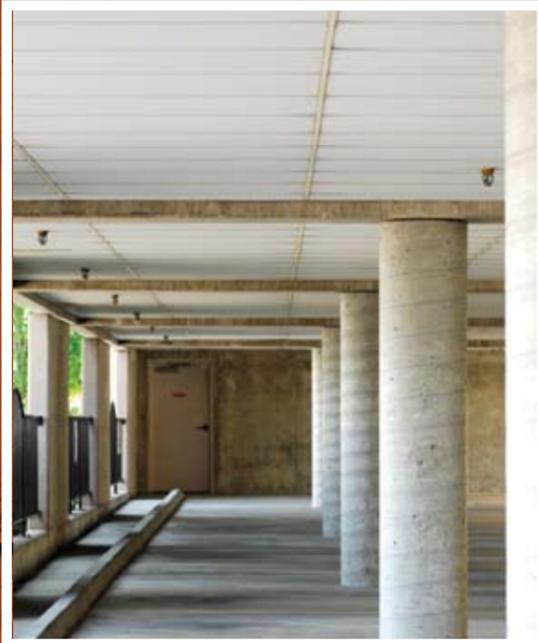




AN MDU RESOURCES COMPANY



Platform Building

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Knife River Prestress is owned by Knife River Corporation, one of the Top 10 Aggregate Producers in America and one of only three companies in that distinction that remains U.S.-owned and operated.

Knife River Corporation purchased Morse Bros. Prestress, along with the rest of Morse Bros., Inc., in the late 1990's. This acquisition was a natural business transition following tremendous successes on the part of both companies. Combined, Knife River Prestress can offer the enhanced services of Knife River Corporation while continuing to provide customers with local, personalized solutions for their construction materials needs.

Today, our parent company, Knife River Corporation, allows us to tap into the collective expertise of more than 60 companies nationwide, operating in 17 states in the central, western and southern United States, and in Alaska and Hawaii. Knife River Precast's primary facility is located in Harrisburg, Oregon.

We are an award-winning leader in the industry, offering a wide variety of precast/prestressed concrete components for long and short-span highway and rail bridges. We also provide precast architectural and structural products for parking structures, commercial buildings, warehouses, manufacturing plants, multi-unit housing, educational facilities, offices, high-tech and athletic facilities. Over the years we have built a local and national reputation as one of Oregon's leading providers of quality aggregate-based products.

Our professional, experienced staff can evaluate your specific project and provide suggestions and recommendations for the most attractive, durable and cost-effective products possible.

We are proud of our history and the values of quality and customer service our founders wove into the fabric of our culture. Be assured that these fundamental values live on and are a part of every product we produce.

Feel free to drop by and take a look for yourself; the door is always open. For more information please visit our web site at www.kniferiverprestress.com



Precast Platform Buildings are best described as a precast concrete solution that works in conjunction with wooden constructions up to four stories in height.

Condominiums, apartments, and hotels often need at grade or below grade parking to serve as a platform for a wooden structure above. The precast platform must be able to meet both the fire separation requirements and structural loading requirements, due to both gravity and dynamic seismic loadings.

Because the parking layout dictates the location of the columns, in certain instances the bearing walls and wooden structure may not line up optimally. If the hollowcore capacity cannot support the wall loads above, due to column placement, it is often possible to substitute a solid slab with more reinforcing in the high load area to maintain the structural depth.

Precast components for these platform structures can be produced simultaneously with the foundation work at the jobsite. Columns can either be precast or cast-in-place. The precast soffit beams must be shored until the composite field topping is placed and fully cured. These precast/prestressed concrete components also allow for a very good span-to-depth ratio, minimizing the total structural depth at that level.

Vertical openings, for plumbing or electrical requirements, can either be installed during in the precasting process, or can be drilled in the field. If the penetrations are drilled in the field, their placement must be coordinated ahead of time to avoid cutting the prestressing strand in the precast hollowcore or solid slabs.

Once the foundation and columns are ready, the precast deck can be erected quickly. The field topping can then be cast, creating a platform that is ready for the construction of the wooden structure above.

Knife River has been a provider of many Precast Platform Buildings. These platforms have historically compressed the construction timeframe and have proven to be a superior choice when compared to steel and cast-in-place concrete solutions.

Benefits Of Using Precast/Prestressed Concrete

There are many building and structural systems on the market today. None offer the cost-saving advantages of precast/prestressed concrete components.

Versatility, Quality, Economy

The versatility of a precast concrete system is unmatched. The components of an entire facility can be precast to precise specifications. Plant manufacturing results in substantial economies through repetitive manufacturing and stringent quality control.

Speed of Construction

Precast and prestressed concrete components are manufactured at the plant and away from site preparation and foundation work, which reduces project congestion and disturbance. Products are shipped to the site as needed and can be erected directly from the delivery truck, greatly reducing time, labor and weather delays.

Attractive Appearance

The pattern, texture, and color variations of architectural precast and prestressed concrete are practically unlimited. The simple, clean shapes of these components project an image of strength and beauty combined.

Fire Resistance

Precast and prestressed concrete's unique fire resistance protects both life and property while reducing insurance rates.

Low Noise Transmission + Energy Conservation

Precast and prestressed concrete components are dense materials that provide both excellent sound attenuation and energy savings. Precast construction allows minimal air infiltration – the thermal mass delays internal temperature changes and reduces peak heating and cooling loads; Sculptured shapes facilitate shading for window areas. In addition, insulation can be cast-in during manufacturing, which increases the U-factor.

Durability

Precast and prestressed concrete is exceptionally resistant to impact, corrosion, weathering, abrasion and vandalism, making it virtually maintenance free.

Cost Effectiveness

Fabrication occurs year-round, regardless of weather and events at the construction site. Work can begin as soon as designs are completed. In a precast/prestressed concrete building, floor-to-floor height is appreciably less, thus reducing the building height and volume and reducing heating and cooling costs. In bridges, superstructures can be kept more shallow to better provide maximum clearance and minimum approach grades.

Longer Economic Life

Precast and prestressed concrete structures give added years of service with a minimum of repairs and maintenance.

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