

Precast Frame Speeds Library

PITTSFORD, N.Y.

Precast concrete framework is helping the Pittsford, N.Y., community library meet its scheduled occupancy date. Choosing precast helped avoid significant cost overruns as steel prices skyrocketed last summer.

Oldcastle Precast Building Systems in Manchester, N.Y., supplied the structural precast components, consisting of columns, beams, stair and elevator shafts, walls and hollowcore plank flooring. The two-story, 30,000-square-foot facility features a façade of concrete block walls faced with brick.



“We recommended the precast framework to the architect early in the design process, particularly due to the lessened shop-drawing time required and the shorter erection time than steel would require,” explains Peter Buckley, project director with the construction manager, Pike Co. of Rochester, N.Y. “Those were important factors due to the limited window of construction we have in our climate.”

The precast frame was installed during the fall, allowing the building to be enclosed before winter set in so interior work could progress. Buckley estimates that the precast components shaved one month from the construction process.

The project, designed by the DeWolff Partnership in Rochester, N.Y., is expected to be completed by July, leaving plenty of time to test new systems and prepare all of the operations before the facility's big September grand opening.



A Pioneer of the Precast, Prestressed Industry is Remembered

BENTONVILLE, AR.

A fixture of the precast, prestressed industry for many years, Leslie D. Martin passed away on April 25, 2005, at the age of 73. Les received a BS in civil engineering from the University of Nebraska in 1954. He spent most of his career working with the **Consulting Engineers Group (CEG)**, which he joined in 1970. The firm expanded along with the growing precast industry and, in September of 1970, CEG contracted with PCI to produce the first edition of the *PCI Design Handbook*. Les served as the project manager and technical editor for the first, second, third, and the newly-released sixth edition of the *Handbook*.

For his many years of service to both PCI and the precast industry, Les was conferred PCI's Medal of Honor in 2002. He was also among the first group of PCI Fellows inducted in 1994. In 1992 he won the Robert J. Lyman Award for authoring the article, “Design-Construction of the Connecticut Tennis Center,” which was published in the January-February 1992 issue of *PCI JOURNAL*. Les was also a longtime contributor to *ASCENT*.

In addition to PCI and ACI, he was a member of ASCE and is a fellow in all three societies. He was a registered professional engineer in several states and authored a number of publications. Les is survived by Vera, his wife of 52 years, as well as four children, eleven grandchildren and one great-grandchild.

Structured Parking Gains Favor In Housing Projects

MT. PROSPECT, ILL.

Structured parking is making its mark on the multifamily housing sector, especially along the East Coast in large metropolitan areas where land is at a premium, according to designers at the **Consulting Engineers Group Inc.** Structured parking becomes economically viable when the cost of land approaches \$30 per foot, the company says.

Structured parking enhances a residential property's “sense of place,” CEG says, eliminating the vast tract of land devoted to surface parking that mars the facility's exterior image. Structured parking also can lessen the required provisions for stormwater run-off, which helps offset the cost of the structure. Providing covered parking that offers safety and security also can create a marketing advantage.

Precast concrete components can provide significant benefits to this type of project, the firm notes. Since the parking structure often is at the center of the site, erection can start prior to framing the residential units, ensuring the structure is ready for residents' vehicles weeks sooner.

CEG recently completed several projects with **Structural Concrete Products** of Richmond, Va., that provided significant advantages to the building's owners and tenants. A project at the Highpointe development in Baltimore, for instance, includes a rooftop recreational area that features tennis courts. Openness was provided on the exterior of the structure, which eliminated the need for sprinklers and ventilation, and lowered costs. The precast concrete walls also served as fire separation from the residential units that were constructed after the parking structure was completed.

Car Dealerships Turn To Precast

VIENNA, VA.

More auto dealerships are turning to precast concrete components when they need to expand their facilities or create a new building. One recent example was Moore Cadillac Hummer, one of the largest Cadillac and Hummer dealerships in the Virginia-Washington, D.C., area.

Designers used precast concrete components to construct a new parking structure on the company's existing lot as the first phase of construction designed to build new-car storage capacity and service facilities for the new Hummer dealership. Speed was paramount in selecting precast, says general Bob Hughes, because permits could not be granted for the construction of the dealership building itself until the parking facility was ready.

Nitterhouse Concrete Products Inc. in Chambersburg, Pa., worked closely with designer ACG Architects in McClean, Va., to create efficient components. Howard C. Handy & Sons in Ashburn, Va., was the general contractor.

The parking structure's design was complicated by the need for 20-foot ceilings on the first floor to accommodate a quick-lube facility and a car wash. The design also had to allow for the larger size of Hummer vehicles.





Precast Elevator Aids Dormitory Renovation

STORRS, CONN.

Precast concrete can aid building renovations in many ways, as designers for a dormitory renovation at the University of Connecticut discovered.

The renovation plan required accessibility for the disabled, but adding it into the building would have required significant demolition and construction, boosting time and cost while reducing available space.

To overcome this, designers created a self-supporting precast concrete elevator shaft alongside the building, using an architectural finish that matched the existing building's limestone accents.

The project, designed by URS Corp. and constructed by Whiting-Turner Construction Co., was created with a design-build process. **Coreslab Structures (CONN) Inc.** in Thomaston, Conn., provided the architectural and structural precast concrete components.

Brick Tile Precast Panels Highlight 12-Story Condo

BOSTON

Architectural precast concrete panels with inset brick — 92,000 pieces of brick in all — have been used to clad the exterior of 25 Channel Center, a 12-story condominium building.

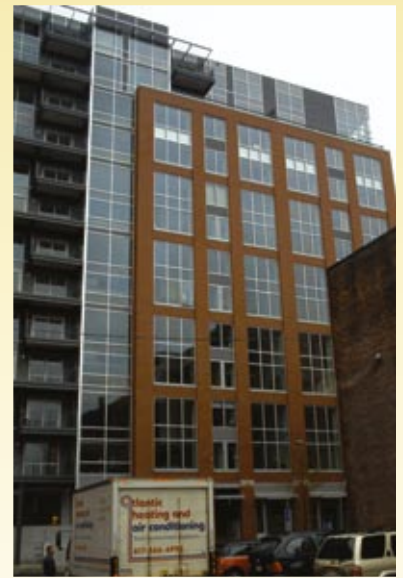
Part of the \$400-million Channel Center mixed-use development, the building is wedged between two existing old-brick factory buildings, creating a tight site and the need to blend the new with the old.

The development's plan calls for renovating 14 historic buildings and replacing four others, requiring a sensitive approach to the new construction so it blends with the existing structures.

The 76-unit 25 Channel Center project, costing approximately \$17 million, includes 9,400 square feet of precast components, including flat panels, spandrels and column covers with brick returns. The components were fabricated and erected by **Strescon Limited** in Saint John, New Brunswick, Canada. Bruner/Cott & Associates is the architectural firm on the project, with R.F. Walsh serving as program manager and A.J. Martini Inc. serving as construction manager.

Precast was selected for a number of reasons, particularly the speed with which the panels could be erected versus typical masonry construction. The amount of thin-brick precast panels that can be erected in one day would take approximately 33 days for traditional masons to complete, according to a spokesman for Strescon Limited.

Thin-brick panels offer additional benefits, including minimizing moisture problems by eliminating most of the joints and setting the brick into hard concrete instead of mortar. That results in fewer maintenance needs as well. Job safety during erection is improved due to the speed and ease of handling, and few weather conditions will stop construction as can happen with brick.



New Seismic Standards For Piers, Wharves Set

RESTON, VA.

The Coasts, Oceans, Ports and Rivers Institute (COPRI) of the American Society of Civil Engineers (ASCE) has established a committee to develop a new standard for seismic design of piers and wharves. The standard will provide analysis and design guidance and address the unique load combinations of these structures.

The standards will also review berthing and mooring loads that govern lateral-load design in low-seismic regions, plus geotechnical issues. Other considerations will include liquefaction, lateral spreading and slope stability.

For information on the new standards, contact Gayle Johnson, committee chair, at gjohnson@han-padron.com or 510/452-0040.