

CHINA AND HONG KONG

QUARTERLY CONSTRUCTION COST REVIEW





CONTENTS

HONG KONG MARKET OVERVIEW	3
MARKET ANALYSIS	4
APPROXIMATE BUILDING COSTS - HONG KONG	5
BUILDING & BUILDING SERVICES PRICE INDEX - MAINLAND CHINA	6
TENDER PRICE INDEX - HONG KONG	7
MATERIALS - MAINLAND CHINA	8
LABOUR	9
GROSS VALUE OF CONSTRUCTION WORK PERFORMED - MAINLAND CHINA.....	10
GROSS VALUE OF CONSTRUCTION WORK PERFORMED - HONG KONG.....	11
APPROXIMATE BUILDING COSTS FOR MAJOR CITIES - ASIA.....	12 - 15

Statistical data is compiled from sources deemed reliable but accuracy is not guaranteed.
The information contained herein should be regarded as indicative and for general guidance only.
Whilst every effort has been made to ensure accuracy, no responsibility can be accepted for errors
and omission, however caused. All rights reserved. Reproduction of this data, in whole or in part,
is permitted providing the source is quoted.

HONG KONG MARKET OVERVIEW



The need to improve productivity and the role of technology in construction continues to be a priority in Hong Kong. The government, developers and contractors need to find ways to integrate digital solutions into new projects.

There is a market-wide challenge to improve productivity and drive the adoption of digital solutions to enhance construction performance. With a well-accepted lag in the general use of technology compared to other global regions, Hong Kong needs to look at its dated processes to see where it can modernize and improve its efficiency.

The high costs of labor, an ageing workforce and labor-

intensive building methods continue to drive up Hong Kong's construction economy.

These factors combined with Hong Kong's demand to provide more housing, better standard of living and improved liveability requires a need for change. If Hong Kong wants progress and discard its tag as one of least digitized cities in the world in terms of construction, it needs to act fast.

MARKET MOVEMENT



ECONOMY

Indicator

	GDP Growth per annum	Q4/15 - Q4/16 (+) 3.3%	Q3/16 - Q3/17 (+)3.7%	Q4/16 - Q4/17 (+)3.4%
	Inflation Rate (CPI) per annum	Feb 16 - 17 (-) 0.1%	Nov 16 - 17 (+)1.6%	Feb 17 - 18 (+) 3.1%



BASIC COSTS

Indicator

	Highways Material Index	Nov 16 - Jan 17 708.4	Aug - Oct 17 781.8	Nov 17 - Jan 18 804.8
	Labour Wages Index	Oct - Dec 16 153.0	Jul - Sep 17 153.5	Oct - Dec 17 151.6



SUPPLY AND DEMAND

Indicator

	Activity Level (Gross output; new + A&A)	Q4/16 HK\$64.859 Bn	Q3/17 HK\$60.939 Bn	Q4/17 HK\$64.519 Bn
--	--	------------------------	------------------------	------------------------



CONSTRUCTION COST TREND

Indicator

	Tender Price Index (Arcadis)	Q1/17 1975	Q4/17 1946	Q1/18 1920
--	------------------------------	---------------	---------------	---------------



1 MARKET ANALYSIS

CONSTRUCTION OUTPUT GROWTH FROM 2017 EXPECTED TO SLOW IN 2018

Hong Kong's construction industry has continued to grow with a Year-on-Year (YoY) increase in the volume of its output. However, the percentage growth rate has dropped YoY from 2015 suggesting that the coming year may experience a sustained flattening, or even a dip. There remains a stable level of demand for building works in the public and private sectors, keeping the market buoyant. The Construction Industry Council (CIC) has estimated an annual growth in, or around 2% up until 2020/21, but with a lack of commencing major infrastructure projects, market sentiment is less optimistic.

The Tender Price Index (TPI) has seen a (-) 1.34% decrease Quarter-on-Quarter (QoQ); (-) 2.78% YoY. This downward trend continued from the fourth quarter of 2017 and is likely to last into the second quarter of 2018. The Hong Kong economy enjoyed continued growth for the fifth quarter in a row at more than 3%, creating market stability and positive sentiment towards public and private construction spending.

CONSTRUCTION WORKER WAGES AND MATERIAL PRICES REMAIN STABLE

The lack of upcoming major infrastructure projects will determine how the construction output finishes towards the end of the year. The slowdown will impact certain trades, specifically those in major steel works such as bar benders. In the first quarter of 2018, the price of steel has continued to rise. Other core materials such as cement, diesel and basic architectural products remain stable. Construction workers' wages, including structural, electrical and mechanical workers, remained stable at peak levels. The high cost of materials continues to be integral to Hong Kong's construction industry with the limitation of having to import the majority of materials from overseas.

COMMENCED RATES EXPERIENCE FIRST QUARTER DROP

Private sector floor area commenced rates in the first quarter of 2018 have declined, moving away from 2017's 12-month average that almost reached the decade's peak. However,

completed floor area rates have stayed flat. Works in the private sector that are ready to start have generally remained flat. Contractors in the private sector still have a positive outlook with a medium-term flow of high volume workload from ongoing projects. The public-sector situation does not look as encouraging. With demand-driven public housing plans hindered by limited land resources, and a lack of mega infrastructure projects, workload in the medium term is less optimistic. In the longer term, public projects such as the Hong Kong 10-year hospital development plan has the potential to boost construction output up to 2026 as Legco is expected to review the project in the third quarter of 2018.

CHINA WITNESSES GROWTH IN CONSTRUCTION WORK PERFORMED

China experienced a (+) 3.6% Year-on-Year (YoY) increase in sales for commercial building floor space. In terms of value, the sales increased by 10.4%. Specifically, the sales of residential buildings went up by (+) 11.4%, office buildings went down by (-) 8.2% and buildings for commercial business increased by (+) 7.9% - according to National Bureau of Statistics (NBS).

The market has experienced an increase in residential floor space sales, which indicates that the industry is adjusting to the tightening of the new mortgage policy and purchase restriction. This is expected to benefit the real-estate market with positive movement and an increase in activity.

Gross value of construction work performed in the first quarter this year has been increased by 13.18% YoY.

Major construction material prices have remained stable after the rise experienced in the fourth quarter of 2017. Labour wages have increased by (+) 3.5%. Market tender price remains stable in the first quarter of 2018. However, under the influence of the warming real estate market, the construction market is anticipated to rise moving into the second quarter of 2018.



2 APPROXIMATE BUILDING COSTS

HONG KONG

Notes:

1. The costs for the respective categories given 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.

2. 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.

3. 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.

BUILDING TYPE	HK\$/m ² CFA	OUTLINE SPECIFICATION
DOMESTIC		
Apartments, high rise, public authority standard	11,000 - 13,500	Apartment units with fit-out, based on Hong Kong Housing Authority Non-standard Cruciform Block design
Apartments, high rise, average standard	24,000 - 28,200	Apartment units with fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings and loose furniture
Apartments, high rise, high end	32,200 - 37,500	Apartment units with good quality fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings and loose furniture
Terraced houses, average standard	32,900 - 38,400	Houses with fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings, loose furniture, garden and parking
Detached houses, high end	42,600 - 48,500	Houses with good quality fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings, loose furniture, garden and parking
OFFICE / COMMERCIAL		
Medium/high rise offices, average standard	23,500 - 27,900	RC structure, curtain wall/window wall, including public area fit-out, tenant area with screeded floor, painted wall and ceiling
High rise offices, prestige quality	29,000 - 34,000	RC structure, curtain wall, including public area fit-out, tenant area with raised floor/carpet, painted wall and false ceiling
Out-of-town shopping centre, average standard	24,000 - 28,000	Including public area fit-out and M&E, but excluding shop fit-out
Retail malls, high end	31,600 - 37,600	
INDUSTRIAL		
Owner operated factories, low rise, light weight industry	18,400 - 23,400	RC structure, including small office with simple fit-out and M&E, but excluding a/c and heating
HOTEL		
Budget hotels - 3-star, mid market	30,500 - 33,000	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	32,000 - 37,500	
Luxury hotels - 5-star	37,500 - 43,500	
OTHERS		
Underground/basement car parks (<3 levels)	25,000 - 30,000	RC structure
Multi storey car parks, above ground (<4 levels)	15,000 - 18,000	RC structure, natural ventilation, no facade enclosure
Schools (primary and secondary)	19,700 - 21,300	Public authority standard, including fit-out, no a/c, complete with basic external works but excluding educational equipment
Students' residences	23,000 - 26,000	Including fit-out, loose furniture and a/c
Sports clubs, multi purpose sports/leisure centres (dry sports)	30,000 - 35,000	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	39,000 - 44,000	Excluding medical and operating equipment

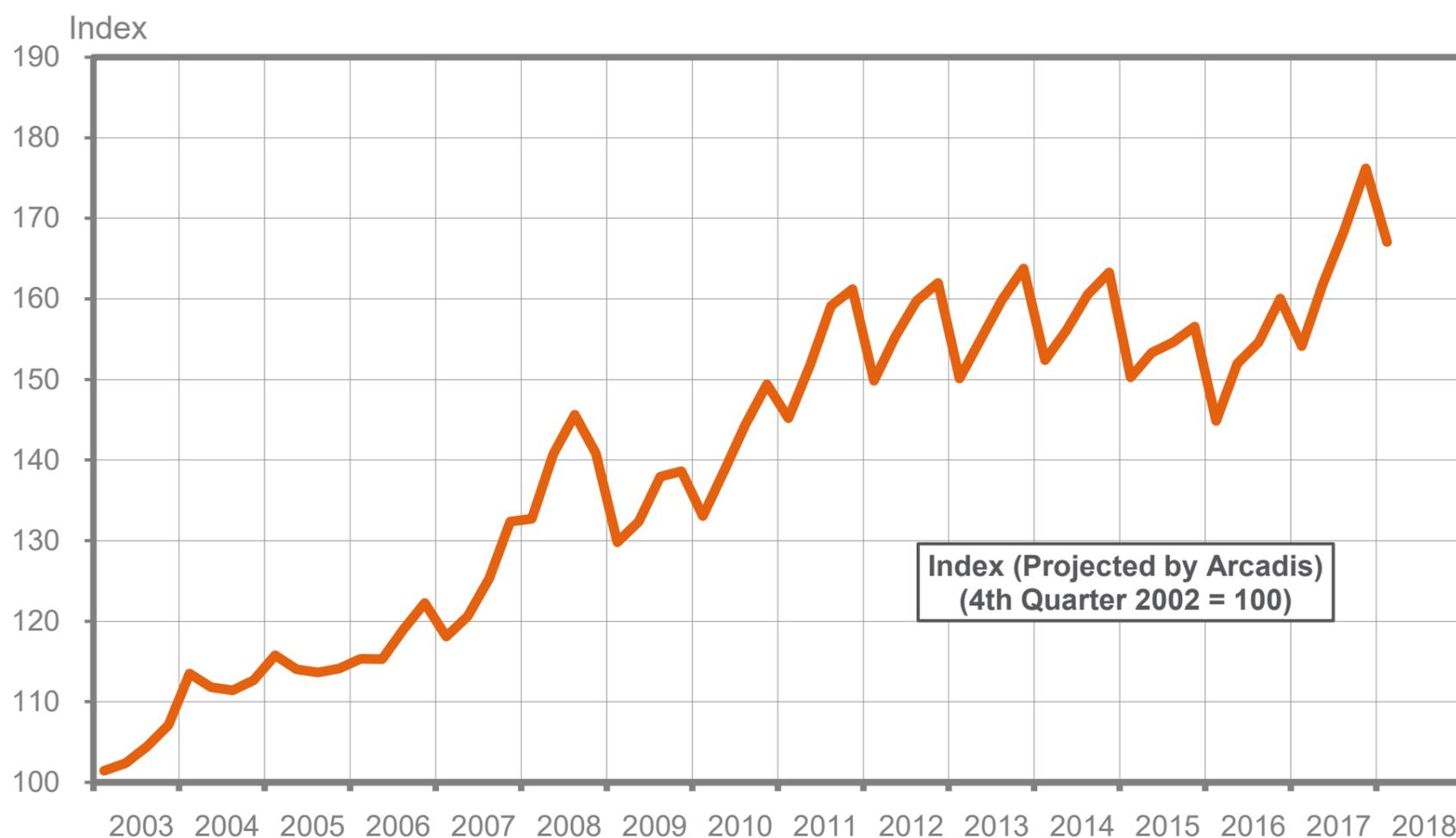
*The above cost are at 1st Quarter 2018 levels.



3

BUILDING & BUILDING SERVICES PRICE INDEX

MAINLAND CHINA



Building & Building Services Price Index

Index	Published (by NBS of China) (Base : Corresponding Quarter in Preceding Year = 100)				Projected (by Arcadis) (Base : Q4/2002 = 100) (see explanatory notes below)			
	2015	2016	2017	2018	2015	2016	2017	2018
Quarter / Year								
1st Quarter	98.6	96.4	106.4	108.4	150.3	144.9	154.1	167.1
2nd Quarter	98.2	99.1	106.5		153.3	152.0	161.8	
3rd Quarter	96.3	100.0	109.0		154.6	154.6	168.5	
4th Quarter	95.9	102.2	110.1		156.6	160.0	176.2	

Source : National Bureau of Statistics (NBS) of China

Notes:

Data are published on a quarterly basis, measuring the year-on-year change in price level of each quarter, but the quarter-on-quarter change is not published, i.e. the changes between consecutive quarters are not given.

To give an illustration of the price trend over time, Arcadis applies a hypothetical calculation to derive the data table and chart as above, basing on the following understanding and assumptions:

1. Only indices from 1st Quarter 2003 and onwards are published.

2. For 2002 and before, indices were only published annually. This annual index indicates that the average fluctuation of 2002 was moderate. Arcadis' own in-house data further substantiates that the construction costs in 2002 were rather stable throughout the year.

3. Changes between quarters in 2002 are assumed to be evenly distributed throughout the year. This establishes a notional relationship between the four quarters in 2002 and can be compared with the published data for 2003 to find their notional quarter-on-quarter changes.

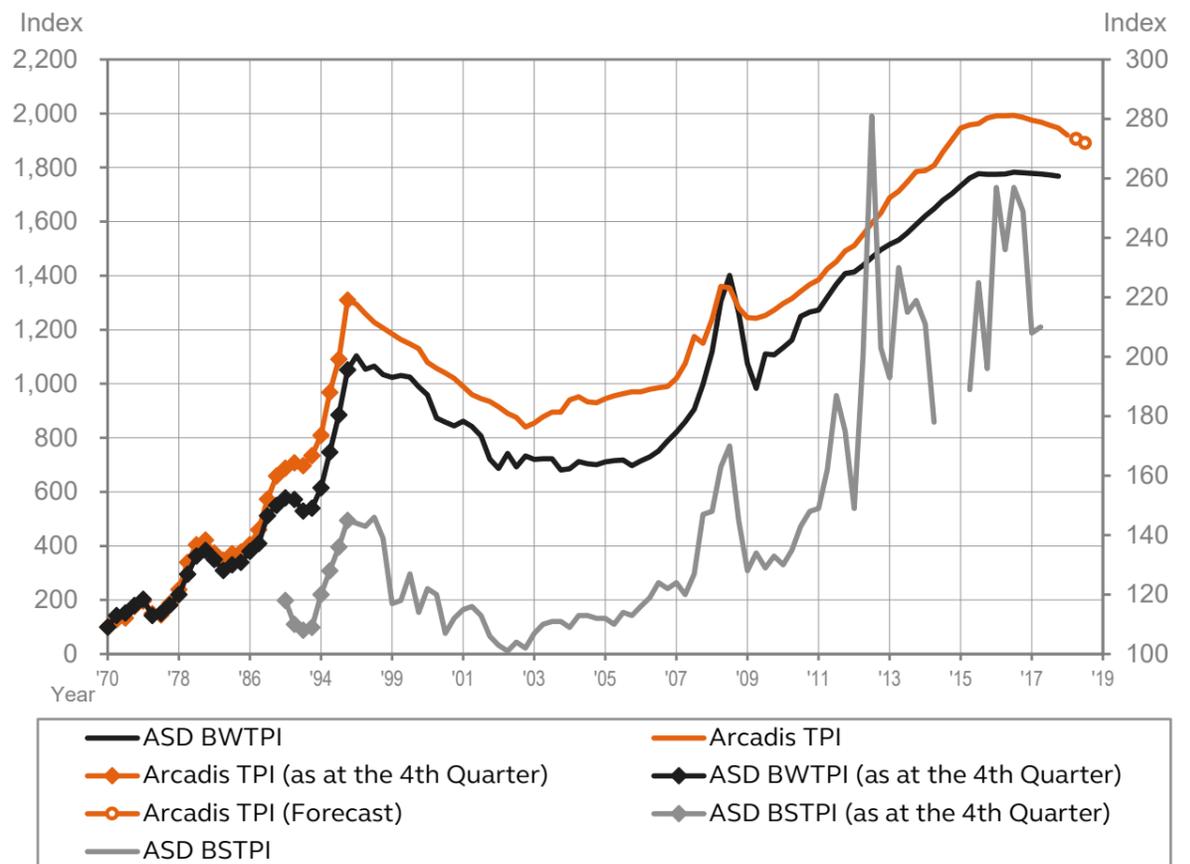
4. For comparison purposes, 4th Quarter 2002 is referred to as base and the base index as 100.

4 TENDER PRICE INDEX

HONG KONG

Notes:

- [*] denotes forecast figures.
- Both BWTP (ArchSD) and Arcadis TPI measure the trend of general builder's works only. Special works and Mechanical and Electrical Services would have to be considered separately.
- All indices were published quarterly. For reference purpose, only indices from 1st quarter of 1998 and onwards are given in detail, whereas indices between year 1970 to 1997 are shown with their 4th Quarter figures.



Quarter / Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ASD BWTP (Base = 100, at Year 1970)										
Q1	1074	1134	1273	1414	1516	1621	1732	1775	1779	
Q2	983	1161	1320	1438	1532	1648	1761	1776	1776	
Q3	1111	1249	1369	1467	1559	1679	1777	1783	1773	
Q4	1107	1266	1408	1496	1590	1703	1775	1781	1768	
ASD BSTPI (Base = 100, at Year 1989)										
Q1	128	130	149	149	193	211	(N/A)	257	208	
Q2	134	135	162	200	230	178	189	236	210	
Q3	129	143	187	281	215	(N/A)	225	257	(N/A)	
Q4	133	148	175	203	219	(N/A)	196	249		
Arcadis TPI (Base = 100, at Year 1970)										
Q1	1245	1297	1385	1511	1688	1789	1946	1992	1975	1920
Q2	1242	1315	1425	1552	1713	1808	1958	1992	1968	1905*
Q3	1253	1342	1452	1595	1747	1857	1963	1993	1957	1890*
Q4	1273	1367	1491	1632	1786	1903	1984	1986	1946	

Source : Competitive tenders received by Arcadis, Building Works Tender Price Index (BWTP) and Building Services Tender Price Index (BSTPI) of Architectural Services Department (ArchSD) of HKSAR

Note : 1. [*] denotes forecast figures

- Both BWTP (ArchSD) and Arcadis TPI measure the trend of general builder's works only. Special works and Mechanical and Electrical Services would have to be considered separately.

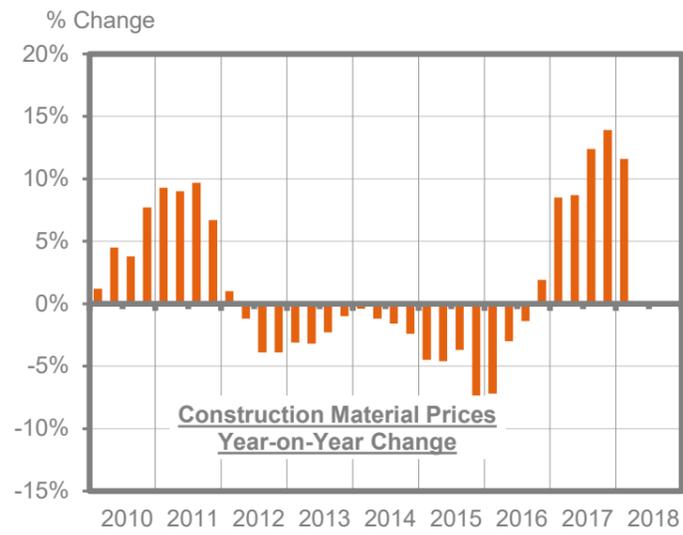


5 MATERIALS

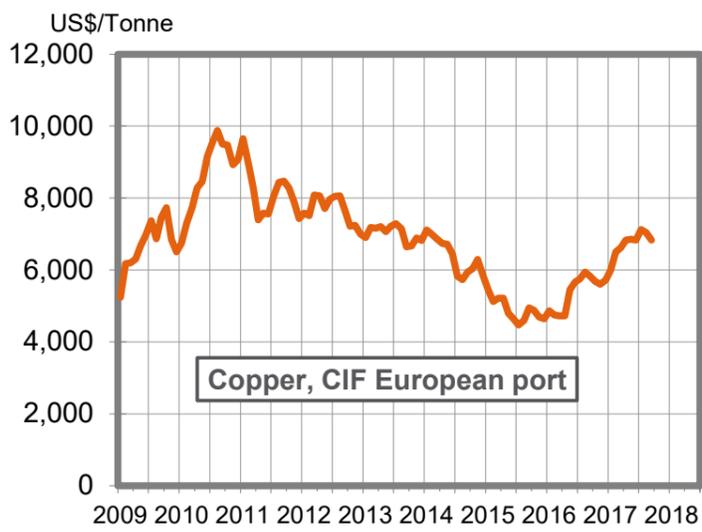
MAINLAND CHINA

CONSTRUCTION MATERIAL PRICES YEAR-ON-YEAR CHANGE			
Quarter / Year	2016	2017	2018
1st Quarter	(-)7.2%	(+)8.5%	(+)11.6%
2nd Quarter	(-)3.0%	(+)8.7%	
3rd Quarter	(-)1.4%	(+)12.4%	
4th Quarter	(-)1.9%	(+)13.9%	

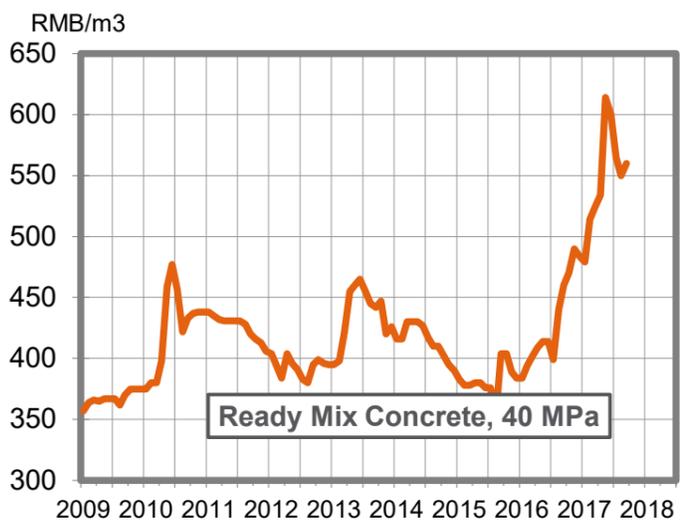
Source : National Bureau of Statistics of China



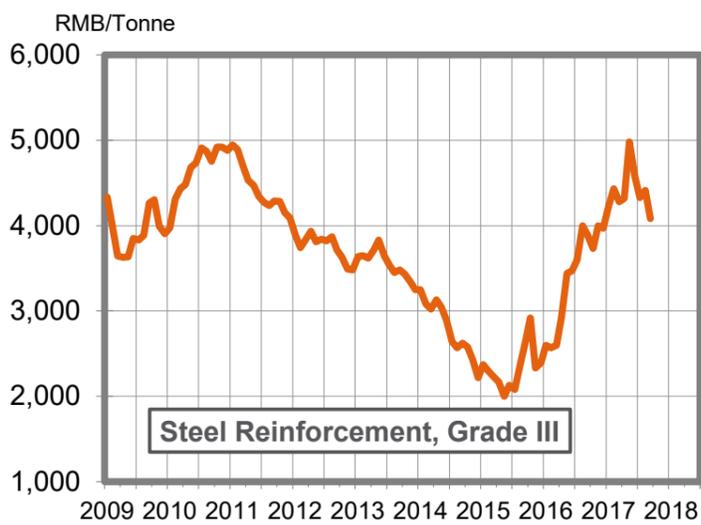
Basic Construction Materials



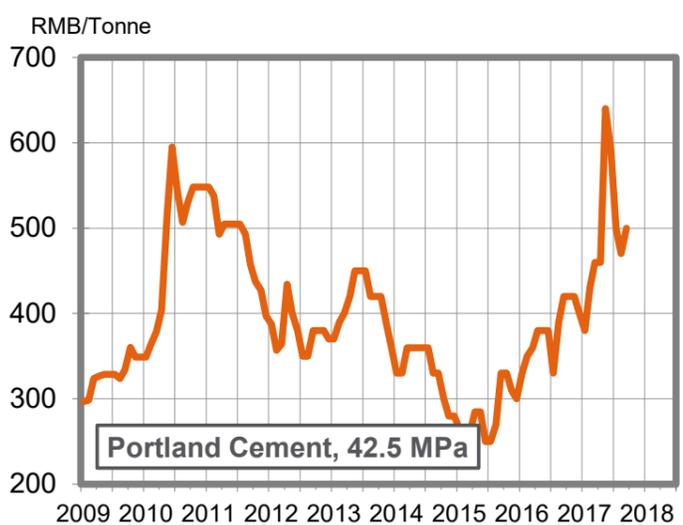
Source : London Metal Exchange



Shanghai Construction & Construction Material Industry Administration Department



Shanghai Construction & Construction Material Industry Administration Department



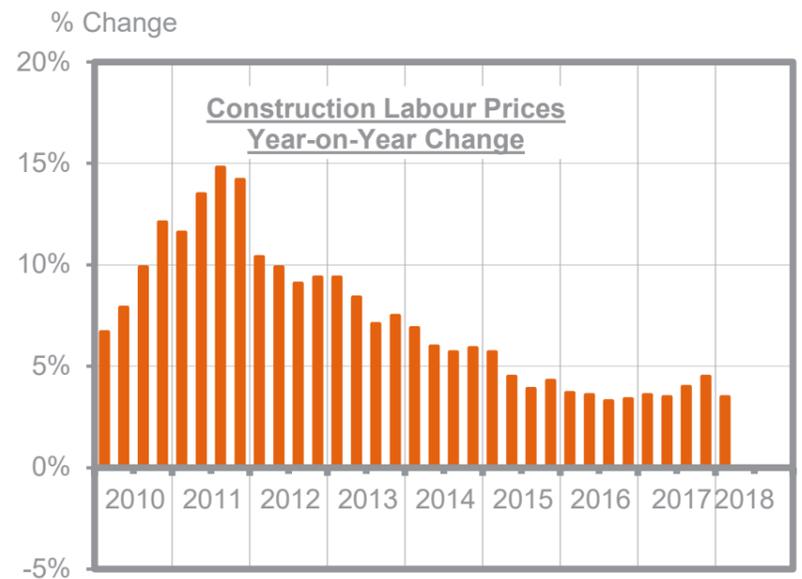
Shanghai Construction & Construction Material Industry Administration Department

6 LABOUR

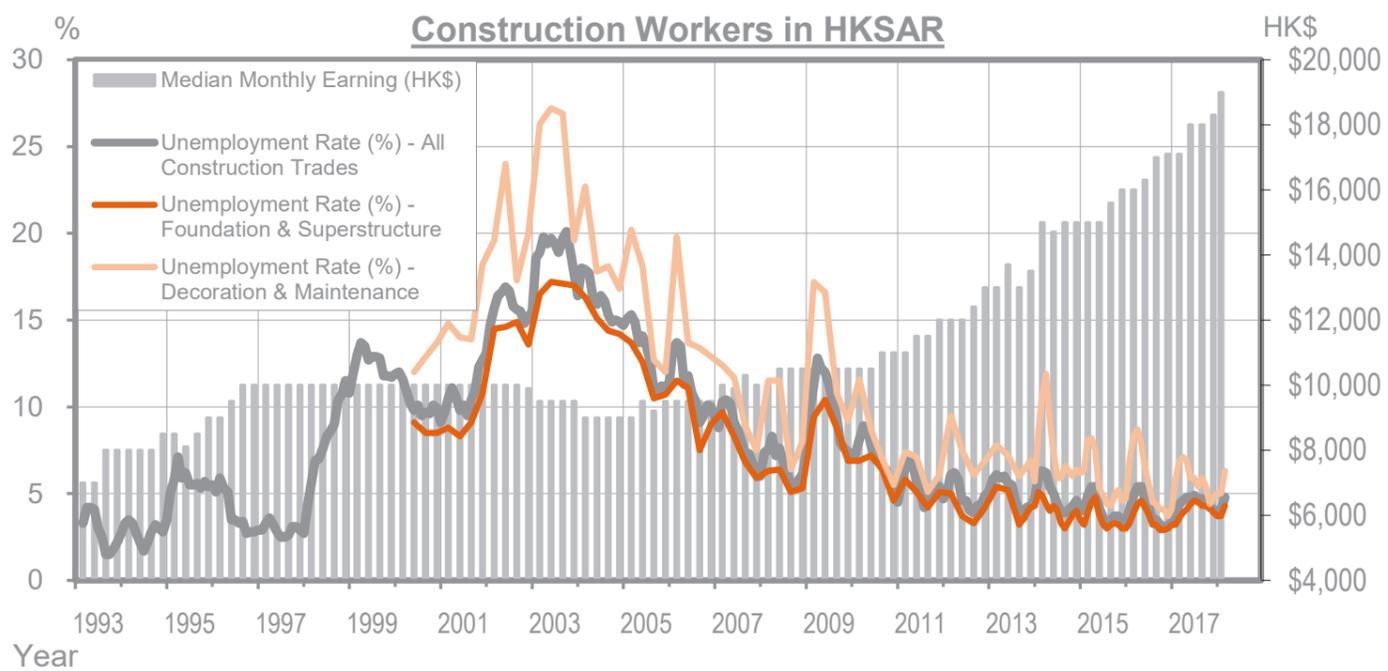
Mainland China

CONSTRUCTION LABOUR PRICES YEAR-ON-YEAR CHANGE			
Quarter / Year	2016	2017	2018
1st Quarter	(+)3.7%	(+)3.6%	(+)3.5%
2nd Quarter	(+)3.6%	(+)3.5%	
3rd Quarter	(+)3.3%	(+)4.0%	
4th Quarter	(+)3.4%	(+)4.5%	

Source : National Bureau of Statistics of China

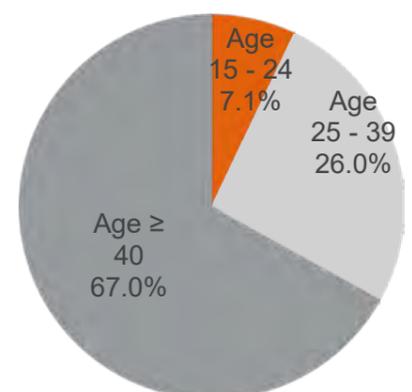


Hong Kong



Age Group	No. of Workers Employed by Construction Industry	
Age 15 - 24	32,928	7.1%
Age 25 - 39	121,265	26.0%
Age ≥ 40	312,544	67.0%
Total (as at Mar 2018):	466,737	100.0%

Source : Construction Industry Council



Age Distribution of Workers

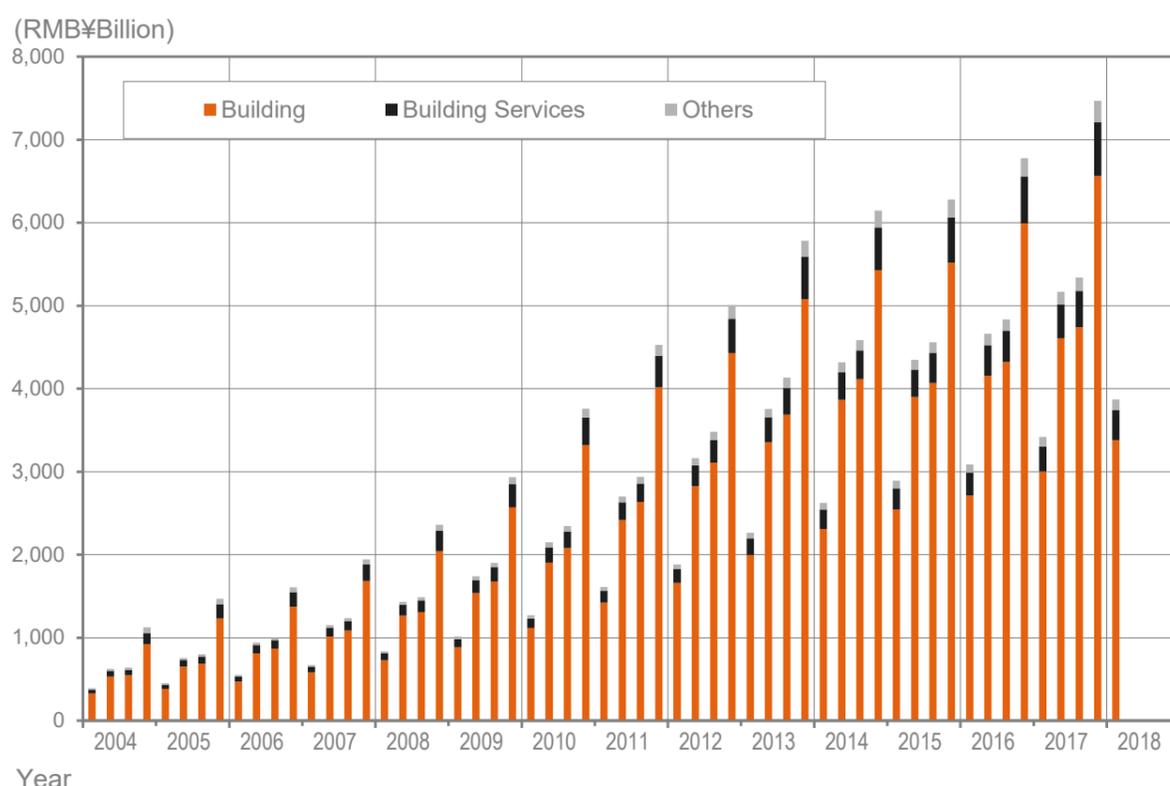


7 GROSS VALUE OF CONSTRUCTION WORK PERFORMED

MAINLAND CHINA

Notes:

1. Value of "Construction" includes builder's works and building services systems.
2. Value of "Installation" is for assembling and installation of equipment for industrial production, power, load-lifting, transportation, medical and laboratory uses, but excludes supply costs of such equipment.
3. Value of "Others" is generally maintenance and other miscellaneous construction activities.



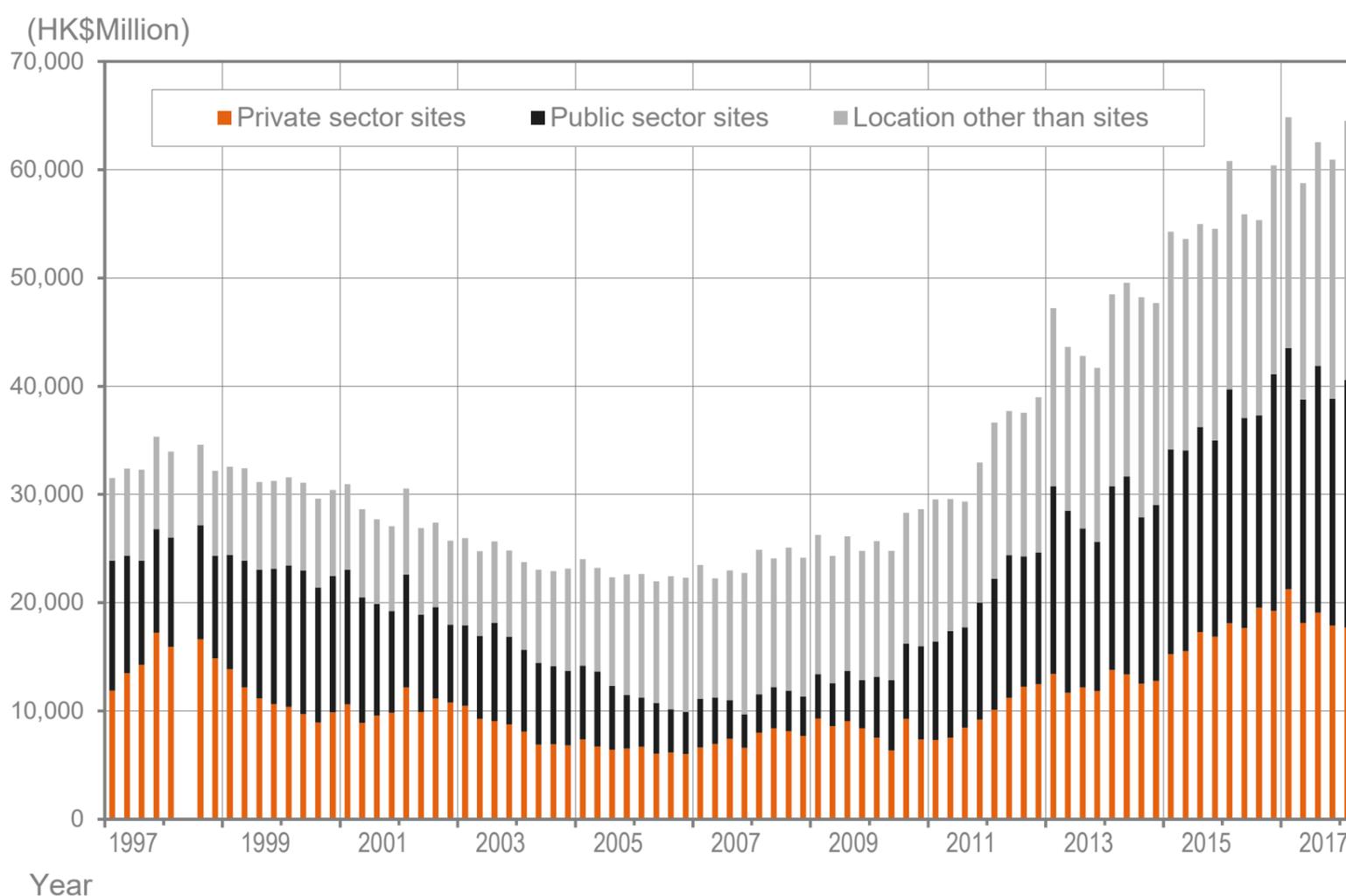
Quarter	Value Performed (RMB¥ Billion)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
A. Building										
1st Quarter	882	1,118	1,422	1,661	1,994	2,311	2,544	2,712	3,003	3,382
2nd Quarter	1,537	1,906	2,419	2,826	3,355	3,866	3,899	4,158	4,609	
3rd Quarter	1,673	2,082	2,634	3,111	3,687	4,113	4,068	4,322	4,742	
4th Quarter	2,572	3,318	4,016	4,427	5,078	5,425	5,517	5,994	6,562	
Year Total :	6,664	8,424	10,490	12,025	14,115	15,714	16,028	17,186	18,916	
B. Building Services										
1st Quarter	100	115	141	165	200	230	255	277	303	358
2nd Quarter	153	183	214	251	300	333	331	366	405	
3rd Quarter	173	196	224	271	322	346	363	374	437	
4th Quarter	277	333	378	413	514	517	548	561	646	
Year Total :	702	827	957	1,100	1,336	1,426	1,498	1,578	1,791	
C. Others										
1st Quarter	30	38	47	57	69	83	91	96	113	129
2nd Quarter	48	60	69	86	100	118	117	138	154	
3rd Quarter	56	66	77	97	123	126	126	137	160	
4th Quarter	86	107	133	166	189	205	216	222	262	
Year Total :	220	270	326	406	481	531	550	593	689	
Annual gross value performed (A + B + C)										
Total :	7,586	9,521	11,773	13,530	15,931	17,671	18,076	19,357	21,396	

Source: National Bureau of Statistics of China



8 GROSS VALUE OF CONSTRUCTION WORK PERFORMED

HONG KONG



Quarter	Value Performed (HK\$ Million)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
A. Private sector sites										
1st Quarter	8,382	8,600	6,349	7,529	11,209	11,675	13,395	15,528	17,652	18,150
2nd Quarter	8,122	9,055	9,276	8,458	12,260	12,176	12,507	17,284	19,530	19,070
3rd Quarter	7,688	8,408	7,360	9,192	12,481	11,848	12,792	16,849	19,252	17,912
4th Quarter	9,303	7,543	7,322	10,102	13,411	13,781	15,259	18,119	21,231	17,712 *
Year Total :	33,495	33,606	30,307	35,281	49,361	49,480	53,953	67,781	77,666	72,844
B. Public sector sites										
1st Quarter	3,819	3,967	6,511	9,880	13,168	16,829	18,258	18,531	19,414	20,639
2nd Quarter	3,762	4,652	6,937	9,263	12,023	14,690	15,397	18,964	17,780	22,827
3rd Quarter	3,653	4,428	8,651	10,814	12,137	13,792	16,253	18,163	21,878	20,934
4th Quarter	4,105	5,605	9,117	12,113	17,332	16,976	18,915	21,585	22,295	22,866 *
Year Total :	15,339	18,652	31,216	42,070	54,660	62,287	68,823	77,242	81,367	87,266
C. Location other than sites										
1st Quarter	11,883	11,750	11,926	12,172	13,347	15,140	17,909	19,549	18,809	19,963
2nd Quarter	13,213	12,415	12,109	11,620	13,245	15,914	20,327	18,744	18,041	20,657
3rd Quarter	12,818	11,969	12,620	12,953	14,358	16,038	18,636	19,520	19,274	22,093
4th Quarter	12,851	12,552	13,097	14,439	16,479	17,716	20,088	21,111	21,333	23,941 *
Year Total :	50,765	48,686	49,752	51,184	57,429	64,808	76,961	78,924	77,458	86,654
Annual gross value performed (A + B + C)										
Total :	99,599	100,944	111,275	128,535	161,450	176,575	199,736	223,947	236,491	246,764

*Provisional
Source : Census and Statistics Department, Hong Kong SAR



9 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	2,648 - 3,053	2,660 - 3,068	2,351 - 2,606	2,315 - 2,718
- Full fit	4,561 - 5,056	4,211 - 4,627	3,491 - 3,861	3,571 - 4,277
Apartments, high rise, high end				
- Shell and core	3,232 - 3,522	3,139 - 4,553	2,464 - 3,249	2,859 - 3,791
- Full fit	10,692 - 11,675	10,197 - 11,616	5,848 - 6,409	5,867 - 7,432
Terraced houses, average standard				
- Shell and core	3,069 - 3,280	3,069 - 3,584	2,653 - 2,917	2,937 - 3,571
- Full fit	N/A	6,025 - 6,532	N/A	N/A
Detached houses, high end				
- Shell and core	4,580 - 5,089	4,627 - 5,148	3,630 - 3,993	3,901 - 4,501
- Full fit	N/A	11,578 - 12,084	N/A	N/A
OFFICE / COMMERCIAL				
Medium/high rise offices, average standard	5,927 - 7,887	5,887 - 7,927	5,102 - 5,643	5,709 - 6,633
High rise offices, prestige quality	7,887 - 9,847	7,927 - 13,022	7,009 - 7,722	7,187 - 9,742
Out-of-town shopping centre, average standard	N/A	4,488 - 5,999	4,858 - 5,333	4,567 - 5,900
Retail malls, high end	8,382 - 10,824	8,118 - 11,174	7,141 - 7,847	7,187 - 10,138
INDUSTRIAL				
Industrial units, shell only. (Conventional single storey framed unit)	1,894 - 2,310	1,855 - 2,264	3,333 - 3,670	2,957 - 3,769
Owner operated factories, low rise, light weight industry	2,944 - 3,676	3,584 - 4,112	N/A	N/A
HOTEL				
Budget hotels - 3-star, mid market	6,501 - 7,979	6,640 - 8,184	6,567 - 7,227	6,323 - 7,847
Business hotels - 4/5-star	10,685 - 14,553	11,095 - 14,652	10,593 - 11,669	12,137 - 15,200
Luxury hotels - 5-star	14,553 - 17,450	14,137 - 18,183	14,428 - 15,899	N/A
OTHERS				
Underground/basement car parks (<3 levels)	5,029 - 7,009	5,128 - 5,636	3,353 - 5,359	N/A
Multi storey car parks, above ground (<4 levels)	2,587 - 3,604	3,082 - 3,122	2,402 - 2,640	2,039 - 2,548
Schools (primary and secondary)	3,590 - 4,600	3,571 - 4,613	2,660 - 2,930	2,752 - 3,062
Students' residences	2,561 - 3,584	2,528 - 3,571	1,729 - 1,940	N/A
Sports clubs, multi purpose sports/leisure centres (dry sports)	6,521 - 8,006	6,118 - 6,164	4,930 - 5,438	N/A
General hospitals - public sector	9,728 - 12,619	8,039 - 10,065	N/A	N/A



9 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)			
DOMESTIC	HK\$ 7.85	MOP 8.085	S\$ 1.32	RM 3.92
Apartments, high rise, average standard - Shell and core - Full fit	N/A 3,057 - 3,592	1,737 - 2,574 2,237 - 2,737	N/A 1,365 - 1,555	N/A 425 - 595 [§]
Apartments, high rise, high end - Shell and core - Full fit	N/A 4,102 - 4,777	2,574 - 3,861 3,124 - 4,774	N/A 2,125 - 3,185	N/A 900 - 1,135
Terraced houses, average standard - Shell and core - Full fit	N/A 4,191 - 4,892	3,049 - 3,786 3,811 - 4,549	N/A 1,780 - 2,010	N/A 240 - 350
Detached houses, high end - Shell and core - Full fit	N/A 5,427 - 6,178	3,686 - 5,311 4,649 - 6,048	N/A 2,275 - 3,030	N/A 630 - 805
OFFICE / COMMERCIAL				
Medium/high rise offices, average standard	2,994 - 3,554	2,574 - 3,324	1,780 [@] - 2,010 [@]	655 - 760
High rise offices, prestige quality	3,694 - 4,331	3,324 - 3,636	2,010 [@] - 2,200 [@]	940 - 1,280
Out-of-town shopping centre, average standard	3,057 - 3,567	2,424 - 3,636	2,010 - 2,125	600 - 735
Retail malls, high end	4,025 - 4,790	3,811 - 4,599	2,125 - 2,350	740 - 1,020
INDUSTRIAL				
Industrial units, shell only. (Conventional single storey framed unit)	N/A	N/A	760 - 970	350 - 440
Owner operated factories, low rise, light weight industry	2,344 - 2,981	N/A	N/A	470 - 530
HOTEL				
Budget hotels - 3-star, mid market	3,885 - 4,204	3,386 - 3,836	2,235 - 2,465	1,090 - 1,520
Business hotels - 4/5-star	4,076 - 4,777	4,599 - 5,498	2,880 - 3,260	1,880 - 2,205
Luxury hotels - 5-star	4,777 - 5,541	5,498 - 6,498	2,880 - 3,260	2,095 - 2,445
OTHERS				
Underground/basement car parks (<3 levels)	3,185 - 3,822	2,012 - 2,949	970 - 1,315	390 - 545
Multi storey car parks, above ground (<4 levels)	1,911 - 2,293	1,112 - 1,462	670 ^{@@} - 970 ^{@@}	245 - 320
Schools (primary and secondary)	2,510 - 2,713	2,224 - 2,574	N/A	275 - 315
Students' residences	2,930 - 3,312	1,762 - 2,049	1,630 - 1,780	325 - 355
Sports clubs, multi purpose sports/leisure centres (dry sports)	3,822 - 4,459	N/A	2,045 - 2,200	635 - 745
General hospitals - public sector	4,968 - 5,605	N/A	2,880 - 3,030	940 - 1,180



9 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

BUILDING TYPE	Jakarta	Manila	Bangkok
	USD / m ² CFA (See also exchange rates per U.S. dollar below)		
DOMESTIC	IDR 13573.00	PHP 51.49	BAHT 31.37
Apartments, high rise, average standard - Shell and core - Full fit	N/A 728 - 824	N/A 925 - 1,080	542 - 701 717 - 893
Apartments, high rise, high end - Shell and core - Full fit	N/A 1,001 - 1,130	N/A 1,228 - 1,679	685 - 886 1,071 - 1,288
Terraced houses, average standard - Shell and core - Full fit	N/A 385 - 502	N/A 755 - 923	319 - 414 478 - 574
Detached houses, high end - Shell and core - Full fit	N/A 1,048 - 1,171	N/A 1,617 - 2,742	558 - 797 829 - 1,004
OFFICE / COMMERCIAL			
Medium/high rise offices, average standard	718 - 794	925 - 1,083	701 - 861
High rise offices, prestige quality	1,056 - 1,180	1,253 - 1,399	956 - 1,180
Out-of-town shopping centre, average standard	617 - 683	733 - 896	654 - 845
Retail malls, high end	681 - 736	1,083 - 1,518	877 - 909
INDUSTRIAL			
Industrial units, shell only. (Conventional single storey framed unit)	332 - 362	458 - 516	510 - 638
Owner operated factories, low rise, light weight industry	360 - 397	647 - 756	N/A
HOTEL			
Budget hotels - 3-star, mid market	1,247 - 1,474	1,185 - 1,321	1,195 - 1,323
Business hotels - 4/5-star	1,700 - 1,836	1,335 - 1,618	1,530 - 1,753
Luxury hotels - 5-star	1,805 - 2,035	1,644 - 2,498	1,785 - 2,072
OTHERS			
Underground/basement car parks (<3 levels)	513 - 629	489 - 585	574 - 749
Multi storey car parks, above ground (<4 levels)	332 - 362	471 - 665	191 - 306
Schools (primary and secondary)	N/A	695 - 958	N/A
Students' residences	N/A	735 - 885	N/A
Sports clubs, multi purpose sports/leisure centres (dry sports)	1,097 - 1,644	1,175 - 1,710	N/A
General hospitals - public sector	N/A	1,276 - 1,533	N/A



9 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 \$\$\$ Excluding 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 Seoul Δ Excluding home appliance ΔΔ Curtain wall to external wall ΔΔΔ Steel structure ΔΔΔΔ Medium to high grade cladding, with garden ΔΔΔΔΔ Mechanical ventilation and car guidance system



OUR OFFICES IN GREATER CHINA

HONG KONG

17/F, Two Harbour Square,
180 Wai Yip Street,
Kwun Tong, Hong Kong
T: +852 2911 2000
F: +852 2911 2002
E: info-hk@arcadis.com

BEIJING

Suite 1225 - 1242, South Wing Central Tower,
Junefield Plaza
10 Xuan Wu Men Wai Street Beijing 100052, China
T: (86 10) 6310 1136
F: (86 10) 6310 1143
E: info-cn@arcadis.com

CHANGSHA

Room 2315-2317, HUAYUAN International Center,
No.36 Section 2,
Xiangjiang Middle Road,
Tianxin District,
Changsha, Hunan Province,
410002, China
T: (86 731) 8277 2500
F: (86 731) 8971 6736
E: info-cn@arcadis.com

CHENGDU

Room 807 Block A
Times Plaza 2 Zong Fu Road
Chengdu, Sichuan Province 610016 China
T: (86 28) 8671 8373
F: (86 28) 8671 8535
E: info-cn@arcadis.com

CHONGQING

Room 3409 - 3410
International Trade Centre
38 Qing Nian Road
Central District
Chongqing 400010, China
T: (86 23) 8655 1333
F: (86 23) 8655 1616
E: info-cn@arcadis.com

DALIAN

Unit 07, 32F, Xiwang Tower
136 Zhongshan Road Zhongshan District
Dalian, Liaoning Province 116001 China
T: (86 411) 8800 8018
F: (86 411) 8800 8823
E: info-cn@arcadis.com

FOSHAN

Room 1002-1004, 10F,
LNTD Commercial Plaza,
No.29, Zumiao Road,
Chancheng District, Foshan,
Guangdong Province, 528000, China
T: (86 757) 8203 0028
F: (86 757) 8203 0029
E: info-cn@arcadis.com

GUANGZHOU

3A10-18 Unit, 3A/F
Bank of America Plaza
555 Ren Min Zhong Road Guangzhou
Guangdong Province 510145 China
T: (86 20) 8130 3813
F: (86 20) 8130 3812
E: info-cn@arcadis.com

HAIKOU

Unit C, 10/F, Times Square
2 Guomao Road
Haikou, Hainan Province 570100 China
T: (86 898) 6652 7818
F: (86 898) 6652 7809
E: info-cn@arcadis.com

HANGZHOU

Room 1306 WinNing International
100 Min Xin Road
Hangzhou
Zhejiang Province 310016, China
T: (86 571) 2829 7766
F: (86 571) 2829 7622
E: info-cn@arcadis.com

HENGQIN

7/F, 156 Nan Shan Ju Road Hengqin, Zhuhai
Guangdong Province 519031 China
T: (86 756) 868 8986
F: (86 756) 868 8969
E: info-cn@arcadis.com

MACAU

12th Floor
Avenida da Praia Grande No. 594
Edificio BCM Macau
T: (853) 2833 1710
F: (853) 2833 1532
E: info-mo@arcadis.com

NANJING

Room 1104
South Tower Jinmao Plaza
201 Zhong Yang Road
Nanjing 210009 China
T: (86 25) 5791 1860
F: (86 25) 6698 1860
E: info-cn@arcadis.com

QINGDAO

Room 2008, 20/F, HNA Center
234 Yan An San Road
Shinan District
Qingdao
Shangdong Province 266071 China
T: (86 532) 8280 1818
F: (86 532) 8280 1881
E: info-cn@arcadis.com

SHANGHAI

11th Floor, Building C, The Place
No. 150 Zunyi Road
Changning District
Shanghai 200051 China
T: (86 21) 6026 1300
F: (86 21) 6026 1800
E: info-cn@arcadis.com

SHENYANG

Room 3013-3015
Office Tower 1, Forum66
1-1 Qingnian Avenue
Shenhe District
Shenyang
Liaoning Province 110063 China
T: (86 24) 3195 8880
F: (86 24) 3128 6983
E: info-cn@arcadis.com

SHENZHEN

Room 1001, AVIC Centre
1018 Huafu Road
Shenzhen
Guangdong Province 518031 China
T: (86 755) 3635 0688
F: (86 755) 2598 1854
E: info-cn@arcadis.com

SUZHOU

Room 906 The Summit,
118 Suzhou Avenue West,
Suzhou,
Jiangsu Province 215021 China
T: (86 512) 8777 5599
F: (86 512) 8777 5600
E: info-cn@arcadis.com

TIANJIN

4002, 40F,
Tianjin World Financial Centre Office Tower
2 Dagubei Road
Heping District
Tianjin 300020
China
T: (86 22) 2329 8611
F: (86 22) 2319 3186
E: info-cn@arcadis.com

WUHAN

Room 1703, Citic Pacific Mansion,
No.1627 Zhongshan Avenue,
Jiangan District, Wuhan,
Hubei Province 430 010, China
T: (86 27) 5920 9299
F: (86 27) 5923 9298
E: info-cn@arcadis.com

XI'AN

Room 1606 - 1607
CapitaMall Office Building
64 South Second Ring Western Xi'an
Shaanxi Province 710065 China
T: (86 29) 8866 9711
F: (86 29) 8866 9760
E: info-cn@arcadis.com



17/F, Two Harbour Square,
180 Wai Yip Street,
Kwun Tong, Hong Kong

 @Arcadis_Asia

 ArcadisAsia

www.arcadis.com

Arcadis. Improving quality of life