

Providing Engineered Concrete Solutions



Precast and Mission Critical Facilities A Natural Fit





Total precast solutions eliminate trade overlap in the construction of the core and shell system

A total precast solution for the core and shell allows the fastest construction schedule and reduces the overlap of similar trades. With a precast floor and roof plate, the lateral system can be installed concurrently, reducing the amount of shoring and bracing required during this phase of the construction cycle.

Aesthetic advantages - multiple mix and finish options with maintenance-free finishes (no future painting to budget for)

An architectural exterior panel can not only be load bearing to reduce additional framing members, but it can also be produced with integral insulation and an architectural colored mix. This eliminates redundancy in a structure by using architectural panels as structural components. Form liners and finishing techniques, ranging from sand blast to acid etch, are commonly used to accentuate and create a building character. Inlay brick and split-face-masonry are additional techniques used to create an exterior architectural façade.



A larger bay footprint to accommodate server racks and mechanical equipment

Long spans and shallow depths support the facility planning for large pieces of mechanical equipment.



High fire ratings for floor, roof, and wall members

All precast members can be designed and constructed to meet a 4-hour fire rating and are typically produced with a 2-hour rating. Unlike steel members and metal decking, there is no need for additional fire protection.



Higher design loads from wind, seismic, and tornadoes are easily resisted

In an effort to keep these facilities operational in a catastrophic event, nearly all data centers require higher than normal design loads. Precast structures have the advantage of being able to transfer these forces through proper load paths down to the foundation. Testing and demonstration have shown that impact from airborne debris is easily resisted by solid and insulated wall panel systems.

Ability to work within the requirements of a fast track construction schedule for faster dry-in times

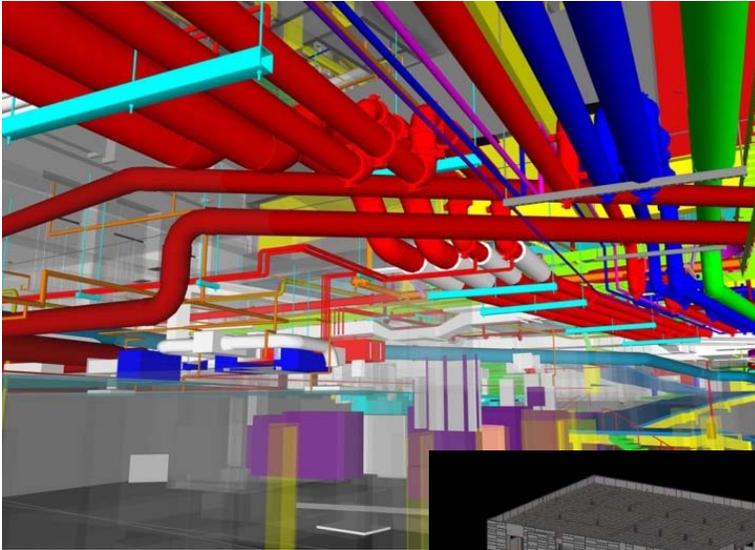
Data centers typically have accelerated construction durations. The speed at which precast can be manufactured and erected compliment these aggressive schedules. Multiple cranes and construction crews can be an effective method for condensing a construction schedule even further. This allows the structure to be occupied by other trades more quickly and supports earlier completion and move in dates.

❁ ***Stiff floor and roof members reduce floor vibrations***

Precast elements are strong, stiff, and heavy, offering an excellent method of minimizing vibration transfer from equipment and foot traffic.

❁ ***High ceiling requirements supported by prestressed load bearing wall systems***

The interior space requirements range from single story to multiple stories. Using a prestressed wall panel system helps to achieve these building heights with one panel and eliminating the need for an interstitial floor connection. Typical design and construction of stacking server components over mechanical components is attained through this high bay construction technique.



❁ ***Trade coordination for many mechanical equipment demands***

The precast design process is a detail oriented step in the delivery process of a total precast data center. In this phase, our design team will facilitate and work closely with the rest of the design team to ensure proper attention has been given to the task of trade coordination.

❁ ***Easily accommodates future expansion planning and future loading demands***

Precast is as easily de-erected as it is erected. In other words, creating a movable wall, a future knock out panel, or adding a perimeter beam line is quite common and simple to achieve with precast.

Company Overview

The EnCon Companies are specialty contractors providing engineered concrete products and services to the commercial, multi-family residential, heavy highway, and public works construction communities. As a full-service precaster, EnCon manufactures a wide range of architectural and structural building components. Corporate offices and the design group are located in downtown Denver, Colorado. EnCon currently sells its products in 15 states.

EnCon entered the precast/prestressed concrete market in early 1993 with the acquisition of Stresscon Corporation, which was founded in 1967. Located on a 68-acre production facility in Colorado Springs, Stresscon Corporation maintains a second plant 20 miles north of Denver in Dacono, Colorado. Stresscon has been serving the Colorado and western United States building industries with quality architectural and structural precast concrete products and innovative building solutions for over 40 years.

In 1997 EnCon acquired Atlanta Structural Concrete Company, founded in 1959, and built a new plant in Buchanan, Georgia. Atlanta Structural, with over 50 years in the structural precast industry, constructed a second production facility in Bainbridge, Georgia in 2006.

Five additional plants were acquired or built between 1999 and 2004, providing manufacturing locations in Seattle, Portland, Salt Lake City, and Denver.

The EnCon family of companies now consists of nine production facilities. The product line includes architectural and structural building elements, bridge girders and deck panels, CarbonCast®, columns, commercial grade walls, double tees, hollow-core, insulated and non-insulated wall panels, noise walls, prestressed beams, retaining walls, risers, spandrels, stairs, concrete tubes / shafts for stairs, elevator and other mechanical cores. As a certified producer of the Precast/Prestressed Concrete Institute and an AltusGroup® Producer Member, EnCon is recognized among the leading precast companies in the United States.

A broad range of products and exceptional service are the cornerstones of EnCon's business philosophy. EnCon continues to expand to meet the rising demand for precast/prestressed concrete products and services through geographical and product diversification, cutting-edge design techniques, the development of innovative product lines, and a strategic corporate development program. The EnCon family of companies looks forward to increasing growth, leadership and service to the construction industry.



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