

Construction Cost Impacts



CONSTRUCTION™

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MATERIAL SUPPLY AND PRICING

Over the last three years the U.S. construction industry has been rocked by unparalleled volatility in materials costs, supply-chain bottlenecks, and a tight labor market. Overall inflation rates and economic growth have cooled, while congestion at West Coast ports has eased. These changes have led some to assume that construction costs and completion times must also have improved. Unfortunately, this is not the case for many projects, materials, and subcontractors. Russia's ongoing attack on Ukraine and Western sanctions against Russia have disrupted production and transport of dozens of commodities. China's prolonged attempt to control the spread of covid has also affected production and shipping. The economic slowdown is expected to continue in 2023. Inflation slowed to 6.0% in February but will remain higher than normal. The 2023 CPI is expected to average 4.3% and will lead to a push for higher wages.

PRIMARY CAUSES

The primary underlying causes of these issues include:

- **Labor shortages** – continuing issue of attracting and retaining workers
- **Raw material shortages** – shortage of one ingredient can stop or limit production.
- **Transportation issues** – demand for container shipping and trucking have outstripped supply, together with truck driver shortages.
- **Production times** – just-in-time production has been severely impacted.
- **Energy disruptions** – the rapid rise in the cost of diesel fuel.
- **Ukraine/Russia War** – both countries are major suppliers of base metals to the world market and the supply of these metal has been severely disrupted.

SUPPLY CHAIN IMPACTS (AS OF MARCH 2023*)

There are signs that portions of the supply chain has improved, but there are still products that are in short supply, cement and electrical transformers as two examples. Even if materials are available, subcontractor bids are still short-lived. Managing supply chain has now become routine on project sites.

CURRENT COST IMPACTS ON CONSTRUCTION MATERIALS

Legend: ■ Alert- Significant Impact ■ Caution - Medium Level Impact ■ Clear- Little to No Impact

	<i>COST IMPACT BASE</i> JAN. 2023	Anticipated Lead Time	Supply Chain Factors
Fabricated structural steel	Increases are as follows: HSS \$60/ton – 2.23.23 HSS \$100/ton – 3.5.23 Wide Flange \$50/ton – 3.10.23 Plate \$60/ton – 3.13.23	20-24 weeks	Material prices have been going up late lead times: Back to pre-pandemic lead times with normal steel and metal deck rollings along with open web joist lead times have returned to normal. Pricing: In the last 3 months, we have seen increases from all the mills. (snip below of increases) Since January, metal deck material has come down approx. \$0.50/sf.
Reinforcement Bars	Stabilized	8 weeks	No supply chain issues.
Metal bar joists	>3.92% M/M	18-24 weeks	Same as fabricated steel.

Concrete	>5% M/M	10 weeks	Despite weaker demand in the residential construction sector reflected in a drop in housing starts, cement and concrete prices continued on an upward trend in late 2022. This primarily reflects higher production costs; the producer price index for cement and concrete manufacturing was up by 15% year on year in November 2022. However, demand-side price pressure is expected to ease. The Portland Cement Association (PCA) estimates that demand will decline by 3.5% in 2023.
Lumber	Stabilized	2 weeks	Lumber prices have stabilized.
MDF	Stabilized	Easily Available	No supply chain issues.
Domestic Plywood	>2-5% M/M	Easily Available	Plywood has increased approximately 2-5% depending on the item. Recent weather conditions have constrained demand.
Imported Plywood	>2-5% M/M	Easily Available	Same as domestic plywood.
Melamine	Stabilized	2 weeks	No supply chain issues.
Insulation	Stabilized	4 weeks	No increases since January 2023.
Drywall	Stabilized	4-16 weeks	Glass-Mat products especially from GP are back on the list of long lead items. Vendors tell us that lead times are in the range of 2 – 4 months. This includes Glass-Mat Tile Backer Board, DensGlass Exterior Sheathing, etc.
Joint Compounds	Stabilized	Easily Available	No supply chain issues.
Steel Components/Studs/ Ceiling T's	Stabilized (5-10% expected in June)	4 weeks	No supply chain issues.
Ceiling Tiles	>8% YTD	Standard:-1-2 weeks, Non-standard:-4-6 weeks, Specialty:-8-12 weeks, Wood Product:-8-16 weeks	No supply chain issues.
Flooring	Stabilized	Lead times vary	No supply chain issues.
Plumbing Fixtures	Same as last month	16-20 weeks	There will be a cost escalation for plumbing services starting July 1, 2023. Please allow a \$7.00 per hr. increase
Steel Piping	12.5% M/M	6-8 weeks	China supply ongoing, domestic producers pull old plants off line, New plants delayed in start-up, AHMSA mexico financial troubles, Demand - construction put in place +6% Jan. vs Per year.
Polypropylene Piping	>5% M/M	12 months	Construction projects are slowing down on the 2023 calendar amid rising interest rates and speculation that the US economy could enter a recession. Conduit and plumbing pipe prices have been steadily falling since mid-2022, and this has begun to back up into PVC prices.
MEP Equipment	Same as Jan. 2023	16 - 35 weeks	Few price increases on plumbing. Lead times remain high.
Copper & Brass Products	>2.48% M/M (Copper) >2.20% M/M (Brass)	Longer Lead Times	There is now a projected shortage in copper supply relative to demand through 2025, with the shortfall reaching as much as 290,000 tonnes.
Nickel Products	<7% M/M	Longer Lead Times	Lack of active mines, global supply chain issue, on-going high demand from EV industry.

*The % adjustments are calculated using a base date of January 2021.

