

## PRECAST FOCUS

## **BUILDING INDUSTRIAL STRUCTURES WITH PRECAST CONCRETE**

Industrial structures are designed and built with precast concrete to meet or exceed high performance design goals. Precast concrete integrates easily with other building systems and inherently provides the versatility, efficiency, and resiliency needed to meet the multi-hazard requirements and long-term demands of high-performance structures.

Precast concrete wall panel systems are barrier or face-sealed systems. Unlike conventional cavity-wall or rainscreen systems, precast concrete does not require a cavity where moisture collects, and other problems can occur.

Precast concrete is an ideal construction material choice for various industrial building types including warehouses, distribution facilities, manufacturing plants, big box retail stores, food processing facilities, and high-tech data centers.

## WHY SHOULD YOU CHOOSE PRECAST CONCRETE FOR INDUSTRIAL BUILDINGS?

- Cost-effective long open spans for optimal bay spacings
- Low maintenance with minimum 5,000 psi and low water-cement ratio concrete mixes
- Durable affordable building envelopes
- Long service life of 50 years or more
- Low life-cycle costs
- Precast panels can be easily relocated to accommodate future building expansion
- Highly durable interior concrete finish ideal for industrial structures
- Interior concrete finishes on insulated

- sandwich wall panels are ready for painting with no furring, insulating and drywalling required reducing labor and material costs
- Architectural finishes are available with virtually any color, form and texture
- Wide variety of architectural finishes are available including, sandblasted, exposed aggregate, acid-etched, painted, thin brick and stone veneers
- Precast concrete designs allow yearround construction resulting in shorter project schedules
- High quality products manufactured off-site
- Design flexibility and assistance from your local precast concrete producer
- Total precast structural and envelope systems available
- Load-bearing envelopes add design economy



- Minimal job site disturbance with off-site production and just-in-time deliveries
- Reduced detailing and trades on the job site
- Accelerated construction
- Energy efficiency with continuous insulation and thermal mass inertia
- Thermally efficient insulated sandwich wall panels are available
- Barrier wall, face-sealed system offers continuous insulation, air and vapor barrier
- Inherent passive fire resistance
- Storm resistance against high winds, floods, and wildfires
- Earthquake resistance
- Blast resistance
- Acoustical control due to precast concrete mass
- Vibration control due to precast concrete mass

Precast concrete products produced in PCI-Certified factory-controlled conditions and erected by PCI-Certified erectors are ideal for designing and building industrial structures and provide numerous advantages and benefits unsurpassed by conventional site-cast tilt-up, concrete masonry or steel construction. The unbeatable speed with which precast concrete can be designed, manufactured, and erected provides time savings that can be critical to a project's success. Precast concrete structures provide numerous longterm cost advantages with exceptional durability, lower energy costs and lower maintenance costs when compared with conventional construction.





