



Roofing material shortages and price volatility

September 2021

The U.S. roofing industry is experiencing unprecedented shortages of roofing materials and products and significant price volatility. NRCA is providing this Industry Issue Update to help its members with building owners, facility managers, general contractors and construction managers involved in roof purchasing decisions.

Although this information is intended to apply specifically to the U.S. roofing market, based on NRCA's communications with its affiliates and partners in Canada, Mexico and elsewhere worldwide, shortages of roofing materials and products and price volatility appear to be global issues.

BACKGROUND

Compared with other industries, the U.S. roofing industry is domestic in nature. With few exceptions, a vast majority of roofing products and materials used are manufactured in the U.S. from U.S.-sourced raw materials, delivered by U.S. suppliers and distributors, and installed by U.S. roofing contractor companies. Although the global economy has some effect on many purchasing decisions, the U.S. roofing industry is largely driven by the U.S. economy, interest rates and consumer sentiment.

During the past decade, the U.S. roofing industry has experienced a period of consistent, moderate growth. The roofing materials and products supply chain has expanded in capacity and roofing contractors have added field personnel and capability to fill this growing need. In many regions of the U.S., additional roofing industry growth has been limited by a lack of adequately trained field personnel.

At the same time, energy code requirements and sustainability incentive programs have resulted in a demand for more energy-efficient roof systems. For example, when reroofing a building, it is not unusual to replace an existing, aged roof system having an R-10 insulation value with a new roof system with an energy code mandated minimum R-20, R-25, R-30 or R-35 insulation value. Such increases in

insulation value necessitate using greater amounts of and thicker insulation, usually in multiple layers, longer fasteners, more layers of insulation adhesive and additional material handling and installation labor.

THE CURRENT SITUATION

The U.S. roofing industry responded and adapted to the onset of the COVID-19 pandemic remarkably well. The U.S. roofing industry quickly was considered "essential," and at the start of the pandemic, the roofing materials and products supply chain functioned with only minimal interruptions. Roofing contractors adapted to additional safe work practices necessary to perform work on occupied buildings during the pandemic.

By many measures, 2020 was a productive year for the U.S. roofing industry. For example, 2020 was a near historic record level year for asphalt shingle installations. Homeowners invested in reroofing and maintaining their homes during the pandemic, spurred in part by low interest rates and the availability of stimulus funding, and the roofing industry responded to several weather events involving high winds and hail. The institutional and industrial segments of the U.S. roofing industry also experienced similar levels of activity.

However, one noticeable change is the level of roofing material and product in inventory shrunk considerably. Roofing material suppliers and distributors reduced their material and product inventories. Since the start of the pandemic, far more roofing materials and products are being shipped on a job-specific basis. This especially is the case with roof insulation and roof covering products and certain specialty products, such as fasteners and adhesives. A few years ago, many roofing jobs often could be carried out with roofing materials and products held in inventory, but manufacturers now are shipping roofing materials and products on a job-specific basis with fewer roofing materials and products being stocked in inventory.

The level of roofing material and product in inventory shrunk considerably

At the end of the 2020, there was a degree of uncertainty in the U.S. economy and within the roofing industry. During this period, most U.S. suppliers, distributors and roofing contractors placed only minimal orders for roofing materials and products to build their inventories in anticipation of the 2021 roofing season. Because of this reduced demand, many manufacturers scaled back their off-season production. As a result, at the start of the 2021 roofing season, roofing material and product inventories were uncharacteristically low.

In February, unseasonably cold temperatures and power outages in Texas and other Gulf Coast states resulted in a weeks-long interruption in the production of methylene diphenyl diisocyanate. Significant shortages of MDI were already occurring, and this production interruption only exacerbated a stressed supply situation. MDI is used in the manufacturing of rigid board and spray polyurethane foam insulation, as well as some adhesives commonly used in the roofing industry.

By late February, the demand for roofing had quickly rebounded in many areas of the U.S., and roofing contractors' backlogs of work under contract were growing significantly. This demand was spurred by continued low interest rates, the availability of stimulus funding and improving consumer sentiment in the U.S. economy.

By mid-March, reports of roofing material and product shortages were common. The demand for roof insulation, insulation and membrane fasteners, roofing nails, some membrane products and roof accessory products began to exceed the available inventory and production capability. Also, prices for roofing materials and products were increasing significantly, and these prices continue to increase.

Currently, demand for roofing services is high. For example, 2021 will likely be a record year for asphalt shingle production and installations. The institutional, industrial and commercial segments of the U.S. roofing industry also are experiencing high levels of activity through much of the U.S. Roofing contractors in many regions are reporting significant backlogs of work under contract through the end of the year and some well into 2022. Also, manufacturers are reporting similarly high demand for roofing material and products with production already being fully committed well into 2022.

Although demand for roofing is high, roofing contractors are facing increasing challenges of shortages and long lead times for roofing material and products. For example, roof insulation, insulation and membrane fasteners, some membrane products and roof accessory products continue to be in short supply. Manufacturers are reporting anticipated lead times for fulfilling newly placed orders for some roofing

materials and products of four months or more with some large orders having lead times as long as 12 months.

Shortages of roofing materials and products have gotten to the point where availability is limiting the ability to perform roofing work rather than a lack of adequately trained field personnel.

Also, price increases from roofing material and product manufacturers continue, often with little or no advance warning to roofing contractors. In some cases, the timing for determining the price roofing contractors pay for roofing materials and products also has changed. Traditionally, pricing was established at the time a roofing contractor placed an order. In some instances, manufacturers quoted project-specific pricing and honored that price for a defined period. But recently, several manufacturers have instituted new policies basing pricing at the time of shipment instead of at the time the order is placed. This puts roofing contractors in the position of not having actual material and product pricing at the time of offering a proposal or bid and entering into a contract with a building owner. The likely potential for still further roofing material and product price increases presents obvious problems for roofing contractors and building owners.

NRCA is aware of a number of situations, including some recently in the aftermath of Hurricane Ida, where roofing manufacturers have been faced with declarations of force majeure regarding supply contracts and shipments from raw material providers. These include MDI, steel rods used in the manufacturing of fasteners, glass mats used in asphalt shingles and some roof membranes, and some specialty chemicals used in a variety of roofing products. These often cause raw material delivery slowdowns. In some cases, manufacturers need to find alternative raw material sources, resulting in stoppages in material and product manufacturing, which only further exacerbates the supply situation. These interruptions in raw material supply also likely have a notable effect on roofing material and product pricing.

The roofing industry, similar to other industries, continues to feel the effects of shortages of, delays in and high pricing for transporting roofing materials and products from roofing manufacturers to suppliers and distributors, roofing contractors' warehouses and job sites. This situation likely will only become more acute and continue indefinitely.

Based on NRCA's discussions with key players in all segments of the U.S. roofing industry and its affiliates and partners worldwide, NRCA expects the current situation of roofing material and product shortages, long lead times and significant price volatility to continue through 2022.

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NRCA'S RECOMMENDATIONS

NRCA remains committed to keeping its members informed of further developments.

NRCA features a supply chain shortage information section on its website, nrca.net. This section provides up-to-date news about additional developments and what you can expect to see in the coming months, suggested contract language addressing unforeseen price increases and access to recordings of NRCA's supply chain webinar with industry leaders and a live action alert describing the change. This can be accessed directly at www.nrca.net/resources/supply-chain-shortage.

NRCA encourages you to share this information with your building owner clients, as well as building managers, general contractors and construction managers involved in roof purchasing decisions.

NRCA encourages building owners to plan their roofing work well in advance and recognize long roofing material and product delivery lead times may affect the start and completion of roofing work. Also, provisions in contracts with roofing contractors for roofing work are needed to address unforeseen, changing roofing material and product pricing.

NRCA would welcome hearing your specific experiences and you can direct any questions to NRCA's Technical Services Section at (847) 299-9070, Option 4, or at nrcatechnical@nrca.net.

