Engineers and Contractors Pivot to Avoid Supply Chain Issues with Plastic Piping

In these difficult times, engineers and contractors are turning to metal to avoid long lead times and skyrocketing costs.

by Francesca Dunbar

We have all experienced major disrupters due to the pandemic, especially the construction sector, which has experienced marketplace chaos with major supply chain interruptions. Global shipping was disrupted with ports backed up, cargo sitting at manufacturing facilities, and containers stacking up like Legos, hoping to get onto ships. Procuring everything from lumber to plumbing products became a challenge, which has added significant cost to projects and the lengthening of lead times. The good news for mechanical contractors is that they have options.

The supply chain challenge, especially with the plastics market, appears that it will continue throughout 2021. The plastics industry was hit with the "perfect storm" consisting of the pandemic, winter weather, hurricanes, factory fires, and the container ship blockage in the Suez Canal, as well as labor shortages. Combined, they have added to the logistic conundrum. This barrage of interrupters has put constraints on supplies of raw materials, which has led to production issues for manufacturing PVC piping products. The results include sharp price increases, massive production delays, and long lead times to procure products.

The final straw was the massive winter storm that hit the Gulf Coast. Some of the largest petrochemical plants that convert oil and gas into other by-products used in plastic manufacturing came to a grinding halt. Reliance on plastics reverberated throughout the globe—from single-use packaging to major construction projects.

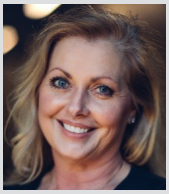
This all translates into a supply chain nightmare for contractors. However, there is an alternative solution for those who had planned on using plastics for underground piping systems. Progressive contractors who saw this massive supply chain interruption pivoted and began choosing metallic piping systems. Instead of PVC piping for water supply and wastewater systems, they have chosen to use copper and cast iron soil pipe and fittings. The ability to quickly maneuver has been a competitive advantage for those contractors that want to stay on budget and on time with their projects.

For example, if a project calls for buried piping underground and you can't get your hands on the PVC piping that was specified in the design, the alternative is a cast iron system. Not only can you use service-weight hub and spigot with a gasketed joint, but you can also use no-hub with a domestic heavy-duty coupling. An example is a corrosion-resistive coupling,* which is specifically designed for corrosive environments. The 316 stainless steel protects the joint from corrosive applications such as below grade buried applications and parking garages. Not only is it accessible and cost effective, but there is much less preparation required for iron pipe compared to plastic.

In many cases, the cost and availability of materials have moved toward parity, allowing contractors to weigh their options for using alternative products. While the plastic industry struggles to maintain production under current constraints, now is a good time to re imagine projects and consider other readily available domestic products that are allowable by code. ■

*McWane recommends the Husky CR7000 coupling for this application.

About the Author



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