

# SUPPLY CHAIN SHORTAGE

Curtis L. Liscum, RRC, RRO  
Senior Consultant  
[CLiscum@benchmark-inc.com](mailto:CLiscum@benchmark-inc.com)

Updated September 18, 2021

Like many sectors of the construction industry, the roofing industry has been suddenly unnerved by abrupt changes caused by supply chain shortages. Simply put, a supply chain shortage is a condition where the demand for a product or service exceeds the available supply. When this occurs, the market is said to be in a state of disequilibrium. This condition is typically temporary in nature as the product will be replenished and the market regains equilibrium.

So how did this supply chain shortage occur throughout our industry?

According to the roofing industry supply chain experts I have spoken with, the shortage has reached this crescendo caused by some of the following "perfect storm" events:

- **Consumer Confidence** – Early in the ongoing pandemic, consumer confidence waned so material manufacturers and raw material manufacturers reduced production and minimized inventory. Now that consumer confidence has returned with a vengeance, manufacturers are struggling to regain full production levels due to the difficulty of finding skilled labor, raw material supply chain shortages and transportation issues.
- **Shortage of Raw Materials** – Either from a reduction in raw materials manufacturing capacities, or from unreliable transportation of raw materials to meet general demand and promised manufacturing dates. Where raw goods are imported, transportation issues have been further compounded by pandemic-related border closures.
- **Natural Disasters** – A 300-mile-wide derecho in the Midwest, Hurricanes Laura, Isaias, Sally and Zeta in the southeast and east, tornadoes in the southeast and extreme hail events in the middle, all were major roof



**PROVEN.**

and building damaging events that significantly increased roofing demand on an already-overstretched market.

- **Transportation** – The delay in off-loading container ships at US ports, and transportation of raw goods and finished products are both contributing factors. Interruptions to the supply chain, such as the 6-day Suez Canal blockage also have a cumulative effect.
- **Hoarding, yes hoarding** – It appears that a few very large companies currently engaged in aggressive construction projects have leveraged their size to several construction industry fabricators, suppliers and manufacturers and "bought out" this year's production capabilities, significantly limiting available materials for "normal" projects. Select contractors have also been placing double orders and stockpiling insulation and other materials tying up even more of the precious available materials.

### **Have the shortages affected all roofing projects?**

Yes, and not only due to difficulties in obtaining primary materials such as membrane and insulation. Roof systems require an array of accessory components for a complete manufacturer and code-compliant installation. Ancillary components include wood nailers, fasteners, adhesives, primers, sealants, metal, bar joists and roof decking among others.

Specific combinations of accessories are tested and form the basis of code approvals. If one key accessory is unavailable, the work must be postponed until material can be received, or a viable workaround achieved. As anticipated, we are seeing a swift increase in substitution requests, and expect this trend to continue for the foreseeable future as contractors attempt to round-up those accessories that are able to be located. This is a rather involved process in coastal wind zones, very severe hail zones and projects with highly specific design requirements such as associated with FM Global or Miami Dade.

It appears the shortages have impacted fasteners and plates (due to the shortage of steel coil stock and the industry reliance on three primary fastener manufacturers), MDI a critical component in the manufacture of polyisocyanurate insulation and poly adhesives, polymers for TPO membranes, and polymers for liquid resin products. Additionally raw material and labor shortages have increased lead times for adhesives and most single-ply and modified bitumen membranes.



# PROVEN.

According to industry experts we anticipate that this shortage will continue through 2022.

### **What impact does the shortage have on material pricing?**

Industry experts believe the shortage will cause additional price increases beyond those already announced. To date, we have already seen double digit roofing material price increases over the last year and we can expect double digit increases again this year. This is not unlike the lumber industry that saw triple digit increases over the past year.

The severity of pricing increases will vary depending on product classifications, ingredients required for manufacturing, and transportation industry trends.

### **What impact does the shortage have on schedule?**

Project delays of several weeks to several months are likely for many roofing projects. We have seen delays of 4 to 6 weeks up to 8 or 9 months being announced on several projects over the past week, reportedly resulting from depleted insulation and fastener inventory. A troubling lack of MDI to manufacture polyisocyanurate insulation may cause significant delays in most roofing projects.

### **What can we do to minimize the impact?**

- Is roof maintenance an alternative? Can the roof be repaired and maintained to defer reroofing to a better (more economical) time to bid work and purchase materials?
- Bid projects based on accurate and concise roof designs and scope of work. Now is not the time to wonder or be unsure about what materials need to be ordered.
- Bid and award projects early as delays are probable. Get on the list early so that projects can be completed by year's end.
- Bid projects in smaller sections, a contractor may be able to get materials for a small area more readily than a larger project
- Investigate tried and true alternative systems, such as lightweight insulating concrete and using asphalt in interstitial component adhesive, whose materials appear to be reasonably accessible.



**PROVEN.**

- Now may be the time to establish long-term relationships with a limited list of reliable, reputable contractors, suppliers and roofing material manufacturers. A formal long-term relationship may help you leverage work and ease delays.
- Communication, as in any crisis, is paramount. Ask the contractor or supplier to provide periodic and timely material status updates.
- Be patient – this is a global event and no construction industry seems to be unaffected by the condition.
- Compromise and teamwork will be necessary to work through the various issues and achieve a win-win result. All segments, manufacturers, contractors, distributors, designers, code officials, insurance companies will need to collaborate more now than ever to resolve problems and keep projects progressing for our mutual clientele.

Most major roofing manufacturers have issued bulletins or other statements explaining their perspective and impacts on production, delivery, allocations, and/or pricing. Many of these bulletins have detailed information that is beyond the scope of this narrative. These bulletins typically explain how many of the factors described above have impacted company operations and how they are attempting to meet consumer demand.

Other good sources of information include the National Roofing Contractors Association (NRCA), the International Institute of Building Enclosure Consultants (IIBEC), and the Single-ply Roofing Industry (SPRI). The NRCA launched a supply chain shortage information webpage on April 27, 2021, that will become a valuable resource for membership in the coming months.

It is important to team-up with trusted partners as the construction landscape continues to evolve. Each project will have unique challenges and pathways to success that will need to be paved. If you are working on an existing project with Benchmark, we encourage you to discuss concerns and challenges with your project manager. If you're not currently working with a Benchmark project manager, please feel free to reach out to Pat Marshall with questions surrounding this supply chain shortage. Pat can be reached at 319.393.9100 or via e-mail at [PMarshall@benchmark-inc.com](mailto:PMarshall@benchmark-inc.com).

