



Innovating Solutions for You!

## THE CONCRETE PANIC



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Concrete is the foundation of almost everything; used to construct buildings, highways, bridges, roads, and more. Concrete is the most widely used manufactured product globally, with 23.022 billion tons poured yearly.

To make concrete, you need cement.

During the housing crisis of 2008, the cement industry was caught off guard as the resulting recession essentially shut construction down for three years and caused the loss of 153,000 jobs. Lesson learned, when the COVID-19 pandemic hit in 2020 and rather than risk another deep recession when the world went into lockdown mode, the cement industry and its supply chain of mining operations also shut down so as not to take the same loss as 2008.

Contrary to industry expectations, things were different during the pandemic. The sale of cement and other construction products picked back up quickly, thanks in part to DIY homeowners and home builders beginning to pour concrete aggressively to meet the demand for homes. However, opening mining operations and getting the supply chain moving again proved to be a difficult task.

Availability of raw materials is not the only issue at play. There is a shortage of long-haul and local truck drivers to get the raw materials and finished products to the needed destinations. To further impede distribution, major winter storms blanketed the northern and eastern parts of the U.S. in February and March of 2021. In 2020 the size of the global cement market was \$313.6B and was predicted to increase to

\$458.6B by 2028. The driver behind this demand is the U.S. Senate's \$1 trillion infrastructure package and the coming of age of millennials who will buy their first homes. The Financial Times calls this a 'construction supercycle,' predicting a wave of government spending.

Supply and demand issues amplify when contractors get into bidding wars — artificially inflating the price of concrete even higher. Companies like Walmart and Amazon build mega-distribution centers to facilitate faster delivery times to customers. SWITCH, a computer database company that provides internet connectivity and cloud storage, is also building mega-centers in critical locations across the U.S. These massive projects consume vast quantities of concrete and steel and pay premiums to keep construction moving forward. Smaller projects cannot compete with the price and do not have the buying power to get the needed construction products.

### Solutions

Aside from Call Innova? Here are three tips to employ to help save on cost and schedule:

1. Pick up the phone. Designers and Developers are only a phone call away from knowing what is available at regional stockyards. Doing so is especially important when specifying reinforcing and custom components like stud rails, anchor heads, etc. In addition, batch plants have readily available mix designs, admixtures, and fiber specifications to help reach your project's strength and durability requirements that can reduce concrete



volume, reinforcing, and post-tension quantities.

2. Partner with Industry Experts. Design Assist contracts are becoming more popular as they allow the sub-contracting teams to generate input into the design process, and sometimes that input becomes direct design supervision. Adding a Division 3 specialist to your design team will bring valuable insights to help control costs and scheduling problems. Sometimes they can "pick up the phone" for you!

3. Brainstorm. Brainstorm. Brainstorm. Whether it is price, schedule, or something different, Developers need to find a solution to fit that driving need. It may come as a surprise; designers are not always creative. Asking for multiple structural solutions in the early conceptualizing phase of a project, including adding this to the RFQ documents, will get us on the right path to successful development. Experience teaches the smaller the project, the less likely the designers have added much brainstorming to their scope of work.

— By Craig Ruark for Innova Technologies, Inc.