

# MOLIN

## Positives of Precast Concrete for Winter Construction

Winters are a harsh reality for residents of the Midwest, who are accustomed to frequent snowfall and shoveling. But blizzards, ice, and plunging temperatures can create serious problems for general contractors and new construction projects. When you're at the mercy of Mother Nature, it can be difficult to adhere to a project schedule.



Fortunately, concrete innovations have made commercial winter construction projects more efficient and economical with precast concrete, which can be safely installed—even during the harshest of conditions. As a leader in Midwest precast concrete, Molin has the experience and expertise you need to keep your project on track during winter.

### Why Use Concrete?

Precast concrete's durability, safety, and sustainability make it a great choice for a variety of construction projects. One application is multi-family housing, like Riverwalk City Downtown Apartments in Rochester, Minn. This five-story apartment building (with over 150 units and many amenities, including enclosed parking) was constructed during winter using precast concrete products. Another example of precast concrete's versatility is Como Park Animal Hospital, erected over a four-week period in early 2022.

### Precast Concrete is Cast in a Controlled Environment

One benefit to precast concrete is the exacting process used to create it. Precast products are cast in Molin Concrete's facilities where both the humidity levels and temperatures inside the curing areas are carefully monitored. Over time, the products cure in this regulated environment. Our technicians keep detailed records and use this information to ensure the products meet quality and safety standards. Molin is a certified producer and erector of the Precast/Prestressed Concrete Institute.

Our precast concrete products include hollow core plank, prestressed concrete beams, precast concrete columns, and precast concrete wall panels.

## Each Batch Undergoes Meticulous Testing

Precast concrete also has the edge when it comes to rigorous quality testing. When each batch of concrete is prepared, Molin's technicians make test cylinders and put them into the kiln with the other products from the batch. After 24 hours, stringent measures are used to test a cylinder's performance to ensure that the batch is on its way to being properly cured. Samples are taken off every line and tested every day. Twenty-eight days is allowed for the curing process, after which, another sample from the batch is tested to confirm that the curing process was successful.

## Increased Efficiency Onsite

This attention to detail during the manufacturing process pays off when it comes time to deliver and install your precast concrete products. During the design process, we carefully analyze which combination of precast concrete materials will best suit your project. Our precast concrete columns and prestressed concrete beams create your building's structure. Our hollow core plank is used for roofing and flooring. Enclose the structure with our architectural precast concrete wall panels.

Architects and designers will appreciate the superior design flexibility that precast concrete products provide. The architectural finish of precast walls can be customized in almost any color, form, or texture. Additionally, foundational wall panels cured in a plant allow a building to be installed quickly, saving precious time in the schedule. On an average day—even in winter—Molin's skilled field crews set eight panels (100 ft) of precast concrete wall panels.

General contractors welcome the convenience and efficiency of precast concrete products. With Molin's precise scheduling and service, the job site won't be clogged up with materials that aren't needed until later in the project. Having the products ready also means contractors can stay on schedule. Costs are kept lower by avoiding delays due to cold weather.

## Superior to Cast-in-Place Concrete

Contrast this process with using cast-in-place concrete and masonry in winter weather construction. Heat is necessary to cure the concrete safely and adequately. General contractors must plan to tent the job site and heat it. Fluctuating winter weather can create additional unforeseen costs and hassle. It's difficult to ensure that the concrete has cured properly and is up to safety standards.

## The Molin Difference

Molin Concrete is a full-service company which designs, manufactures, and installs precast concrete products. With over 125 years of experience, no one understands the precast concrete business in the Midwest like we do. We are a producing member of PCI Midwest, headquartered in Minnesota. As leaders in concrete innovation, we have our own specialized drafters and engineers on staff, as well as highly trained field crews. These teams work closely together to ensure your project is completed with excellence.

We will deliver the products you need—when you need them. Have confidence that your project will go together smoothly and on schedule when you use our products to bring your vision to reality. Reach out today to talk to a Molin expert about your project needs.