

# Quarterly Construction Cost Review

**China and Hong Kong** 





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### **China and Hong Kong**

### **Market Overview**



In the third quarter of 2023, despite a 12.5% yearon-year growth on the expenditure on building and construction in public and private sector, the costs of ownership transfer have fallen due to the shrinkage of property transactions, as reported in the Third Quarter Economic Report 2023 published by the Government.

In the past twenty-four months, the total gross floor area of the commenced private construction works has decreased by about 55% compared to the preceding period, which is also only about 40% of that of the completed private construction works in the same period. It is observed that fewer new projects are being commenced. The delay in kicking off the construction projects may be attributed to the inactive sales activities in private property market. According to the Land Registry, the total number of private residential transactions including primary and secondary sales, shrank to 9,174 in Q3 2023, down 24.8% QoQ, and represents only 41.7% of the record during the peak in Q2 2021. Additionally. the Centa-City Leading Index (CCL) has experienced a drop of 5.4% from 165.68 to 156.79 throughout Q3 2023, indicating that the secondary market of the private property sector has eased in terms of both prices and sales volume.

On the other hand, in addressing the demand for public housing, the Government has announced that sufficient land has been identified, and approximately 410,000 public housing units will be developed over the next ten years. Furthermore, 13,000 new units of Transitional Housing are anticipated to be commissioned in the next two years, while 30,000 units of Light Public Housing are expected to be completed by 2027-28. With the increasing supply of public housing in the coming years and the steady supply of capital works, it is foreseeable that the economy of the construction industry in Hong Kong will rely more on the public sector in coming year.

To meet future labour demand in the construction industry, 4,680 quotas of imported construction workers were approved under the Labor Importation Schemes, with the premise of safeguarding local workers' employment priority. It is believed that the new labour force will alleviate the shortage problem and, in turn, stabilize labour costs.

### Market movement



### **Economy**



**GDP Growth** 



**Inflation Rate** (CPI)

Q3/21 - Q3/22 (-) 4.6%

Sep 21-22 (+) 4.4%

Q2/22 - Q2/23 (+) 1.5% Jun 22-23 (+) 1.9%

Q3/22 - Q3/23 (+) 4.1% Sep 22-23

(+) 2.0%



### Sonstruction Output

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

Q2/22 Q1/23 Q2/23 





**Material Index** 

Labour **Wages Index**  Jun - Aug 22 **1233.7** Jun - Aug 22 **155.1** 

Mar - May 23 1150.2 Mar - May 23 **155.1** 

**Jun - Aug 23** 1122.0 Jun - Aug 23 **155.1** 



### Construction Cost Trend



Tender Price Index (Arcadis)

Q3/22 1840

1910

Q2/23

Q3/23 1925

<sup>\*</sup>Provisional



### China

In the third quarter of 2023, China's GDP grew by 5.2% Year-on-Year (YoY). While GDP growth has shown improvement, the overall economic growth is not optimistic considering that this data is based on the large-scale containment of the epidemic during the same period last year.

The real estate market continues to cool down, with both real estate investment and the commencement of new construction areas experiencing a downward trend. By the end of Q3 2023, the capital source for real estate investment had decreased by 13.5% YoY, and the commencement of new construction areas had seen a decrease of 23.4% YoY.

In Q3 2023, construction wages remained stable. However, when comparing with the previous quarter, prices of basic construction materials have been continuously dropping. Rebar and steel prices decreased by 4%, while aluminium and copper prices slightly increased by 2%. Additionally, concrete prices decreased by 5% and cement prices decreased by 12%.

By the end of Q3 2023, construction investment saw a significant rise of 20.1%. However, real estate investment experienced a decline of 7.8%, while infrastructure investment witnessed an increase of 6.2%. Notably, transportation investment, including railway transportation and water transportation, showed remarkable growth, both exceeding 20%. The remaining growth was primarily attributed to industrial projects.

The third quarter of 2023 witnessed a continuation of the downward trend in bidding prices, primarily driven by fierce competition among bidders for real estate projects and the decline in basic construction material prices. As a result, the construction market price level is expected to further decrease in the next quarter due to the prevailing strong competition.

### **Hong Kong**

### Growth in economy of Hong Kong

The real gross domestic product (GDP) in Q3 2023 increased by 4.1% compared to the previous quarter's growth of 1.5%. This positive trend indicates a strengthening economy and signifies a pickup in economic activity. Moreover, by the end of the third quarter of 2023, the Consumer Price Index (CPI) has remained stable at 1.9%. The CPI for the past 9 months in 2023 ranges from 1.7% to 2.4%. This stability suggests that inflation is well managed and under control.

### Floor area of commenced and completed works

In Q3 2023, the data reveals some noteworthy trends. The total gross floor area of the consented private construction works experienced a significant increase of 97% compared to the previous quarter. Additionally, there was a notable 55.9% increase in the last 12 months comparing to the preceding period. On the other hand, there was a noticeable decline in the commenced private construction works, with a decrease of 49.4% comparing to previous quarter. Over the last 12 months, there was a slight decrease of 4.6% in the commenced private construction works. In contrast, completed private construction works showed a substantial increase of 304% QoQ, with a slight drop of 6.4% over the last 12 months.

### Gross value of performed construction works

The gross value of performed new-built private works increased by 15.8% QoQ while public works decreased by 5.2% QoQ in Q2 2023. The gross value of performed A&A works also increased by 5.6% QoQ. In comparison to the second quarter of the previous year, the gross value of new-built private works increased by 27.6% while that of public works decreased by 8.9%. The gross value of performed A&A works also recorded an increase of 10.7% in the same period. Overall, the performed construction works in Q2 2023 showed an increase of 7.5% as compared to the previous year.

### Cost of materials and labour

During Q3 2023, the Tender Price Index (TPI) recorded a 4.62% YoY increase. During this period, steel price slightly decreased by 7.5% QoQ and dropped by 25% from the peak in early 2022. Price of homogeneous floor tiles remained stable compared to the previous quarter witnessed a year-on-year increase of 11%. In terms of fuel price, diesel fuel experienced a slight rise of 0.9% QoQ and a decline of 6% YoY. It also fell by 6.1% from its peak in mid-2022. The construction labour wages index remained stable compared to the previous quarter and the same period last year. Year-on-year, wages for general worker, general welder, electrical fitter and mechanical fitter increased by 3.2%, 2.5%, 4.6% and 3.2% respectively. However, wages for joiner and plasterer decreased by 1.5% and 5.5% respectively.

# **Approximate Building Costs Hong Kong**

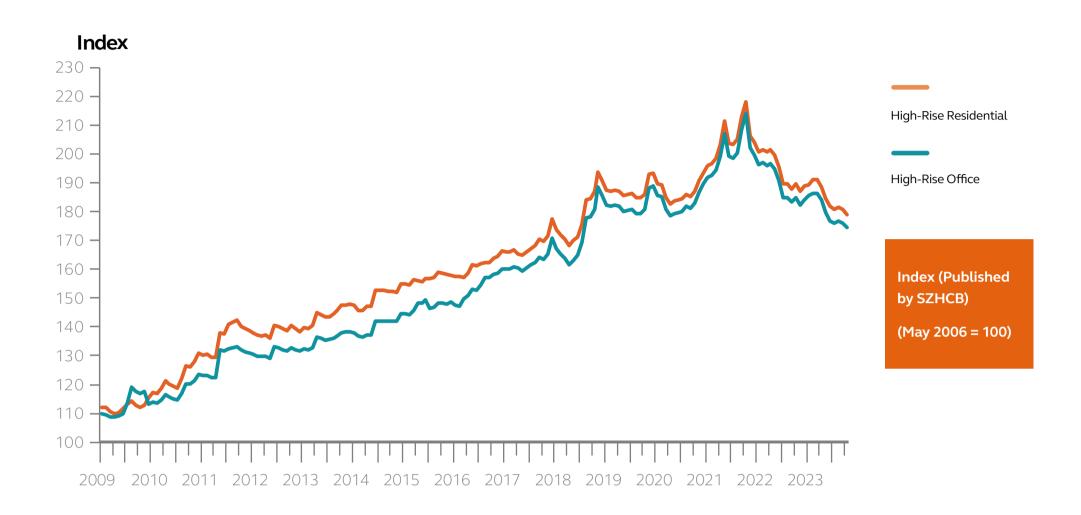
#### **Notes:**

- 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	11,700 - 14,000	Based on Hong Kong Housing Authority Non-standard Cruciform Block design (Rental Housing)				
Apartments, high rise, average standard	25,400 - 29,200	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	32,800 - 37,900	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	35,000 - 40,200	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	50,800 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	25,300 - 28,600	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	30,100 - 34,400	RC structure, curtain wall, including public area fit-out, tenant area with raised floor, painted wall and false ceiling				
Out-of-town shopping centre, average standard	24,900 - 29,200	Including public area fit-out and M&E, but excluding shop fit-out				
Retail malls, high end	32,200 - 37,400	and the same of th				
Industrial						
Owner operated factories, low rise, light weight industry	19,000 - 23,700	RC structure, including small office with simple fit-out and M&E, but excluding a/c				
Hotel						
Budget hotels - 3-star, mid market	31,900 - 33,900	1) Interior decoration				
Business hotels - 4/5-star	32,900 - 37,900	2) Furniture (fixed and movable)				
Luxury hotels - 5-star	38,200 - 42,800	3) Special light fittings (chandeliers, etc.)				
Others	33,233 12,333	4) Operating Supplies and Equipment (OS&E) excluded				
Underground/basement car parks (<3 levels)	27,500 - 32,800	RC structure				
Multi storey car parks, above ground (<4 levels)	16,600 - 19,500	RC structure, natural ventilation, no facade enclosure				
		Public authority standard including fit-out and a/c, but excluding loose				
Schools (primary and secondary)	21,300 - 22,900	furniture and educational equipment				
Students' residences	24,200 - 27,200	Including fit-out, loose furniture and a/c				
Sports clubs, multi purpose sports/ leisure centres (dry sports)	31,800 - 36,000	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	40,000 - 44,000	Excluding medical and operating equipment				

The above costs are at  $3^{\rm rd}\,Quarter\,2023$  levels.

## **Building & Building Services Price Index Mainland China**

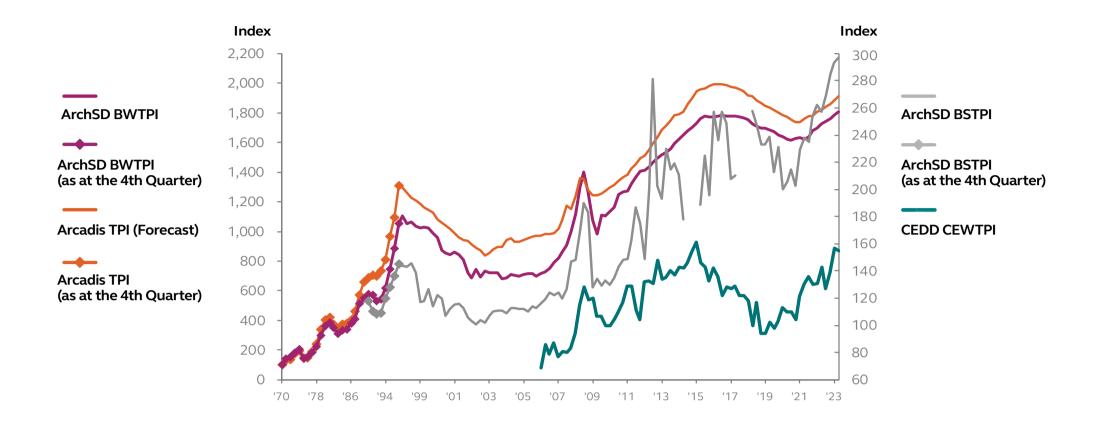


	Building & Building Services Price Index							
Index			<b>(</b> B	ase Index: M	1ay 2006 = 10	0)		
maex		High-Rise	Residential			High-Rise Office		
Month / Year	2020	2021	2022	2023	2020	2021	2022	2023
January	189.8	195.8	200.8	189.3	185.5	191.8	196.3	185.6
February	189.4	196.6	201.5	191.1	185.2	192.4	196.9	186.4
March	185.0	198.5	200.5	191.1	180.8	194.3	195.8	186.5
April	182.7	203.4	201.6	188.6	178.3	199.3	196.7	184.0
May	183.8	211.4	199.4	184.5	179.3	207.0	194.7	179.7
June	184.1	203.5	195.5	181.8	179.7	199.1	190.7	176.9
July	184.6	203.3	189.6	180.7	180.1	198.4	184.6	175.8
August	186.0	205.2	189.6	181.4	181.7	200.3	184.8	176.5
September	185.3	212.9	187.9	180.9	181.2	208.4	183.2	175.8
October	186.8	218.0	189.5	178.7	182.8	213.8	184.9	174.6
November	190.8	206.2	187.0		186.8	202.0	182.3	
December	193.4	204.0	188.7		189.4	199.6	184.1	

 $Source: Housing \ and \ Construction \ Bureau \ of \ Shenzhen$ 

### **Tender Price Index**

### **Hong Kong**



Quarter/Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	ArchSD BWTPI (Base = 100, at Q1 1970)									
Q1	1621	1732	1775	1779	1755	1695	1641	1631	1696	1785
Q2	1648	1761	1776	1776	1727	1686	1623	1620	1726	1806
Q3	1679	1777	1783	1773	1708	1675	1618	1640	1744	
Q4	1703	1775	1781	1768	1698	1652	1625	1679	1763	
			Arch	SD BSTPI (Ba	se = 100, at C	(4 1989)				
Q1	211	(N/A)	257	208	(N/A)	233	200	229	262	293
Q2	178	189	236	210	258	239	206	238	257	297
Q3	(N/A)	225	257	(N/A)	247	213	215	235	269	
Q4	(N/A)	196	249	287	233	231	203	254	285	
			Arca	adis TPI (Base	e = 100, at Q1	1970)				
Q1	1789	1946	1992	1975	1920	1848	1785	1740	1810	1882
Q2	1808	1958	1992	1968	1910	1835	1775	1760	1820	1910
Q3	1857	1963	1993	1957	1885	1818	1757	1780	1840	1925
Q4	1903	1984	1986	1946	1868	1800	1740	1780	1860	
			CED	D CEWTPI (Ba	se = 100, at Q1	I 2010)				
Q1	143	161	142	127	118	94	113	121	131	157
Q2	142	146	136	129	100	102	110	130	143	155*
Q3	146	143	122	122	117	98	110	136	127	
Q4	154	133	128	122	94	103	104	130	139	

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 2013 and onwards are given in detail, whereas indices between year 1970 to 1997 are shown with their 4th Quarter figures.



### Index



Index (Projected by Arcadis)

(12/2006 = 100)

	Construction Material Price Index								
	(Base : Cori		NBS of China) ath in preceding	year = 100)		(Base : 12/2	(by Arcadis) 2006 = 100) ry notes below)		
Month / Year	2020	2021	2022	2023	2020	2021	2022	2023	
January	101.3	97.3	107.5	92.5	140.1	136.3	146.6	135.6	
February	101.6	97.0	106.8	93.1	138.6	134.5	143.6	133.7	
March	101.0	97.8	106.7	93.5	138.7	135.7	144.8	135.3	
April	99.2	100.2	105.1	94.1	135.2	135.5	142.4	134.0	
May	98.9	101.7	103.0	94.1	134.2	136.5	140.6	132.3	
June	98.9	101.5	101.4	94.1	134.0	136.0	137.9	129.7	
July	98.3	101.2	100.7	94.1	136.4	138.0	139.0	130.8	
August	98.3	101.3	100.0	93.9	134.0	135.8	135.8	127.5	
September	98.4	103.7	96.9	93.4	134.0	139.0	134.7	125.8	
October	98.2	110.4	91.3		130.3	143.9	131.4		
November	98.0	111.8	90.0		131.2	146.7	132.0		
December	97.6	109.9	91.0		132.8	146.0	132.8		

Source: National Bureau of Statistics (NBS) of China

- 1. 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.
- 2. 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**

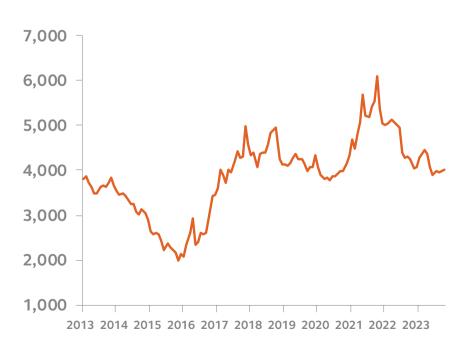
### Copper, CIF European port

### 

Source : London Metal Exchange

### Steel Reinforcement, Grade III

### RMB/Tonne



Shanghai Municipal Management Commission of Housing and Urban-Rural Development

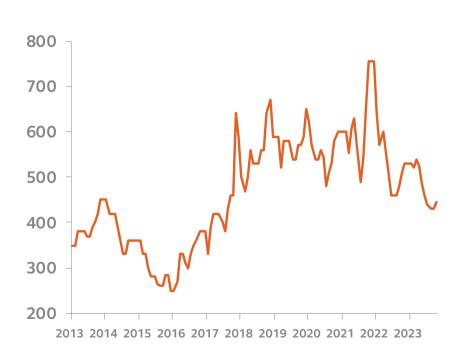
### Ready Mix Concrete, 40 MPa

### 

Shanghai Municipal Management Commission of Housing and Urban-Rural Development

### Portland Cement, 42.5 MPa

### RMB/Tonne



Shanghai Municipal Management Commission of Housing and Urban-Rural Development

### Labour

### **Mainland China**

General workers

Concretor

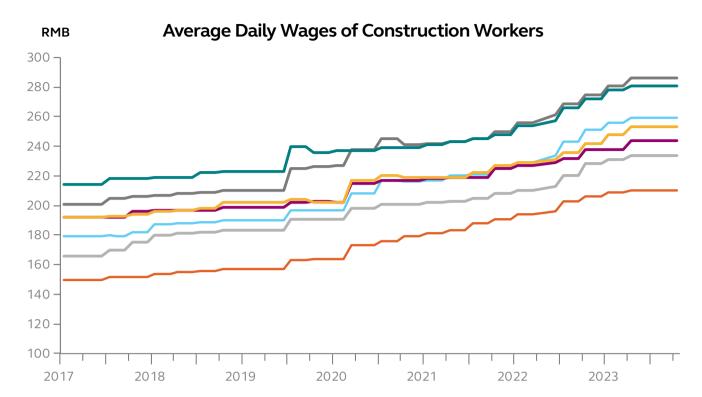
Bar bender and fixer

Carpenter

\_\_\_ Joiner

Metal worker

\_\_\_ Painter



Source: Shanghai Municipal Management Commission of Housing and Urban-Rural Development

### **Hong Kong**



Median Monthly Earning (HK\$)

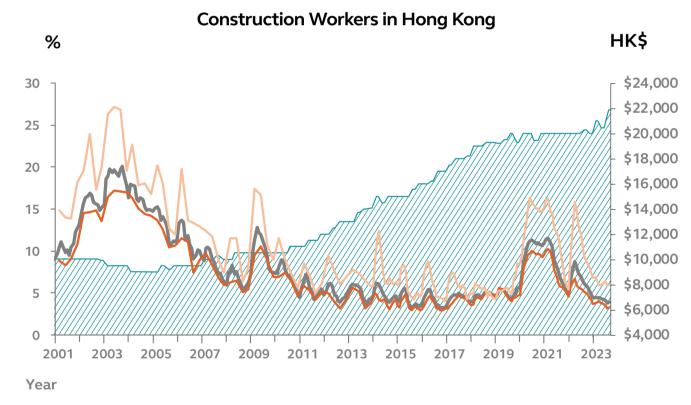
Unemployment Rate (%)All Construction Trades

Unemployment Rate (%)

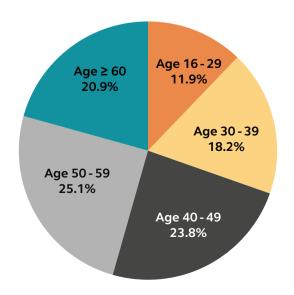
- Foundation & Superstructure

Unemployment Rate (%)

- Decoration & Maintenance



Source : Census & Statistics Department, Hong Kong SAR



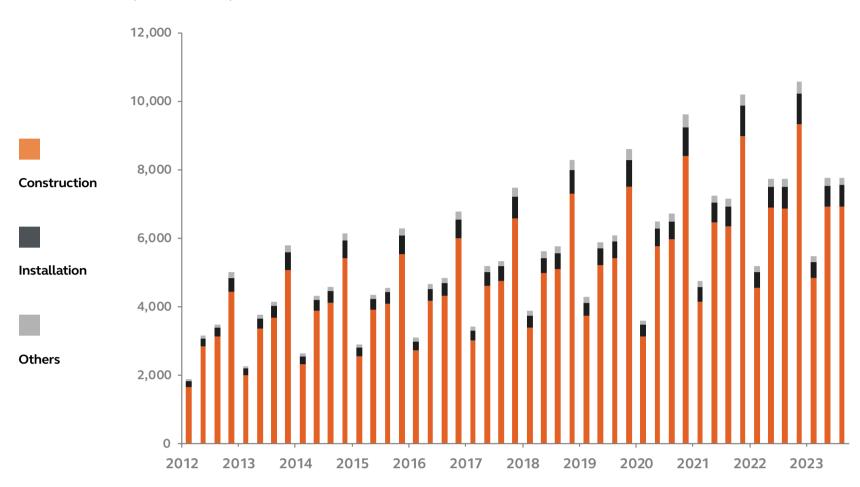
### Age Distribution of Workers

Age Group	No. of Workers Employed by Construction Industry				
Age 16 - 29	75,452	11.9%			
Age 30 - 39	115,303	18.2%			
Age 40 - 49	150,690	23.8%			
Age 50 - 59	158,731	25.1%			
Age ≥ 60	131,911	20.9%			
Total (as at Oct 2023):	632,087	100.0%			

Source : Construction Industry Council

### Gross Value of Construction Work Performed – Mainland China



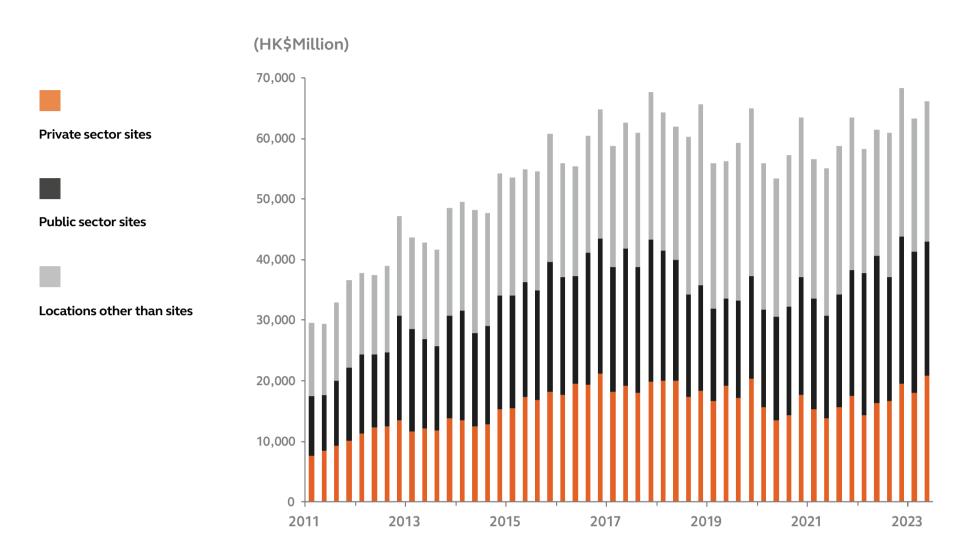


	Value Performed (RMB Billion)									
Quarter	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
				A.	Construction					
1st Quarter	2,311	2,544	2,712	3,003	3,382	3,727	3,138	4,141	4,533	4,820
2 <sup>nd</sup> Quarter	3,866	3,899	4,158	4,609	4,985	5,223	5,753	6,453	6,902	6,907
3 <sup>rd</sup> Quarter	4,113	4,068	4,322	4,742	5,106	5,414	5,977	6,336	6,863	6,929
4 <sup>th</sup> Quarter	5,425	5,517	5,994	6,562	7,286	7,502	8,405	8,991	9,328	
Year Total:	15,714	16,028	17,186	18,916	20,759	21,867	23,272	25,921	27,625	18,656
	B. Installation									
1 <sup>st</sup> Quarter	230	255	277	303	358	393	326	428	463	485
2 <sup>nd</sup> Quarter	333	331	366	405	438	476	523	569	602	614
3 <sup>rd</sup> Quarter	346	363	374	437	459	498	519	579	623	638
4 <sup>th</sup> Quarter	517	548	561	646	708	768	840	871	906	
Year Total:	1,426	1,498	1,578	1,791	1,963	2,135	2,208	2,448	2,594	1,737
					C. Others					
1 <sup>st</sup> Quarter	83	91	96	113	129	155	127	164	175	175
2 <sup>nd</sup> Quarter	118	117	138	154	187	186	217	229	223	224
3 <sup>rd</sup> Quarter	126	126	137	160	189	173	213	228	240	194
4 <sup>th</sup> Quarter	205	216	222	262	282	328	357	318	340	
Year Total:	531	550	593	689	787	843	915	940	978	594
			An	nual gross va	alue perform	ed (A + B + C	)			
Total:	17,671	18,076	19,357	21,396	23,509	24,845	26,395	29,308	31,198	20,987

 $Source: National\ Bureau\ of\ Statistics\ of\ China$ 

- 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 Performed (HK\$ Million)										
Quarter	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	A. Private sector sites										
1 <sup>st</sup> Quarter	11,675	13,395	15,528	17,652	18,150	19,918	16,583	15,647	15,339	14,351	18,031
2 <sup>nd</sup> Quarter	12,176	12,507	17,284	19,530	19,070	19,925	19,112	13,489	13,758	16,360	20,872*
3 <sup>rd</sup> Quarter	11,848	12,792	16,849	19,252	17,912	17,340	17,199	14,303	15,620	16,674	
4 <sup>th</sup> Quarter	13,781	15,259	18,119	21,231	19,813	18,369	20,393	17,685	17,521	19,540	
Year Total:	49,480	53,953	67,780	77,665	74,945	75,552	73,287	61,124	62,238	66,925	38,903*
B. Public sector sites											
1 <sup>st</sup> Quarter	16,829	18,258	18,531	19,414	20,639	21,533	15,338	16,083	18,167	23,356	23,303
2 <sup>nd</sup> Quarter	14,690	15,397	18,964	17,780	22,827	20,002	14,512	17,155	17,054	24,247	22,100*
3 <sup>rd</sup> Quarter	13,792	16,253	18,163	21,878	20,934	16,888	16,022	17,940	18,604	20,462	
4 <sup>th</sup> Quarter	16,976	18,915	21,585	22,295	23,455	17,433	16,825	19,400	20,687	24,292	
Year Total:	62,287	68,823	77,243	81,367	87,855	75,856	62,697	70,578	74,512	92,357	45,403*
				C	. Location o	ther than sit	tes				
1st Quarter	15,140	17,909	19,549	18,809	19,963	22,871	24,032	24,126	23,075	20,526	21,888
2 <sup>nd</sup> Quarter	15,914	20,327	18,744	18,041	20,657	22,073	22,592	22,674	24,249	20,867	23,109*
3 <sup>rd</sup> Quarter	16,038	18,636	19,520	19,274	22,093	26,027	25,992	24,971	24,465	23,864	
4 <sup>th</sup> Quarter	17,716	20,088	21,111	21,333	24,406	29,797	27,839	26,398	25,183	24,569	
Year Total:	64,808	76,960	78,924	77,457	87,119	100,768	100,455	98,169	96,972	89,826	44,997*
				Annual g	ross value p	erformed (A	A + B + C)				
Total:	176,575	199,736	223,947	236,489	249,919	252,176	236,439	229,871	233,722	249,108	129,303*

\*Provisional

Source: Census and Statistics Department, Hong Kong SAR

### For Major Cities In Asia

- Full fit 4,930 - 5,434 4,339 - 4,765 4,127 - 4,734  Apartments, high rise, high end  - Shell and core - Full fit 3,626 - 3,927 3,269 - 4,741 2,714 - 3,681 - Full fit 11,131 - 12,136 10,516 - 11,971 6,705 - 7,644	2,665 - 3,029 4,073 - 4,723 3,293 - 4,191 6,578 - 8,067
Domestic         Apartments, high rise, average standard       3,015 - 3,438       2,743 - 3,164       2,601- 2,987         - Full fit       4,930 - 5,434       4,339 - 4,765       4,127- 4,734         Apartments, high rise, high end       3,626 - 3,927       3,269 - 4,741       2,714 - 3,681         - Full fit       11,131 - 12,136       10,516 - 11,971       6,705 - 7,644	4,073 - 4,723 3,293 - 4,191
Apartments, high rise, average standard  - Shell and core - Full fit  Apartments, high rise, high end - Shell and core - Shell and core - Full fit  3,015 - 3,438 2,743 - 3,164 4,339 - 4,765 4,127 - 4,734  Apartments, high rise, high end - Shell and core - Full fit  11,131 - 12,136 10,516 - 11,971 6,705 - 7,644	4,073 - 4,723 3,293 - 4,191
- Shell and core 3,015 - 3,438 2,743 - 3,164 2,601 - 2,987 4,339 - 4,765 4,127 - 4,734  Apartments, high rise, high end 3,626 - 3,927 3,269 - 4,741 2,714 - 3,681 5,705 - 7,644	4,073 - 4,723 3,293 - 4,191
- Full fit       4,930 - 5,434       4,339 - 4,765       4,127 - 4,734         Apartments, high rise, high end       3,626 - 3,927       3,269 - 4,741       2,714 - 3,681         - Full fit       11,131 - 12,136       10,516 - 11,971       6,705 - 7,644	4,073 - 4,723 3,293 - 4,191
Apartments, high rise, high end  - Shell and core - Full fit  3,626 - 3,927 3,269 - 4,741 2,714 - 3,681 11,131 - 12,136 10,516 - 11,971 6,705 - 7,644	3,293 - 4,191
- Shell and core 3,626 - 3,927 3,269 - 4,741 2,714 - 3,681 - Full fit 11,131 - 12,136 10,516 - 11,971 6,705 - 7,644	
- Full fit 11,131 - 12,136 10,516 - 11,971 6,705 - 7,644	
	6,578 - 8,067
Terraced houses, average standard	
- Shell and core 3,375 - 3,663 3,167 - 3,698 2,733 - 3,103	3,286 - 3,929
- Full fit 6,810 - 7,419 6,213 - 6,730 6,252 - 7,475	5,559 - 6,527
Detached houses, high end         4,964 - 5,487         4,769 - 5,307         3,803 - 4,320	4,307 - 4,914
- Shett and core	7,073 - 8,035
Office / Commercial	
Medium/high rise offices, average standard         6,324 - 8,356         6,189 - 8,338         5,879 - 6,715	6,389 - 7,342
High rise offices, prestige quality 8,125 - 11,112 10,059 - 13,693 8,606 - 10,816 8	8,057 - 10,708
Out-of-town shopping centre, average standard N/A N/A 5,602 - 6,369	5,170 - 6,544
Retail malls, high end 8,586 - 11,576 8,368 - 11,520 8,289 - 12,010	7,680 - 10,601
Industrial	
Industrial units, shell only (Conventional single storey framed units)  1,947 - 2,386  1,911 - 2,330  2,200 - 2,704	3,150 - 3,917
Owner operated factories, low rise, light weight industry 3,013 - 3,773 3,695 - 4,235 N/A	N/A
Hotels	
Budget hotels - 3-star, mid market 6,920 - 8,434 6,847 - 8,434 7,519 - 8,527	6,975 - 8,525
Business hotels - 4/5-star 11,150 - 15,093 11,667 - 15,403 12,154 - 17,889 1	12,515 - 15,481
Luxury hotels - 5-star 15,075 - 18,020 14,849 - 19,115 16,357 - 18,587 1	15,411 - 18,324
Others	
Underground/basement car parks (<3 levels)	3,011 - 4,170
Multi storey car parks, above ground (<4 levels) 2,648 - 3,700 3,182 - 3,213 2,768 - 3,136	2,400 - 2,934
Schools (primary and secondary)         3,950 - 4,985         3,682 - 4,753         3,127 - 4,062	3,181 - 3,505
Students' residences         2,891 - 3,943         2,604 - 3,682         2,882 - 3,675	2,227 - 3,185
Sports clubs, multi purpose sports/ 6,664 - 8,186 6,305 - 6,360 5,343 - 6,054	5,020 - 5,503
General hospitals - public sector         10,182 - 13,127         8,290 - 10,382         8,091 - 10,428	8,023 - 9,934

The above costs are at  $3^{rd}$  Quarter 2023 levels.

### For Major Cities In Asia

	Hong Kong	Macau	Singapore	Kuala Lumpur	
	Q3/2023	Q3/2023	Q3/2023	Q3/2023	
Building Type	USI	D/ m2 CFA (See also exchar	nge rates per U.S. dollar b	elow)	
	HK\$ 7.82	MOP 8.01	S\$ 1.34 RM 4.69		
Domestic					
Apartments, high rise, average standard					
- Shell and core	N/A	1,899 - 2,815	N/A	N/A	
- Full fit	3,250 - 3,730	2,446 - 2,992	1,905 - 2,200	305 - 600	
Apartments, high rise, high end					
- Shell and core	N/A	2,815 - 4,221	N/A	N/A	
- Full fit	4,190 - 4,850	3,415 - 5,218	2,950 - 4,365	690 - 1,435	
Terraced houses, average standard					
- Shell and core - Full fit	N/A 4,480 - 5,140	3,334 - 4,140 4,167 - 4,973	N/A 2,465 - 2,760	N/A 220 - 355	
	4,400 - 3,140	4,107 - 4,373	2,403 - 2,700	220 - 333	
Detached houses, high end - Shell and core	N/A	4,030 - 5,807	N/A	N/A	
- Full fit	6,500 up	5,083 - 6,612	3,135 - 4,180	735 - 1,000	
Office / Commercial					
Medium/high rise offices, average standard	3,240 - 3,660	2,815 - 3,634	2,465 - 2,800 <sup>®</sup>	575 - 765	
High rise offices, prestige quality	3,850 - 4,400	3,634 - 3,976	2,800 - 3,020 <sup>@</sup>	905 - 1,295	
Out-of-town shopping centre, average standard	3,180 - 3,730	2,652 - 3,976	2,650 - 2,950	425 - 640	
Retail malls, high end	4,120 - 4,780	4,167 - 5,027	2,950 - 3,210	670 - 1,020	
Industrial					
Industrial units, shell only (Conventional single storey framed units)	N/A	N/A	1,155 - 1,345 <sup>@@</sup>	315 - 440	
Owner operated factories, low rise, light weight industry	2,430 - 3,030	N/A	N/A	415 - 530	
Hotels					
Budget hotels - 3-star, mid market	4,080 - 4,340	3,703 - 4,194	3,135 - 3,435	975 - 1,435	
Business hotels - 4/5-star	4,210 - 4,850	5,027 - 6,013	4,030 - 4,700	1,275 - 2,240	
Luxury hotels - 5-star	4,880 - 5,470	6,013 - 7,104	4,030 - 4,700	1,865 - 2,505	
Others					
Underground/basement car parks (<3 levels)	3,520 - 4,190	2,200 - 3,223	1,380 - 1,790	300 - 535	
Multi storey car parks, above ground (<4 levels)	2,120 - 2,490	1,215 - 1,599	860 - 1,270	200 - 350	
Schools (primary and secondary)	2,720 - 2,930	2,432 - 2,815	N/A	240 - 310	
Students' residences	3,090 - 3,480	1,927 - 2,241	2,315 - 2,425	290 - 365	
Sports clubs, multi purpose sports/ leisure centres (dry sports)	4,070 - 4,600	N/A	2,835 - 3,020	580 - 740	
General hospitals - public sector	5,120 - 5,630	N/A	3,995 - 4,180	810 - 1,180	

The above costs are at  $3^{rd}$  Quarter 2023 levels.

### For Major Cities In Asia

	Bangkok	Bangalore	Manila	Ho Chi Minh
	Q3/2023	Q3/2023	Q3/2023	Q3/2023
Building Type	US	D/ m2 CFA (See also exchar	nge rates per U.S. dollar be	elow)
	BAHT 35.16	INR 82.67	PHP 56.96	VND 24,140
Domestic				
Apartments, high rise, average standard				
- Shell and core	529 - 697	630 - 720	N/A	N/A
- Full fit	708 - 865	718 - 866	942 - 1,283	581 - 721
Apartments, high rise, high end				
- Shell and core - Full fit	617 - 782 953 - 1,166	980 - 1,191 1,146 - 1,445	N/A 1,273 - 2,286	N/A 913 - 1,231
Terraced houses, average standard	355 1,155	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,273 2,233	3.3 ,,23
- Shell and core	296 - 381	480 - 541	N/A	351 - 406
- Full fit	449 - 552	505 - 565	845 - 1,034	576 - 669
Detached houses, high end				
- Shell and core	515 - 737	523 - 615	N/A	489 - 593
- Full fit	779 - 939	639 - 718	1,641 - 2,794	836 - 939
Office / Commercial				
Medium/high rise offices, average standard	788 - 939	521 - 576#	863 - 1,144	756 - 865
High rise offices, prestige quality	981 - 1,260	602 - 764#	1,249 - 1,611	871 - 1,174
Out-of-town shopping centre, average standard	671 - 867	525 - 571	734 - 915	637 - 779
Retail malls, high end	902 - 953	703 - 809	1,002 - 1,404	797 - 974
Industrial				
Industrial units, shell only (Conventional single storey framed units)	523 - 660	448 - 554	490 - 630	310 - 386
Owner operated factories, low rise, light weight industry	N/A	475 - 594	657 - 826	352 - 460
Hotels				
Budget hotels - 3-star, mid market	1,226 - 1,365	1,026 - 1,106	1,095 - 1,354	1,201 - 1,453
Business hotels - 4/5-star	1,564 - 1,806	1,455 - 1,855	1,250 - 2,072	1,383 - 1,674
Luxury hotels - 5-star	1,832 - 2,125	1,999 - 2,336	1,730 - 3,283	1,789 - 2,123
Others				
Underground/basement car parks (<3 levels)	603 - 794	346 - 401	571 - 742	639 - 754
Multi storey car parks, above ground (<4 levels)	199 - 324	286 - 336	451 - 688	412 - 446
Schools (primary and secondary)	N/A	362 - 423	643 - 888	568 - 695
Students' residences	N/A	374 - 460	720 - 912	542 - 688
Sports clubs, multi purpose sports/ leisure centres (dry sports)	N/A	691 - 780	1,084 - 1,578	1,093 - 1,336
General hospitals - public sector	N/A	778 - 902	1,305 - 1,525	N/A

The above costs are at  $3^{rd}$  Quarter 2023 levels.

### For Major Cities In Asia

Building Type  Domestic	Outline Specification
Apartments, high rise, average standard	Shell and core, including finishes and fittings to public area, but excluding finishes and fittings 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 and fittings to public area, but excluding finishes and fittings to apartment units  Full fit, good quality provisions, with air-conditioning, kitchen cabinets and home appliances, but excluding 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, including finishes and fittings to house interior, 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/window wall, including public area fit-out, tenant area with screeded floor, painted wall and ceiling
High rise offices, prestige quality	RC structure, curtain wall, including public area fit-out, tenant area with raised floor, painted wall and false ceiling
Out-of-town shopping centre, average standard Retail malls, high end	Including public area fit-out and M&E, but <b>excluding</b> shop fit-out
Industrial	
Industrial units, shell only (Conventional single storey framed units)	RC structure with steel roof and M&E to main distribution, but <b>excluding</b> a/c and tenant fit-out
Owner operated factories, low rise, light weight industry	RC structure, including ancillary office with simple fit-out and M&E, but <b>excluding</b> a/c
Hotels	
Budget hotels - 3-star, mid market	
Business hotels - 4/5-star	Interior decoration     Furniture (fixed and movable)
Susmess notets 175 star	3. Special light fittings (chandeliers, etc.)
Luxury hotels - 5-star	4. Operating Supplies and Equipment (OS&E) excluded  Operating Supplies and Equipment (OS&E) excluded
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)	Government standard and provisions; <b>excluding</b> educational equipment
Students' residences	University standard
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 / café, bar, etc. Costs include a/c, Furniture, Fittings and Equipment (FF&E)
General hospitals - 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 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 and corridors) and M&E main plant and upfeed, with occupant areas unfurnished.
- 6. "Full fit" buildings should complete with all elements that allow the buildings to be ready for operation, including public and occupant 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. **Kuala Lumpur:** \$ 6-12 units per floor, 46m2 83m2 per unit; excluding air-conditioning, kitchen cabinets and home appliances \$\$ Excluding air-conditioning, kitchen cabinets and home appliances. **Bangalore:** #Tenant area with screeded floor, painted wall and ceiling, excluding raised floor.
- 9. The data for Bangkok is provided by Mentabuild Limited.
- 10. The data for Bangalore is provided by Arkind LS Private Limited.
- 11. The data for Singapore is provided by Asia Infrastructure Solutions Singapore Pte. Ltd.
- 12. The data for Kuala Lumpur is provided by JUBM Group.
- 13. The data for Ho Chi Minh is provided by DLS Consultant Company Limited.
- 14. Singapore, Kuala Lumpur and Bangalore: Rates are nett of GST. Bangkok and Ho Chi Minh: Rates are nett of VAT. Manila: Rates include 12% VAT.



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