

# Snapshot: Building Materials Prices

## Building Materials Prices

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According to the National Construction Cost Centre (N3C) portal, an initiative by the Construction Industry Development Board (CIDB), building material prices (BMP) refer to the transaction prices between contractors and suppliers under specified normal credit terms, including applicable discounts for an average contractor. There are 19 building material groups under BMP, with prices monitored on a monthly basis.

For this report, the analysis focuses on four key building materials.

**Table 1: Type of Building Materials**

Building Material	Type	Unit
Cement	Ordinary Portland Cement	50 kg bag
Steel	Mild Steel Round Bar R10 (MS146)	Metric tonne
Sand	Normal River Sand (Ex)	Metric tonne
Concrete	Ready Mix Concrete (Normal Mix, Grade 30, Granite)	Cubic metre

Source: N3C portal, REHDA Institute Research

The analysis covers six States using the July price of each year - from 2015 to 2024. However, data for Negeri Sembilan is unavailable from 2015 to 2017.

**Table 2: States Covered**

1. Selangor	2. Johor	3. Penang
4. Negeri Sembilan	5. Perak	6. Kelantan

Source: N3C portal, REHDA Institute Research

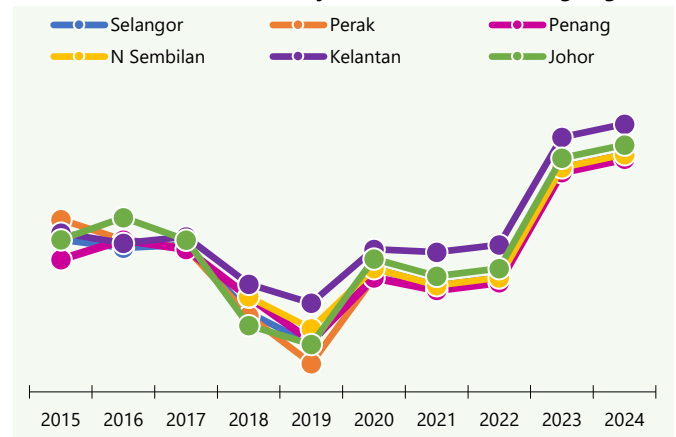
### Cement: Ordinary Portland Cement (50 kg bag)

The overall trend indicates that cement prices have fluctuated over the years, experiencing a notable decline from 2015 to 2019, followed by a gradual increase from 2021 onwards. The sharpest price surge occurred between 2022 and 2023 across all States.

Key highlights:

- In 2024, Kelantan had the highest price at RM24.10, while Perak and Penang remained among the lowest at RM22.25.
- The lowest prices were recorded around 2019, with Perak at RM11.50, and both Selangor and Johor at RM12.50.
- Kelantan and Johor generally recorded higher cement prices compared to other States.
- Penang and Kelantan recorded the highest total growth over the period at 31.2%, with a Compounded Annual Growth Rate (CAGR) of approximately 3.1%.

**Chart 1: Trend of Ordinary Portland Cement (50 kg bag)**



Source: N3C Portal, REHDA Institute Research

**Table 3: Price of Ordinary Portland Cement (50 kg bag) (RM/bag)**

Year/State	Selangor	Perak	Penang	Negeri Sembilan	Kelantan	Johor
2015	18.02	19.08	16.96	-	18.37	18.02
2016	17.58	18.00	18.00	-	17.83	19.17
2017	17.75	17.58	17.50	-	18.17	18.00
2018	14.17	14.00	15.00	15.00	15.67	13.50
2019	12.50	11.50	12.67	13.33	14.67	12.50
2020	16.50	16.00	16.00	16.50	17.50	17.00
2021	15.60	15.35	15.35	15.60	17.35	16.10
2022	16.00	15.75	15.75	16.00	17.75	16.50
2023	21.80	21.55	21.55	21.80	23.40	22.30
2024	22.50	22.25	22.25	22.50	24.10	23.00

Source: N3C Portal, REHDA Institute Research

### Steel: Mild Steel Round Bar R10 (MS146) (metric tonne)

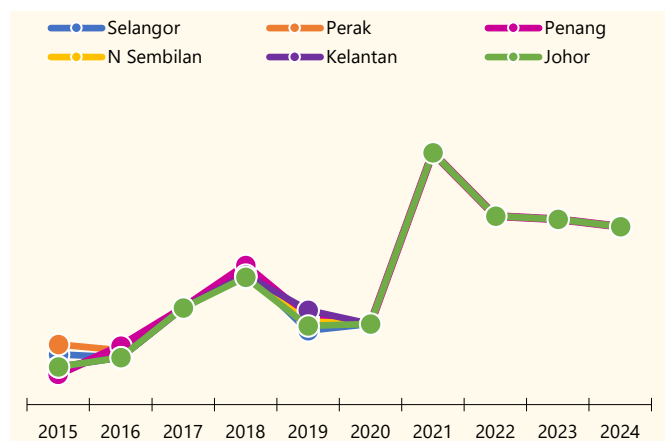
The data reveals fluctuations in values over the years, with distinct peaks and declines. Between 2015 and 2018, all States experienced substantial growth, reaching their highest levels in 2018. This was followed by a decline in 2019 and a subsequent recovery in 2021, marked by a significant increase across all States. Although prices dipped slightly from 2022 to 2024, they remained above pre-2020 levels.

Key highlights:

- In 2021, the peak price of RM3,580 was the highest recorded in the past decade across all States.
- The lowest price was RM2,014, recorded in Penang in 2015.
- During the period from 2020 to 2024, the price remained the same across all States for each year.
- Penang experienced the highest total growth over the period at 51.8%, with a CAGR of approximately 4.7%.

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**Chart 2: Trend of Mild Steel Round Bar R10 (MS146) (metric tonne)**



Source: N3C portal, REHDA Institute Research

**Table 4: Price of Mild Steel Round Bar R10 (MS146) (RM/metric tonne)**

Year/State	Selangor	Perak	Penang	Negeri Sembilan	Kelantan	Johor
2015	2,155.33	2,226.00	2,014.00	-	2,067.00	2,067.00
2016	2,133.33	2,183.33	2,213.33	-	2,133.33	2,133.33
2017	2,482.00	2,482.00	2,482.00	-	2,482.00	2,482.00
2018	2,750.00	2,750.00	2,783.33	2,700.00	2,716.67	2,700.00
2019	2,323.33	2,433.33	2,420.00	2,386.67	2,466.67	2,356.67
2020	2,370.00	2,370.00	2,370.00	2,370.00	2,370.00	2,370.00
2021	3,580.00	3,580.00	3,580.00	3,580.00	3,580.00	3,580.00
2022	3,132.50	3,132.50	3,132.50	3,132.50	3,132.50	3,132.50
2023	3,110.00	3,110.00	3,110.00	3,110.00	3,110.00	3,110.00
2024	3,058.00	3,058.00	3,058.00	3,058.00	3,058.00	3,058.00

Source: N3C Portal, REHDA Institute Research

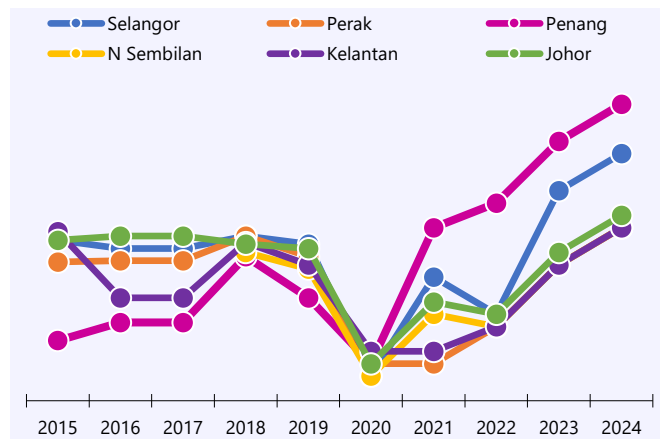
## Sand: Normal River Sand- Ex (metric tonne)

Most States experienced fluctuations in values, with a significant drop observed in 2020 across all States. After 2020, the figures show a general upward trend, with most States reaching their highest values in 2024.

### Key highlights:

- Prices remained relatively stable between 2015 and 2019, fluctuating slightly around RM32 – RM41 across States.
- A significant drop in prices occurred in 2020, reaching around RM30 – RM32 across all States.
- Prices started recovering in 2021, with Penang leading at RM42.
- By 2024, all States recorded their highest prices, with Penang reaching RM52, Selangor RM48 and other States experiencing similar increases (RM42 – RM43)
- Over the years, Penang recorded the highest total growth of 58.2%, with a CAGR of 5.2%.

**Chart 3: Trend of Normal River Sand- Ex (metric tonne)**



Source: N3C Portal, REHDA Institute Research

**Table 5: Price of Normal River Sand- Ex (RM/metric tonne)**

Year/State	Selangor	Perak	Penang	Negeri Sembilan	Kelantan	Johor
2015	40.99	39.22	32.86	-	41.69	40.99
2016	40.33	39.33	34.33	-	36.33	41.33
2017	40.33	39.33	34.33	-	36.33	41.33
2018	41.33	41.33	39.67	40.00	40.80	40.67
2019	40.67	39.67	36.33	38.67	39.00	40.33
2020	30.00	31.00	31.00	30.00	32.00	31.00
2021	38.00	31.00	42.00	35.00	32.00	36.00
2022	35.00	34.00	44.00	34.00	34.00	35.00
2023	45.00	39.00	49.00	39.00	39.00	40.00
2024	48.00	42.00	52.00	42.00	42.00	43.00

Source: N3C Portal, REHDA Institute Research

## Concrete: Ready Mix Concrete - Normal Mix - Grade 30, Granite (cubic metre, m³)

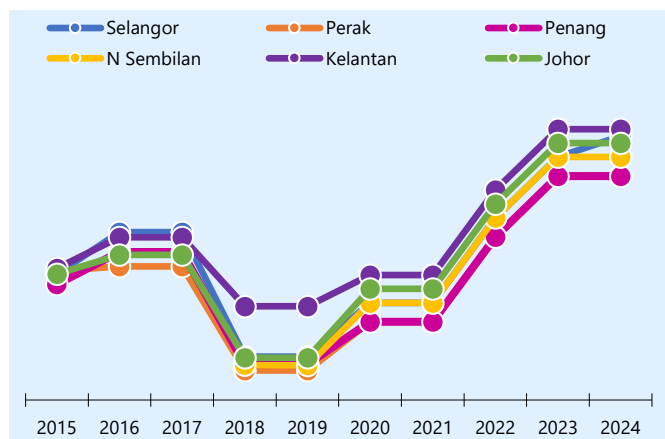
The data shows a mix of growth and declines, with significant drops in 2018 and 2019. The values began to increase in 2020 and continued to rise steadily through 2024. All States saw a sharp decrease in 2018, with values remaining low in 2019.

### Key highlights:

- From 2023 to 2024, prices hit their peak across all States, with Kelantan (RM306.00), Selangor (RM302.00) and Johor (RM298.00).
- Kelantan consistently had the highest prices throughout the years, reaching its peak in 2024 at RM306.00.
- Perak generally recorded the lowest prices, especially from 2018 onwards, with its lowest price of RM167.00 in 2018.
- Over the period, Selangor recorded the highest total growth at 35.7%, followed closely by Kelantan at 35.5%. The CAGR for both States was approximately 3.4%.

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**Chart 4: Trend of Ready-Mix Concrete - Normal Mix - Grade 30, Granite (cubic metre)**



Source: N3C Portal, REHDA Institute Research

**Table 6: Price of Ready Mix Concrete - Normal Mix - Grade 30, Granite (RM/cubic metre)**

Year/ State	Selangor	Perak	Penang	Negeri Sembilan	Kelantan	Johor
2015	222.60	224.37	216.59	-	225.78	222.60
2016	246.67	227.00	235.33	-	243.67	233.67
2017	246.67	227.00	235.33	-	243.67	233.67
2018	175.00	167.00	170.33	170.00	204.00	174.33
2019	175.00	167.00	170.67	170.00	204.00	174.33
2020	206.00	195.00	195.00	206.00	222.00	214.00
2021	206.00	195.00	195.00	206.00	222.00	214.00
2022	255.00	244.00	244.00	255.00	271.00	263.00
2023	290.00	279.00	279.00	290.00	306.00	298.00
2024	302.00	279.00	279.00	290.00	306.00	298.00

Source: N3C Portal, REHDA Institute Research

For further details on construction costs, please visit:  
[n3c.cidb.gov.my](http://n3c.cidb.gov.my)

## Key Summary

- **Cement: Ordinary Portland Cement (50 kg bag)**
  - ✓ Penang and Kelantan recorded the highest total price growth at 31.2%, followed by Johor at 27.6%.
  - ✓ The CAGR across these States ranged from 2.7% to 3.1%, indicating a steady price increase over time.
- **Steel: Mild Steel Round Bar R10 (MS146) (metric tonne)**
  - ✓ Penang saw the highest price growth at 51.8%, with a CAGR of 4.7%, followed by Kelantan and Johor at 47.9% (CAGR: 4.4%).
- **Sand: Normal River Sand- Ex (metric tonne)**
  - ✓ Penang experienced the most significant total price growth at 58.2%, the highest among all materials, with a CAGR of 5.2%.
  - ✓ In contrast, Kelantan recorded the lowest growth at 0.7%, with a CAGR of 0.1%.
- **Concrete: Ready Mix Concrete - Normal Mix - Grade 30, Granite (cubic metre, m3)**
  - ✓ Selangor recorded the highest price growth at 35.7%, followed closely by Kelantan at 35.5%.
  - ✓ Both States had a CAGR of approximately 3.4%.

The price trends of building materials over the studied period showed significant differences across States. Penang recorded the highest overall price growth for Normal River Sand at 58.2%, while Kelantan registered the lowest increase at 0.7% for the same material. These variations highlight the differing cost dynamics in each State, with certain materials experiencing sharper price increases than others. The steady rise in prices across key materials, such as cement, steel, sand and concrete, indicates ongoing market shifts that may influence future construction costs and industry trends impacting market prices.