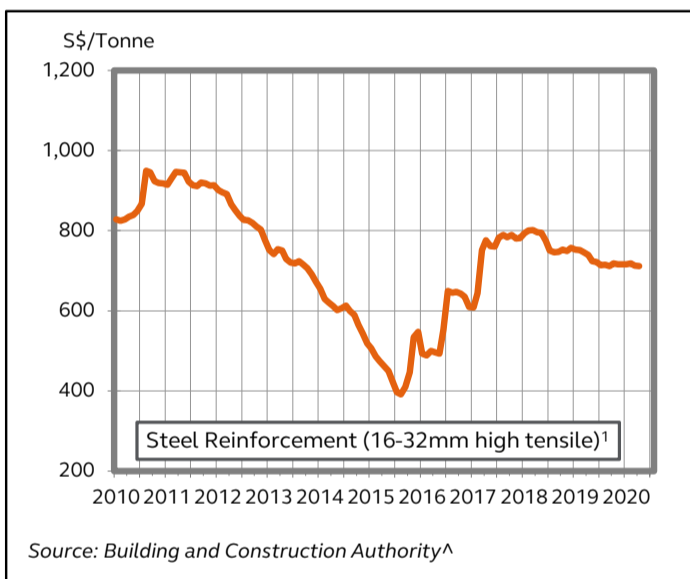
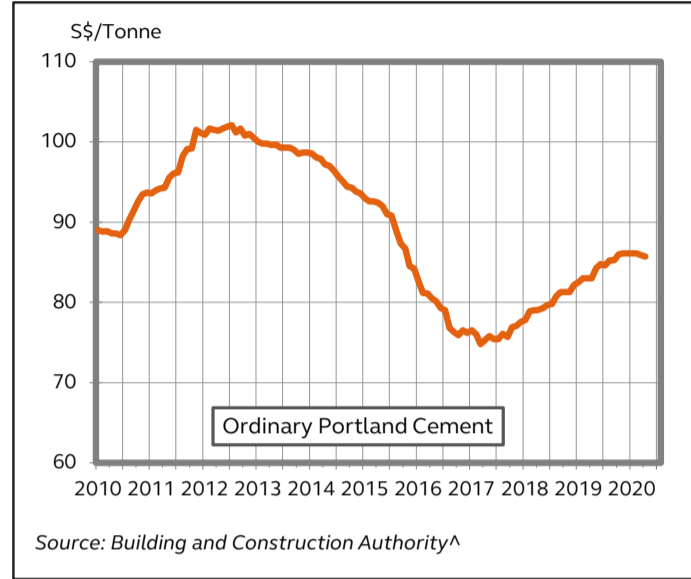
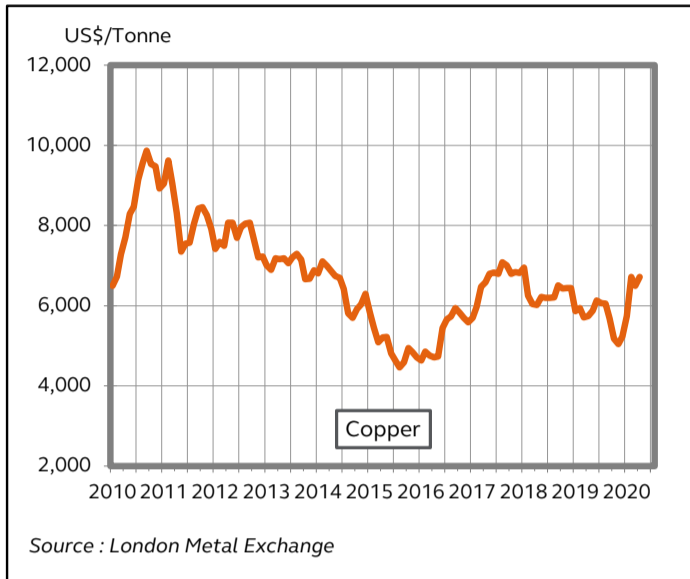
# The BCA TPI sub-indices for 2Q20 (all categories) and 3Q20 (all except Public Residential) are assumed unchanged from 1Q20 in view of a lack of representative data due to insufficient tenders for new works awarded during this period

## Arcadis Singapore TPI for 2Q20 and 3Q20 are assumed unchanged from 1Q20 in view of a lack of representative data due to insufficient tenders



# 4 MATERIALS SINGAPORE

## Basic Construction Materials



### Notes:

<sup>1</sup> Prices of rebar other than 16-32mm dimensions may subject to surcharge

<sup>1</sup> 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

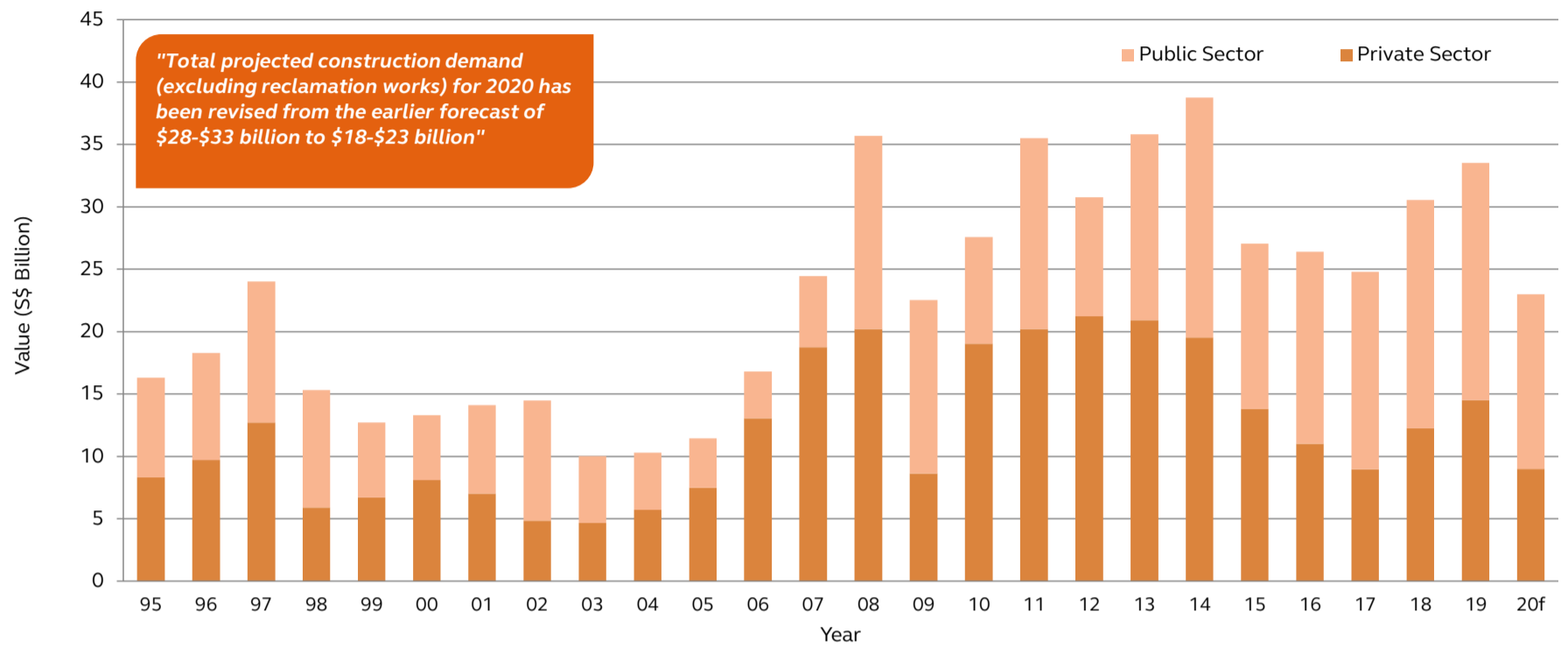
<sup>2</sup> Prices of granite and concreting sand exclude local delivery charges to concrete batching plants

<sup>3</sup> 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

<sup>^</sup> 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	2020f	1Q20	2Q20	3Q20
Private Sector	14.5	7.0 - 9.0	3.1	2.0	1.1
Public Sector	19.0	11.0 - 14.0	3.4	4.0	1.6
Total Value	33.5	18.0 - 23.0	6.5	6.0	2.7

Source: Building and Construction Authority

**Notes:**

1. Construction demand refers to the total value of construction contracts awarded. It is a leading market indicator for the construction industry.
2. f - denotes forecast (as at September 2020)





# 6 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

## ASIA

BUILDING TYPE	Shanghai	Beijing	Guangzhou/ Shenzhen	Chongqing/ Chengdu
	RMB/ m2 CFA			
<b>DOMESTIC</b>				
<b>Apartments, high rise, average standard</b>				
- Shell and core	2,960 - 3,375	2,719 - 3,136	2,652 - 2,924	2,631 - 3,063
- Full fit	4,887 - 5,386	4,305 - 4,727	3,857 - 4,246	3,981 - 4,737
<b>Apartments, high rise, high end</b>				
- Shell and core	3,559 - 3,855	3,240 - 4,700	2,767 - 3,602	3,213 - 4,212
- Full fit	11,035 - 12,027	10,423 - 11,870	6,217 - 6,800	6,445 - 8,124
<b>Terraced houses, average standard</b>				
- Shell and core	3,346 - 3,561	3,139 - 3,666	2,811 - 3,096	3,238 - 3,905
- Full fit	N/A	6,158 - 6,677	N/A	N/A
<b>Detached houses, high end</b>				
- Shell and core	4,873 - 5,386	4,727 - 5,261	3,838 - 4,227	4,252 - 4,883
- Full fit	N/A	11,835 - 12,352	N/A	N/A
<b>OFFICE/COMMERCIAL</b>				
Medium/high rise offices, average standard	6,208 - 8,206	6,019 - 8,105	5,392 - 5,968	6,321 - 7,314
High rise offices, prestige quality	8,054 - 10,045	9,783 - 13,309	7,856 - 9,445	7,987 - 10,749
Out-of-town shopping centre, average standard	N/A	4,586 - 6,131	5,198 - 5,704	5,100 - 6,529
Retail malls, high end	8,540 - 11,017	8,295 - 11,420	7,551 - 10,556	7,605 - 10,645
<b>INDUSTRIAL</b>				
Industrial units, shell only (Conventional single storey framed units)	1,933 - 2,363	1,896 - 2,311	3,449 - 3,797	3,106 - 3,911
Owner operated factories, low rise, light weight industry	2,988 - 3,737	3,666 - 4,200	N/A	N/A
<b>HOTELS</b>				
Budget hotels - 3-star, mid market	6,858 - 8,364	6,785 - 8,365	6,836 - 7,522	6,849 - 8,452
Business hotels - 4/5-star	11,049 - 14,963	11,343 - 14,974	11,047 - 15,773	12,324 - 15,385
Luxury hotels - 5-star	14,942 - 17,864	14,447 - 18,584	15,024 - 16,558	15,183 - 18,188
<b>OTHERS</b>				
Underground/basement car parks (<3 levels)	5,124 - 7,143	5,239 - 5,759	3,560 - 5,690	3,016 - 4,238
Multi storey car parks, above ground (<4 levels)	2,626 - 3,666	3,154 - 3,189	2,547 - 2,804	2,399 - 2,961
Schools (primary and secondary)	3,916 - 4,943	3,652 - 4,713	2,825 - 3,110	3,190 - 3,530
Students' residences	2,867 - 3,909	2,585 - 3,652	1,832 - 2,061	N/A
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	6,606 - 8,112	6,251 - 6,300	5,233 - 5,774	N/A
General hospitals - public sector	10,092 - 13,013	8,217 - 10,289	N/A	N/A

The above costs are at 3rd Quarter 2020 levels.



# 6 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

## ASIA

BUILDING TYPE	Hong Kong	Macau	Singapore	Kuala Lumpur
	USD/ m2 CFA (See also exchange rates per U.S. dollar below)			
	HK\$ 7.75	MOP 8.060	S\$ 1.37	RM 4.16
<b>DOMESTIC</b>				
<b>Apartments, high rise, average standard</b>				
- Shell and core	N/A	1,748 - 2,591	N/A	N/A
- Full fit	3,019 - 3,484	2,250 - 2,754	1,350 - 1,495	300 - 585 \$
<b>Apartments, high rise, high end</b>				
- Shell and core	N/A	2,591 - 3,885	N/A	N/A
- Full fit	3,897 - 4,542	3,143 - 4,803	2,080 - 3,065	700 - 1,370
<b>Terraced houses, average standard</b>				
- Shell and core	N/A	3,068 - 3,810	N/A	N/A
- Full fit	4,103 - 4,748	3,835 - 4,577	1,750 - 1,935	215 - 345 \$\$
<b>Detached houses, high end</b>				
- Shell and core	N/A	3,709 - 5,344	N/A	N/A
- Full fit	6,013 up	4,678 - 6,086	2,225 - 2,920	725 - 985
<b>OFFICE/COMMERCIAL</b>				
Medium/high rise offices, average standard	2,968 - 3,406*	2,591 - 3,345	1,750 - 1,935@	565 - 745 \$\$\$
High rise offices, prestige quality	3,561 - 4,103	3,345 - 3,659	1,970 - 2,115@	855 - 1,260 \$\$\$
Out-of-town shopping centre, average standard	2,955 - 3,458	2,440 - 3,659	1,970 - 2,045	540 - 720
Retail malls, high end	3,819 - 4,542	3,835 - 4,627	2,080 - 2,265	670 - 1,005
<b>INDUSTRIAL</b>				
Industrial units, shell only (Conventional single storey framed units)	N/A	N/A	765 - 935	315 - 435
Owner operated factories, low rise, light weight industry	2,284 - 2,865	N/A	N/A	425 - 525
<b>HOTELS</b>				
Budget hotels - 3-star, mid market	3,781 - 4,026	3,408 - 3,860	2,190 - 2,370	1,000 - 1,405
Business hotels - 4/5-star	3,910 - 4,555	4,627 - 5,533	2,810 - 3,140	1,320 - 2,185
Luxury hotels - 5-star	4,555 - 5,239	5,533 - 6,539	2,810 - 3,140	1,905 - 2,445
<b>OTHERS</b>				
Underground/basement car parks (<3 levels)	3,213 - 3,845	2,024 - 2,967	950 - 1,265	310 - 530
Multi storey car parks, above ground (<4 levels)	1,923 - 2,284	1,119 - 1,472	655 - 935@@	215 - 345
Schools (primary and secondary)	2,503 - 2,697**	2,238 - 2,591	N/A	245 - 310 \$\$\$\$
Students' residences	2,865 - 3,239	1,773 - 2,062	1,605 - 1,715	290 - 365 \$\$\$\$\$
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	3,755 - 4,284	N/A	2,005 - 2,115	585 - 730
General hospitals - public sector	4,774 - 5,303	N/A	2,810 - 2,920	840 - 1,155

The above costs are at 3rd Quarter 2020 levels.





# 6 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

## ASIA

BUILDING TYPE	Bangkok	Bangalore	Manila	Ho Chi Minh
	USD/ m2 CFA (See also exchange rates per U.S. dollar below)			
	BAHT 31.66	INR 74.39	PHP 48.94	VND 23,500
<b>DOMESTIC</b>				
<b>Apartments, high rise, average standard</b>				
- Shell and core	557 - 715	520 - 580	N/A	N/A
- Full fit	764 - 905	585 - 665	1,009 - 1,422	638 - 791
<b>Apartments, high rise, high end</b>				
- Shell and core	653 - 842	765 - 910	N/A	N/A
- Full fit	1,019 - 1,254	880 - 1,060	1,363 - 2,590	812 - 931
<b>Terraced houses, average standard</b>				
- Shell and core	319 - 413	345 - 375	N/A	N/A
- Full fit	478 - 587	405 - 425	983 - 1,203	430 - 505
<b>Detached houses, high end</b>				
- Shell and core	557 - 794	460 - 490	N/A	N/A
- Full fit	828 - 1,000	530 - 560	1,909 - 3,237	491 - 599
<b>OFFICE/COMMERCIAL</b>				
Medium/high rise offices, average standard	764 - 905 #	460 - 500	999 - 1,236	746 - 864
High rise offices, prestige quality	956 - 1,223 ##	580 - 610	1,446 - 1,823	861 - 1,173
Out-of-town shopping centre, average standard	653 - 842	450 - 490	849 - 1,058	N/A
Retail malls, high end	876 - 921	630 - 675	1,160 - 1,626	697 - 913
<b>INDUSTRIAL</b>				
Industrial units, shell only (Conventional single storey framed units)	510 - 635	365 - 420	566 - 633	306 - 386
Owner operated factories, low rise, light weight industry	N/A	385 - 450	761 - 951	347 - 457
<b>HOTELS</b>				
Budget hotels - 3-star, mid market	1,194 - 1,318	865 - 960	1,269 - 1,415	1,384 - 1,694
Business hotels - 4/5-star	1,529 - 1,747	1,350 - 1,600	1,430 - 2,389	N/A
Luxury hotels - 5-star	1,784 - 2,064	1,705 - 1,870	1,965 - 3,783	1,748 - 2,098
<b>OTHERS</b>				
Underground/basement car parks (<3 levels)	573 - 762	295 - 320	594 - 783	633 - 756
Multi storey car parks, above ground (<4 levels)	191 - 311	245 - 265	504 - 725	407 - 447
Schools (primary and secondary)	N/A	305 - 340	744 - 1,026	535 - 584
Students' residences	N/A	335 - 370	787 - 1,010	535 - 687
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	N/A	620 - 650	1,259 - 1,831	791 - 846
General hospitals - public sector	N/A	675 - 740	1,512 - 1,753	N/A

The above costs are at 3rd Quarter 2020 levels.



# 6 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

## ASIA

BUILDING TYPE	OUTLINE SPECIFICATION
<b>DOMESTIC</b>	
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
<b>OFFICE / COMMERCIAL</b>	
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	
<b>INDUSTRIAL</b>	
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
<b>HOTELS</b>	
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) excluded
<b>OTHERS</b>	
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	Excluding 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.
- Hong Kong: \* (i) Tenant areas include screeded floor, painted wall and ceiling (ii) Facade in curtain wall/window wall \*\* 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, 46m<sup>2</sup> - 83m<sup>2</sup> per unit; excluding air-conditioning \$\$ Excluding air-conditioning, Kitchen cabinets and home appliances \$\$\$ Exclude Tenant fit-out \$\$\$\$ Standard government provisions \$\$\$\$\$ University standard.
- Bangkok: # (i) Excluding raised floor/carpet and inter-tenancy partition (ii) Facade in windows and brick wall/pre-cast concrete panel ## Excluding raised floor/carpet and inter-tenancy partition.
- The data for Bangalore / India is provided by Arkind LS Private Limited, an Arcadis Alliance Partner.



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