

利比 RLB | Rider Levett Bucknall

CHINA  
REPORT

CONSTRUCTION PROCUREMENT AND  
COST INTELLIGENCE

September 2016



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## FOREWORD

From the first half of the year, China's economy has achieved steady growth and tends to continue its growth in the future. China's GDP has increased 6.7% as compared to last year. The expansion of job opportunity, increase in average household income, improvement in ecosystem, reformation of the structure of the economy as well as the boost in the efficiency of the economy have resulted in the increase in China's GDP. At the same time, it comes with the expansion of China's industry and service sector and the increase in domestic consumption and improvement in export efficiency.

Total investment in real estate was RMB4.6631 trillion in the first 6 months of 2016, a year-on-year growth of 6.1%, a drop of 0.9% as compared to the first 5 months. Total residential property investment reached RMB3.1149 trillion, a year-on-year growth of 5.6%, a drop of 1.2% as compared to the first 5 months, and accounted for 66.8% of the total real estate investment.

Real estate investment in Eastern China\* amounted to RMB2.6589 trillion, a year-on-year growth of 4.6%, but a drop of 1.4% as compared to the first 5 months. Real estate investment in Central China\* reached RMB974.7 billion, represented a growth of 10%, a drop of 1.6% as compared to the first 5 months. Real estate investment in Western China\* reached RMB1.0294 trillion, represented an increase of 6.5%, up by 0.7% as compared to the first 5 months.

Total floor area in the real estate development is 6,697.50 million m<sup>2</sup> in the first 6 months of 2016, a year-on-year growth of 5.0%, a drop of 0.6%. The floor area for residential development under construction is 4,594.44 million m<sup>2</sup>, a year-on-year growth of 3.4%. The total floor area of new project is 775.37 million m<sup>2</sup>, represented a growth of 14.9%, a drop of 3.4%. Total floor area of new residential project is 534.33 million m<sup>2</sup>, represented a growth of 14.0%. Total real estate completions reached 395.46 million m<sup>2</sup>, a year-on-year growth of 20.0%, a drop of 0.4%. Total completed residential floor area is 290.24 million m<sup>2</sup>, represented a year-on-year growth of 19.2%.

With regard to the land market, all land plots in terms of site area acquired by property developers and real estate companies amounted to 95.02 million m<sup>2</sup>, a drop of 13.0% as compared to last year, a drop of 2.9% as compared with the first 5 months. Aggregate transaction value of the land market is RMB315.9 billion, represented a year-on-year growth of 10.2%, up by 5.5%.

(Source: [www.stats.gov.cn](http://www.stats.gov.cn))

- \* Eastern China includes 11 provinces (cities), which are Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan.
- \* Central China includes 8 provinces, which are Shanxi, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei and Hunan.
- \* Western China includes 12 provinces (cities and autonomous regions), which are Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shanxi, Gansu, Qinghai, Ningxia and Xinjiang.







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## Export price components for Chinese building materials / equipment

Building materials/equipment export price refers to the price of building materials/equipment exported from one country to another country given that a normal trade is conducted, i.e. the price of the products that the exporters sell to the importers. The price is mainly composed of the following parts:

### 1. Export costs

#### 1.1 Procurement costs

The production, processing or procurement costs of export enterprises or foreign trade units for the export of their products are usually called costs including tax.

#### 1.2 Export tax rebate

In accordance with the current national provisions in China, the VAT should be refunded in full or partially in order to reduce the cost of exports of goods. The specific amount of tax rebate shall be calculated according to the product corresponding to the tax rebate rate. The tax refund rates of different products, ranging from 5% to 17%, can be found on the official website of the State Administration of Taxation.

### 2. Export expenses

Export expenses refer to the costs paid by the export enterprises or foreign trade units associated with moving the goods to their overseas clients, encompassing initial negotiations through physical delivery to settling the payment, essentially all costs incurred other than the purchase price of the export goods.

#### 2.1 Domestic costs

Domestic costs, including packaging, storage, domestic transportation, miscellaneous port charges, certification, inspection, customs clearance, as well as company overheads and interests, etc.

#### 2.2 Bank charges

Expense charged by the bank to the exporter for receiving payment from the importer.

#### 2.3 Commissions

The commissions payable by the exporter to the agent who facilitated the successful closing of the deal.

#### 2.4 Sea freight

Sea freight includes the transportation cost to the destination by ocean and various expenses during the transportation. Sea freight is charged by "the list of freight price", which is a monopoly price. Different shipping companies have different charges. The freight price has two parts: the base rate and the extra charge, which vary according to the category, size & weight of the goods/equipment, layout of container, shipping season, and shipping port and shipping companies.

#### 2.5 Insurance

According to relevant regulations, the exporter is responsible for purchasing insurance to hedge against the risk of loss or damage during transfers to buyer, with the buyer (importer) named as the beneficiary.

### 3. Expected profit

The profit that the exporter expects to make.

Please note the list above cannot be considered exhaustive, while the procedures of exports of construction materials/equipment depend on the relevant rules or regulations set by local authorities, manufacturers and exporters in different regions. Moreover, the aforesaid costs may vary from region to region, and further confirmation from local authorities is required before exporting.



## Export price components for Chinese

### Sample price breakdown (A)

The case study represents the scenario in which bathroom pod, size internal dimension 2,700mmx1,900mm, manufactured and processed in China, are being exported.

Supply and install the following unit including timber door, white ceramic sanitaryware, chrome finish taps and accessories, wall mounted WC with concealed cistern, semi-recessed hand basin, large solid bath tub with detachable shower handset and glass shower screen, larger wall mounted mirror above basin, matt finish ceramic tiles to floors & walls and side panels to bath, UPVC ceiling, heated towel rail, shelf, toilet paper box, M&E installation etc.

The export price (CIF) listed in the following table represents the price (CIF) of merchandise exported from Shanghai, China to Dublin, Ireland.

(Price as at second quarter of 2016)

	Item	Price RMB/Set	Percentage %	Notes
1.	Export costs	14,690.00	67%	Including goods production and processing costs, storage tacks, taxes and factory profits, and also deducting the commodity export tax rebates
	Export expenses	5,607.00	26%	
2.	2.1 Domestic costs	1,050.00	5%	Domestic freight, container, station, and port charge, dock fees, operating costs, document costs, electricity charges and customs clearance
	2.2 Bank charges	-	-	Excluded, no consideration given due to exchange rate risk
	2.3 Commissions	-	-	Excluded
	2.4 Ocean freight	4,407.00	20%	Ocean freight of goods exported from Shanghai, China to Dublin, Ireland (varies with seasons and shipping companies)
	2.5 Insurance	150.00	1%	
3.	Expected profit (7% of total of items 1&2 above)	1,469.00	7%	
<b>Export price CIF (from 1 to 3)</b>		<b>21,766.00</b>	<b>100%</b>	

## building materials / equipment

### Sample price breakdown (B)

The case study represents the scenario in which composite timber floor, dimensions of 1860\*190\*12mm, Oak wear layer and UV lacquer finish, manufactured and processed in China, are being exported.

The export price (CIF) listed in the following table represents the price (CIF) of merchandise exported from Shanghai, China to Houston, USA.

(Price as at the second quarter of 2016)

	Item	Price RMB/m <sup>2</sup>	Percentage %	Notes
1.	Export costs	150.00	71%	Including commodity production and processing costs, storage tacks, taxes and factory profits, and also deducting the commodity export tax refate
	Export expenses	25.00	12%	
2.	2.1 Domestic costs	12.00	6%	Domestic freight, container, station, and port charges, dock fees, operating costs, document costs, electricity charges and customs clearance
	2.2 Bank charges	-	-	Excluded, no consideration given due to exchange rate risk
	2.3 Commissions	-	-	Excluded
	2.4 Ocean freight	10.00	5%	Ocean freight of goods exported from Shanghai, China to Houston, USA (varies with seasons and shipping companies)
	2.5 Insurance	3.00	1%	
3.	Expected profit (20% of total of items 1&2 above)	35.00	17%	
<b>Export price CIF (from 1 to 3)</b>		<b>210.00</b>	<b>100%</b>	

Some export costs of construction building materials

No.	Description	Sizes/Dimensions	Unit	Reference price (RMB) (Excludes export tax rebate)
1.	Precast reinforced concrete members			
	PC external wall panel	240mm thick precast external wall panel	m <sup>3</sup>	2,821.00 ~ 3,526.00
	PCF external wall panel	160mm thick precast external wall panel	m <sup>3</sup>	3,018.00 ~ 3,772.00
	Stair	Precast stair	m <sup>3</sup>	1,924.00 ~ 2,405.00
2.	Timber door/Steel door			
	Painted timber door (for interior door)	800*2150*40	No.	700.00 ~ 1,250.00
	Painted timber door (for kitchens, toilets)	800*2150*40	No.	740.00 ~ 1,150.00
	Painted timber door frame (single door angle frame)	858*2041*150	No.	730.00 ~ 850.00
	Painted timber door frame (single door angle frame)	858*2041*250	No.	880.00 ~ 1,000.00
	Steel safety door	1000*2100	m <sup>2</sup>	1,429.00
3.	Door hardware			
	Three-dimensional hinge (for sliding doors)	Standard product	No.	20.00 ~ 25.00
	Door lock (silent lock, suitable for interior door)	Standard product	No.	160.00 ~ 200.00
	Door lock (mute safety lock, suitable for interior door)	Standard product	No.	250.00 ~ 260.00
4.	Fire-rated door/fire-rated roller shutter			
	Steel fire-rated door	Customize size	m <sup>2</sup>	750.00 ~ 3,600.00
	Timber fire-rated door	Customize size	m <sup>2</sup>	850.00 ~ 1,500.00
	Composite type fire-rated steel roller shutter (4 hours FRP, exclude motor and accessories)	Galvanized steel	m <sup>2</sup>	300.00 ~ 400.00
5.	Wall tile/floor tile			
	Emery sandstone (gloss finish)	600x600	m <sup>2</sup>	80.00 ~ 95.00
	Emery sandstone (honed finish)	600x600	m <sup>2</sup>	75.00 ~ 90.00
6.	Timber flooring			
	Wire drawing composite timber flooring	1845*190*12/1860*152.4*12	m <sup>2</sup>	160.00 ~ 250.00
	Solid timber flooring	910*(90-95)*18	m <sup>2</sup>	120.00 ~ 280.00
7.	Raised floor			
	OA network floor	500*500/600*600/609.4*609.4	m <sup>2</sup>	160.00 ~ 190.00
	Free trunking floor	500*500/600*600/609.4*609.4	m <sup>2</sup>	180.00 ~ 220.00
	Combined trunking floor	500*500/600*600/609.4*609.4	m <sup>2</sup>	160.00 ~ 190.00
	Antistatic floor	600*600/609.4*609.4	m <sup>2</sup>	230.00 ~ 260.00
	Calcium sulfate floor	600*600*30(26)	m <sup>2</sup>	210.00 ~ 230.00
8.	Gypsum board			
	Common gypsum board	9.5mm/12mm/15mm	m <sup>2</sup>	7.00 ~ 15.00
	Moistureproof gypsum board	9.5mm/12mm/15mm	m <sup>2</sup>	13.50 ~ 29.00
9.	Paint			
	Interior wall emulsion paint	Type I- Type III	kg	7.50 ~ 14.00
	Interior wall mouldproof paint	Type I- Type III	kg	8.50 ~ 16.00
	External wall emulsion paint	Type I- Type III	kg	10.00 ~ 19.00
10.	Glass (The given prices are for these kinds of glass which are not great than the standard size of 2.44m x 3.66 m )			
	Float transparent glass	6mm/8mm thick	m <sup>2</sup>	40.00 ~ 58.00
	Toughened transparent glass	6mm/8mm/10mm/12mm thick	m <sup>2</sup>	53.00 ~ 110.00
	Low iron float transparent glass	6mm/8mm thick	m <sup>2</sup>	58.00 ~ 80.00
	Low iron toughened transparent glass	6mm/8mm/10mm/12mm thick	m <sup>2</sup>	75.00 ~ 165.00
	6 mm/8 mm+12A+6 mm+1.52PVB+6mm toughened Low-E (double silver) insulated glass		m <sup>2</sup>	390.00 ~ 410.00
	6 mm+12A+6 mm toughened Low-E (double silver) hollow glass		m <sup>2</sup>	200.00 ~ 210.00
	8 mm+12A+8 mm toughened Low-E (double silver) hollow and hollow laminated glass		m <sup>2</sup>	245.00 ~ 260.00
	6 mm+1.14PVB+6 mm toughened laminated glass		m <sup>2</sup>	195.00 ~ 210.00
	8 mm+1.52PVB+8 mm toughened laminated glass		m <sup>2</sup>	265.00 ~ 280.00
	12 mm+1.52PVB+12 mm toughened laminated glass		m <sup>2</sup>	340.00 ~ 360.00
	12 mm+1.78SGP+12 mm toughened laminated glass		m <sup>2</sup>	680.00 ~ 720.00
11.	Reinforcement bar			
	Deformed steel bar	ø10/ø12/ø14/ø16/ø18/ø20/ ø22/ø25/ø28/ø32/ø40	ton	2,740.00
12.	Metal pipes			
	Galvanized steel pipe	DN20 DN25	m	6.80 ~ 7.40 9.90 ~ 10.70

No.	Description	Sizes/Dimensions	Unit	Reference price (RMB) (Excludes export tax rebate)	
		DN32	m	13.70 ~ 14.80	
		DN40	m	15.80 ~ 17.10	
		DN50	m	21.60 ~ 23.40	
		DN70	m	29.00 ~ 31.40	
		"W" centrifugal cast iron pipe	DN50	m	28.00 ~ 40.00
		DN75	m	44.00 ~ 60.00	
		DN100	m	64.00 ~ 84.00	
		DN150	m	92.00 ~ 128.00	
		DN200	m	152.00 ~ 204.00	
		13.	Non-metal pipes UPVC pipe	DN50	m
DN75	m			13.50 ~ 21.80	
DN100	m			24.80 ~ 39.80	
DN150	m			48.00 ~ 78.00	
DN200	m			72.00 ~ 117.00	
14.	Cables and wirings Wiring	WDZB-BYJ-2.5mm <sup>2</sup>	m	1.50 ~ 1.80	
		WDZB-BYJ-4.0mm <sup>2</sup>	m	2.30 ~ 2.80	
		WDZB-BYJ-6.0mm <sup>2</sup>	m	3.30 ~ 4.20	
		WDZB-BYJ-10.0mm <sup>2</sup>	m	5.30 ~ 6.50	
		Cable	WDZA-YJY-4x2.5+E2.5mm <sup>2</sup>	m	8.20 ~ 10.80
			WDZA-YJY-4x10+E10mm <sup>2</sup>	m	23.60 ~ 31.40
			WDZA-YJY-4x50+E25mm <sup>2</sup>	m	96.30 ~ 124.80
			WDZA-YJY-4x120+E70mm <sup>2</sup>	m	235.20 ~ 306.40
	WDZA-YJY-4x240+E120mm <sup>2</sup>	m	470.30 ~ 605.60		
15.	Valves	Ball valve (copper)	DN20	No.	45.00 ~ 60.00
			DN25	No.	70.00 ~ 95.00
			DN32	No.	100.00 ~ 120.00
			DN40	No.	125.00 ~ 170.00
		Gate valve (copper)	DN20	No.	50.00 ~ 70.00
			DN25	No.	70.00 ~ 100.00
			DN32	No.	90.00 ~ 125.00
			DN40	No.	120.00 ~ 165.00
			DN50	No.	190.00 ~ 265.00
		Gate valve (ductile iron)	DN65	No.	600.00 ~ 760.00
			DN80	No.	680.00 ~ 870.00
			DN100	No.	800.00 ~ 1,000.00
			DN125	No.	1,250.00 ~ 1,420.00
			DN150	No.	1,350.00 ~ 1,560.00
			Butterfly valve (ductile iron)	DN50	No.
		DN65		No.	285.00 ~ 335.00
		DN80		No.	345.00 ~ 420.00
		DN100		No.	450.00 ~ 545.00
		DN150		No.	545.00 ~ 660.00
		16.	MEP equipment	Centrifugal fan (HTFC-I)	Wind speed 3000CMH,1000RPM
Wind speed 9000CMH,1000RPM	No.				8,100.00 ~ 11,200.00
Wind speed 15000CMH,900RPM	No.				11,700.00 ~ 16,100.00
Wind speed 25000CMH,700RPM	No.				15,500.00 ~ 21,300.00
Wind speed 45000CMH,600RPM	No.				20,000.00 ~ 27,500.00
Single-level centrifugal pump (KQL)	Flow rate 50M <sup>3</sup> /H, rising capacity 50M			No.	4,800.00 ~ 6,300.00
	Flow rate 100M <sup>3</sup> /H, rising capacity 80M			No.	10,000.00 ~ 13,200.00
	Flow rate 100M <sup>3</sup> /H, rising capacity 150M			No.	23,000.00 ~ 30,500.00
Chiller	Water-cooled centrifugal chillers, cooling load 900 tons			No.	1,000,000.00 ~ 1,300,000.00
	Water-cooled screw chillers, cooling load 390 tons			No.	550,000.00 ~ 700,000.00
Boiler	Gas boiler, heating 4300KW			No.	450,000.00 ~ 600,000.00
	500KVA capacity			No.	700,000.00 ~ 900,000.00
Generator	1000KVA capacity			No.	1,200,000.00 ~ 1,500,000.00

## Development Costs for Real Estate Investment in China

The major costs and fees are as follows:

1. Land cost
  2. Advance works
    - 2.1 **Design fees** (for designer under statutory requirement)  
Design fees, include hydro-geological surveys, topographic surveying, planning design fee, excavation and lateral support design fee, architecture/structure/fitting out design fee, civil defense design fee (for civil defense within the site boundary), landscape design fee, traffic design fee, etc.
    - 2.2 **Consultancy fees**  
Consultancy fees (need to clarify the interface with design companies as mentioned in item 2.1 above), include project management fee, MEP consultancy fee, curtain-wall / facade consultancy fee, interior designer consultant fee, lighting consultancy fee, and acoustic consultancy fee, graphic and signage consultancy fee, traffic management consultancy fee, hotel operator's hospitality operational consultancy fee, business administration consultancy fee, kitchen equipment consultancy fee, laundry equipment consultancy fee, green building / LEED authorized person consultancy fee, tender agency fee, quantity surveyor consultancy fee, legal advisor consultancy fee, etc.
    - 2.3 **Temporary works**  
Temporary works, include temporary water connection, temporary electricity connection, temporary roads, temporary fencing, temporary drainage and sewage connection, rough grading and others (such as relocation of gas pipes and fire hydrants, trees transplant ), etc.
    - 2.4 **Professional consultation fees**  
Professional consultation fees, fees for consultation by the authorities, include feasibility study fee, curtain wall / facade assessment fee & expert report fee, energy saving calculation fee, environmental impact assessment fee, building survey and waterproof proposal assessment fee, piles testing fee, foundation monitoring fee, surrounding environment and pipeline monitoring fee, sunshine analysis fee, aseismatic assessment fee, pipeline map fee, flooding assessment fee, traffic assessment fee, power substation environmental impact assessment fee, ACC (authorized check of construction drawing) fee, deep foundation pit assessment fee, boiler room safety assessment fee, fire fighting third party assessment fee, indoor environment assessment fee, and final account audit fees, etc.
    - 2.5 **Tender management fees**  
Tendering management fees, include fees for site investigation, design consultant, contractors and supervision company.
    - 2.6 **Quality assurance and inspection fees**  
Quality assurance and inspection fees, include quality assurance fee, environmental inspection fee, site surveying fees (including as-built building area surveying fee), bulk cement levy, termite prevention fees, special equipment safety inspection fees, special funds for new partition materials, etc.
    - 2.7 **Planning permit application fee**
    - 2.8 **Project supervision fee**
    - 2.9 **Insurance premium**
    - 2.10 **Project design archive fee**
    - 2.11 **Royalties and Patents**
    - 2.12 **Compensation fee for civil defense construction outside project site**
  3. Project construction costs  
Project construction costs, total costs for constructing the permanent elements, include pile and foundation works, lateral support works, earthworks, structural works, architectural works, HV works, HVAC works, plumbing and drainage works, ELV works, fire protection works, town gas installation works, lift installation works, facade / curtain wall works, interior fitting out works, facade lighting installation works, external works and landscaping works, etc.
  4. Infrastructure costs  
Infrastructure costs (inside site boundary), include utilities connections (include water, gas, etc.), in-coming power connection (including urban power grid cables outside the site boundary), communications connection, cable television fees, drainage, etc.
  5. Public facilities fees  
Public facilities fees, related to public facilities incurred in the cost on developing the public facilities under the lease of land with non-refundable by the Government.
  6. Risk and uncertainty costs  
Risk and uncertainty costs, include contingencies and escalation allowance.
  7. Taxes during development period  
Taxes during the development, all taxes and levies regulated by the relevant departments and local governments, etc.
  8. Indirect costs  
Indirect costs, include employer's management fee, building maintenance fund (from employer's part), real estate transaction fees, ownership certificate fees, marketing fees and finance charges, etc.
- The costs above cannot be deemed as exhaustive, please contact the local authorities for details, and comply with regulations from regions. Since the fees and charges vary from region to region, please consult and confirm the magnitude before investment.



# Development Costs for Real Estate Investment in China

## Cost Analysis

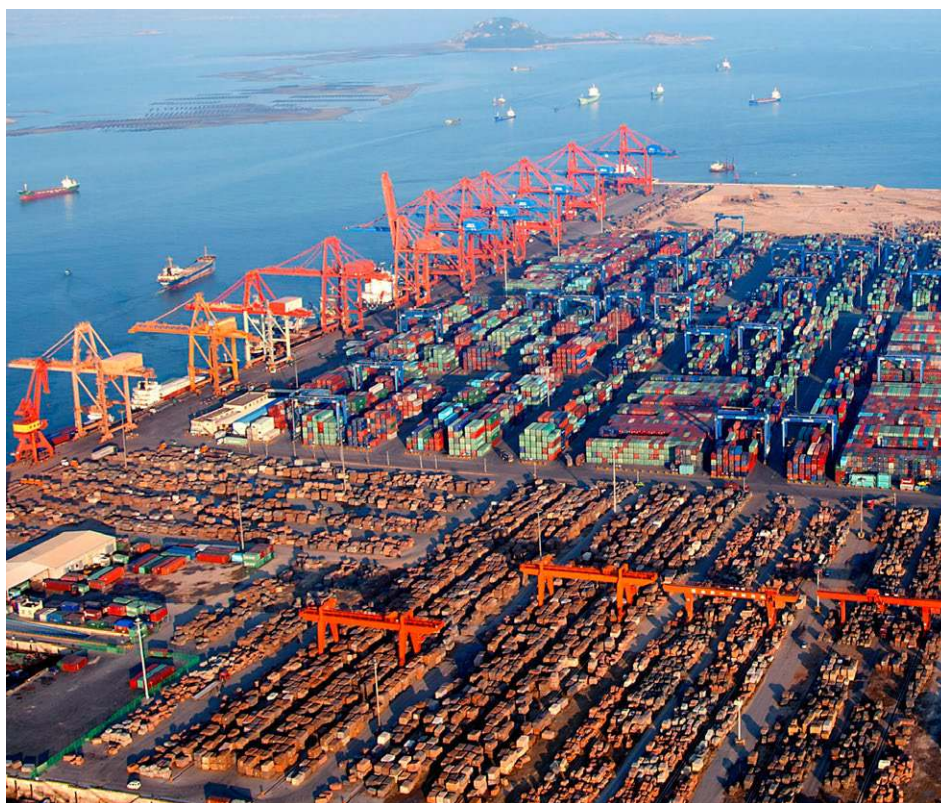
This case study exemplifies the costs associated with the commercial-office development in the centre of Guangzhou, which comprises a 3-storey basement for carport, 3 to 4-storey podium and 29-storey tower, including commercial, office and link bridge.

The height of tower and podium is 148.58 meters and 23.6 meters respectively.

Site area is about 27,770m<sup>2</sup>. Total construction floor area is 146,423.80m<sup>2</sup>.

(Price as at second quarter of 2016)

Item		Total Cost	Cost/m <sup>2</sup>	Percentage
		RMB (Million)	RMB/m <sup>2</sup>	%
1.	Land cost	427.65	2,921	24%
2.	Advance works	133.63	913	8%
3.	Project construction costs	995.72	6,800	57%
4.	Infrastructure costs	55.72	381	3%
5.	Public facilities fees	5.00	34	0%
6.	Risk and uncertainty costs	65.66	448	4%
7.	Taxes during development period	Not included	-	-
8.	Indirect costs	77.70	531	4%
<b>Total Costs for Real Estate Investment (1-8)</b>		<b>1,761.08</b>	<b>12,027</b>	<b>100%</b>



## Average wholesale prices of selected building materials in selected cities of China (RMB) (All rates described are at 2nd Quarter 2016)

Building materials			Beijing	Chengdu	Chongqing	Guangzhou	Hangzhou	Nanjing	Shanghai	Shenyang	Shenzhen	Tianjin	Wuhan	Xian
1	Reinforcement bar HPB235 (1st-class) 10mm	¥/t	2,360	2,569 Average less than 10mm HPB300	2,710 HPB300 (1st-class) 10mm	2,326	2,823	2,650	2,787	2,313	2,967	2,727	2,933	2,238 R235(1st Class) 6-10mm
2	Reinforcement bar HRB400 (3rd class) 10mm	¥/t	2,560	2,666 8-10mm	2,770	2,440	2,983	2,750	2,773	2,363	2,980	2,737	3,083	2,436 RL400(3rd Class) 12-38mm
3	Reinforcement bar HRB400 (3rd class) 25mm	¥/t	2,347	2,605	2,650	2,347	2,716	2,700	2,640	2,263	2,800	2,703	2,933	2,436 RL400(3rd Class) 12-38mm
4	Reinforced concrete Grade C30 5-25mm aggregates P8 waterproofing (without pumping fee)	¥/m <sup>3</sup>	350	366	287 Average of main areas of the city, electric pump	341	384	309	375	339	406	399	373 5-31.5 Stone	398 Include pumping fee
5	Timber Formwork local commonly used materials	¥/m <sup>3</sup>	1,990 logs	1,859 2440 × 1220 × 15	1,110 Average of main areas of the city, logs	1,153 pine broad	1,750 Φ 14-16x600cm pine logs	1,655	1,837	2,137	2,820 1830x915x18 3rd Class blackboard	1,843	2,203	2,018 northeast pine logs
6	Portland cement Grade 42.5(bulk)	¥/t	259	310	333 Average of main areas of the city, bagged	323	310	294	323	275	370	392	287	424
7	Sand Rough/mixed	¥/t	66	63 Medium sand Natural river sand (integrated)	61 Average of main areas of the city, extra fine sand	68	68 Clean sand	84	61	80	60	81	79	44 Coarse sand
8	Hot rolled equal-leg angle steel 45-50x3-6mm	¥/t	2,143	2,810 Q235 L50x50x5	2,853 4-8mm	2,335	2,824 3#-4#	2,810	2,820	2,237	3,177	2,781	2,617 45-50 × 3-5mm	3,013 30x3-100x10mm
9	Galvanized steel sheet 1.0mm	¥/t	3,407	5,917 0.5-1.2mm	4,147	3,664	4,515	3,780	5,283	3,977	3,600	3,711	4,117	3,863 0.35-1.50mm
10	Seamless steel pipe 108x3.5-4mm	¥/t	2,450	6,117 Integrated	3,470 108 × 4.5mm	4,000	3,700	5,162	3,855 108 × 3-4.5mm #20	2,837	4,544	3,324	3,150 108 × 4.5-5mm	4,683 Cold drawn seamless steel tube D25x2.5-D108x4.0mm
11	Galvanized welded steel pipe 20mm 26.75x2.75mm	¥/t	3,477	4,497 Hot-dip galvanizing DN15~DN32	3,913 Hot dip galvanized steel pipe Q235 / Q195 DN15-20	5,099 Galvanized water, gas transportation pipe	3,061 Φ 20mm	5,213	4,225 Φ 20mm	3,180	4,415	3,464	3,917 20 × 2.75mm	3,610 DN15-200mm
12	Hot-rolled steel channel Grade a steel #16-18mm	¥/t	2,190	3,167 Q235 18#	2,797 Channel steel Q235 16-22#	2,613	2,824 8#-10#	2,829	2,733 Q235 # 16	2,250	3,260	2,637	2,850 General	2,937
13	Float plate glass 5mm	¥/m <sup>2</sup>	23	28 White float glass	27 White float glass	22	24	33	20(#) (White glass original film)	30	25	32	31	30
14	Aluminum A00 aluminum ingot	¥/t	12,137											
15	Copper 1# electrolytic copper	¥/t	35,807											
16	Steel fire rate door (Grade II)	¥/m <sup>2</sup>	320	670(#)	520	323 Single-leaf	450	-	704(#)	462	600	680(#)	445(#)	740
17	Timber fire rated door (Grade II)	¥/m <sup>2</sup>	340 Pine	470(#)	320	443 Single-leaf	430	-	460(#)	330(#)	469(#)	470(#)	343(#)	710
18	PHC piles Φ400A	¥/m	-	130(#) Thickness 95mm	-	106 Thickness 95mm	107 Thickness 95mm	-	125(#) Thickness 95mm	129(#)	123	79 Thickness 95mm	128(#)	151 Prefabricated pipe pile Φ 400x95AB
19	APP Modified Bitumen Waterproofing membrane 3mm PY	¥/m <sup>2</sup>	33 Type II	35(#)	27	36	46 4mm	30	37(#)	24	28 SBS 3mm	31(#)	27	39
20	JS Cementitious Waterproofing Coatings Type I two-component	¥/kg	9	14(#)	16	13	12	-	15(#)	15(#)	12	13	12(#)	17
21	Interior wall Latex paint Type II	¥/kg	16	15(#)	9	9	16 latex paint	11	16(#)	11	11	12	10	20(#)
22	Advanced Acrylic Exterior Wall Latex paint Type II	¥/kg	25	27(#)	29 high quality emulsion paint\ (luminant)	18	20 elastic emulsion paint	21	24(#)	12	25(#)	26	35(#)	24(#)

**Notes:**

- The above prices (except items 14, 15 and those marked with "#") are based on either guiding price from websites or periodicals published by local construction cost management office; or market prices published by "China construction material online";
- Items 14 & 15 in the above table are based on final price by end of month published by Shanghai Futures Exchange (www.shfe.com.cn), as a general reference price for all areas;

- "#" means its price is based on the market prices;
- "-" means local price is not available;
- The price selection guideline is based on actual current market prices;
- No price posted from Guangzhou's construction cost website; Quarterly price is based on guidance price published in Guangzhou construction cost periodical.



## Average daily wages of workers for construction industry in selected cities of China

(All rates described are at 2nd Quarter 2016)

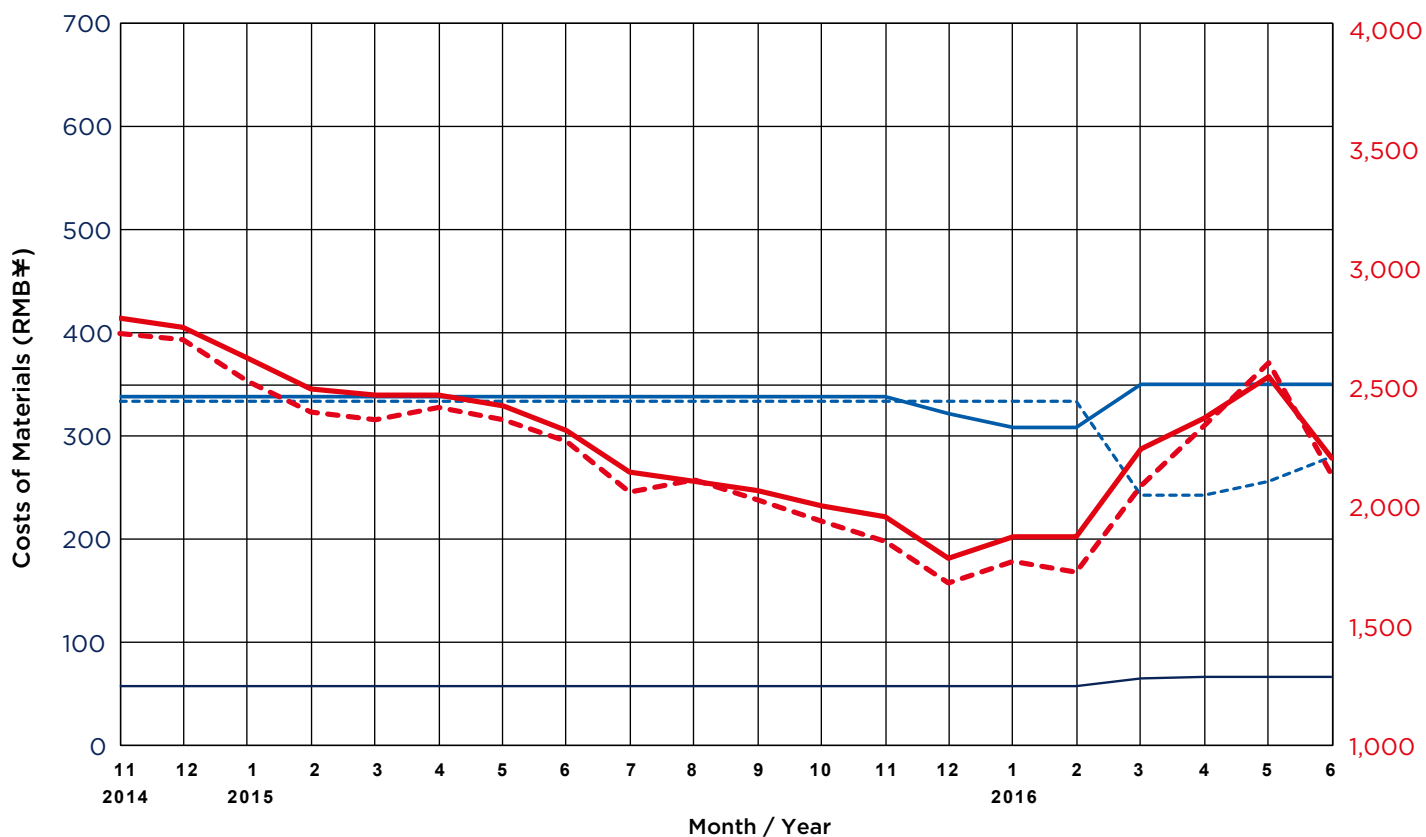
The currency below is RMB

Selected Occupations (according to the general public standards)		Beijing	Chengdu	Chongqing	Guangzhou	Hangzhou	Nanjing	Shanghai	Shenyang	Shenzhen	Tianjin	Wuhan	Xian
1	Joiner (construction)	262	237	261 Decoration Joiner	199	187 Decoration Joiner	170	280	175	340 Decoration Joiner	221	179	155
2	Painter	254	171	221	188	184	150	280	128	246	199	170	133
3	Formwork erector	271	210	267	199	185	160	273	150	291	205	179	151
4	Plasterer (normal)	245	174	216	184	177	157	273	150	256	199	166	149
5	Bar Bender	254	195	244	203	182	156	273	150	278	193	165	138
6	Bricklayer (masonry)	247	183	214	181	184	150	280	150	261	196	171	145
7	E&M worker	234	148	214 Average plumber / electrician / ventilation	184	178 Average plumber / electrician / ventilation	152	273	128	242 Average plumber / electrician	183	158	140
8	Concretor	220	157	222	170	172	150	260	128	265	179	143	132
9	Waterproofer	288	165	214	170	188	150	260	128	244	186	162	134
10	Plaster (Surface)	323	185	238	195	188	160	260	175	290	239	211	155
11	Scaffolder	287	201	258	192	186	153	260	128	307	200	186	149
12	Welder	247	167	232	192	186	161	293	128	325	190	191	139
13	Rigger	243	156	186	177	184	153	267	128	251 mechanician	188	164	135
14	Glazier	335	145	208	181	182	151	273	-	261	130	154	136
<b>Average daily wage (1-14)</b>		<b>265</b>	<b>178</b>	<b>228</b>	<b>187</b>	<b>183</b>	<b>155</b>	<b>272</b>	<b>142</b>	<b>275</b>	<b>193</b>	<b>171</b>	<b>142</b>

### Notes:

1. Various types of daily wage are based on construction market price, which are updated in real time. The data covers commercial, residential and industrial development project; every rate is weighted daily rates received from 2-4 construction companies;
2. Labour costs include: basic wage, allowances, benefits, etc. i.e. all expense payable to workers;
3. Daily rate is based on 8 hours per day, excluding overtime allowance;
4. All trades are based on general labour.

### Wholesale Prices of Selected Building Materials in Beijing

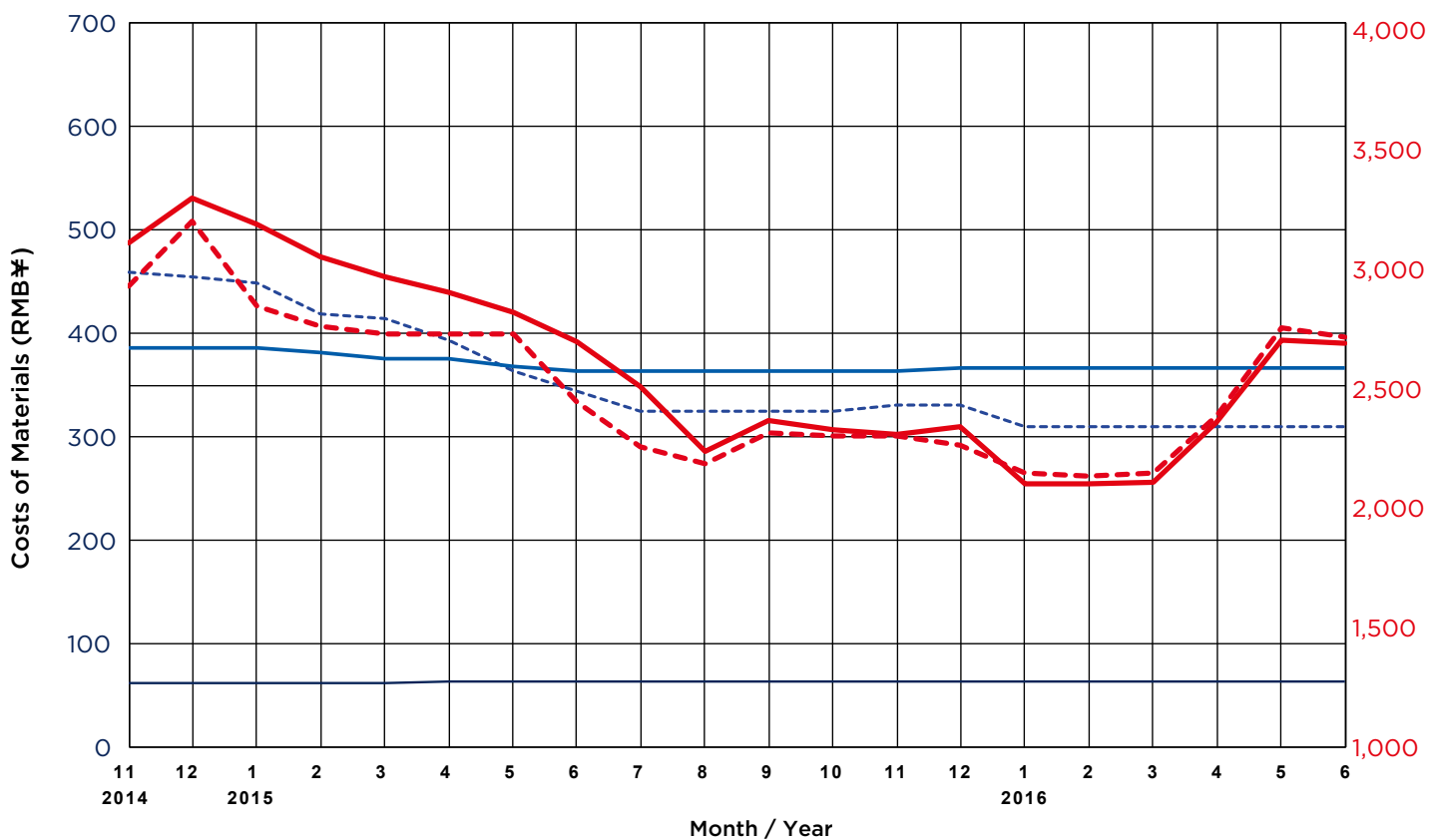


Building Materials			Wholesale Prices of Selected Building Materials in Beijing																			
			2014		2015										2016							
			Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Reinforcement bar HPB235( I )10mm	¥/t	—	2,778	2,735	2,607	2,479	2,453	2,453	2,410	2,308	2,137	2,094	2,060	1,991	1,949	1,778	1,863	1,863	2,230	2,360	2,530	2,190
Reinforcement bar HRB400(III)25mm	¥/t	.....	2,709	2,684	2,513	2,385	2,350	2,402	2,350	2,265	2,051	2,103	2,017	1,932	1,846	1,675	1,761	1,718	2,080	2,330	2,590	2,120
Portland cement Grade 42.5 (bag)	¥/t	.....	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	242	242	256	280
Reinforced concrete Grade C30 5-25 stone P8 waterproofing (without pumping fee)	¥/m <sup>3</sup>	—	338	338	338	338	338	338	338	338	338	338	338	338	338	321	308	308	350	350	350	350
Sand (rough/mixed)	¥/t	—	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	64	66	66	66

(Source: www.bjzj.net)



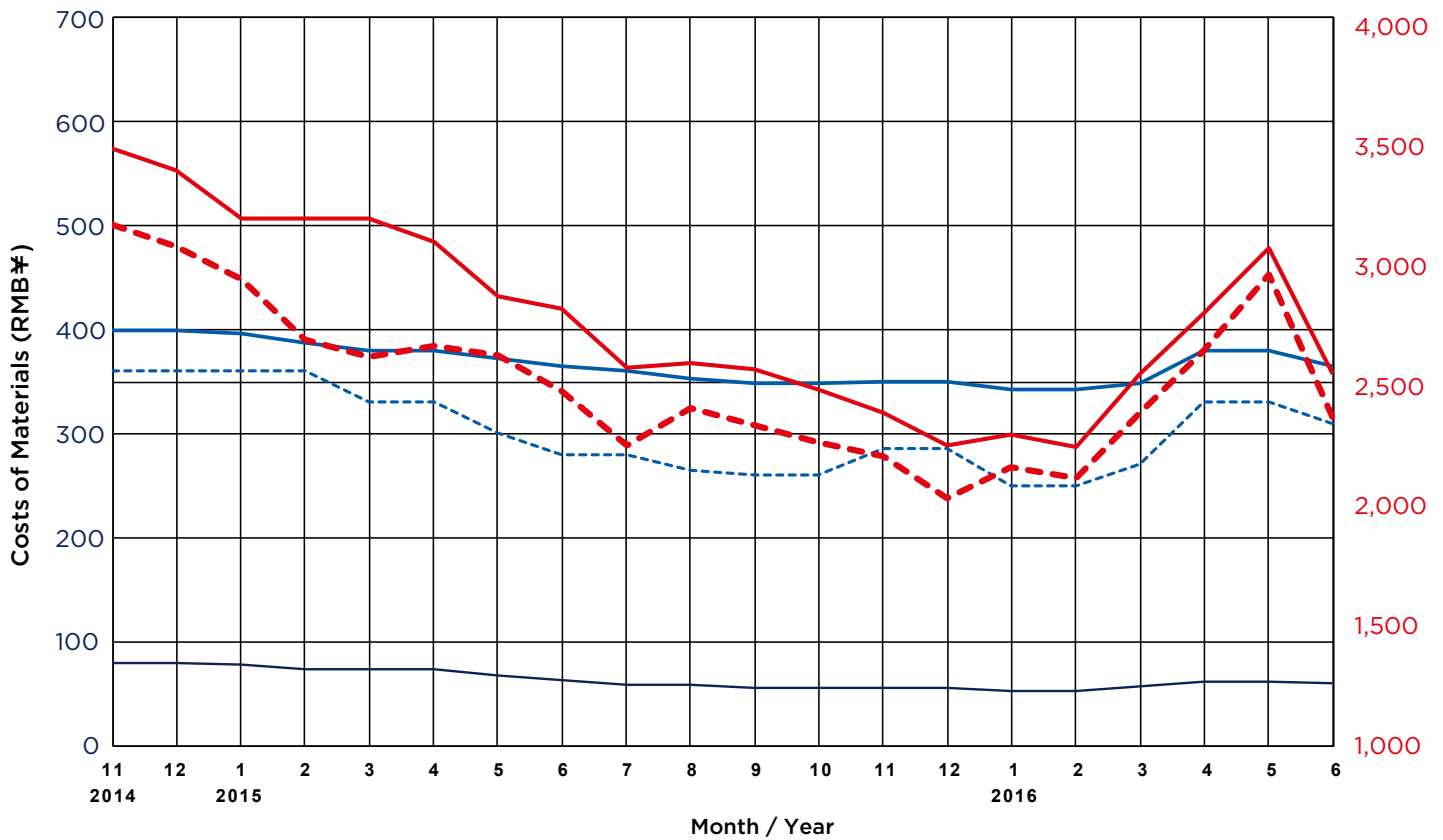
Wholesale Prices of Selected Building Materials in Chengdu



Building Materials			Wholesale Prices of Selected Building Materials in Chengdu																			
			2014		2015												2016					
			Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Reinforcement bar HPB235( I )10mm	¥/t	—	3,090	3,275	3,164	3,033	2,947	2,887	2,801	2,677	2,491	2,222	2,352	2,317	2,294	2,327	2,092	2,089	2,099	2,348	2,689	2,670
Reinforcement bar HRB400(III)25mm	¥/t	.....	2,910	3,180	2,825	2,745	2,710	2,710	2,710	2,430	2,245	2,170	2,300	2,290	2,290	2,250	2,132	2,125	2,135	2,375	2,739	2,700
Portland cement Grade 42.5 (bag)	¥/t	.....	459	454	449	419	414	394	364	344	324	324	324	324	330	330	310	310	310	310	310	310
Reinforced concrete Grade C30 5-25 stone P8 waterproofing (without pumping fee)	¥/m <sup>2</sup>	—	386	386	386	381	376	375	368	363	363	363	363	363	363	366	366	366	366	366	366	366
Sand (rough/mixed)	¥/t	—	61	61	61	61	61	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63

(Source: www.sceci.net)

### Wholesale Prices of Selected Building Materials in Shanghai

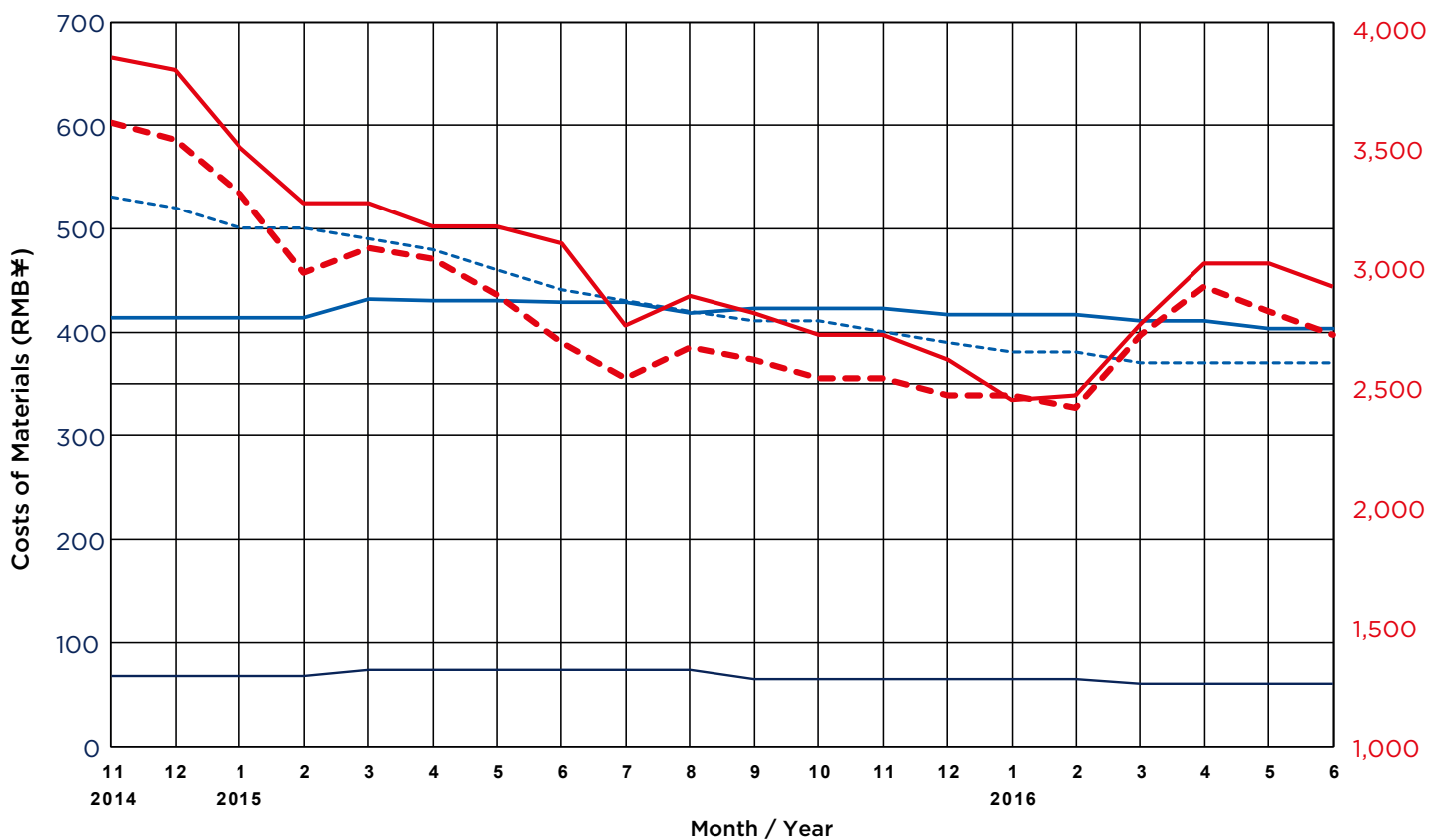


Building Materials			Wholesale Prices of Selected Building Materials in Shanghai																							
			2014		2015												2016									
			Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun				
Reinforcement bar HPB235(I) 10mm	¥/t	—	3,460	3,370	3,170	3,170	3,170	3,080	2,850	2,800	2,560	2,580	2,550	2,470	2,370	2,240	2,280	2,230	2,530	2,780	3,050	2,530				
Reinforcement bar HRB400(III) 25mm	¥/t	----	3,150	3,060	2,920	2,670	2,600	2,650	2,610	2,460	2,240	2,390	2,320	2,250	2,190	2,020	2,150	2,100	2,370	2,630	2,940	2,350				
Portland cement Grade 42.5 (bag)	¥/t	.....	360	360	360	360	330	330	300	280	280	265	260	260	285	285	250	250	270	330	330	310				
Reinforced concrete Grade C30 5-25 stone P8 waterproofing (without pumping fee)	¥/m <sup>3</sup>	—	400	400	397	387	380	380	372	365	360	353	348	348	350	350	343	343	348	380	380	365				
Sand (rough/mixed)	¥/t	—	80	80	78	74	74	74	68	63	58	58	56	56	56	56	53	53	57	62	62	60				

(Source: www.ciac.sh.cn)



Wholesale Prices of Selected Building Materials in Shenzhen



Building Materials			Wholesale Prices of Selected Building Materials in Shenzhen																			
			2014		2015												2016					
			Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Reinforcement bar HPB235( I )10mm	¥/t	—	3,850	3,800	3,480	3,250	3,250	3,150	3,150	3,080	2,740	2,860	2,790	2,700	2,700	2,600	2,430	2,450	2,750	3,000	3,000	2,900
Reinforcement bar HRB400(III)25mm	¥/t	⋯	3,580	3,510	3,290	2,960	3,060	3,020	2,870	2,670	2,520	2,650	2,600	2,520	2,520	2,450	2,450	2,400	2,700	2,900	2,800	2,700
Portland cement Grade 42.5 (bag)	¥/t	⋯	530	520	500	500	490	480	460	440	430	420	410	410	400	390	380	380	370	370	370	370
C30 5-25 stone P8 waterproofing (without pumping fee)	¥/m³	—	413	413	413	413	431	430	430	429	429	418	423	423	423	416	416	416	411	411	404	404
Sand (rough/mixed)	¥/t	—	68	68	68	68	73	73	73	73	73	73	65	65	65	65	65	65	60	60	60	60

(Source: www.szcost.cn)

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