

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 is expected to grow by “0.5% to 1.0%” in 2019 and by “0.5% to 2.5%” in 2020.

The Singapore economy grew by 0.5% year-on-year in 3Q2019 slightly higher than the 0.2% growth in the previous quarter.

The construction sector has performed well with its third consecutive quarter of year-on-year growth. It expanded by 2.9% year-on-year supported by increased construction activities.

Based on Arcadis Singapore’s data, tender prices for 3Q2019 have remained relatively stable as compared to 2Q2019. Looking ahead, tender prices are anticipated to decline moderately attributed by contractors’ competitive tender bidding to fill up their order books amidst uncertainties in the global economy.

MARKET MOVEMENT



ECONOMY

Indicator	Q3/17 - Q3/18	Q2/18 - Q2/19	Q3/18 - Q3/19
GDP Growth per annum	(+) 2.6%	(+) 0.2%	(+) 0.5%
Inflation Rate (CPI) per annum	Sep 17 - 18 (+) 0.7%	Jun 18 - 19 (+) 0.6%	Sep 18 - 19 (+) 0.5%

Source: Ministry of Trade and Industry



SUPPLY & DEMAND

Indicator	Q3/18	Q2/19	Q3/19
BCA Construction Demand	S\$6.55 Bn	S\$7.36 Bn	S\$9.42 Bn
BCA Construction Output	Q3/18 S\$6.57 Bn	Q2/19 S\$6.76 Bn	Q3/19p S\$6.95 Bn

Source: Building and Construction Authority
p - denote preliminary data



BASIC COSTS

Indicator	Jul 19	Aug 19	Sep 19
BCA Concrete Price Index	120.5	120.4	121.4
BCA Steel Reinforcement Price Index	98.2	97.3	96.5

Source: Building and Construction Authority



CONSTRUCTION COST TREND

Indicator	Q3/18	Q2/19	Q3/19
BCA Tender Price Index	98.9	99.5	99.8
Arcadis Singapore Tender Price Index	Q3/18 99.7	Q2/19 101.2	Q3/19 101.2

Source: Building and Construction Authority



1 MARKET ANALYSIS

INCREASED CONSTRUCTION DEMAND FROM PUBLIC SECTOR

According to the Building and Construction Authority's (BCA) data, total construction demand (based on actual contracts awarded) for 3Q2019 has increased by approximately 28% from \$7.4 billion in 2Q2019 to \$9.4 billion.

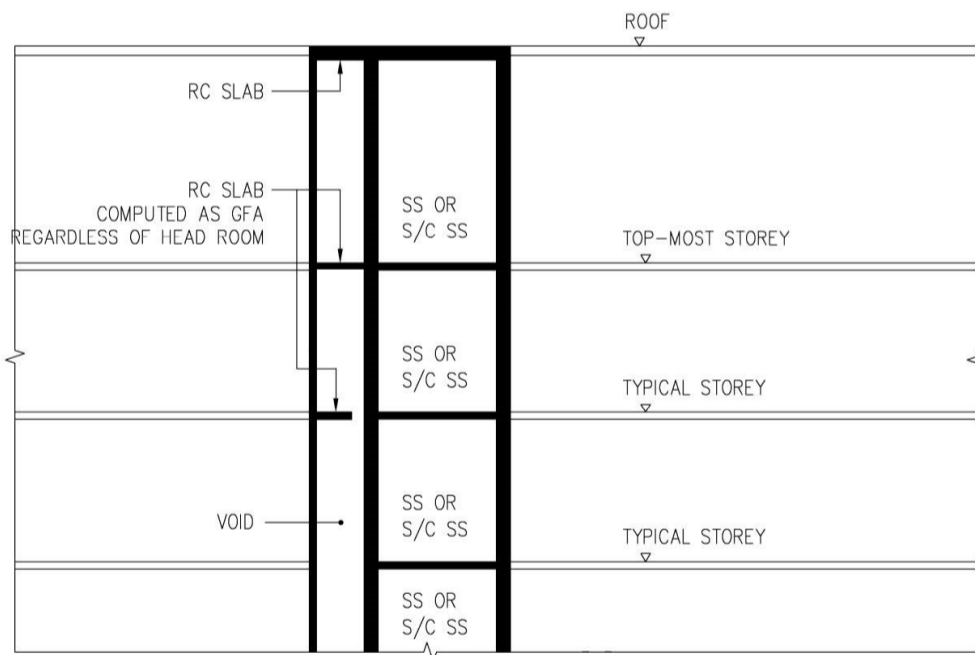
Public sector construction demand contributed \$6.5 billion; approximately 69% of the total construction demand, an increase of approximately 74% as compared to 2Q2019. This was attributed to strong demand for industrial and institutional projects. Private sector construction demand, on the other hand, declined by approximately 20% from \$3.6 billion to \$2.9 billion. The decline was attributed to a reduction in residential, industrial and civil engineering projects.

GROSS FLOOR AREA (GFA) TREATMENT FOR COVERED REINFORCED CONCRETE (RC) SLABS IN VOIDS AND SERVICE RISERS

The Singapore Civil Defence Force (SCDF) and BCA have reviewed the "Technical Requirements for Storey Shelters 2015" and the revised guidelines will accord more flexibility to the treatment of voids and service risers that abut shelter walls or are located within the storey shelter setback.

Only the roof and the level below the roof of the void and service riser that abut shelter walls are required to be slabbed over by RC. Covered RC slabs proposed in voids and service risers will be computed as GFA. They do not qualify as mechanical and electrical (M&E) spaces for GFA exemption, even if the space has a low headroom.

This is the same approach as other covered floor slabs being computed as GFA, regardless of whether they are accessible spaces. On the other hand, metal grating/load-bearing mesh with width not exceeding 1m and are intended solely for maintenance access will not be computed as GFA.



Section Cut of Storey Shelter and Void proposed adjacent to the Storey Shelter

NOTE:

- 1) SS = STOREY SHELTER
- 2) S/C SS = STAIRCASE STOREY SHELTER

Source: URA's press release dated 19 August 2019

ACTIVE COMMUTE GRANT FOR END-OF-TRIP (EOT) FACILITIES

The Land Transport Authority (LTA) has launched the Active Commute Grant (ACG) on 2 November 2019 to continue the support and encouragement for developers and building owners who wish to provide EOT facilities in their developments following the cessation of Travel Smart Grant (Developer).

Under the ACG, LTA will co-fund up to 80% of the construction cost for end-of-trip amenities such as showers, lockers, changing rooms, wayfinding signage to these facilities as well as necessary security features in Offices, Business Parks and Light/General Industrial development – up to a maximum of \$80,000 per development. The grant will be available until 30 June 2021.

AMENDMENTS TO BUILDING CONTROL (BUILDABILITY AND PRODUCTIVITY) REGULATIONS 2011 AND REVISIONS TO CODE OF PRACTICE ON BUILDABILITY TO RAISE PRODUCTIVITY IN THE BUILT ENVIRONMENT SECTOR

Changes to the Building Control (Buildability and Productivity) Regulations 2011 and enhancements to the Code of Practice on Buildability will take effect on 15 December 2019. The changes are appended below.

• Exemption of projects with GFA < 5,000m² from buildability legislation

This is based on industry's feedback where smaller projects have limited scope for prefabrication due to lack of economies of scale and modularization.

• Higher minimum Buildable Design Score (B-Score) for Residential Non-Landed (RNL) projects with GFA ≥ 25,000m²

The minimum B-Score for superstructure works for all new building projects:

YEAR	FROM 15 DECEMBER 2019*	
	MINIMUM BUILDABLE DESIGN SCORE (FOR SUPERSTRUCTURE WORKS)	
CATEGORY OF BUILDING WORK / DEVELOPMENT	5,000 m ² ≤ GFA < 25,000 m ²	GFA ≥ 25,000m ²
Residential (Landed)	78	81
Residential (Non-Landed)	85	92 (raised from 88 to 92 points)
Commercial	87	90
Industrial	87	90
School	82	85
Institutional and Others	79	82

*based on date of planning application made to URA

• Introduction of outcome-based options for RNL projects with GFA ≥ 25,000m² to adopt in lieu of meeting the minimum B-Score

To allow designers flexibility to choose the types of DfMA designs and technologies that best meet their project needs, three deemed acceptable solutions and one 'open' option will be made available. Designers can choose to adopt any of these in lieu of meeting the minimum required B-Score for their projects.

Designers will be required to submit documents to support their deemed acceptable solution or 'open' option on how their proposal can achieve the stipulated productivity improvement at plan approval stage and upon completion of the project.

Deemed acceptable solution:

1. Minimum 50% prefabrication level + minimum 70% system formwork + minimum 50% prefabricated Mechanical, Electrical and Plumbing (MEP); or
2. Minimum 65% prefabrication level + minimum 70% system formwork; or
3. Minimum 65% PPVC adoption; or

Open Option:

4. Any proposal which can achieve minimum 20% productivity improvement (from 2010's level)

The Code of Practice on Buildability will be revamped to have DfMA as a major component in each of the three sections of buildability framework i.e. structural works, architectural works and MEP works. BCA will pilot the new framework before full implementation in 2020.



2 APPROXIMATE BUILDING COSTS

SINGAPORE

BUILDING TYPE	S\$/m ² CFA
RESIDENTIAL	
Terraced Houses	2,400 - 2,700
Semi-Detached Houses	2,600 - 3,050
Detached Houses	3,050 - 4,050
Average Standard Condominium	1,850 - 2,100
Above Average Standard Condominium	2,100 - 2,850
Luxury Condominium	2,850 - 4,250
OFFICE	
Average Standard Offices	2,400 - 2,700
Prestige Offices	2,700 - 2,950
COMMERCIAL	
Shopping Centres, Average Quality	2,700 - 2,850
Shopping Centres, High Quality	2,850 - 3,150
CAR PARKS	
Multi-Storey Car Parks	900 - 1,300
Basement Car Parks	1,300 - 1,750
INDUSTRIAL	
Flatted Light Industrial Buildings	1,250 - 1,400
Flatted Heavy Industrial Buildings	1,400 - 1,900
Single Storey Industrial Buildings	1,150 - 1,300
Flatted Warehouses	1,150 - 1,300
Single Storey Warehouses	1,050 - 1,300
HOTEL (Including Furniture and Fittings)	
3-Star Hotels	3,000 - 3,300
4-Star Hotels	3,200 - 3,800
5-Star Hotels	3,850 - 4,350
HEALTH	
Private Hospitals	3,850 - 4,050
Polyclinics, non air-conditioned	1,650 - 1,850
Nursing Homes, non air-conditioned	1,650 - 1,950
Medical Centres	2,950 - 3,150

The above costs are at 3rd Quarter 2019 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.

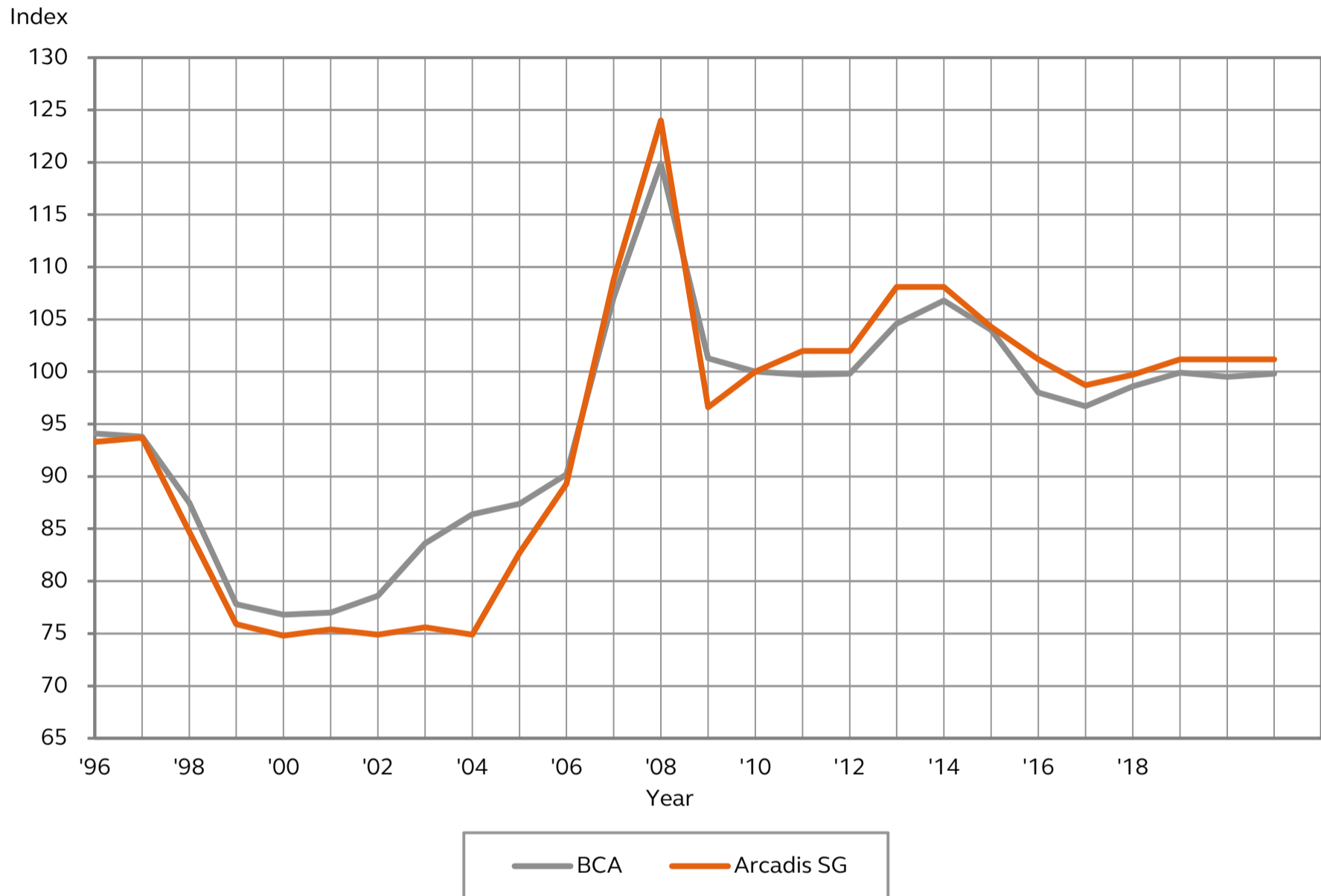
All buildings are assumed to have no basements (unless otherwise stated) and are built on flat ground with normal soil conditions. The costs exclude the following:

- 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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BCA*	101.3	100.0	99.7	99.8	104.6	106.8	104.0	98.0	96.7	98.6
Arcadis SG^	96.6	100.0	102.0	102.0	108.1	108.1	104.3	101.2	98.7	99.7

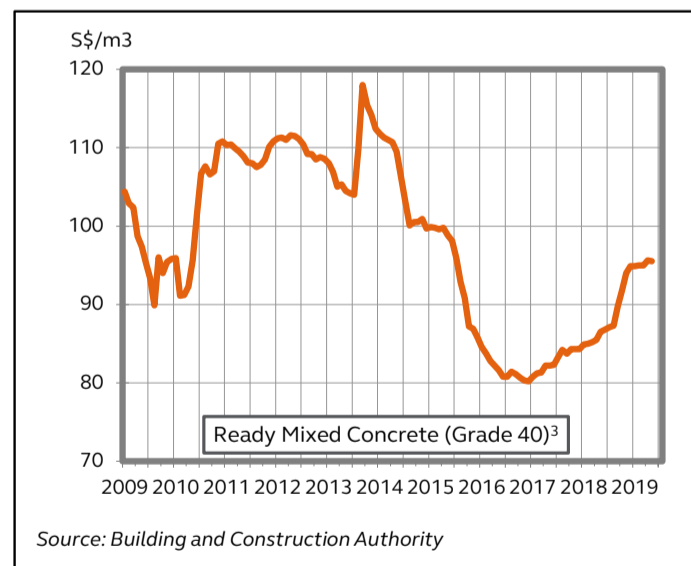
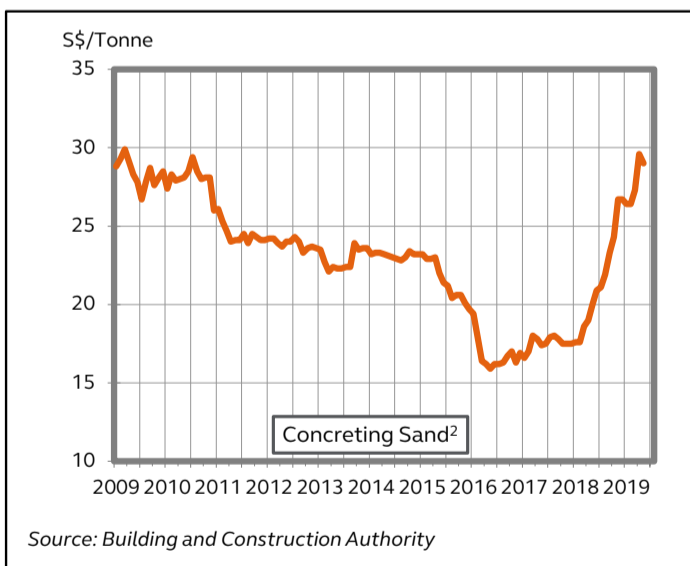
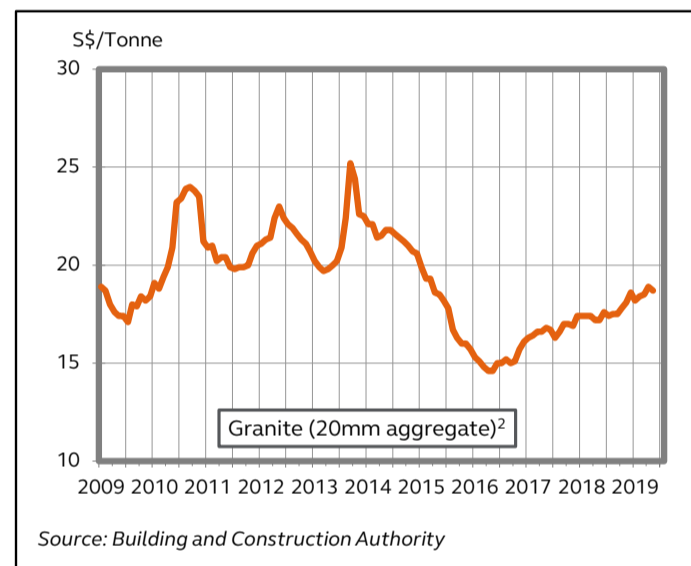
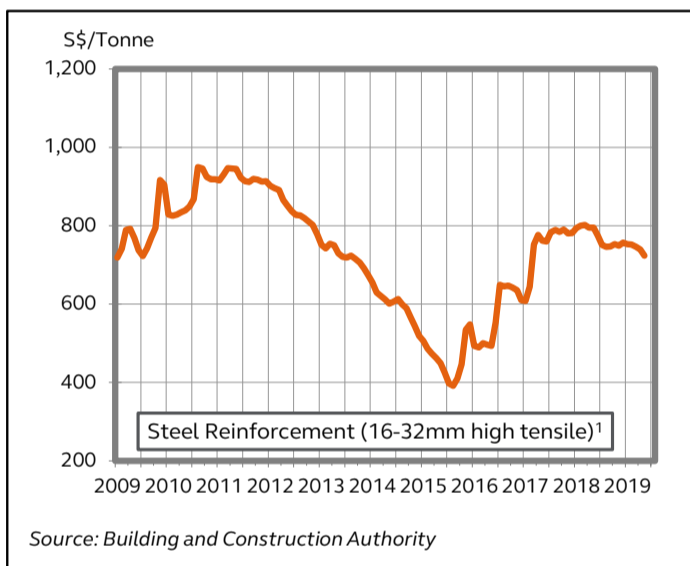
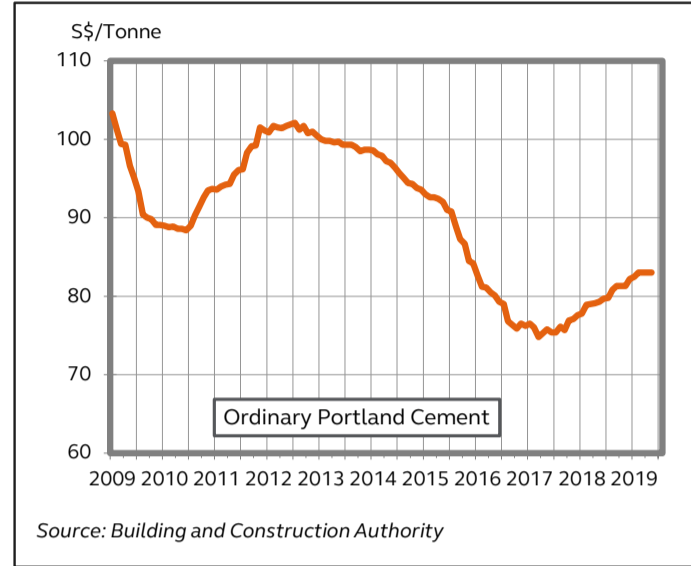
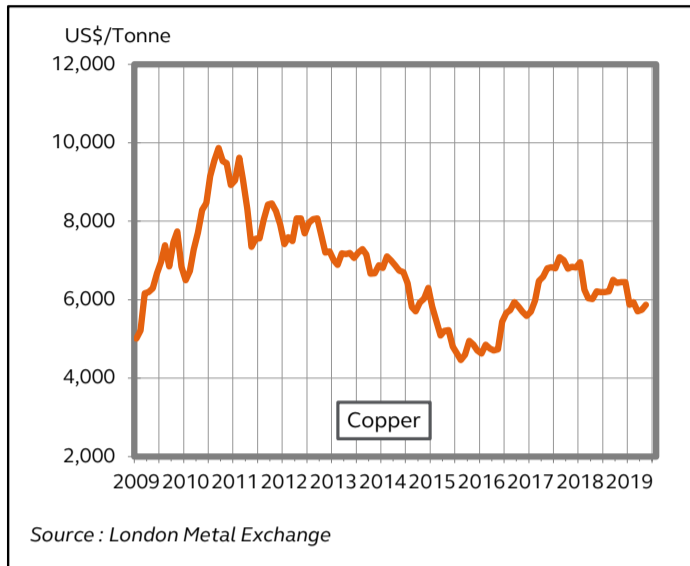
Year	1Q19	2Q19	3Q19
BCA*	99.9	99.5	99.8
Arcadis SG^	101.2	101.2	101.2

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

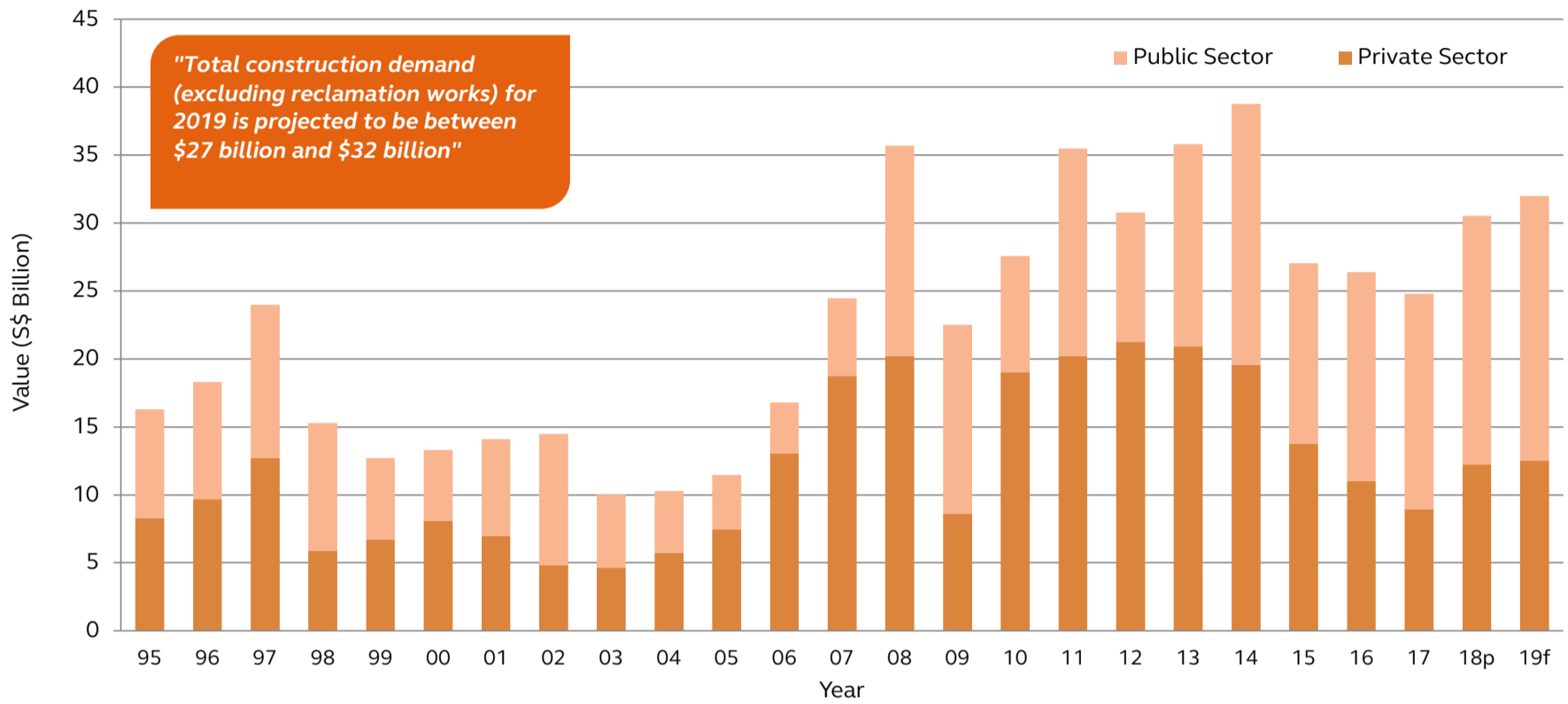
¹ With effect from Jan 2015, the market prices of rebar (without cut & bend) are based on fixed price supply contracts with contract period 1 year or less

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



5 CONSTRUCTION DEMAND SINGAPORE



BCA Construction Demand (Exclude Reclamation) (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	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	2018p
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

	2019f	1Q19	2Q19	3Q19
Private Sector	11 - 13	5.1	3.6	2.9
Public Sector	16 - 19	3.6	3.7	6.5
Total Value	27 - 32	8.7	7.4	9.4

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. p - denotes preliminary data
3. f - denotes forecast



6 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

BUILDING TYPE	Shanghai	Beijing	Guangzhou/ Shenzhen	Chongqing/ Chengdu
	RMB/ m2 CFA			
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	2,931 - 3,342	2,692 - 3,105	2,626 - 2,895	2,631 - 3,063
- Full fit	4,839 - 5,333	4,263 - 4,680	3,819 - 4,204	3,981 - 4,737
Apartments, high rise, high end				
- Shell and core	3,524 - 3,817	3,176 - 4,608	2,740 - 3,566	3,213 - 4,212
- Full fit	10,926 - 11,908	10,320 - 11,752	6,155 - 6,733	6,445 - 8,124
Terraced houses, average standard				
- Shell and core	3,313 - 3,526	3,108 - 3,630	2,783 - 3,065	3,238 - 3,905
- Full fit	N/A	6,097 - 6,610	N/A	N/A
Detached houses, high end				
- Shell and core	4,825 - 5,333	4,680 - 5,208	3,800 - 4,185	4,252 - 4,883
- Full fit	N/A	11,717 - 12,229	N/A	N/A
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	6,147 - 8,125	5,959 - 8,025	5,339 - 5,909	6,321 - 7,314
High rise offices, prestige quality	7,974 - 9,946	8,025 - 13,178	7,778 - 9,351	7,987 - 10,749
Out-of-town shopping centre, average standard	N/A	4,541 - 6,071	5,147 - 5,648	5,100 - 6,529
Retail malls, high end	8,455 - 10,908	8,213 - 11,307	7,476 - 10,451	7,605 - 10,645
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	1,914 - 2,340	1,878 - 2,288	3,415 - 3,759	3,106 - 3,911
Owner operated factories, low rise, light weight industry	2,958 - 3,700	3,630 - 4,158	N/A	N/A
HOTELS				
Budget hotels - 3-star, mid market	6,790 - 8,281	6,717 - 8,282	6,768 - 7,448	6,849 - 8,452
Business hotels - 4/5-star	10,940 - 14,815	11,231 - 14,826	10,938 - 15,617	12,324 - 15,385
Luxury hotels - 5-star	14,794 - 17,687	14,304 - 18,400	14,875 - 16,394	15,183 - 18,188
OTHERS				
Underground/basement car parks (<3 levels)	5,073 - 7,072	5,188 - 5,702	3,525 - 5,634	3,016 - 4,238
Multi storey car parks, above ground (<4 levels)	2,600 - 3,630	3,122 - 3,157	2,522 - 2,776	2,399 - 2,961
Schools (primary and secondary)	3,877 - 4,894	3,616 - 4,666	2,797 - 3,079	3,190 - 3,530
Students' residences	2,839 - 3,870	2,559 - 3,616	1,814 - 2,041	N/A
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	6,541 - 8,032	6,189 - 6,238	5,181 - 5,717	N/A
General hospitals - public sector	9,992 - 12,884	8,136 - 10,187	N/A	N/A

The above costs are at 3rd Quarter 2019 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\$ 7.83	MOP 8.085	S\$ 1.38	RM 4.187
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	N/A	1,746 - 2,588	N/A	N/A
- Full fit	3,027 - 3,499	2,248 - 2,751	1,340 - 1,520	340 - 580 \$
Apartments, high rise, high end				
- Shell and core	N/A	2,588 - 3,881	N/A	N/A
- Full fit	3,934 - 4,585	3,140 - 4,798	2,065 - 3,080	700 - 1,120
Terraced houses, average standard				
- Shell and core	N/A	3,065 - 3,806	N/A	N/A
- Full fit	4,112 - 4,777	3,831 - 4,572	1,740 - 1,955	215 - 345 \$\$
Detached houses, high end				
- Shell and core	N/A	3,705 - 5,338	N/A	N/A
- Full fit	6,054 up	4,673 - 6,079	2,210 - 2,935	725 - 980
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	2,963 - 3,436*	2,588 - 3,341	1,740 - 1,955@	565 - 740 \$\$\$
High rise offices, prestige quality	3,576 - 4,151	3,341 - 3,655	1,955 - 2,140@	850 - 1,250 \$\$\$
Out-of-town shopping centre, average standard	2,937 - 3,474	2,437 - 3,655	1,955 - 2,065	535 - 715
Retail malls, high end	3,857 - 4,610	3,831 - 4,622	2,065 - 2,285	670 - 1,000
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	N/A	N/A	760 - 940	315 - 430
Owner operated factories, low rise, light weight industry	2,286 - 2,886	N/A	N/A	425 - 520
HOTELS				
Budget hotels - 3-star, mid market	3,806 - 4,049	3,404 - 3,856	2,175 - 2,390	1,000 - 1,395
Business hotels - 4/5-star	3,959 - 4,610	4,622 - 5,527	2,790 - 3,150	1,680 - 2,170
Luxury hotels - 5-star	4,598 - 5,300	5,527 - 6,532	2,790 - 3,150	1,905 - 2,430
OTHERS				
Underground/basement car parks (<3 levels)	3,193 - 3,831	2,022 - 2,964	940 - 1,270	305 - 530
Multi storey car parks, above ground (<4 levels)	1,916 - 2,273	1,118 - 1,470	650 - 940@@	215 - 345
Schools (primary and secondary)	2,490 - 2,682**	2,236 - 2,588	N/A	245 - 305 \$\$\$\$
Students' residences	2,886 - 3,269	1,771 - 2,060	1,595 - 1,740	290 - 360 \$\$\$\$\$
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	3,768 - 4,355	N/A	1,995 - 2,140	585 - 725
General hospitals - public sector	4,853 - 5,402	N/A	2,790 - 2,935	840 - 1,150

The above costs are at 3rd Quarter 2019 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 30.07	INR 70.42	PHP 51.77	VND 23,273
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	582 - 748	495 - 550	N/A	N/A
- Full fit	798 - 948	565 - 645	954 - 1,180	650 - 806
Apartments, high rise, high end				
- Shell and core	682 - 881	725 - 865	N/A	N/A
- Full fit	1,064 - 1,314	850 - 1,025	1,269 - 2,245	827 - 948
Terraced houses, average standard				
- Shell and core	333 - 432	320 - 345	N/A	N/A
- Full fit	499 - 615	390 - 410	929 - 1,137	438 - 514
Detached houses, high end				
- Shell and core	582 - 831	425 - 450	N/A	N/A
- Full fit	865 - 1,048	515 - 540	1,804 - 3,060	500 - 610
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	798 - 948 #	425 - 460	945 - 1,136	760 - 880
High rise offices, prestige quality	998 - 1,280 ##	535 - 565	1,269 - 1,594	877 - 1,195
Out-of-town shopping centre, average standard	682 - 881	415 - 450	803 - 1,000	N/A
Retail malls, high end	915 - 964	580 - 625	1,097 - 1,537	710 - 930
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	532 - 665	335 - 390	512 - 576	312 - 393
Owner operated factories, low rise, light weight industry	N/A	355 - 415	687 - 860	353 - 465
HOTELS				
Budget hotels - 3-star, mid market	1,247 - 1,380	800 - 885	1200 - 1337	1,410 - 1,725
Business hotels - 4/5-star	1,596 - 1,829	1,245 - 1,475	1,352 - 2,259	N/A
Luxury hotels - 5-star	1,862 - 2,162	1,575 - 1,725	1,858 - 3,114	1,780 - 2,137
OTHERS				
Underground/basement car parks (<3 levels)	599 - 798	280 - 305	495 - 740	645 - 770
Multi storey car parks, above ground (<4 levels)	200 - 326	225 - 245	476 - 673	415 - 455
Schools (primary and secondary)	N/A	280 - 315	703 - 970	545 - 595
Students' residences	N/A	305 - 335	744 - 955	545 - 700
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	N/A	590 - 615	1,190 - 1,731	806 - 862
General hospitals - public sector	N/A	645 - 710	1,429 - 1,642	N/A

The above costs are at 3rd Quarter 2019 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
HOTEL	
Budget hotels - 3-star, mid market	1) Interior decoration 2) Furniture (fixed and movable) 3) Special light fittings (chandeliers, etc.) 4) Operating Supplies and Equipment (OS&E) excluded
Business hotels - 4/5-star	
Luxury hotels - 5-star	
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)	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 hospital - 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.
- Hong Kong: * (i) Tenant area with 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, 46m² - 83m² 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

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