

Arcadis Asia Limited Arcadis Hong Kong Limited 2020 THIRD QUARTER



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### **MARKET OVERVIEW**

After experiencing two consecutive quarters in severe economic depression, Hong Kong economy slightly rebounded from the trough in the light of abating third wave of COVID-19 epidemic and resumption of global economic activities especially in the Mainland, however deflation appeared firstly since February 2017, including the effects of all government's one-off relief measures. The Composite Consumer Price Index (CPI) is (+)0.5% YoY in September 2020 even after netting out effects of the one-off relief measures and is the lowest since January 2010.

Construction activities in Hong Kong would be mainly driven by the government in the short run in our forecast. The government is trying to maintain development opportunities with stable land sale programme up to March 2021. As reported by Lands Department, site area of land to be sold in the year of April 2020 to March 2021 is 40.7 ha<sup>2</sup>, which is much greater than that in the same period of last year. Meanwhile, private sector exhibited decline in this quarter. Gross

value of performed private development dropped and floor area of consented and commenced construction has notably declined QoQ and YoY, indicating a slowdown in private construction activities in the following quarters.

### **MARKET MOVEMENT**



### **ECONOMY**

### **Indicator**



Inflation Rate (CPI) per annum

Q3/18-Q3/19 (-) 2.8% per annum

Sep 18-19 (+) 3.2%

Q2/19-Q2/20 (-) 9.0%

Jun 19 - 20 (+) 0.7%

Q3/19-Q3/20 (-) 3.5%

> Sep 19-20 (-) 2.2%

> > 154.0

## **SUPPLY & DEMAND**

### **Indicator**



Activity Level (Gross output; new + A&A)

Q2/19 HK\$56.216 Bn

Q1/20 HK\$55.855 Bn Q2/20



### **Indicator**



Highways Material Index

Labour Wages Index

May-Jul 19 868.8

846.5 Mar-May 20 Jun-Aug 19 150.7 155.7

Feb-Apr 20 May-Jul 20 824.0 Jun-Aug 20

## CONSTRUCTION COST TREND



Tender Price Index (Arcadis)

**Indicator** 

Q3/19 1818

Q2/20 1775

Q3/20 1757

## MARKET ANALYSIS

### **CHINA**

China's GDP grown by 4.9 percent in the third quarter, and the accumulated GDP growth in the first three quarters are 0.7 percent, according to the preliminary statical data from National Bureau of Statistics (NBS). In spite of the globally economic recession triggered by the epidemic, China's GDP growth firstly reversed to be positive since Q1 2020.

The real estate investment in Mainland China in the first 9 months of this year has been increased by (+)5.6% YOY, the sales of commercial buildings amounted had a increase of (+)3.7% YOY, (according to National Bureau of Statistics (NBS)). These data continue to present an V-shaped recovery in real estate market.

In Q3 2020, construction wages remain stable. Comparing with last quarter, the average basic construction product costs fluctuated in price with rebar (+)3.1%, steel (+)4.8%, concrete (-)3.3% and cement (-)7.6%. The tender price recorded remain stable. The construction market price level is anticipated to remain stable or slightly grow in the next guarter.

## HONG KONG DECLINE IN ECONOMIC GROWTH

Hong Kong Gross Domestic Product (GDP) recorded negative figures in the fifth consecutive quarter yet a marked rebound in the third quarter of 2020 with a (-)3.5% YoY movement. In view of the abatement of third wave of local epidemic and gradual resumption of economic activities, which is demonstrated by the recovery in private consumption, import and export of goods and services amongst major expenditure components of GDP in Q3 2020, economy of Hong Kong is expected to recover at slow rate in the rest of this year. Consumer Price Index (CPI) kept declining since April this year and recorded consecutive deflation from July to September 2020.

### SUPPRESSED CONSTRUCTION ACTIVITIES

Floor areas of consent, commenced and completed construction works in Hong Kong shrank in this quarter, and both consent and commenced works showed a sharp decline comparing to last year – indicating a downturn in construction kick-off in the private sector. Overall gross value of construction works performed dropped by 0.5% YoY in Q2 2020 with (-)27.4% drop and (+)14.6% rise YoY in private and public sectors respectively. Overall gross value marginally increased by 0.1% in this quarter however still not yet retrieved to the level before the outbreak of COVID-19.

### **COST OF MATERIALS AND LABOUR**

Regarding construction material cost, steel, sand and diesel prices continued to drop in the quarter between May and July 2020. Cement, floor tiles, other basic architectural products remained constant. As for labour cost, overall labour wage index remained stable with (+)2% YoY and (-)1% QoQ movement. Wages of carpenter, concreter and plasterer decreased in the recent quarter between June and August whilst that of painter, mechanical and electrical fitters increased. Wages of general worker, bricklayer, bar bender, welder and plumber held generally constant. Bricklayer, plasterer and mechanical fitter enjoyed notable rise in wages, i.e. from (+)9% to (+)17%, over the earlier year.



# 2 APPROXIMATE BUILDING COSTS HONG KONG

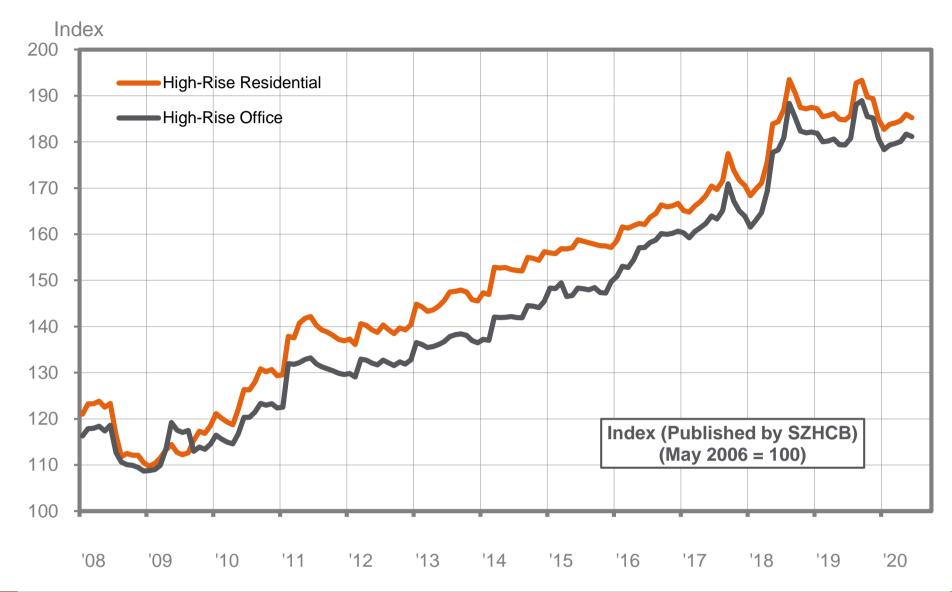
- 1. The cost for the respective categories given are averages based on fixed price competitive tenders. It must be understood that the actual cost of a building will depend upon the design and many other factors and may vary from the figures shown.
- 2. The cost per square metre are based on the Construction 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\$/m2 CFA	OUTLINE SPECIFICATION		
DOMESTIC				
Apartments, high rise, public authority standard	10,800 - 13,000	Apartment units with fit-out, based on Hong Kong Housing Authority Non-standard Cruciform Block design		
Apartments, high rise, average standard	23,400 - 27,000	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	30,200 - 35,200	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	31,800 - 36,800	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	46,600 up	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	23,000 - 26,400	RC structure, curtain wall/window wall, including public area fitout, tenant area with screeded floor, painted wall and ceiling		
High rise offices, prestige quality	27,600 - 31,800	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	22,900 - 26,800	Including public area fit-out and M&E, but excluding shop fit-or		
Retail malls, high end	29,600 - 35,200			
INDUSTRIAL				
Owner operated factories, low rise, light weight industry	17,700 - 22,200	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	29,300-31,200			
Business hotels - 4/5-star	30,300-35,300	3) Special light fittings (chandeliers, etc.)		
Luxury hotels - 5-star	35,300 - 40,600	4) Operating Supplies and Equipment (OS&E) excluded		
OTHERS				
Underground/basement car parks (<3 levels)	24,900 - 29,800	RC structure		
Multi storey car parks, above ground (<4 levels)	14,900-17,700	RC structure, natural ventilation, no facade enclosure		
Schools (primary and secondary)	19,400 - 20,900	Public authority standard, including fit-out, no a/c, complete with basic external works but excluding educational equipment		
Students' residences	22,200-25,100	Including fit-out, loose furniture and a/c		
Sports clubs, multi purpose sports/ leisure centres (dry sports)	29,100-33,200	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	37,000-41,100	Excluding medical and operating equipment		

<sup>\*</sup>The above cost are at 3rd Quarter 2020 levels.

# BUILDING & BUILDING SERVICES PRICE INDEX

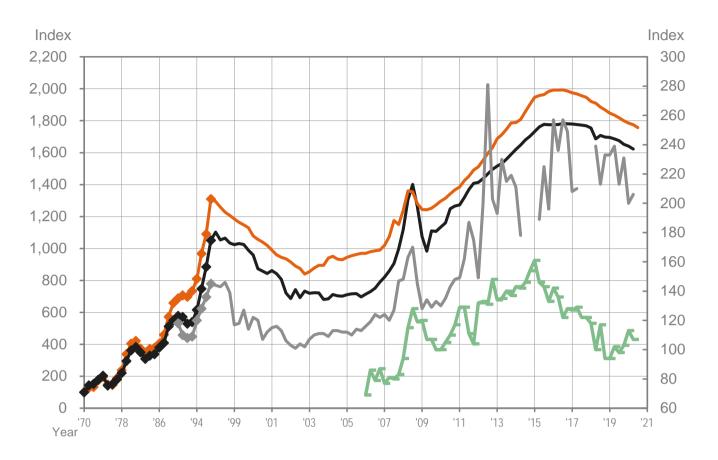
### MAINLAND CHINA



	BUILDING & BUILDING SERVICES PRICE INDEX										
		(Base Index: May 2006 = 100)									
Index		High-Rise I	Residential			High-Ri	ise Office				
Quarter / Year	2017	2018	2019	2020	2017	2018	2019	2020			
January	165.9	173.8	187.5	189.8	160.0	167.2	182.4	185.5			
February	166.1	171.7	187.2	189.4	160.2	165.1	182.0	185.2			
March	166.7	170.5	187.5	185.0	160.7	163.9	182.1	180.8			
April	165.1	168.3	187.2	182.7	160.3	161.5	181.9	178.3			
May	164.8	169.9	185.5	183.8	159.2	163.1	180.1	179.3			
June	166.1	171.1	185.7	184.1	160.6	164.7	180.2	179.7			
July	167.1	175.6	186.1	184.6	161.5	169.3	180.6	180.1			
August	168.3	183.9	184.9	186.0	162.3	177.7	179.4	181.7			
September	170.4	184.4	184.8	185.3	164.0	178.3	179.3	181.2			
October	169.7	187.0	185.7		163.3	180.9	180.8				
November	171.6	193.5	192.8		165.1	188.4	188.1				
December	177.5	190.7	193.4		170.9	185.4	189.0				

Source: Housing and Construction Bureau of Shenzhen

# TENDER PRICE INDEX HONG KONG



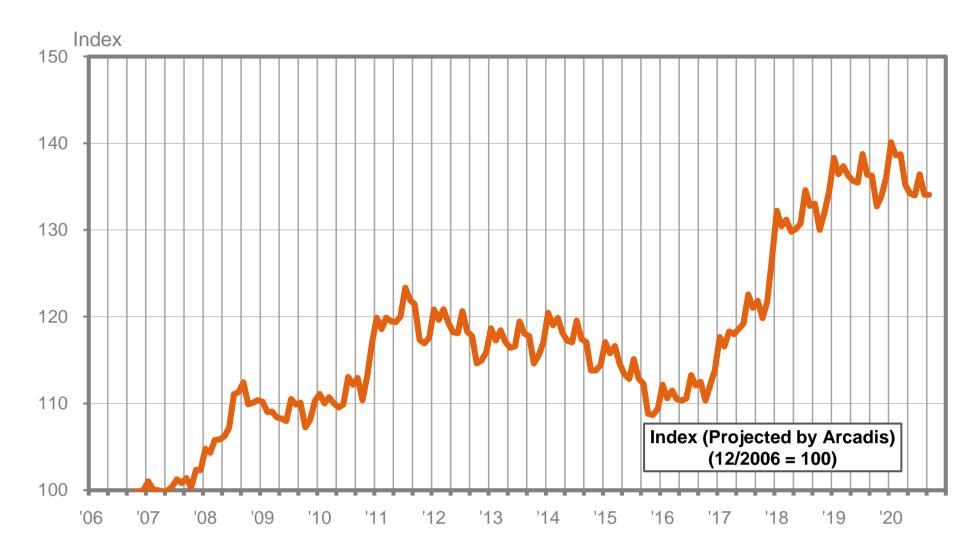
- ----ArchSD BWTPI
- → Arcadis TPI (as at the 4th Quarter)
- Arcadis TPI (Forecast)
- ----ArchSD BSTPI
- ----Arcadis TPI
- ArchSD BWTPI (as at the 4th Quarter)
- ArchSD BSTPI (as at the 4th Quarter)
- ——CEDD CEWTPI

Quarter/Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
			ArchS	D BWTPI (B	ase = 100, a	t Year 1970)				
1 <sup>st</sup> Quarter	1273	1414	1516	1621	1732	1775	1779	1755	1695	1641
2 <sup>nd</sup> Quarter	1320	1438	1532	1648	1761	1776	1776	1727	1686	1623
3 <sup>rd</sup> Quarter	1369	1467	1559	1679	1777	1783	1773	1708	1675	
4 <sup>th</sup> Quarter	1408	1496	1590	1703	1775	1781	1768	1698	1652	
	·		Arch	SD BSTPI (Ba	ase = 100, at	Year 1989)				
1 <sup>st</sup> Quarter	149	149	193	211	(N/A)	257	208	(N/A)	233	200
2 <sup>nd</sup> Quarter	162	200	230	178	189	236	210	258	239	206
3 <sup>rd</sup> Quarter	187	281	215	(N/A)	225	257	(N/A)	247	213	
4 <sup>th</sup> Quarter	175	203	219	(N/A)	196	249	287	233	231	
			Arc	adis TPI (Bas	se = 100, at Y	'ear 1970)				•
1 <sup>st</sup> Quarter	1385	1511	1688	1789	1946	1992	1975	1920	1848	1785
2 <sup>nd</sup> Quarter	1425	1552	1713	1808	1958	1992	1968	1910	1835	1775
3 <sup>rd</sup> Quarter	1452	1595	1747	1857	1963	1993	1957	1885	1818	1757
4 <sup>th</sup> Quarter	1491	1632	1786	1903	1984	1986	1946	1868	1800	
			CE	WTPI (Base	= 100, at Ye	ar 2010)				
1 <sup>st</sup> Quarter	129	132	134	143	161	142	127	118	94	113
2 <sup>nd</sup> Quarter	129	133	135	142	146	136	129	100	102	107*
3 <sup>rd</sup> Quarter	111	131	140	146	143	122	122	117	98	
4 <sup>th</sup> Quarter	104	148	137	154	133	128	122	94	103	

Source: Competitive tenders received by Arcadis, Building Works Tender Price Index (BWTPI) and Building Services Tender Price Index (BSTPI) of Architectural Services Department (ArchSD) of HKSAR, and Civil Engineering Works Tender Price Index (CEWTPI) of Civil Engineering and Development Department (CEDD) of HKSAR

- 1. [\*] denotes forecast figures
- 2. Both BWTPI (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.
- 3. 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.





	CONSTRUCTION MATERIAL PRICE INDEX									
Index	Published (by NBS of China) (Base: Corresponding Month in Preceding Year = 100)				onth (Base: 12/2006 = 100)					
Month / Year	2017	2018	2019	2020	2017	2018	2019	2020		
January	104.9	112.4	104.6	101.3	117.6	132.2	138.3	140.1		
February	105.4	111.9	104.6	101.6	116.6	130.4	136.4	138.6		
March	106.1	110.9	104.7	101.0	118.3	131.2	137.3	138.7		
April	106.8	110.0	105.0	99.2	118.0	129.8	136.3	135.2		
May	107.5	109.7	104.3	98.9	118.6	130.1	135.7	134.2		
June	107.8	109.7	103.6	98.9	119.2	130.7	135.5	134.0		
July	108.2	109.8	103.1	98.3	122.6	134.6	138.8	136.4		
August	108.0	109.7	102.7	98.3	121.0	132.8	136.4	134.0		
September	108.3	109.2	102.4	98.4	121.8	133.0	136.2	134.0		
October	108.6	108.5	102.1		119.8	130.0	132.7			
November	108.6	108.4	101.5		121.7	131.9	133.9			
December	111.3	106.1	101.2		126.7	134.5	136.1			

Source : National Bureau of Statistics (NBS) of China

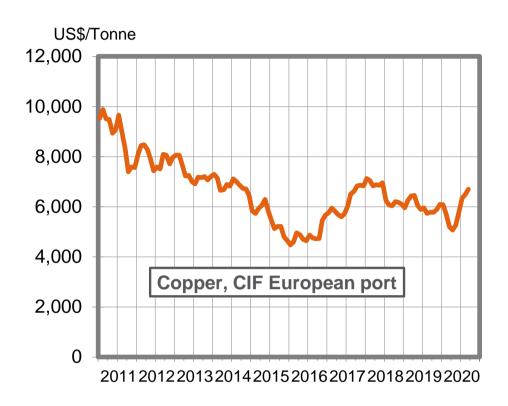
### Notes:

Data are published on a monthly basis, measuring the year-on-year change in price level of each month, but the quarter-on-quarter change is not published, ie. 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. For comparison purpose, December 2006 is referred to as base and the base index as 100.



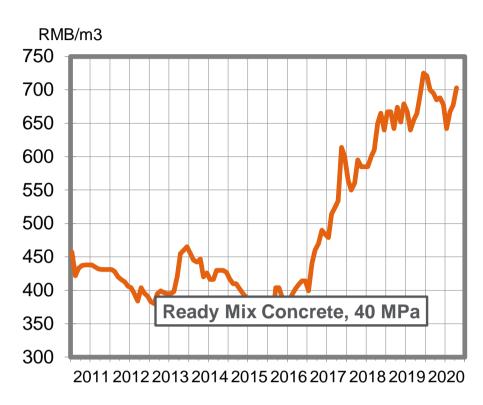
### **Basic Construction Materials**



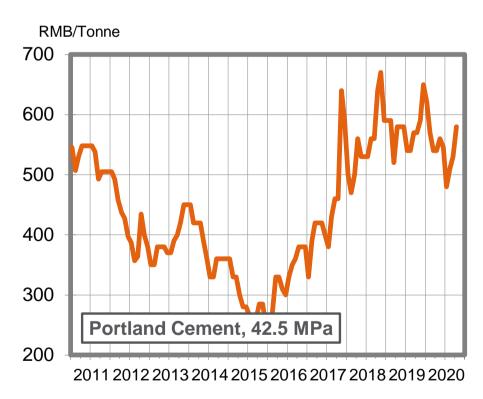
Source : London Metal Exchange



Shanghai Construction & Construction Material Industry Administration Department



Shanghai Construction & Construction Material Industry Administration Department



Shanghai Construction & Construction Material Industry Administration Department



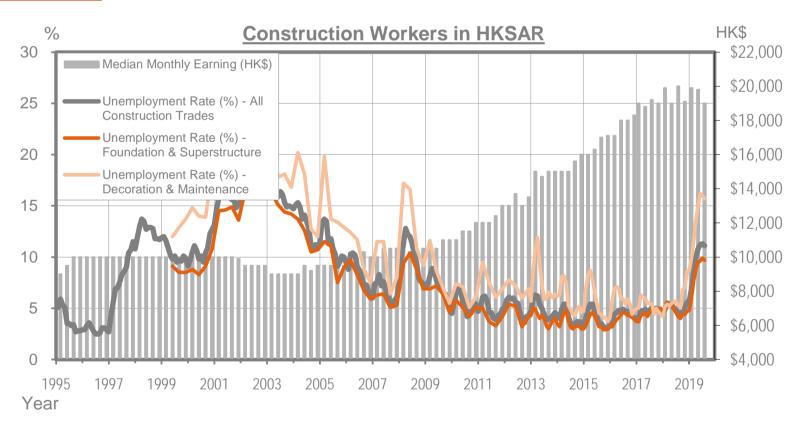
## Mainland China

	ON LABOUF D ON SKILLED LA E INDEX: Q1/2016	BOUR)	EX
Month / Year	2018	2019	2020
January	105.57	115.46	126.74
February	106.28	115.56	130.66
March	106.18	116.30	130.84
April	105.84	117.30	131.23
May	105.96	117.87	131.64
June	108.15	118.89	132.49
July	108.26	119.47	133.22
August	109.78	119.47	132.76
September	114.37	119.28	132.75
October	115.09	119.52	
November	114.93	125.10	
December	115.44	126.04	



Source: Housing and Construction Bureau of Shenzhen

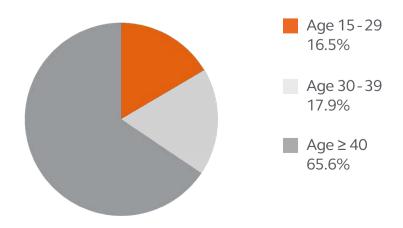
### Hong Kong



Source : Census and Statistics Department

Age Group	No. of Workers Em by Construction Ir	
Age 15-29	75,320	16.5%
Age 30 - 39	81,818	17.9%
Age ≥ 40	299,254	65.6%
Total (as at Aug 2018)	456,392	100.0%

Source : Construction Industry Council

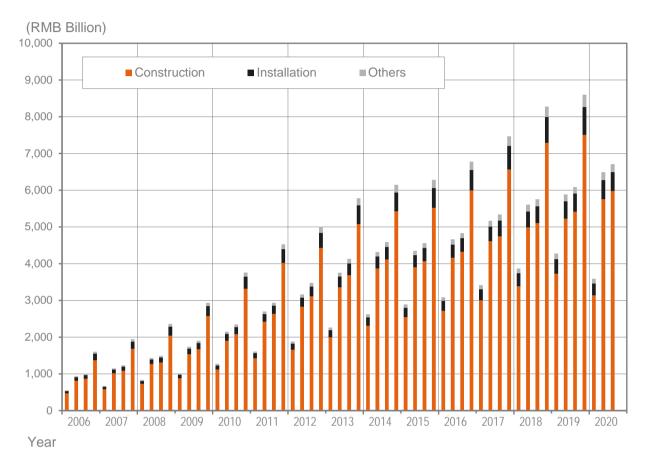


Age Distribution of Workers

## **7**

## GROSS VALUE OF CONSTRUCTION WORK PERFORMED

### MAINLAND CHINA



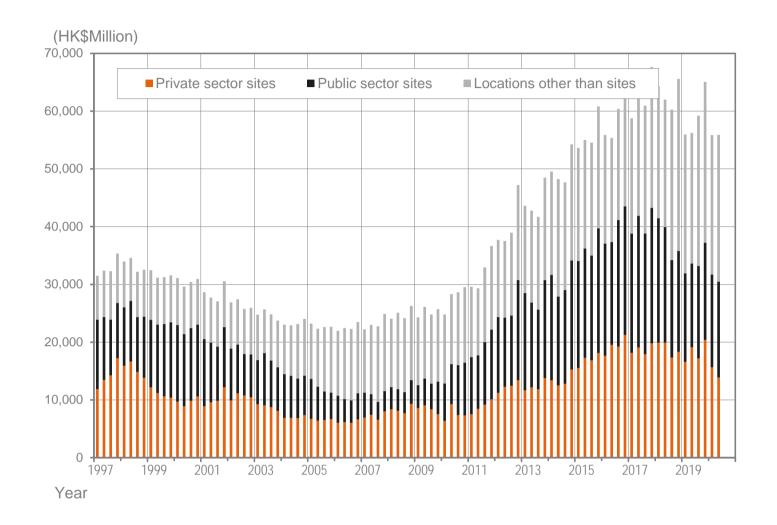
<u> </u>					Value Perform	ed (RMB Billior	1)			
Quarter	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		,	*	A. Co	nstruction			,		
1 <sup>st</sup> Quarter	1,422	1,661	1,994	2,311	2,544	2,712	3,003	3,382	3,727	3,138
2 <sup>nd</sup> Quarter	2,419	2,826	3,355	3,866	3,899	4,158	4,609	4,985	5,223	5,753
3 <sup>rd</sup> Quarter	2,634	3,111	3,687	4,113	4,068	4,322	4,742	5,106	5,414	5,977
4 <sup>th</sup> Quarter	4,016	4,427	5,078	5,425	5,517	5,994	6,562	7,286	7,502	
Year Total:	10,490	12,025	14,115	15,714	16,028	17,186	18,916	20,759	21,867	14,867
				B. Ir	stallation					
1 <sup>st</sup> Quarter	141	165	200	230	255	277	303	358	393	326
2 <sup>nd</sup> Quarter	214	251	300	333	331	366	405	438	476	523
3 <sup>rd</sup> Quarter	224	271	322	346	363	374	437	459	498	519
4 <sup>th</sup> Quarter	378	413	514	517	548	561	646	708	768	
Year Total:	957	1,100	1,336	1,426	1,498	1,578	1,791	1,963	2,135	1.368
				С	. Others					
1 <sup>st</sup> Quarter	47	57	69	83	91	96	113	129	155	127
2 <sup>nd</sup> Quarter	69	86	100	118	117	138	154	187	186	217
3 <sup>rd</sup> Quarter	77	97	123	126	126	137	160	189	173	213
4 <sup>th</sup> Quarter	133	166	189	205	216	222	262	282	328	
Year Total:	326	406	481	531	550	593	689	787	843	558
			An	nual gross val	ue performed	(A + B + C)				
Total:	11,773	13,530	15,931	17,671	18,076	19,357	21,396	23,509	24,845	16,793

Source : National Bureau of Statistics of China

- $1. \ \ Value \ of "Construction" \ refers \ to \ the \ value \ of \ projects \ included \ in \ the \ project \ budgets.$
- $2. \ \ Value \ of "Installation" refers to the value \ of the installation of equipment, excluding the value of the equipment to be installed.$
- 3. Value of "Others" refer to the output value excluding construction projects and installation projects. It includes: output value of repairing buildings and structures; output value of non-standard equipment manufacturing; overhead expenses received by contracted enterprises from the sub-contracted enterprises and the completed output value of construction activities undefined.

# GROSS VALUE OF CONSTRUCTION WORK PERFORMED

### HONG KONG



				Value perfo	rmed (HK\$ Mi	llion)				
Quarter	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	•		*	A. Priva	te sector sit	es			,	*
1 <sup>st</sup> Quarter	7,529	11,209	11,675	13,395	15,528	17,652	18,150	19,918	16,583	15,647
2 <sup>nd</sup> Quarter	8,458	12,260	12,176	12,507	17,284	19,530	19,070	19,925	19,112	13,867*
3 <sup>rd</sup> Quarter	9,192	12,481	11,848	12,792	16,849	19,252	17,912	17,340	17,199	
4 <sup>th</sup> Quarter	10,102	13,411	13,781	15,259	18,119	21,231	19,813	18,369	20,393	
Year Total:	35,281	49,361	49,480	53,953	67,781	77,666	74,945	75,552	73,287	29,514*
				B. Publ	ic sector site	es				
1 <sup>st</sup> Quarter	9,880	13,168	16,829	18,258	18,531	19,414	20,639	21,533	15,338	16,083
2 <sup>nd</sup> Quarter	9,263	12,023	14,690	15,397	18,964	17,780	22,827	20,002	14,512	16,631*
3 <sup>rd</sup> Quarter	10,814	12,137	13,792	16,253	18,163	21,878	20,934	16,888	16,022	
4 <sup>th</sup> Quarter	12,113	17,332	16,976	18,915	21,585	22,295	23,455	17,433	16,825	
Year Total:	42,070	54,660	62,287	68,823	77,242	81,367	87,855	75,856	62,697	32,714*
				C. Location	other than	sites				
1 <sup>st</sup> Quarter	12,172	13,347	15,140	17,909	19,549	18,809	19,963	22,871	24,032	24,126
2 <sup>nd</sup> Quarter	11,620	13,245	15,914	20,327	18,744	18,041	20,657	22,073	22,592	25,410*
3 <sup>rd</sup> Quarter	12,953	14,358	16,038	18,636	19,520	19,274	22,093	26,027	25,992	
4 <sup>th</sup> Quarter	14,439	16,479	17,716	20,088	21,111	21,333	24,406	29,797	27,839	
Year Total:	51,184	57,429	64,808	76,961	78,924	77,458	87,119	100,768	100,455	49,536*
			Ar	nual gross val	ue performed	(A + B + C)				
Total:	128,535	161,450	176,575	199,737	223,947	236,491	249,919	252,176	236,439	111,764*

\*Provisional

Source : Census and Statistics Department, Hong Kong SAR

# APPROXIMATE BUILDING COSTS FOR MAJOR CITIES ASIA

DUIL DING TYPE	Shanghai	Beijing	Guangzhou/ Shenzhen	Chongqing/ Chengdu
BUILDING TYPE		RMB/ r	m2 CFA	
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core - Full fit	2,960 - 3,375 4,887 - 5,386	2,719 - 3,136 4,305 - 4,727	2,652 - 2,924 3,857 - 4,246	2,631 - 3,063 3,981 - 4,737
Apartments, high rise, high end				
- Shell and core - Full fit	3,559 - 3,855 11,035 - 12,027	3,240 - 4,700 10,423 - 11,870	2,767 - 3,602 6,217 - 6,800	3,213 - 4,212 6,445 - 8,124
Terraced houses, average standard - Shell and core - Full fit	3,346 - 3,561 N/A	3,139 - 3,666 6,158 - 6,677	2,811 - 3,096 N/A	3,238 - 3,905 N/A
Detached houses, high end				
- Shell and core - Full fit	4,873 - 5,386 N/A	4,727 - 5,261 11,835 - 12,352	3,838 - 4,227 N/A	4,252 - 4,883 N/A
OFFICE/COMMERCIAL		I		
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
INDUSTRIAL				
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
HOTELS				
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
OTHERS				
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.

# APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

	Hong Kong	Macau	Singapore	Kuala Lumpur
BUILDING TYPE		USD/ m2 CFA (See also excha	nge rates per U.S. dollar below)	
	HK\$ 7.75	MOP 8.060	S\$ 1.37	RM 4.16
DOMESTIC				
Apartments, high rise, average standard				
Shell and core Full fit	N/A 3,019 - 3,484	1,748 - 2,591 2,250 - 2,754	N/A 1,350 - 1,495	N/A 300 - 585 \$
Apartments, high rise, high end				
- Shell and core - Full fit	N/A 3,897 - 4,542	2,591 - 3,885 3,143 - 4,803	N/A 2,080 - 3,065	N/A 700 - 1,370
Terraced houses, average standard				
Shell and core Full fit	N/A 4,103 - 4,748	3,068 - 3,810 3,835 - 4,577	N/A 1,750 - 1,935	N/A 215 - 345 \$\$
Detached houses, high end				
- Shell and core - Full fit	N/A 6,013 up	3,709 - 5,344 4,678 - 6,086	N/A 2,225 - 2,920	N/A 725 - 985
OFFICE/COMMERCIAL				
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
NDUSTRIAL				
ndustrial units, shell only (Conventional single torey framed units)	N/A	N/A	765 - 935	315-435
Owner operated factories, low rise, light weight ndustry	2,284 - 2,865	N/A	N/A	425 - 525
HOTELS				
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
uxury hotels - 5-star	4,555 - 5,239	5,533 - 6,539	2,810 - 3,140	1,905 - 2,445
OTHERS				
Underground/basement car parks (<3 levels)	3,213 - 3,845	2,024 - 2,967	950 - 1,265	310-530
1 Aulti 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.

# APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

	Bangkok	Bangalore	Manila	Ho Chi Minh
BUILDING TYPE		USD/ m2 CFA (See also excha	ange rates per U.S. dollar below)	
	BAHT 31.66	INR 74.39	PHP 48.94	VND 23,500
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core - Full fit	557 - 715 764 - 905	520 - 580 585 - 665	N/A 1,009 - 1,422	N/A 638-791
Apartments, high rise, high end				
Shell and core Full fit	653 - 842 1,019 - 1,254	765 - 910 880 - 1,060	N/A 1,363 - 2,590	N/A 812 - 931
Ferraced houses, average standard				
Shell and core Full fit	319-413 478-587	345 - 375 405 - 425	N/A 983 - 1,203	N/A 430 - 505
Detached houses, high end				
- Shell and core - Full fit	557 - 794 828 - 1,000	460 - 490 530 - 560	N/A 1,909 - 3,237	N/A 491 - 599
OFFICE/COMMERCIAL	020 - 1,000	330-300	1,303-3,237	431-333
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
NDUSTRIAL				
ndustrial units, shell only (Conventional single torey framed units)	510-635	365 - 420	566 - 633	306 - 386
Owner operated factories, low rise, light weight ndustry	N/A	385 - 450	761 - 951	347 - 457
HOTELS				
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
uxury hotels - 5-star	1,784 - 2,064	1,705 - 1,870	1,965 - 3,783	1,748 - 2,098
OTHERS				
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
		<u> </u>		<u> </u>

The above costs are at 3rd Quarter 2020 levels.

# APPROXIMATE BUILDING COSTS FOR MAJOR CITIES ASIA

BUILDING TYPE	OUTLINE SPECIFICATION
DOMESTIC	
Apartments, high rise, average standard	Shell and core, including finishes to public area, but excluding finishes to apartment units  Full fit, with air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings and loose furniture
Apartments, high rise, high end	Shell and core, including finishes to public area, but <u>excluding</u> finishes to apartment units  Full fit, 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	Shell and core, joined houses in row(s), excluding garden, parking, finishes and fittings to house interior Full fit, joined houses in row(s), with air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings, loose furniture, garden and parking
Detached houses, high end	Shell and core, good quality facade, excluding garden, parking, finishes and fittings to house interior Full fit, good quality provisions, with 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	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 excluding 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 excluding 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	<ol> <li>Interior decoration</li> <li>Furniture (fixed and movable)</li> <li>Special light fittings (chandeliers, etc.)</li> <li>Operating Supplies and Equipment (OS&amp;E) excluded</li> </ol>
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 excluding 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	Excluding medical and operating equipment

- 1. 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.
- 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.
- 4. The standard for each category of building varies from region to region and do not necessarily follow that of each other.
- 5. "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.
- 6. "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).
- $7. \ \ Fluctuation\ in\ exchange\ rates\ may\ lead\ to\ changes\ in\ construction\ costs\ expressed\ in\ U.S.\ dollars.$
- 8. Hong Kong: \*\* 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.
- 9. The data for Bangalore / India is provided by Arkind LS Private Limited, an Arcadis Alliance Partner.

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