

TRANSPORTATION EFFICIENCY WITH PRECAST CONCRETE

Precast concrete is a high-performance building material manufactured off-site in a PCI-Certified quality-controlled plant environment, cast, cured, removed from custom molds or forms, yarded, and allowed to continue curing in storage at the precaster's yard until needed at the project site. These nonperishable precast concrete products are then efficiently transported to the project site for just-in-time delivery and installation. In comparison, conventional on-site cast-in-place concrete construction is considered perishable until it is delivered to the site, cast into forms, and properly cured. Perishable concrete transported by ready-mix concrete trucks can be extremely vulnerable to excessive wait times in traffic congestion and/or delays at the project site.

The ability to efficiently manufacture and transport precast concrete components year-round in all weather conditions both increases speed at the site and makes efficient use of plant/delivery personnel. Working in tandem with well-organized precast concrete production is the optimized coordination of efficient transportation and delivery. During the construction phase, the speed of precast concrete installation is unrivaled. The just-in-time delivery of precast products to the jobsite makes effective use of transportation and site access.

A small crew and crane can erect thousands of square feet per day and enclose the structure in only days or weeks. Precast concrete construction is the most capable of meeting tight deadlines and enabling finishing trades to jump-start their work. A single-source precast concrete supplier enables the collective project team to make changes more easily with fewer coordination issues and less site mobilization, which keeps costs to a minimum.

The transportation efficiency of precast concrete construction allows for minimal site disturbance with off-site prefabrication, negligible waste, and dust on the project site, accelerated construction with fewer project delays and shorter project schedules, and fewer trades on the project site resulting in reduced risks to the general contractor and owner. Building with precast concrete and utilizing nonperishable precast products can avoid unnecessary project delays when compared with conventional on-site perishable cast-in-place concrete construction, resulting in fewer risks to the general contractor and faster project completion time.

