

CREATING RESILIENCE

India Construction Cost Trends 2023: Ushering in an Era of Normalization

INDIA

REAL ESTATE

CBRE RESEARCH
DECEMBER 2023

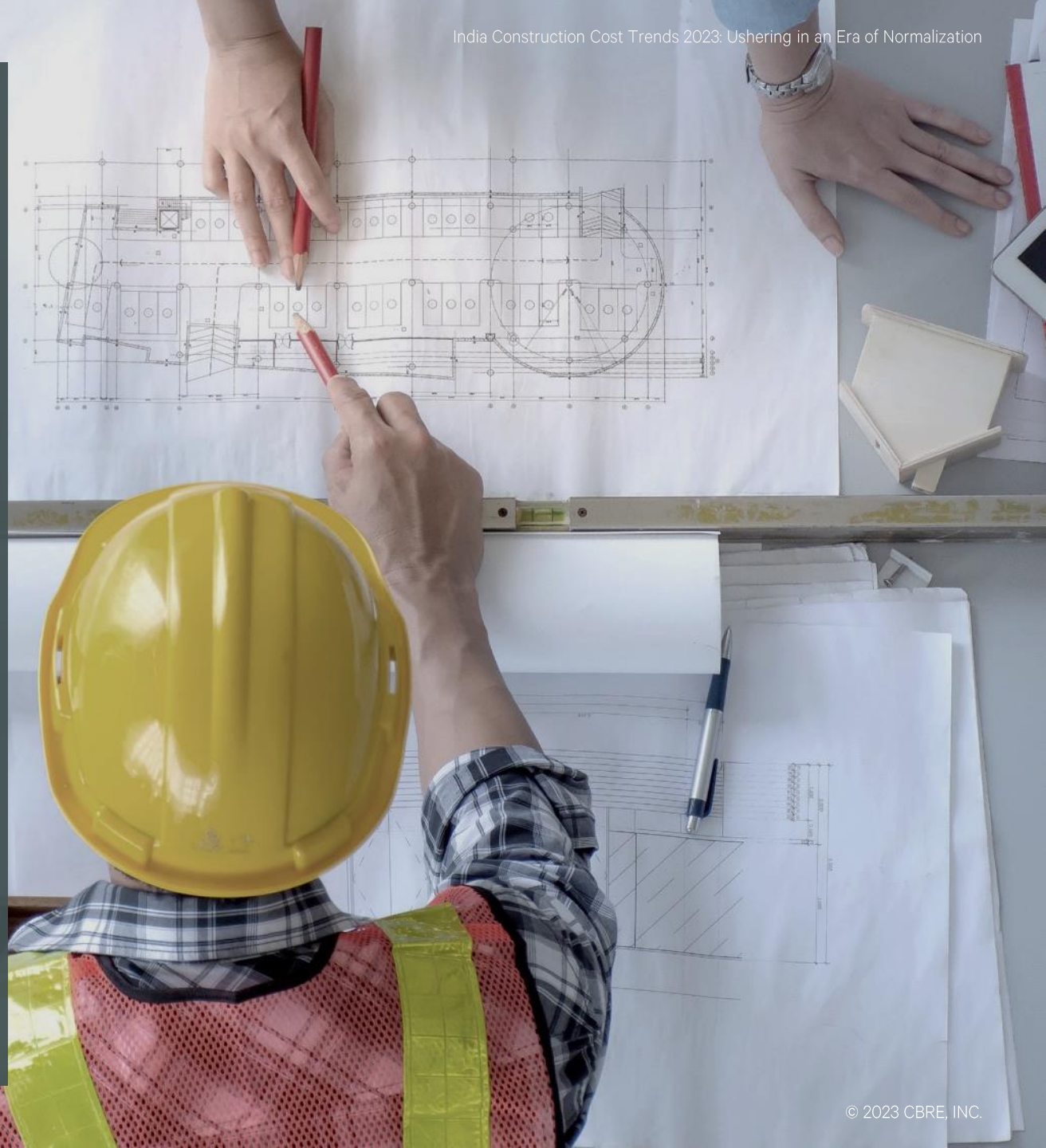


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Introduction

1



Construction Sector: The Cornerstone of India's Economic Growth

Contribution to Gross Domestic Product (GDP), employment, infrastructure development, and overall economic vibrancy



Approximately 9% share in India's GDP¹, Y-o-Y construction output increased by 5.7% in 2022-23 and is projected to go up by 13.3% in 2023-24²



With 51 million people currently employed, the construction sector is India's second-highest employment generator,¹ expected to surpass 60 million by 2025³



Plays a crucial role in infrastructure development - under the National Infrastructure Plan (NIP), India has an investment budget of USD 1.4 trillion on infrastructure development¹

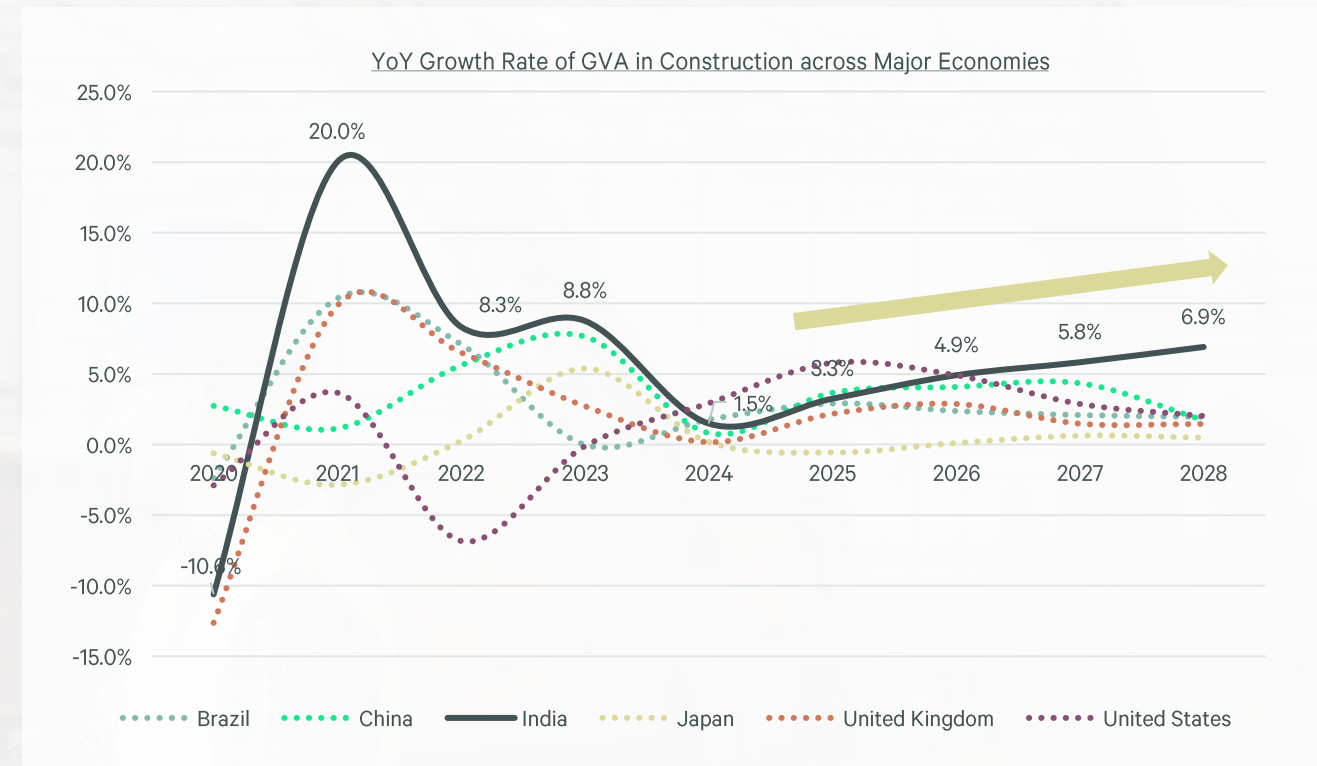


Supports demand for allied industries such as cement, steel, building materials, electrical equipment, machinery, and services



Cumulative Foreign Direct Investment (FDI) of USD 26.42 billion in construction development (townships, housing, built-up infrastructure and construction-development projects) during the April 2000 – September 2023 period

FIGURE 1.1: Y-o-Y growth rate of gross value added (GVA) in construction across major economies



Source: Oxford Economics, November 2023

¹ National Investment Promotion and Facilitation Agency

² Ministry of Statistics and Programme Implementation (MoSPI)

³ Oxford Economics

India's Construction Sector: Navigating Turbulent Times

Impact of key events on material, labour and fuel prices

COVID-19 Pandemic



2020

- › Nationwide lockdowns **disrupt construction supply chains**, causing **material shortages** and **price volatility**
- › **Migrant worker exodus** hinders construction, **inflating labour costs**
- › **Cement prices fluctuate** amid demand shifts, transport hurdles, and policy changes
- › Despite deregulation, restricted movement and economic slowdown **cause fuel demand to dampen, leading to price volatility**

Post-pandemic Reset



2021

- › The Union Budget aims to **boost construction** by increasing infrastructure funding, focusing on the construction sector's **material and labour requirements**
- › Global trends such as a **revival in demand, supply chain disruptions, and rising raw material costs drive up steel prices**
- › **Global oil prices, changes in taxation policies** (import tariffs, export restrictions, etc.), and **geopolitical tensions lead to fluctuation in fuel prices**

European Geopolitical Crisis & Supply Chain Disruptions



2022

- › **Rise in steel prices** driven by Russian export disruptions, growing demand, and soaring iron ore costs
- › Influenced by global oil market dynamics, **fuel prices remain volatile**
- › **Cement prices surge** owing to soaring fuel and transportation costs
- › Increasing demand, inflation, and skilled labour shortages **fuel labour cost hikes**

Global Recessionary Pressures



2023

- › **Construction labour wages continue to inch up** due to surging demand, volatile inflation, and a dearth of skilled workers
- › **However, moderation in growth** of fuel and construction material costs

Note: Only materials which are significantly impacted during the respective years have been highlighted

Upstream Factors Impacting Construction Costs

2



Unveiling the Factors Influencing Real Estate Construction Costs



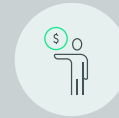
Supply-Demand Conundrum

During times of high demand, construction costs rise to mitigate risk, while during periods of low demand, contractors may lower prices to sustain their business



Volatility in Commodity Pricing

Lower oil prices impact petroleum-based products such as asphalt, plastic, PVC, paints, and coatings. Conversely, rising steel prices affect structural & reinforcement steel, steel fasteners (bolts, screws), etc



Labour Cost Fluctuations

Higher wages stem from increased demand for skilled labour and wage hikes due to living expenses in certain areas. Upskilling the workforce can also further contribute to increased costs












Local Market Dynamics

Local market pricing, influenced by factors like prolonged monsoons, political climate, legislative constraints, etc. can have a significant impact on the cost of a project compared to national averages

Due to the cyclical nature of the construction industry, it often lags the overall economy. Therefore, an economic shift does not immediately lead to a corresponding reaction in construction pricing. Instead, prices tend to remain stable as the industry works through its existing backlog of projects and evaluates the economic situation. This phenomenon was evident last year when the construction industry experienced a rise in prices despite an overall economic slowdown.

A deep dive into variations in greenfield construction costs across asset classes

TABLE 2.1: Greenfield construction costs across asset classes in Q3 2023 (INR / sq. ft.)










Item	Segment	Delhi – NCR (INR)	Mumbai (INR)	Bangalore, Hyderabad & Chennai (INR)	Pune (INR)
Residential 	Low rise - 5 floors	2,278 – 2,518	2,404 – 2,657	2,179 – 2,408	2,213 – 2,445
	Mid rise -12 floors	2,993 – 3,308	3,159 – 3,491	2,857 – 3,158	2,917 – 3,224
	High rise - 30 floors	5,303 – 5,861	5,582 – 6,170	5,061 – 5,593	5,149 – 5,691
	Villas - 100 nos. & above	4,253 – 4,700	4,490 – 4,962	4,065 – 4,493	4,144 – 4,580
Office 	Mid rise -12 floors	3,143 – 3,474	3,328 – 3,678	3,005 – 3,321	3,060 – 3,382
	High rise - 20 floors	3,746 – 4,141	3,953 – 4,370	3,590 – 3,968	3,651 – 4,036
Retail 	Shopping centre / mall	4,399 – 4,862	4,619 – 5,105	4,205 – 4,648	4,282 – 4,733
	Mixed use with retail - 10 to 12 floors	4,992 – 5,517	5,265 – 5,819	4,770 – 5,273	4,869 – 5,381
Hotels 	3 Star	7,191 – 7,948	7,574 – 8,371	6,875 – 7,599	6,997 – 7,734
	4 Star	10,794 – 11,930	11,349 – 12,543	10,308 – 11,393	10,506 – 11,612
	5 Star	14,367 – 15,880	15,123 – 16,715	13,729 – 15,174	13,975 – 15,446
	Resorts	15,558 – 17,196	16,390 – 18,115	14,872 – 16,438	15,143 – 16,737
Service Apartments 	Mid rise	5,995 – 6,626	6,318 – 6,983	5,725 – 6,327	5,834 – 6,448
Hospitals 	Hospitals	5,745 – 6,350	6,804 – 7,520	5,538 – 6,121	5,588 – 6,176
Industrial 	Light Industrial	2,698 – 2,983	2,846 – 3,145	2,582 – 2,854	2,622 – 2,897
	Heavy industrial	4,399 – 4,862	4,634 – 5,122	4,200 – 4,642	4,282 – 4,733
Warehouses 	Warehouse & Logistics	1,572 – 1,737	2,036 – 2,251	1,500 – 1,658	1,533 – 1,694
Basement & Car Park 	3 basement	2,399 – 2,652	2,523 – 2,789	2,292 – 2,533	2,336 – 2,582
	2 basement	2,254 – 2,491	2,364 – 2,613	2,144 – 2,370	2,188 – 2,418
	1 basement	2,100 – 2,322	2,210 – 2,443	2,011 – 2,223	2,045 – 2,260
	Standalone	1,628 – 1,800	1,713 – 1,894	1,559 – 1,723	1,582 – 1,748

Note: The data provided depicts an average range of costs and CBRE advises its readers to exercise discretion when referring to it. Prices are per sq. ft on built up area and include contingency but exclude escalation & GST.

Source: CBRE Project Management; CBRE Research, Q4-2023

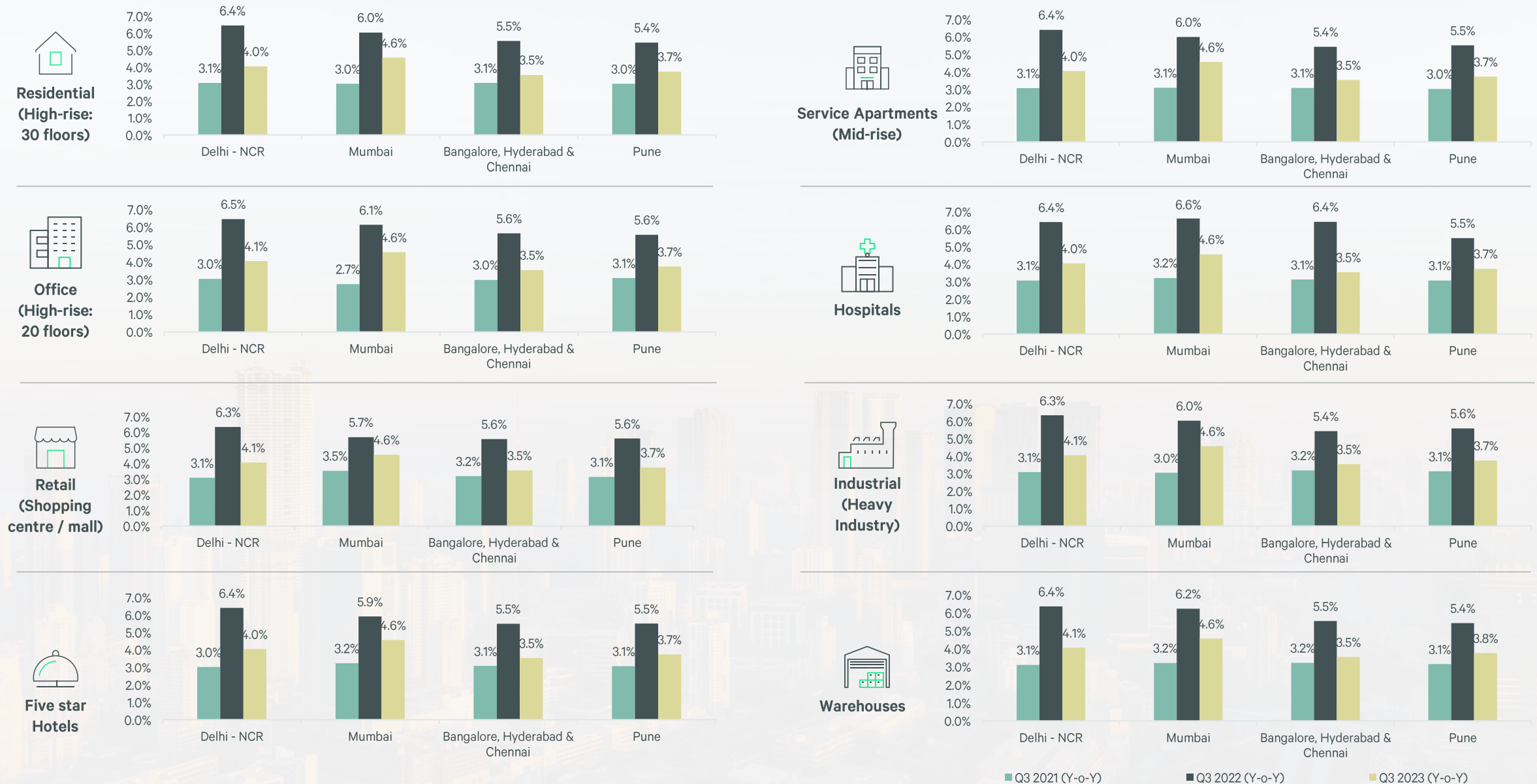
A deep dive into variations in greenfield construction costs across asset classes

TABLE 2.1: Greenfield construction costs across asset classes in Q3 2023 (USD / sq. ft.)

Item	Segment	Delhi – NCR (USD)	Mumbai (USD)	Bangalore, Hyderabad & Chennai (USD)	Pune (USD)
Residential 	Low rise - 5 floors	28 - 30	29 - 32	26 - 29	27 - 30
	Mid rise -12 floors	36 - 40	38 - 42	35 - 38	35 - 39
	High rise - 30 floors	64 - 71	68 - 75	61 - 68	62 - 69
	Villas - 100 nos. & above	51 - 57	54 - 60	49 - 54	50 - 55
Office 	Mid rise -12 floors	38 - 42	40 - 44	36 - 40	37 - 41
	High rise - 20 floors	45 - 50	48 - 53	43 - 48	44 - 49
Retail 	Shopping centre / mall	53 - 59	56 - 62	51 - 56	52 - 57
	Mixed use with retail - 10 to 12 floors	60 - 67	64 - 70	58 - 64	59 - 65
Hotels 	3 Star	87 - 96	92 - 101	83 - 92	85 - 94
	4 Star	13 - 23	14 - 31	12 - 17	13 - 19
	5 Star	17 - 71	18 - 81	17 - 63	17 - 66
	Resorts	19 - 87	20 - 98	18 - 78	18 - 81
Service Apartments 	Mid rise	72 - 80	76 - 84	69 - 77	71 - 78
Hospitals 	Hospitals	69 - 77	82 - 91	67 - 74	68 - 75
Industrial 	Light Industrial	33 - 36	34 - 38	31 - 35	32 - 35
	Heavy industrial	53 - 59	56 - 62	51 - 56	52 - 57
Warehouses 	Warehouse & Logistics	19 - 21	25 - 27	18 - 20	19 - 20
Basement & Car Park 	3 basement	29 - 32	31 - 34	28 - 31	28 - 31
	2 basement	27 - 30	29 - 32	26 - 29	26 - 29
	1 basement	25 - 28	27 - 30	24 - 27	25 - 27
	Standalone	20 - 22	21 - 23	19 - 21	19 - 21

Note: The data provided depicts an average range of costs and CBRE advises its readers to exercise discretion when referring to it. Prices are per sq. ft on built up area and include contingency but exclude escalation & GST. USD 1 = INR 82.69
 Source: CBRE Project Management; CBRE Research, Q4-2023

FIGURE 2.1: Y-o-Y percent change in greenfield construction costs across asset classes



Source: CBRE Project Management; CBRE Research, Q4 2023

The Ripple Effect of Input Material Prices on Overall Construction Costs

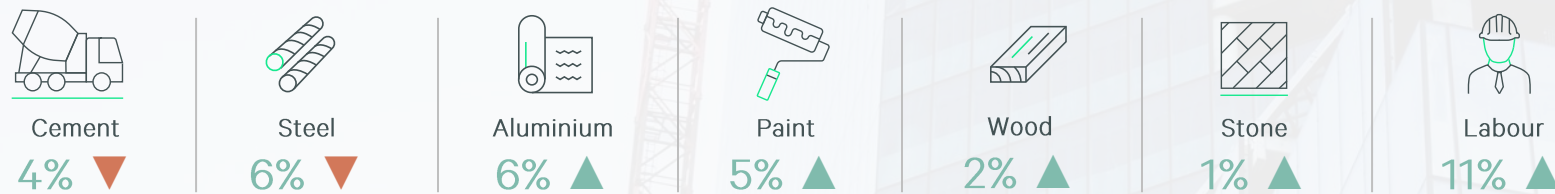
3



The year of easing in key input materials prices

Since the release of our previous report, "[Construction Cost Trends in India 2022](#)," there have been notable improvements in global and domestic inflation scenario. These improvements can be attributed to robust central bank policies and a gradual recovery from the disruptions caused by the pandemic and other regional / global headwinds. Moreover, lead time challenges have eased this year as manufacturing and supply chains have caught up with increasing demand trends. The softening of commodity prices has further contributed to an overall improvement in global macroeconomics, leading to a reduction in raw material costs and subsequently lowering input costs for the construction industry.

FIGURE 3.1: Percentage change in material prices between Q3 2022 and Q3 2023



Note: The % change is calculated at an India level, taking respective material prices across major cities into consideration

While there has been some relief in input material costs over the past 12-18 months, it is important to note that prices of key components such as cement, steel, and aluminium have exhibited divergence.

Source: CBRE Project Management; CBRE Research, Q4 2023

CBRE input material cost index

- CBRE Research arrived at the input material cost index to understand the change in key input material costs over the past three years of heightened volatility (base year 2020). Rather than looking at price fluctuations in input costs in isolation, the index aims to give a holistic view of the impact that these fluctuations have had over the past two years.
- Since all input materials do not impact construction costs equally, we identified the top high-impact components (steel, cement, glass, labour, metals, plumbing, and fuel, amongst others) and assigned them weightages basis their usage and impact on overall construction costs. Price trends for these input materials are explained in the upcoming sections.
- In order to smoothen out the index, volatility scoring was assigned which measured the change these input materials have witnessed since 2020 (on a scale of 1-5). A sum of the weightage along with the score has been considered as the cost index value.

Figure 3.6: CBRE input material cost index for India



Source: CBRE Project Management; CBRE Research, Q4 2023

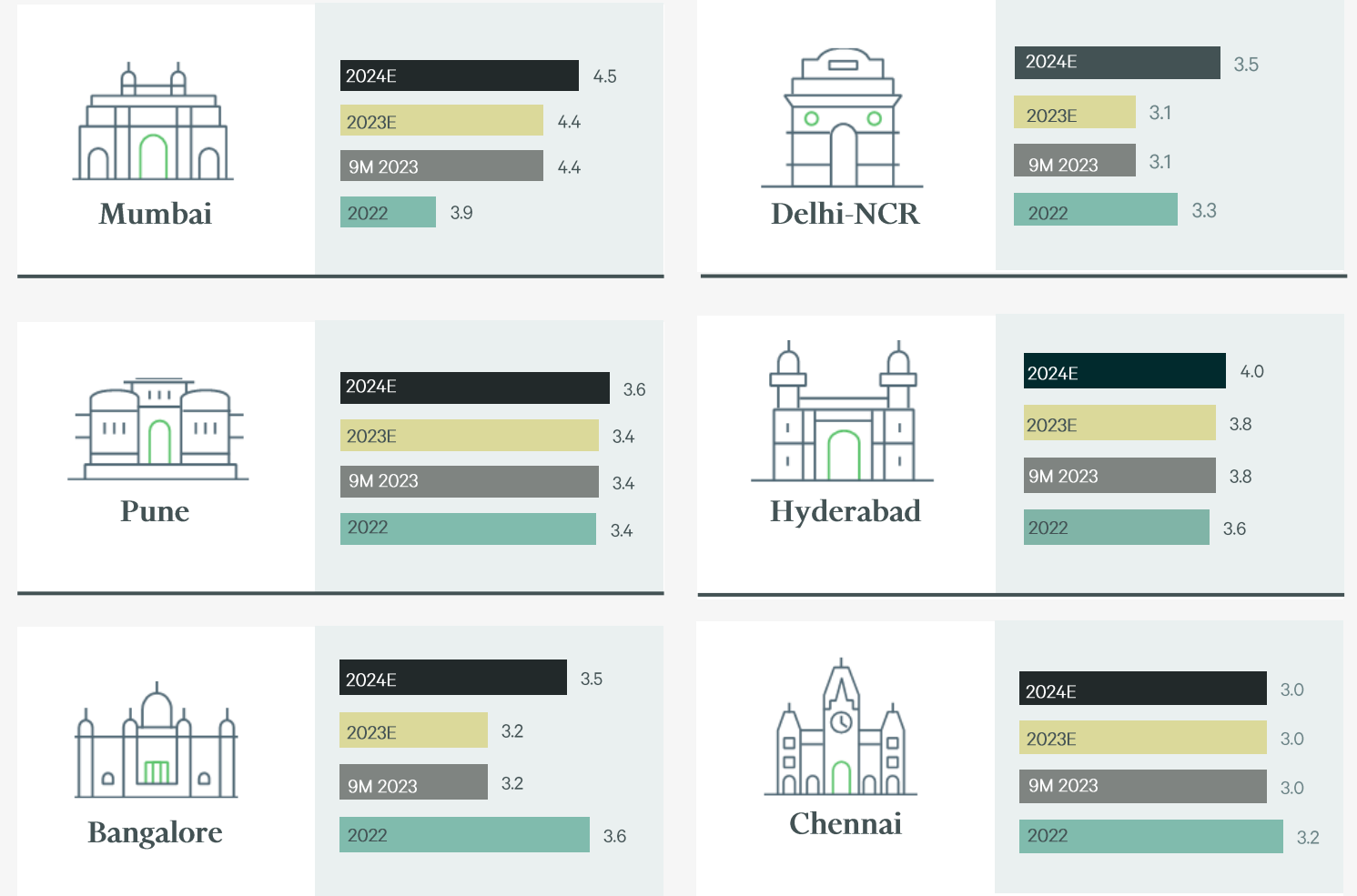
CBRE input material cost index

The gradual decrease in material prices resulted in the tapering of the CBRE input material cost index across most cities in 9M 2023.

However, a few cities, such as Mumbai and Hyderabad, experienced an upward trend in the index. This increase can be attributed to several factors, including regional dynamics, local market demand, construction activity, and order quantities.

Looking ahead, it is widely anticipated that inflationary pressures will diminish in 2024. Nevertheless, market volatility is expected to persist throughout the year, primarily due to uncertainties surrounding the possibility of a recession in developed economies and challenges arising from geopolitical turmoil. As a result, the index is projected to exhibit only a marginal increase in 2024 across most cities.

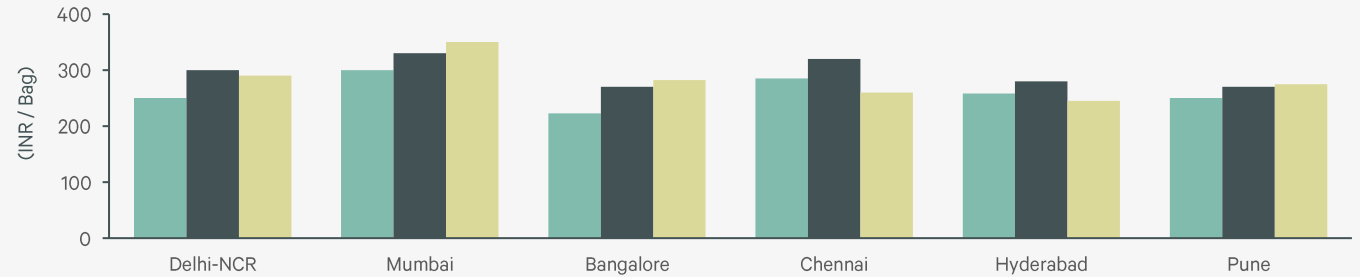
FIGURE 3.7: City-wise CBRE input material cost index



Source: CBRE Project Management; CBRE Research, Q4 2023

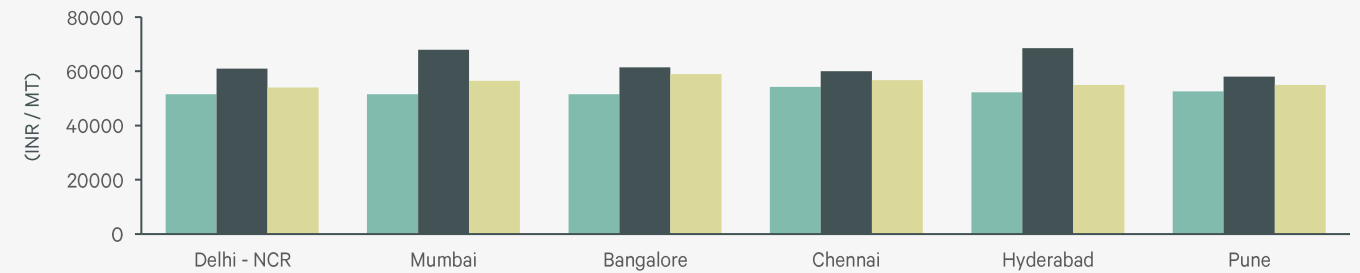
During Q3 2023, cement prices in most cities experienced a Y-o-Y decrease of approximately 4% and a quarterly decrease of about 2%. This decline can be attributed to the moderation of raw material and fuel prices in the market. As of September 2023, the cost of a 50kg cement bag was estimated to range between INR 245 – 350.

FIGURE 3.2: Cement Price Trend



The steel industry has experienced significant volatility in the past 12 to 18 months, influenced by a range of external and internal factors. The imposition of export duties on several finished steel products from May 2022 to November 2022 impacted the market dynamics. Furthermore, the softening of iron ore and coking coal prices contributed to a decline in steel prices. In January 2023, we witnessed an increase in the prices of iron ore lumps. Subsequently, the steel prices increased by 3.9% Q-o-Q during Q1 2023. However, weak global demand, particularly from China, and a downward trend in iron ore prices resulted in a decline of about 6.6% and 1.5% in the Q2 and Q3 quarters of 2023, respectively.

FIGURE 3.3: Reinforced Steel Price Trend









In contrast to other input materials, Aluminium prices have remained largely stable across most cities. Even in Q3 2023, prices remained mostly flat, with a slight decrease of about 0.2% compared to the previous quarter.

FIGURE 3.4: Aluminium Price Trend









Source: CBRE Project Management; CBRE Research, Q4 2023

TABLE 3.1: City-wise material cost trends (in INR terms , Q-o-Q & Y-o-Y percent change)

Item	Description (Unit)	Delhi – NCR (Q-o-Q Y-o-Y%)	Mumbai (Q-o-Q Y-o-Y%)	Bangalore (Q-o-Q Y-o-Y%)	Chennai (Q-o-Q Y-o-Y%)	Hyderabad (Q-o-Q Y-o-Y%)	Pune (Q-o-Q Y-o-Y%)
Cement	 Grade 53 (INR/bag)	290 (▲ ▼)	350 (▲ ▲)	282 (▼ ▲)	260 (▼ ▼)	245 (▶ ▼)	275 (▶ ▲)
Steel	 Reinforcement (INR/MT)	54,000 (▼ ▼)	56,500 (▼ ▼)	59,000 (▲ ▼)	56,700 (▼ ▼)	55,000 (▼ ▼)	55,000 (▲ ▼)
	Structural Steel (INR/MT)	62,000 (▼ ▼)	72,000 (▶ ▼)	63,000 (▲ ▼)	75,890 (▼ ▶)	75,000 (▶ ▲)	75,000 (▶ ▲)
Clear Glass	 6mm (INR/sq. ft.)	75 – 100 (▶ ▲)	80 – 100 (▶ ▲)	72 – 103 (▶ ▲)	75 – 95 (▶ ▲)	80 – 100 (▶ ▲)	80 – 110 (▲ ▲)
	8mm (INR/sq. ft.)	120 – 150 (▶ ▶)	120 – 150 (▶ ▶)	124 – 155 (▲ ▲)	100 – 150 (▶ ▶)	100 – 120 (▶ ▼)	100 – 150 (▲ ▶)
Stone	 Granite (INR/sq. ft.)	200 – 400 (▶ ▶)	200 – 400 (▶ ▶)	207 – 413 (▲ ▲)	200 – 350 (▶ ▶)	90 – 300 (▶ ▶)	200 – 400 (▶ ▶)
	Marble (INR/sq. ft.)	300 – 800 (▶ ▶)	350 – 850 (▶ ▲)	306 – 817 (▲ ▲)	200 – 700 (▶ ▶)	200 – 800 (▶ ▲)	300 – 800 (▶ ▶)
	Makrana (INR/sq. ft.)	800 (▶ ▶)	800 – 900 (▶ ▲)	817 (▲ ▲)	800 (▶ ▶)	800 (▶ ▲)	600 – 800 (▶ ▼)
	Kota (INR/sq. ft.)	50 – 90 (▶ ▶)	50 – 90 (▶ ▶)	51 – 72 (▲ ▼)	50 – 80 (▶ ▶)	50 – 80 (▶ ▲)	45 – 65 (▶ ▶)
	Cuddappa (INR/sq. ft.)	45 - 65 (▶ ▼)	50 – 70 (▶ ▶)	51 – 72 (▲ ▲)	50 – 70 (▶ ▶)	50 – 80 (▶ ▲)	45 – 65 (▲ ▲)
Wood	 Salwood (INR/cu. ft.)	2,200 (▶ ▶)	2,200 -2,400 (▼ ▲)	2,370 (▼ ▼)	2,000 (▲ ▶)	2,300 (▶ ▲)	2,200 (▶ ▲)
	Plywood 12mm Thk (INR/sq. ft.)	75 - 100 (▶ ▲)	80 - 100 (▶ ▲)	73 – 103 (▲ ▲)	70 – 100 (▶ ▶)	70 – 100 (▶ ▶)	75 – 100 (▶ ▶)
Paint	 Emulsion (INR/20 ltr)	3,500 – 4,000 (▶ ▶)	3,700 - 4 100 (▲ ▲)	3,455 – 3,948 (▶ ▼)	3 000 – 3,500 (▶ ▶)	3,500 – 4,500 (▶ ▲)	3,500 – 4,500 (▶ ▲)
Metals	 Aluminium (INR/kg)	250 – 350 (▶ ▶)	300 – 400 (▶ ▲)	249 – 348 (▼ ▼)	250 – 300 (▶ ▶)	300 – 350 (▶ ▲)	250 - 350 (▶ ▶)
	Stainless Steel (INR/kg)	300 – 350 (▶ ▶)	300 – 400 (▶ ▲)	249 – 348 (▼ ▼)	250 – 300 (▶ ▶)	300 – 350 (▶ ▲)	300 - 350 (▶ ▶)
Plumbing	 GI Pipe - 50mm - 80mm C Class Heavy (INR/m)	891 – 1,410 (▶ ▲)	900 – 1,375 (▶ ▲)	750 – 1,101 (▶ ▶)	600 – 850 (▶ ▶)	700 – 1,050 (▶ ▲)	750 – 1,180 (▶ ▲)
	Upvc 32mm - 50mm (INR/m)	90 – 135 (▶ ▲)	80 – 190 (▶ ▲)	72 – 165 (▼ ▼)	65 – 110 (▶ ▶)	65 – 110 (▶ ▶)	80 - 130 (▶ ▲)
	CPVC 25mm - 50mm SDR 11 (INR/m)	360 – 850 (▶ ▲)	350 - 900 (▶ ▲)	340 - 900 (▶ ▲)	325 – 675 (▶ ▲)	320 - 680 (▶ ▲)	340 - 740 (▶ ▲)

Source: CBRE Project Management; CBRE Research, Q4 2023

TABLE 3.2: City-wise material cost trends (in USD terms , Q-o-Q & Y-o-Y percent change)

Item	Description (Unit)	Delhi – NCR (Q-o-Q Y-o-Y%)	Mumbai (Q-o-Q Y-o-Y%)	Bangalore (Q-o-Q Y-o-Y%)	Chennai (Q-o-Q Y-o-Y%)	Hyderabad (Q-o-Q Y-o-Y%)	Pune (Q-o-Q Y-o-Y%)	
Cement	 Grade 53 (INR/bag)	3.5 (▲ ▼)	4.2 (▲ ▲)	3.4 (▼ ▲)	3.1 (▼ ▼)	3.0 (▶ ▼)	3.3 (▶ ▲)	
Steel	 Reinforcement (INR/MT)	653.0 (▼ ▼)	683.3 (▼ ▼)	713.5 (▲ ▼)	685.7 (▼ ▼)	665.1 (▼ ▼)	665.1 (▲ ▼)	
	Structural Steel (INR/MT)	749.8 (▼ ▼)	870.7 (▶ ▼)	761.9 (▲ ▼)	917.8 (▼ ▶)	907.0 (▶ ▲)	907.0 (▶ ▲)	
Clear Glass	 6mm (INR/sq. ft.)	0.9 - 1.2 (▶ ▲)	1.0 - 1.2 (▶ ▲)	0.9 - 1.2 (▶ ▲)	0.9 - 1.1 (▶ ▲)	1.0 - 1.2 (▶ ▲)	1.0 - 1.3 (▲ ▲)	
	8mm (INR/sq. ft.)	1.5 - 1.8 (▶ ▶)	1.5 - 1.8 (▶ ▶)	1.5 - 1.9 (▲ ▲)	1.2 - 1.8 (▶ ▶)	1.2 - 1.5 (▶ ▼)	1.2 - 1.8 (▲ ▶)	
Stone		Granite (INR/sq. ft.)	2.4 - 4.8 (▶ ▶)	2.4 - 4.8 (▶ ▶)	2.5 - 5.0 (▲ ▲)	2.4 - 4.2 (▶ ▶)	1.1 - 3.6 (▶ ▶)	0.2 - 4.8 (▶ ▶)
		Marble (INR/sq. ft.)	3.6 - 9.7 (▶ ▶)	4.2 - 10.3 (▶ ▲)	3.7 - 9.9 (▲ ▲)	2.4 - 8.5 (▶ ▶)	2.4 - 9.7 (▶ ▲)	0.4 - 9.7 (▶ ▶)
		Makrana (INR/sq. ft.)	9.7 (▶ ▶)	9.7 - 10.9 (▶ ▲)	9.9 (▲ ▲)	9.7 (▶ ▶)	9.7 (▶ ▲)	4.5 (▶ ▼)
		Kota (INR/sq. ft.)	0.6 - 1.1 (▶ ▶)	0.6 - 1.1 (▶ ▶)	0.6 - 0.9 (▲ ▼)	0.6 - 1.0 (▶ ▶)	0.6 - 1.0 (▶ ▲)	0.5 - 0.8 (▶ ▶)
		Cuddappa (INR/sq. ft.)	0.5 - 0.8 (▶ ▼)	0.6 - 0.8 (▶ ▶)	0.6 - 0.9 (▲ ▲)	0.6 - 0.8 (▶ ▶)	0.6 - 1.0 (▶ ▲)	0.5 - 0.8 (▲ ▲)
Wood		Salwood (INR/cu. ft.)	26.6 (▶ ▶)	26.6 - 29.0 (▼ ▲)	28.7 (▼ ▼)	24.2 (▲ ▶)	27.8 (▶ ▲)	26.6 - 26.6 (▶ ▲)
		Plywood 12mm Thk (INR/sq. ft.)	0.9 - 1.2 (▶ ▲)	1.0 - 1.2 (▶ ▲)	0.9 - 1.2 (▲ ▲)	0.8 - 1.2 (▶ ▶)	0.8 - 1.2 (▶ ▶)	0.9 - 1.2 (▶ ▶)
Paint	 Emulsion (INR/20 ltr)	42.3 - 48.4 (▶ ▶)	44.7 - 49.6 (▲ ▲)	41.8 - 47.7 (▶ ▼)	36.3 - 42.3 (▶ ▶)	42.3 - 54.4 (▶ ▲)	42.3 - 54.4 (▶ ▲)	
Metals		Aluminium (INR/kg)	3.0 - 4.2 (▶ ▶)	3.6 - 4.8 (▶ ▲)	3.0 - 4.2 (▼ ▼)	3.0 - 3.6 (▶ ▶)	3.6 - 4.2 (▶ ▲)	3.0 - 4.2 (▶ ▶)
		Stainless Steel (INR/kg)	3.6 - 4.2 (▶ ▶)	3.6 - 4.8 (▶ ▲)	3.0 - 4.2 (▼ ▼)	3.0 - 3.6 (▶ ▶)	3.6 - 4.2 (▶ ▲)	3.6 - 4.2 (▶ ▶)
Plumbing		GI Pipe - 50mm - 80mm C Class Heavy (INR/m)	10.8 - 5 (▶ ▲)	10.9 - 16.6 (▶ ▲)	9.1 - 13.3 (▶ ▶)	7.3 - 10.3 (▶ ▶)	8.5 - 12.7 (▶ ▲)	9.1 - 14.3 (▶ ▲)
		Upvc 32mm - 50mm (INR/m)	1.1 - 1.6 (▶ ▲)	1.0 - 2.3 (▶ ▲)	0.9 - 2.0 (▼ ▼)	0.8 - 1.3 (▶ ▶)	0.8 - 1.3 (▶ ▶)	1.0 - 1.6 (▶ ▲)
		CPVC 25mm - 50mm SDR 11 (INR/m)	4.4 - 10.3 (▶ ▲)	4.2 - 10.9 (▶ ▲)	4.1 - 10.9 (▶ ▲)	3.9 - 8.2 (▶ ▲)	3.9 - 8.2 (▶ ▲)	4.1 - 8.9 (▶ ▲)

Note: 1 USD = INR 82.69

Source: CBRE Project Management; CBRE Research, Q4 2023

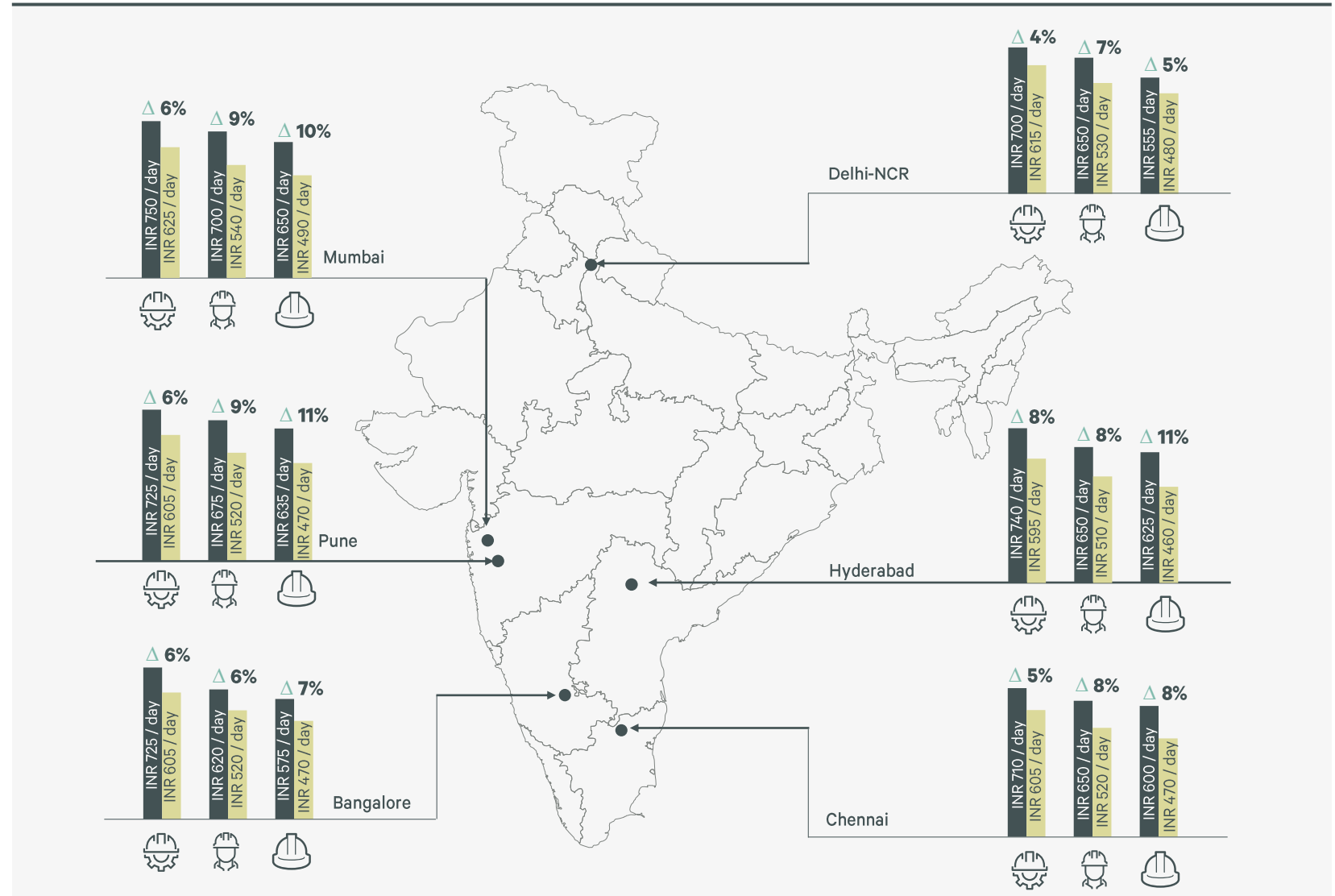
TABLE 3.5: Labour wage overview as of Q3 2023

Labour cost continues to trend upwards

As economic development unfolds, it is translating into the construction of numerous infrastructure projects and expansive real estate developments. This in turn highlights the challenges surrounding the availability and retention of skilled manpower.

To address this issue, employers have resorted to measures such as investing in training, higher wages, provision of benefits, and incentives. As a result, average hiring costs for skilled, semi-skilled, and unskilled labour have witnessed an annual increase of 5-15% during Q3 2023 nationwide.

-  Skilled labour
-  Semi-skilled labour
-  Unskilled labour



Source: CBRE Project Management; CBRE Research, Q4 2023

Legend: Q3 2023 (dark grey), 2020 (light grey). Note: Percent change above the bar graph indicates CAGR (2020 – 2023YTD)

Focusing on Office Fit-out Pricing

4



Evolving Workplace Behaviours Impacting Fitout Costs

The global shift in workplace behaviours has resulted in new ways of thinking about the construction of offices. Companies have adopted hybrid work models, with a need for a blend of flexible team and event spaces. Flight to quality has been an underlying theme for most occupiers, which entails the need for better quality fit-out materials. In addition, numerous companies have established net-zero carbon targets that extend beyond energy savings. These targets now encompass factors such as the use of sustainable construction materials and techniques, which can potentially influence fit-out costs as well.

Moreover, as technology takes centre stage, occupiers are increasingly conscious of their budgetary constraints. Consequently, they are willing to make essential adaptations in fit-out expenses pertaining to operations, civil work, and interior design, in order to accommodate necessary technology upgrades. Figure 4.1 indicates an increase in the share of active components compared to last year as occupiers are investing more on technology-related requirements.









Civil & interior works, furniture and MEP works drive fit-out costs

- Soft cost - Consultancy charges
- Civil & interior works - Civil & interior works & modular false ceiling
- Flooring works - Raised flooring works & carpet works
- Furniture - Workstations, meeting room tables, office & meeting room chairs, loose furniture
- MEP works - Plumbing, internal electrical works, luminaries & LMS, UPS system, BMS, HVAC low side distribution, CRAC units, FPS & ELV system, access control system, CCTV system
- Networking passive works - Cabling
- AV equipment – Video conferencing equipment for meeting rooms
- Active components – Racks in the server room
- Miscellaneous - Signage, graphics, baggage scanner, kitchen equipment, preliminaries and housekeeping, HSE

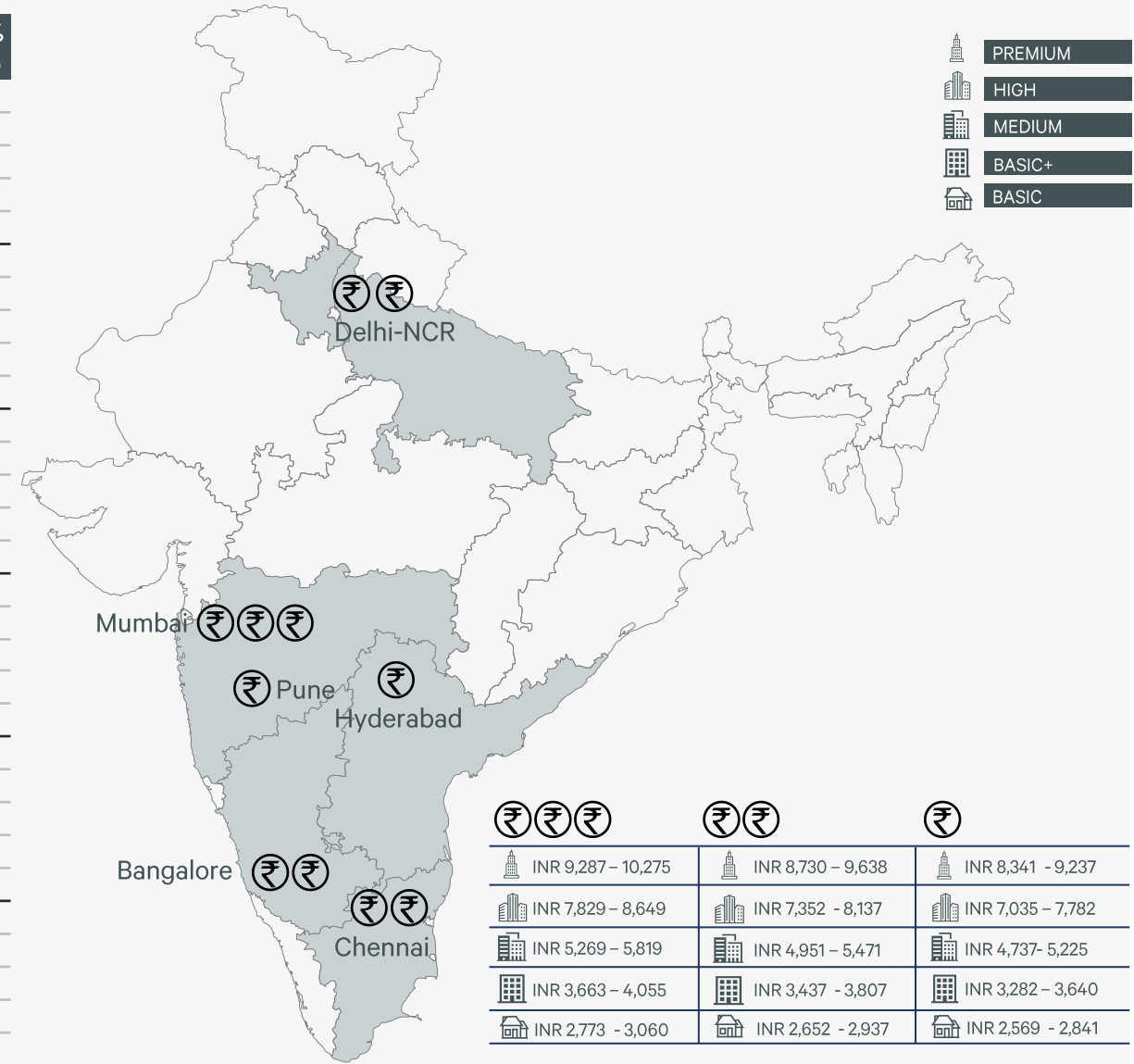
FIGURE 4.1: Office fit-out cost breakup



FIGURE 4.2: Office fit-out costs across leading cities in India (in INR / sq. ft.)







City	Categories	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Y-o-Y (% change)
 Delhi - NCR	Premium	8,585	8,585	8,671	8,843	9,184	7%
	High	7,235	7,235	7,307	7,452	7,745	7%
	Medium	4,915	4,915	4,964	5,062	5,211	6%
	Basic+	3,415	3,415	3,449	3,517	3,622	6%
	Basic	-	-	-	-	2,795	-
 Mumbai	Premium	9,055	9,055	9,146	9,327	9,781	8%
	High	7,630	7,630	7,706	7,859	8,239	8%
	Medium	5,180	5,180	5,232	5,335	5,544	7%
	Basic+	3,605	3,605	3,641	3,713	3,859	7%
	Basic	-	-	-	-	2,917	-
 Bangalore	Premium	8,585	8,585	8,671	8,843	9,184	7%
	High	7,235	7,235	7,307	7,452	7,745	7%
	Medium	4,915	4,915	4,964	5,062	5,211	6%
	Basic+	3,415	3,415	3,449	3,517	3,622	6%
	Basic	-	-	-	-	2,795	-
 Chennai	Premium	8,585	8,585	8,671	8,843	9,184	7%
	High	7,235	7,235	7,307	7,452	7,745	7%
	Medium	4,915	4,915	4,964	5,062	5,211	6%
	Basic+	3,415	3,415	3,449	3,517	3,622	6%
	Basic	-	-	-	-	2,795	-
 Hyderabad	Premium	8,330	8,330	8,413	8,580	8,789	6%
	High	7,020	7,020	7,090	7,231	7,409	6%
	Medium	4,765	4,765	4,813	4,908	4,981	5%
	Basic+	3,310	3,310	3,343	3,409	3,461	5%
	Basic	-	-	-	-	2,705	-
 Pune	Premium	8,330	8,330	8,413	8,580	8,789	6%
	High	7,020	7,020	7,090	7,231	7,409	6%
	Medium	4,765	4,765	4,813	4,908	4,981	5%
	Basic+	3,310	3,310	3,343	3,409	3,461	5%
	Basic	-	-	-	-	2,705	-

Note: Rate / sq. ft. on RSF (Rentable Square Footage is the total square footage that equals the usable square footage plus the tenant's pro rata share of the building's common areas; Basic category from the previous report has been re-classified as the Basic+ category and a new category called "Basic" has been introduced in this report

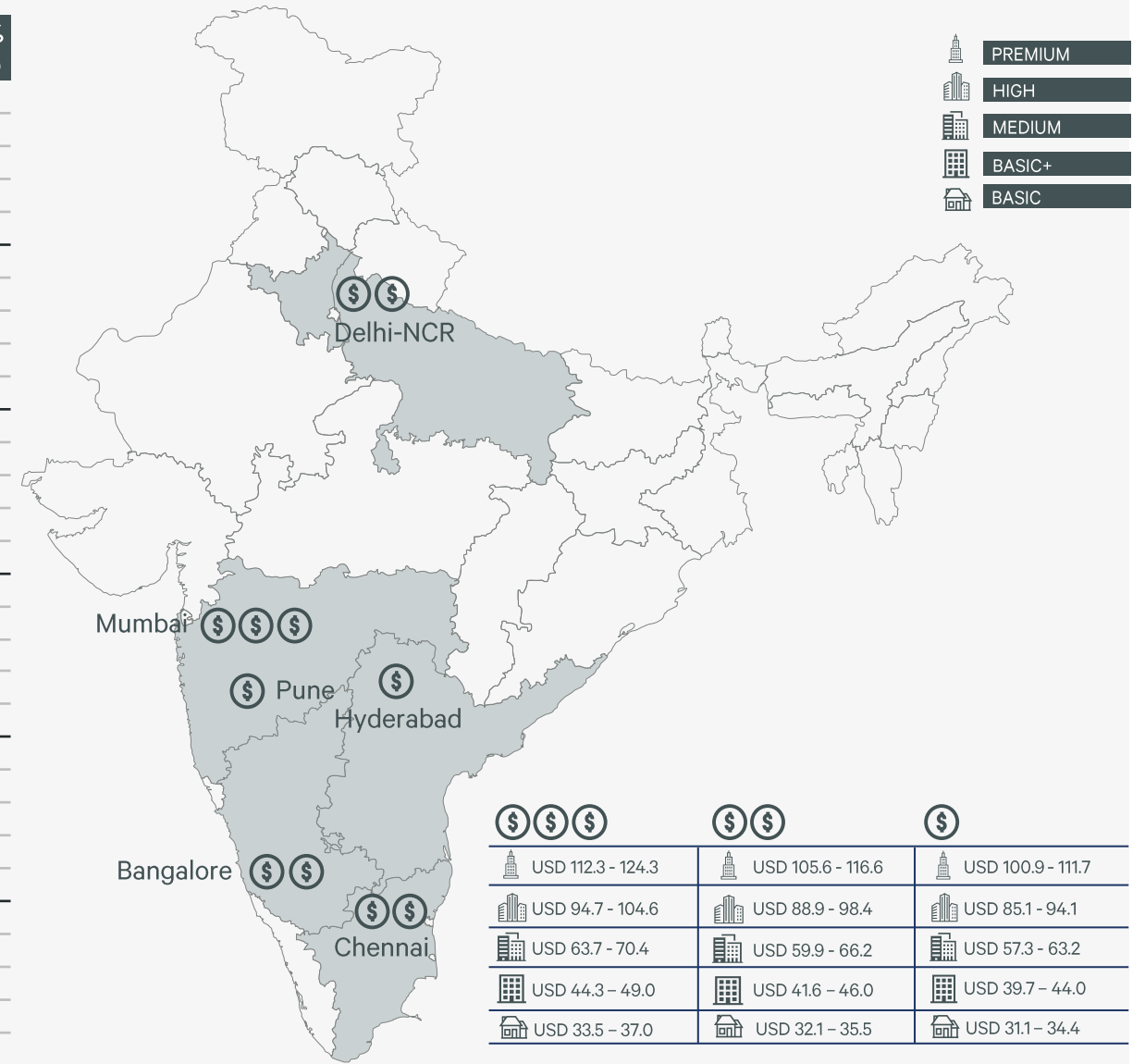


Note: The rupee sign is for representation purpose only and indicates most expensive to least expensive market ` Source: CBRE Project Management; CBRE Research, Q4 2023

FIGURE 4.2: Office fit-out costs across leading cities in India (in USD / sq. ft.)

City	Categories	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Y-o-Y (% change)
 Delhi - NCR	Premium	106	104	106	108	111	7%
	High	89	87	89	91	94	7%
	Medium	60	59	60	62	63	6%
	Basic+	42	41	42	43	44	6%
	Basic	-	-	-	-	34	-
 Mumbai	Premium	111	109	111	114	118	8%
	High	94	92	94	96	100	8%
	Medium	64	63	64	65	67	7%
	Basic+	44	44	44	45	47	7%
	Basic	-	-	-	-	35	-
 Bangalore	Premium	106	104	106	108	111	7%
	High	89	87	89	91	94	7%
	Medium	60	59	60	62	63	6%
	Basic+	42	41	42	43	44	6%
	Basic	-	-	-	-	34	-
 Chennai	Premium	106	104	106	108	111	7%
	High	89	87	89	91	94	7%
	Medium	60	59	60	62	63	6%
	Basic+	42	41	42	43	44	6%
	Basic	-	-	-	-	34	-
 Hyderabad	Premium	102	101	102	105	106	6%
	High	86	85	86	88	90	6%
	Medium	59	58	59	60	60	5%
	Basic+	41	40	41	42	42	5%
	Basic	-	-	-	-	33	-
 Pune	Premium	102	101	102	105	106	6%
	High	86	85	86	88	90	6%
	Medium	59	58	59	60	60	5%
	Basic+	41	40	41	42	42	5%
	Basic	-	-	-	-	33	-

Note: Rate / sq. ft. on RSF (Rentable Square Footage is the total square footage that equals the usable square footage plus the tenant's pro rata share of the building's common areas; Basic category from the previous report has been re-classified as the Basic+ category and a new category called "Basic" has been introduced in this report



Note: The dollar sign is for representation purpose only and indicates most expensive to least expensive market, 1 USD = INR at respective quarters
Source: CBRE Project Management; CBRE Research, Q4 2023

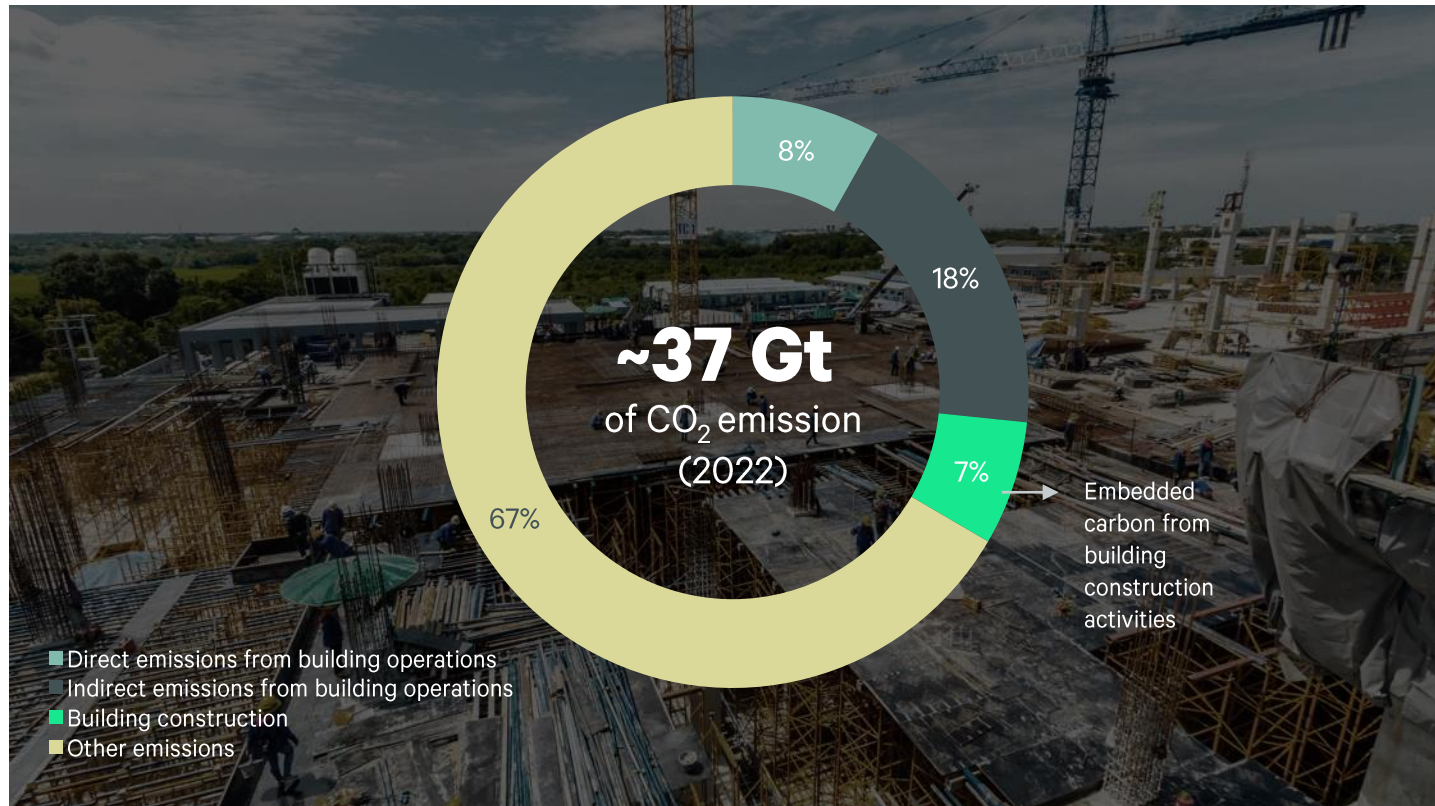
Building a Greener Future

5



Building operations and construction account for one-third of overall emissions globally

Global CO₂ emissions from building operations and construction (2022)



Source: CO₂ emissions in 2022, International Energy Agency, 2023
 Note: Other emission include power, industrial and transport emissions



Direct CO₂ emissions from buildings marginally decreased from 3.1 Gt in 2021 to **3.0 Gt in 2022**



Indirect CO₂ emissions from buildings increased from 6.7 Gt in 2021 to nearly **6.8 Gt in 2022**



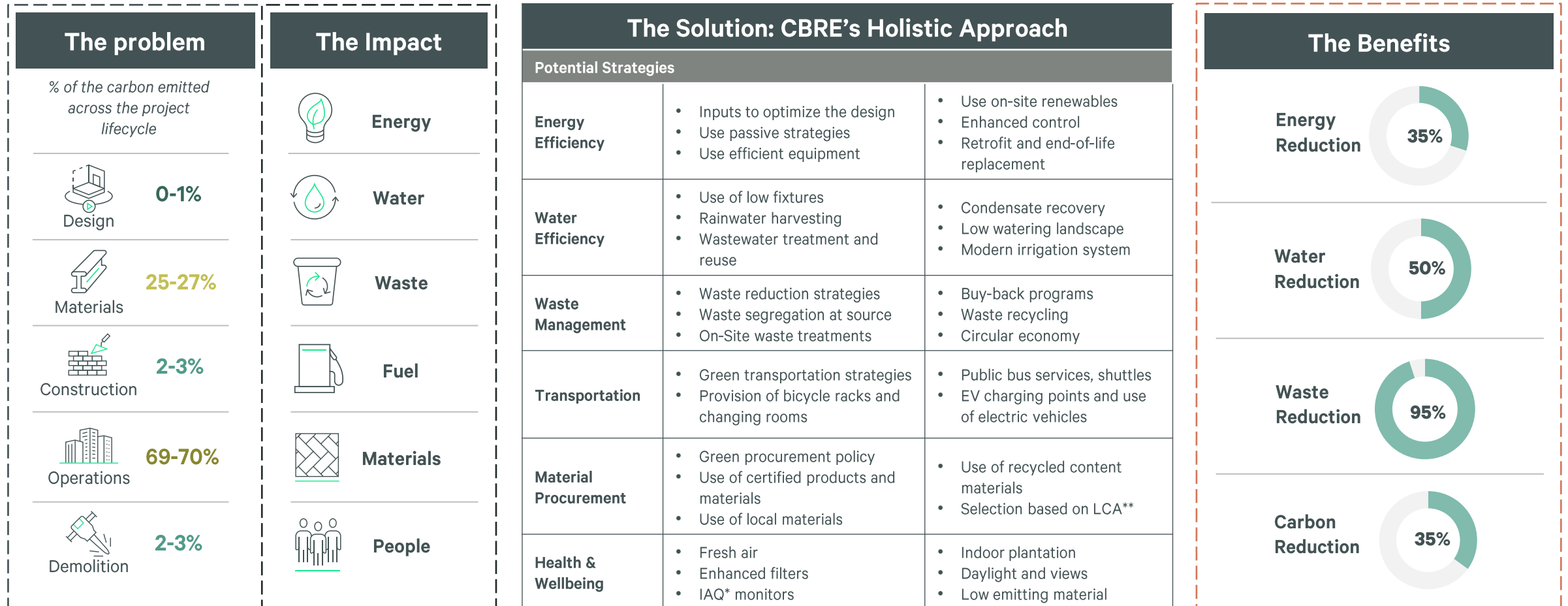
Building construction accounted for **2.5 Gt of CO₂ emissions in 2022**

Note:

Direct emissions in buildings sector include on-site fuel combustion (e.g. gas used on site for cooking, water heating, space heating etc.) and refrigerant leaks
Indirect emissions in buildings sector include purchased electricity from the grid and other centralized energy sources
Building construction emissions include construction works and manufacturing & processing of cement, steel, and aluminium for buildings

Re-imagining the construction industry through a sustainability lens

Incorporating a holistic approach towards sustainability at the project planning stage can lead to a reduction in overall construction costs (of sustainable elements) by approximately 10% - 12%

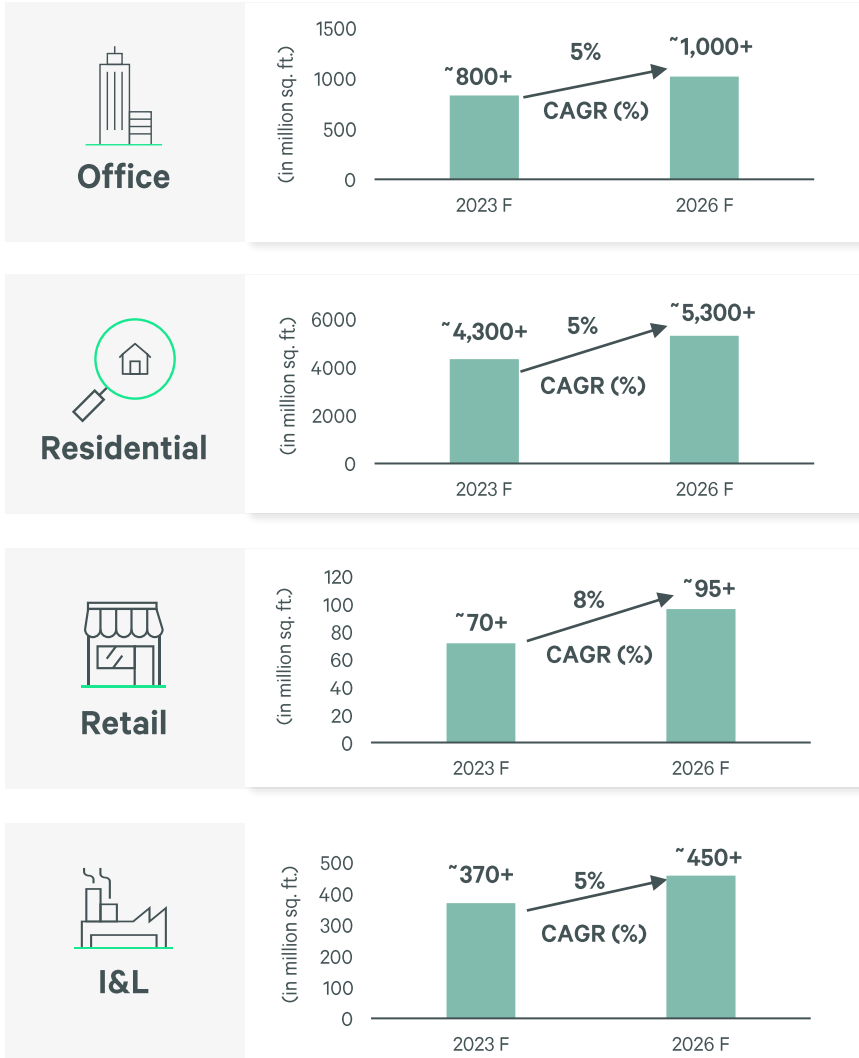


*IAQ – Indoor Air Quality, **LCA – Life Cycle Assessment
Source: CBRE Project Management; CBRE Research, Q4 2023

Outlook

6



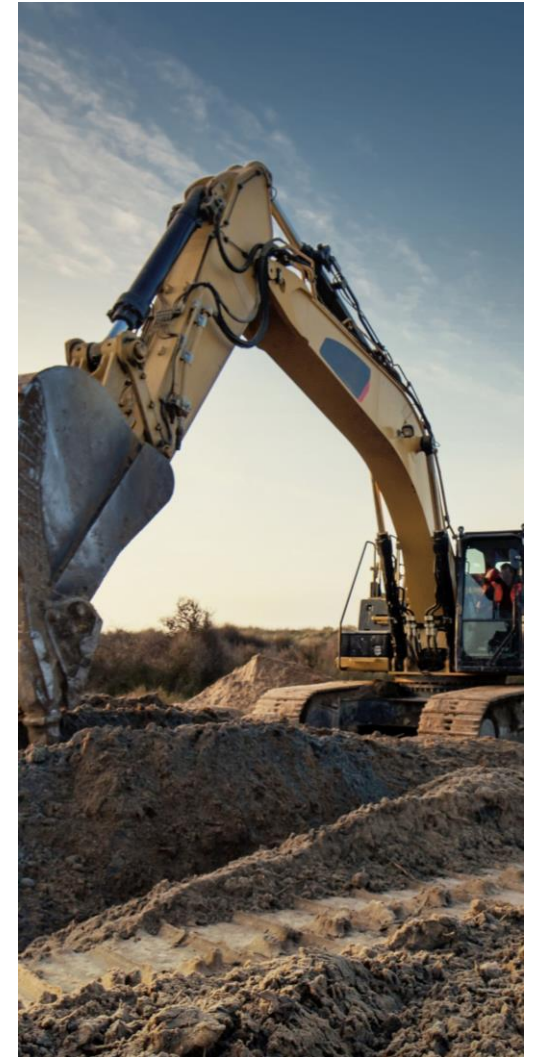


Source: CBRE Research, Q4 2023

Thriving Real Estate Market to Spur Construction Momentum

As the demand for residential, commercial, and industrial properties continues to rise, developers will undertake new construction projects to meet this demand. This is likely to result in increased construction activities across various real estate sectors, including housing, office spaces, and retail centres along with infrastructure projects. By 2026, the total stock across **commercial, residential, and I&L sectors** is expected to cross **the 1,540 million sq. ft. mark**. Notably, the total stock for the **residential sector** alone is projected to touch more than **5,300 million sq. ft.** by 2026.

The real estate industry's expansion is also likely to lead to ancillary construction activities such as infrastructure development, including roads, bridges, utilities, and transportation networks, to support the newly developed properties. Additionally, it would also help create employment opportunities for skilled workers, engineers, architects, and other professionals involved in the sector. The increased construction activity is expected to stimulate economic growth, contribute to the GDP of the country, and attract more investments in the industry.



However, costs for key construction materials expected to remain range-bound in 2024

The rise in construction costs is expected to normalise in the near future, driven by a convergence of favourable factors. The market tends to find a new equilibrium as supply and demand dynamics, backlog levels, labour wages, and commodity pricing reach a balance. This equilibrium often leads to a more predictable pricing environment for construction projects..

Furthermore, the construction industry in India is embracing innovative solutions and streamlined processes, paving the way for standardized and manageable costs.

Government support through incentives for sustainable building materials and streamlined permitting processes are likely to create a favourable environment causing the overall costs to temper.

Overall, the combination of market dynamics, industry adaptations, technological advancements, and supportive policies are expected to contribute to the normalisation of construction costs going forward. This will allow for better cost predictability and improved planning for construction projects.

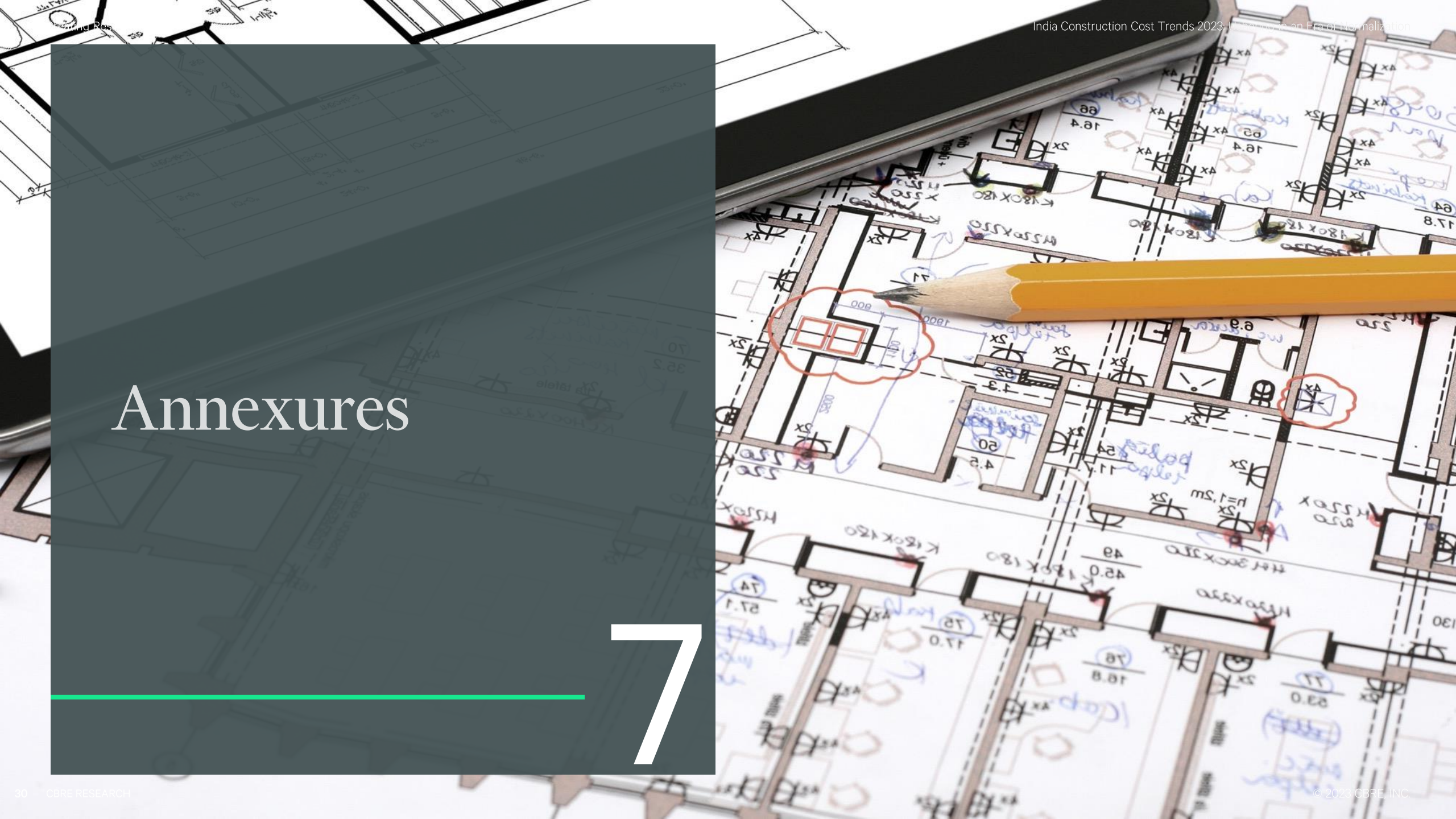
TABLE 6.1: Cost trends for key construction materials

Material	Anticipated average % change (2023F – 2024F)
Greenfield cost for an office high rise	4 – 5%
Cement	4 – 5%
Steel	3 – 4%
Labour	6 – 8%
Fuel	4 – 5%

Source: CBRE Project Management; CBRE Research, Q4 2023

Annexures

7



FIT-OUT COST SPECIFICATIONS

Description	Specifications			
	Premium Level	High Level	Medium Level	Basic+ Level
Civil & interiors works	High end & premium finishes for partitions, cladding, acoustic finishes	Partitions 160 mm thickness, double glazed partitions & doors, motorized blinds for meeting rooms, high-end veneer / acrylic finishes, acoustic requirements, imported motorized foldable partitions	Partitions 120mm thickness, imported single glazed partitions, manual blinds, high-end finishes, indigenous semi motorized foldable partitions	Partitions 90mm thickness, indigenous single glazed partitions, manual blinds, manual foldable / non-foldable partitions
Raised flooring works	For total carpet area	For total carpet area	For workstation area	For workstation and lower areas
Carpet works	Use of premium products	INR 2,250/Sq. m.	INR 1,875/Sq. m.	INR 1,500/Sq. m..
Modular false ceiling works	Use of premium products	Higher acoustic ceilings, sprays / techzone ceiling / metallic ceiling etc	Acoustic ceilings / grid ceiling / gypsum ceiling etc	Grid ceiling / Gypsum ceiling / open ceilings etc
Workstations	Use of premium products	HAT motorized imported WS, cost > approx. INR 90,000	HAT manual / motorized WS, Cost approx. INR 60,000 to 75,000	Fixed, > approx. INR 41,250
Office & meeting room chairs	Use of premium products	Imported > approx. INR41,250	Approx. INR 30,500 to 37,500	< Approx. INR 22,500
Internal electrical works	Hot swappable breakers in panels, more zoning, salt pepper connection, power cords, import DBs, raceways etc.	Hot swappable breakers in panels, more zoning, salt pepper connection, power cords, import DBs, raceways etc.	Non swappable breakers in panels	NA
Luminaries & LMS	Use of premium products & decorative models	Import luminaries, Flos / Artemide, LMS for office space	Indigenous luminaires, LMS for closed rooms	Indigenous luminaries
UPS system	Modular N+1 > 30 min backup	Modular N+1 > 30 min backup	Conventional	Conventional
HVAC low side distribution	Thermo diffusers, N+1 configuration for critical areas	Thermo diffusers, N+1 configuration for critical areas	N+1 configuration for critical areas	Normal Specs
CRAC units	N+N	N+N	N+1	N+1 Normal Specs
FPS & ELV system	GSS, RRS, Grove coupling, GI pipes	GSS, RRS, Grove coupling, GI pipes	GI Pipes with welding	MS pipes with welding
Kitchen equipment	Reheating provision / Full-fledged kitchen	Reheating provision / Full-fledged kitchen	Reheating provision	Reheating provision
Networking passive works	Premium / state of the art specs	Higher specs	Medium specs	Lower specs
AV equipment	Premium / state of the art specs	Higher specs	Medium specs	Lower specs

Note: 1 USD = INR 82.69 Source: CBRE Project Management; CBRE Research, Q4 2023

ASSET CLASS SPECIFICATIONS FOR GREENFIELD COSTS

Asset Class	Segment	Specification
Residential	Low rise - 5 floors	Medium-quality finishes with nominal external facilities
	Mid rise -12 floors	High-quality finishes with good external facilities
	High rise-30 floors	Shear wall with high-quality finished with good external facilities
	Villas - 100 nos. & above	High-end finishes with air conditioning and false ceiling
Office	Mid rise -12 floors	Flat slab, glazing, warm shell with all high-side MEP ready for tenant fitout
	High rise - 20 floors	Flat slab, glazing, warm shell with all high-side MEP ready for tenant fitout
Retail	Shopping centre / mall	Composite structure, glazing, warm shell with all high-side MEP ready for anchor tenant and other retailers to occupy
	Mixed retail - 10 to 12 floors	
Hotel	3 star	Standalone hotels , moderate finishes, focused public areas excluding operation supplies
	4 star	Standalone hotels, high-end finishes, focused public areas excluding operation supplies
	5 star	Standalone hotels; luxury finishes with well-laid public areas, multiple restaurants and banquets
	Resorts	Low-rise, high-end finishes with more ground coverage; provision for leisure
Service Apartment	Mid rise	Standalone 1,2,3-bed configuration, minimal public areas and restaurants and kitchens
Hospital	Hospitals	Corporate hospital-grade with all the prescribed facilities with medical infra excluding medical equipment
Industrial	Light industrial	Light industrial use with well laid out doors with heavy duty flooring and partial equipment lifting
	Heavy industrial	Heavy industry-like care and manufacturing with all utilities
Warehouse	Warehouse & logistics	PEB structure with heavy-duty flooring with minimal MEP works
Basement & Car Parking	3 basement	Raft, retaining wall, water proofing with subsoil drains; the car park does not have provision for mechanical parking
	2 basement	Raft, retaining wall, water proofing with subsoil drains; the car park does not have provision for mechanical parking
	1 basement	Raft, retaining wall, water proofing with subsoil drains; the car park does not have provision for mechanical parking
	Standalone	Standalone building with parking main criteria; the car park does not have provision for mechanical parking

Source: CBRE Project Management; CBRE Research, Q4 2023

TABLE 7.1: Fit-out cost breakup as of Q3 2023 (in INR /sq. ft.)

Description	Mumbai					Delhi - NCR, Bangalore & Chennai					Hyderabad & Pune				
	Premium	High	Medium	Basic+	Basic	Premium	High	Medium	Basic+	Basic	Premium	High	Medium	Basic+	Basic
Soft Cost / Consultancy Charges	457 - 505	457 - 504	339 - 375	227 - 251	180 - 198	429 - 474	429 - 474	319 - 352	212 - 235	172 - 190	410 - 454	411 - 453	304 - 338	203 - 225	166 - 184
Civil & Interiors Works	2,054 - 2,272	1,484 - 1,641	904 - 999	678 - 752	564 - 624	1,931 - 2,133	1,393 - 1,542	850 - 939	636 - 705	541 - 598	1,846 - 2,041	1,335 - 1,474	813 - 898	608 - 674	523 - 578
Modular False Ceiling Works	342 - 379	286 - 316	170 - 188	91 - 100	77 - 85	322 - 355	269 - 297	160 - 177	85 - 94	74 - 82	307 - 341	257 - 284	154 - 168	82 - 91	71 - 79
Plumbing Works	137 - 151	137 - 151	103 - 113	67 - 75	51 - 57	128 - 142	128 - 142	96 - 106	64 - 71	49 - 54	122 - 136	122 - 136	92 - 100	61 - 67	48 - 53
Signage & Graphics	75 - 82	75 - 82	57 - 63	40 - 44	31 - 34	70 - 77	70 - 77	54 - 59	37 - 41	29 - 33	66 - 74	66 - 74	52 - 56	36 - 40	29 - 32
Preliminaries and Housekeeping, HSE	114 - 126	114 - 126	74 - 81	40 - 44	31 - 34	107 - 119	107 - 119	69 - 76	37 - 41	29 - 33	102 - 114	102 - 114	66 - 73	36 - 40	29 - 32
Raised Flooring Works	114 - 126	114 - 126	91 - 100	74 - 80	56 - 62	107 - 119	107 - 119	85 - 94	69 - 76	54 - 60	102 - 114	102 - 114	82 - 90	66 - 73	52 - 58
Carpet Works	228 - 253	228 - 253	170 - 188	113 - 125	92 - 102	215 - 236	214 - 238	160 - 177	106 - 118	88 - 98	205 - 227	205 - 227	154 - 168	101 - 113	86 - 95
Workstations	1,142 - 1,263	856 - 947	453 - 500	284 - 314	154 - 170	1,073 - 1,184	805 - 890	425 - 470	266 - 295	147 - 163	1,027 - 1,135	771 - 850	407 - 448	254 - 281	143 - 158
Meeting Room Tables	114 - 126	114 - 126	85 - 94	57 - 63	36 - 40	107 - 119	107 - 119	80 - 88	54 - 59	34 - 38	102 - 114	102 - 114	76 - 85	51 - 56	33 - 37
Office & Meeting Room Chairs	629 - 694	401 - 442	255 - 280	170 - 188	123 - 136	591 - 653	376 - 415	240 - 264	160 - 177	118 - 130	564 - 625	360 - 398	228 - 252	153 - 168	114 - 126
Loose Furniture	457 - 505	342 - 378	170 - 188	113 - 125	77 - 85	429 - 474	322 - 356	160 - 177	106 - 118	74 - 82	410 - 454	307 - 341	154 - 168	101 - 113	71 - 79
Internal Electrical Works	570 - 631	571 - 631	453 - 500	367 - 407	308 - 340	536 - 593	536 - 593	425 - 470	345 - 382	295 - 326	513 - 567	514 - 567	407 - 448	329 - 365	285 - 315
Luminaries & LMS	286 - 316	172 - 190	136 - 150	85 - 94	51 - 57	269 - 296	162 - 179	127 - 141	80 - 88	49 - 54	257 - 284	155 - 170	121 - 135	76 - 85	48 - 53
UPS System	92 - 102	92 - 100	62 - 68	51 - 56	31 - 34	86 - 95	86 - 95	58 - 65	48 - 53	29 - 33	82 - 92	82 - 92	55 - 62	46 - 51	29 - 32
HVAC Low Side Distribution	525 - 581	525 - 580	453 - 500	367 - 407	282 - 312	493 - 545	493 - 546	425 - 470	345 - 382	270 - 299	472 - 521	473 - 521	407 - 448	329 - 365	261 - 289
CRAC Units	114 - 126	114 - 126	85 - 94	57 - 63	31 - 34	107 - 119	107 - 119	80 - 88	54 - 59	29 - 33	102 - 114	102 - 114	76 - 85	51 - 56	29 - 32
FPS & ELV System	228 - 253	228 - 253	170 - 188	113 - 125	82 - 91	215 - 236	214 - 238	160 - 177	106 - 118	79 - 87	205 - 227	205 - 227	154 - 168	101 - 113	76 - 84
Building Management System	85 - 95	85 - 95	62 - 68	40 - 44	26 - 28	80 - 89	80 - 89	58 - 65	37 - 41	25 - 27	77 - 85	77 - 85	55 - 62	36 - 40	24 - 26
Access Control System	92 - 102	92 - 100	67 - 75	40 - 44	26 - 28	86 - 95	86 - 95	64 - 70	37 - 41	25 - 27	82 - 92	82 - 92	61 - 67	36 - 40	24 - 26
CCTV System	92 - 102	92 - 100	45 - 50	34 - 39	26 - 28	86 - 95	86 - 95	42 - 47	33 - 36	25 - 27	82 - 92	82 - 92	41 - 45	30 - 33	24 - 26
Baggage Scanner / Turnstiles	57 - 64	57 - 64	45 - 50	34 - 39	21 - 23	55 - 60	55 - 60	42 - 47	33 - 36	20 - 22	53 - 57	53 - 57	41 - 45	30 - 33	19 - 21
Kitchen Equipment	228 - 253	137 - 151	85 - 94	45 - 50	31 - 34	215 - 236	128 - 142	80 - 88	42 - 47	29 - 33	205 - 227	122 - 136	76 - 85	41 - 45	29 - 32
Networking Passive Works	228 - 253	228 - 253	170 - 188	136 - 150	103 - 113	215 - 236	214 - 238	160 - 177	127 - 141	98 - 109	205 - 227	205 - 227	154 - 168	121 - 135	95 - 105
AV Equipment	342 - 379	342 - 378	226 - 250	113 - 125	103 - 113	322 - 355	322 - 356	213 - 235	106 - 118	98 - 109	307 - 341	307 - 341	203 - 225	101 - 113	95 - 105
Active Components	485 - 536	486 - 536	339 - 375	227 - 251	180 - 198	456 - 503	456 - 504	319 - 352	212 - 235	172 - 190	436 - 482	436 - 482	304 - 338	203 - 225	166 - 184
Total	9,287 - 10,275	7,829 - 8,649	5,269 - 5,819	3,663 - 4,055	2,773 - 3,060	8,730 - 9,638	7,352 - 8,137	4,951 - 5,471	3,437 - 3,807	2,652 - 2,937	8,341 - 9,237	7,035 - 7,782	4,737 - 5,225	3,282 - 3,640	2,569 - 2,841

Source: CBRE Project Management; CBRE Research, Q4 2023

TABLE 7.2: Fit-out cost breakup as of Q3 2023 (in USD / sq. ft.)

Description	Mumbai					Delhi- NCR, Bangalore & Chennai					Hyderabad & Pune				
	Premium	High	Medium	Basic+	Basic	Premium	High	Medium	Basic+	Basic	Premium	High	Medium	Basic+	Basic
Soft Cost / Consultancy Charges	5.5 - 6.1	5.5 - 6.1	4.1 - 4.5	2.7 - 3.0	2.2 - 2.4	5.2 - 5.7	5.2 - 5.7	3.9 - 4.3	2.6 - 2.8	2.1 - 2.3	5.0 - 5.5	5.0 - 5.5	3.7 - 4.1	2.5 - 2.7	2.0 - 2.2
Civil & Interiors Works	24.8 - 27.5	17.9 - 19.8	10.9 - 12.1	8.2 - 9.1	6.8 - 7.5	23.4 - 25.8	16.8 - 18.6	10.3 - 11.4	7.7 - 8.5	6.5 - 7.2	22.3 - 24.7	16.1 - 17.8	9.8 - 10.9	7.4 - 8.2	6.3 - 7.0
Modular False Ceiling Works	4.1 - 4.6	3.5 - 3.8	2.1 - 2.3	1.1 - 1.2	0.9 - 1.0	3.9 - 4.3	3.3 - 3.6	1.9 - 2.1	1.0 - 1.1	0.9 - 1.0	3.7 - 4.1	3.1 - 3.4	1.9 - 2.0	1.0 - 1.1	0.9 - 1.0
Plumbing Works	1.7 - 1.8	1.7 - 1.8	1.2 - 1.4	0.8 - 0.9	0.6 - 0.7	1.5 - 1.7	1.5 - 1.7	1.2 - 1.3	0.8 - 0.9	0.6 - 0.7	1.5 - 1.6	1.5 - 1.6	1.1 - 1.2	0.7 - 0.8	0.58 - 0.64
Signage & Graphics	0.9 - 1.0	0.9 - 1.0	0.7 - 0.8	0.48 - 0.53	0.37 - 0.41	0.8 - 0.9	0.8 - 0.9	0.65 - 0.71	0.4 - 0.5	0.35 - 0.4	0.8 - 0.9	0.8 - 0.9	0.6 - 0.7	0.4 - 0.5	0.35 - 0.39
Preliminaries and Housekeeping, HSE	1.4 - 1.5	1.4 - 1.5	0.9 - 1.0	0.48 - 0.53	0.37 - 0.41	1.3 - 1.4	1.3 - 1.4	0.8 - 0.9	0.4 - 0.5	0.35 - 0.4	1.2 - 1.4	1.2 - 1.4	0.8 - 0.9	0.4 - 0.5	0.35 - 0.39
Raised Flooring Works	1.4 - 1.5	1.4 - 1.5	1.1 - 1.2	0.9 - 1.0	0.68 - 0.75	1.3 - 1.4	1.3 - 1.4	1.0 - 1.1	0.8 - 0.9	0.65 - 0.73	1.2 - 1.4	1.2 - 1.4	1.0 - 1.1	0.8 - 0.9	0.6 - 0.7
Carpet Works	2.8 - 3.1	2.8 - 3.1	2.1 - 2.3	1.4 - 1.5	1.1 - 1.2	2.6 - 2.9	2.6 - 2.9	1.9 - 2.1	1.3 - 1.4	1.1 - 1.2	2.5 - 2.7	2.5 - 2.7	1.9 - 2.0	1.2 - 1.4	1.0 - 1.1
Workstations	13.8 - 15.3	10.4 - 11.5	5.5 - 6.0	3.4 - 3.8	1.9 - 2.1	13 - 14.3	9.7 - 10.8	5.1 - 5.7	3.2 - 3.6	1.8 - 2.0	12.4 - 13.7	9.3 - 10.3	4.9 - 5.4	3.1 - 3.4	1.7 - 1.9
Meeting Room Tables	1.4 - 1.5	1.4 - 1.5	1.0 - 1.1	0.7 - 0.8	0.4 - 0.5	1.3 - 1.4	1.3 - 1.4	1.0 - 1.1	0.7 - 0.7	0.4 - 0.5	1.2 - 1.4	1.2 - 1.4	0.9 - 1.0	0.6 - 0.7	0.4 - 0.45
Office & Meeting Room Chairs	7.6 - 8.4	4.8 - 5.3	3.1 - 3.4	2.1 - 2.3	1.5 - 1.6	7.1 - 7.9	4.5 - 5.0	2.9 - 3.2	1.9 - 2.1	1.4 - 1.6	6.8 - 7.6	4.4 - 4.8	2.8 - 3.0	1.9 - 2.0	1.4 - 1.5
Loose Furniture	5.5 - 6.1	4.1 - 4.6	2.1 - 2.3	1.4 - 1.5	0.9 - 1.0	5.2 - 5.7	3.9 - 4.3	1.9 - 2.1	1.3 - 1.4	0.9 - 1.0	5.0 - 5.5	3.7 - 4.1	1.9 - 2.0	1.2 - 1.4	0.9 - 1.0
Internal Electrical Works	6.9 - 7.6	6.9 - 7.6	5.5 - 6.0	4.4 - 4.9	3.7 - 4.1	6.5 - 7.2	6.5 - 7.2	5.1 - 5.7	4.2 - 4.6	3.6 - 3.9	6.2 - 6.9	6.2 - 6.9	4.9 - 5.4	4.0 - 4.4	3.4 - 3.8
Luminaries & LMS	3.5 - 3.8	2.1 - 2.3	1.6 - 1.8	1.0 - 1.1	0.6 - 0.7	3.3 - 3.6	2.0 - 2.2	1.5 - 1.7	1.0 - 1.1	0.6 - 0.7	3.1 - 3.4	1.9 - 2.1	1.5 - 1.6	0.9 - 1.0	0.58 - 0.64
UPS System	1.1 - 1.2	1.1 - 1.2	0.7 - 0.8	0.6 - 0.7	0.37 - 0.41	1.0 - 1.1	1.0 - 1.1	0.7 - 0.8	0.6 - 0.6	0.35 - 0.4	1.0 - 1.1	1.0 - 1.1	0.7 - 0.7	0.6 - 0.6	0.35 - 0.39
HVAC Low Side Distribution	6.3 - 7.0	6.3 - 7.0	5.5 - 6.0	4.4 - 4.9	3.4 - 3.8	6.0 - 6.6	6.0 - 6.6	5.1 - 5.7	4.2 - 4.6	3.3 - 3.6	5.7 - 6.3	5.7 - 6.3	4.9 - 5.4	4.0 - 4.4	3.2 - 3.5
CRAC Units	1.4 - 1.5	1.4 - 1.5	1.0 - 1.1	0.7 - 0.8	0.37 - 0.41	1.3 - 1.4	1.3 - 1.4	1.0 - 1.1	0.7 - 0.7	0.35 - 0.4	1.2 - 1.4	1.2 - 1.4	0.9 - 1.0	0.6 - 0.7	0.35 - 0.39
FPS & ELV System	2.8 - 3.1	2.8 - 3.1	2.1 - 2.3	1.4 - 1.5	1.0 - 1.1	2.6 - 2.9	2.6 - 2.9	1.9 - 2.1	1.3 - 1.4	1.0 - 1.1	2.5 - 2.7	2.5 - 2.7	1.9 - 2.0	1.2 - 1.4	0.9 - 1.0
Building Management System	1.0 - 1.1	1.0 - 1.1	0.7 - 0.8	0.48 - 0.53	0.31 - 0.34	1.0 - 1.1	1.0 - 1.1	0.7 - 0.8	0.4 - 0.5	0.3 - 0.33	0.9 - 1.0	0.9 - 1.0	0.67 - 0.75	0.4 - 0.5	0.29 - 0.31
Access Control System	1.1 - 1.2	1.1 - 1.2	0.8 - 0.9	0.48 - 0.53	0.31 - 0.34	1.0 - 1.1	1.0 - 1.1	0.77 - 0.85	0.4 - 0.5	0.3 - 0.33	1.0 - 1.1	1.0 - 1.1	0.7 - 0.8	0.4 - 0.5	0.29 - 0.31
CCTV System	1.1 - 1.2	1.1 - 1.2	0.5 - 0.6	0.4 - 0.5	0.31 - 0.34	1.0 - 1.1	1.0 - 1.1	0.5 - 0.6	0.4 - 0.44	0.3 - 0.33	1.0 - 1.1	1.0 - 1.1	0.5 - 0.54	0.36 - 0.4	0.29 - 0.31
Baggage Scanner / Turnstiles	0.7 - 0.8	0.7 - 0.8	0.5 - 0.6	0.4 - 0.5	0.25 - 0.28	0.67 - 0.73	0.67 - 0.73	0.5 - 0.6	0.4 - 0.44	0.24 - 0.27	0.6 - 0.7	0.6 - 0.7	0.5 - 0.54	0.36 - 0.4	0.2 - 0.3
Kitchen Equipment	2.8 - 3.1	1.7 - 1.8	1.0 - 1.1	0.5 - 0.6	0.37 - 0.41	2.6 - 2.9	1.5 - 1.7	1.0 - 1.1	0.5 - 0.6	0.35 - 0.4	2.5 - 2.7	1.5 - 1.6	0.9 - 1.0	0.5 - 0.54	0.35 - 0.39
Networking Passive Works	2.8 - 3.1	2.8 - 3.1	2.1 - 2.3	1.6 - 1.8	1.2 - 1.4	2.6 - 2.9	2.6 - 2.9	1.9 - 2.1	1.5 - 1.7	1.2 - 1.3	2.5 - 2.7	2.5 - 2.7	1.9 - 2.0	1.5 - 1.6	1.1 - 1.3
AV Equipment	4.1 - 4.6	4.1 - 4.6	2.7 - 3.0	1.4 - 1.5	1.2 - 1.4	3.9 - 4.3	3.9 - 4.3	2.6 - 2.8	1.3 - 1.4	1.2 - 1.3	3.7 - 4.1	3.7 - 4.1	2.5 - 2.7	1.2 - 1.4	1.1 - 1.3
Active Components	5.9 - 6.5	5.9 - 6.5	4.1 - 4.5	2.7 - 3.0	2.2 - 2.4	5.5 - 6.1	5.5 - 6.1	3.9 - 4.3	2.6 - 2.8	2.1 - 2.3	5.3 - 5.8	5.3 - 5.8	3.7 - 4.1	2.5 - 2.7	2.0 - 2.2
Total	112.3 - 124.3	94.7 - 104.6	63.7 - 70.4	44.3 - 49.0	33.5 - 37.0	105.6 - 116.6	88.9 - 98.4	59.9 - 66.2	41.6 - 46.0	32.1 - 35.5	100.9 - 111.7	85.1 - 94.1	57.3 - 63.2	39.7 - 44.0	31.1 - 34.4

Source: CBRE Project Management; CBRE Research, Q4 2023

Note: 1 USD = INR 82.69

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