

**ANALYSIS AND CONSTRUCTION OF BREAKDOWN PRICE  
AND LEAD TIME FOR CONCRETE, CEMENT, STEEL,  
LUMBER, INSTALLATION, DRILLING, AND HEAVY EQUIPMENT  
IN THE COMING YEAR.**

Plan for market conditions to get worse before they get better.

Despite battling supply chain issues since late 2020, the construction industry will see continued material price escalation over the next couple of years, according to industry sources.

The forecast for year-over-year price escalation in 2022

With production and transportation costs unlikely to ease markedly, cement and concrete prices will remain close to current highs, according to the report.

That's because new supply chain problems continue to pop up, according to an Associated General Contractors of America update on construction materials.

For instance, barges on the Mississippi River have been sidelined by drought-caused low water levels, limiting movement of cement and other heavy construction materials. Contractors around Chicago and Milwaukee have reported being put on allocations of cement as low as 60% of 2021 deliveries.

In Texas, winter storm Uri in February 2021 caused certain cement manufacturers to shut down, resulting in a shortage of cement, said David Vanderhider, a member at Dykema, a Detroit-based law firm. With the demand exceeding supply, cement prices rose and other manufacturers were strained by efforts to increase supply. About 43 states are reporting supply shortages of cementitious material, according to the Portland Cement Association.

Meanwhile sand, also essential for concrete, has more than doubled to over \$10 a ton today due to its own global shortage.

#### **FALLING: CEMENT AND LUMBER**

But while prices for cement and concrete jump, other structural materials, such as steel, have experienced a slightly different journey.

"In the last year, we saw some extreme price increases, such as copper prices increasing 44%, however, not everything saw such significant price escalations," said Hardman. "For some products, such as iron and steel, we saw prices reduce slightly, in this case by 5%, but the cost still sits well above pre-pandemic levels."

Steel prices declined significantly from their high points in the third quarter, with national prices down approximately 12%, according to Gordian, a Greenville, South Carolina-based provider of data insights and construction pricing data. Weakening demand also indicates more downside in prices for steel, according to the Linesight report.

Skanska's Cantando also sees steel pricing coming down, as well as lumber, which is now at pre-COVID levels, he said, due to a combination of oversupply from the mills and a housing development slowdown.

Lumber prices were elevated through the majority of 2021 for products ranging from standard #2 pine boards, plywood, and framing lumber. Leveling off on those prices began in 2022, with the most recent data showing an average 9% quarterly decrease, said Sam Giff'n, director of data operations at Gordian.

The anticipation of a global recession amid a monetary tightening cycle, in addition to a property sector slowdown in China, have all contributed to broader global demand weakness, according to the Linesight report.

However, over the medium to long term, demand should be sustained by heightened infrastructure spending in the U.S. due to the bipartisan infrastructure law, the CHIPS Act, and the Inflation Reduction Act, according to the report.

#### **LEVELING OFF: INFLATION MATERIAL**

The hardest insulation material to procure over the last couple of years has been polyiso insulation, a closed-cell, rigid foam board typically used for roofing.

That's because 2021's winter storm Uri, in addition to causing issues with cement, also disrupted the supply chain of MDI, one of the raw materials that goes into polyiso insulation material. That resulted in a shortage of insulation materials starting in February 2021, said Vanderhider.

In other parts of the country, COVID-19 and transportation issues strained supply, said Vanderhider. When demand eventually increased as domestic COVID-19 restrictions decreased, prices then rose, he added.

Recently, however, pricing has begun to stabilize as supply has increased in many markets.

Industry sources report that lead times for items like fiberglass insulation and spray foam insulation have improved in recent months. That said, certain industry players also anticipate future price increases due to increased raw material and transportation costs, said Vanderhider.

Overall, the insulation materials Gordian tracks are up almost 67% from their 2018 levels, said Giff n.

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During the third quarter of 2022, drywall prices saw their seventh consecutive quarterly increase, adding another 8% to bring national average prices to their highest point since the residential-driven peaks of the third quarter in 2020, according to Gordian.

That jump is due to increased demand and material costs, said Vanderhider. The Linesight report also notes higher production costs have been a factor in keeping drywall prices at these elevated levels in recent quarters.

However, upward pressures on the demand side are easing, which will contain further rises in prices, according to the Linesight report. Vanderhider also added that, like with insulation material, drywall material supply has begun to stabilize in recent months following COVID-19 related shortages.

### LONGER LEAD TIME : MECHANICAL COMPONENTS

Don't expect a quick recovery for mechanical components, such as HVAC equipment or wiring and electrical items, said Tom Park, vice president of strategic supply chain at Skanska.

"HVAC right now is probably one of the most challenging items that we have to procure in terms of equipment," said Park. "It looks like it's actually continuing to worsen."

In addition to longer than usual lead times, many of the major manufacturers are also having supply chain disruption issues due to shortages of semiconductor chips used in this type of equipment.

That's causing them to push orders out for four to six months beyond their originally committed delivery date, said Park. Those issues are with air handlers, rooftop units, and chillers, particularly air cooled chillers.

"A lot of these chips are the same types of chips that the automotive manufacturers are procuring, so they're competing there and there's not enough capacity in that space," said Park. "...There's just an enormous amount of demand coming from several verticals. That's putting pressure there."

Some industry players feel the negative trend will continue until 2024 due to ongoing volatility in the global market, said

