

# Best Parking Structure Blue Cross Blue Shield of Michigan Parking Structure and Campus Improvements Detroit, Mich.



Photo courtesy of Justin Maconochie of Maconochie Photography.

Beauty, environmental sustainability, and functionality were the goals of this urban parking structure and plaza, which anchors the Blue Cross Blue Shield of Michigan corporate campus in Detroit, Mich. Sitting on the footprint of the original 125-spot parking lot, the new parking structure houses 1808 vehicles. The ground floor of the parking structure also has meeting rooms, a fitness center, and maintenance offices.

“The owner was looking for a design that would capture the attention of others, be user friendly, and at the same time be environmentally conscious,” says project designer Scott R. Bonney of Neumann/Smith Architecture in Soutfield, Mich.

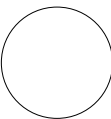
The design team was able to meet those goals within the budget and schedule by using a total precast concrete design solution.

Design elements made possible by the flexibility and functionality of precast concrete gave the structure visual appeal and contrast. For example, the ends of the precast concrete double-tee stems and flanges in the roof are cantilevered to create a dramatic soaring effect. Decorative aluminum endplates conceal exposed steel reinforcing at the double-tee ends, and a vertical metal fascia disguises the sloped edges of the double-tees to create an elegant and inexpensive cornice feature to the structure.

The exterior wall panel system, which doubles as both structural system and finished architecture, hides the sloping floors of the parking structure from exterior view, and the plaza features a gentle sloping spiral walk flanked by curved precast concrete walls and bench seating.

The total precast concrete solution also enabled designers to utilize a skewed floor plan to capture every inch of the space available and support a vegetated roof and walking path, which helped the project achieve Leadership in Energy and Environmental Design (LEED) certification.

“The design of this LEED-certified parking structure showcases the fresh and uninhibited concept for using standard industry materials in an application that is not standard for the industry and to emphasize their intrinsic beauty,” says project manager Kathleen M. Buck.



**Owner** Boston Properties, Washington, D.C.

**Architect** SmithGroup Inc., Washington

**Engineer of Record** Tadjer Cohen Edelson, Silver Spring, Md.

**Contractor** HITT Contracting Inc., Fairfax, Va.

**Precaster** High Concrete Group LLC, Denver, Pa.

**Precast Shop Drawings** Computerized Engineering Inc., Ashland, Va.

RM

---

*"Precast gave us great design flexibility."*  
— Andy Rollman, architect

---



# Best Retail/Mixed-Use Building

## South of Market Office and Retail Complex

### Reston, Va.

RM



Photos courtesy of Nathan Cox Photography.

Aesthetics were the primary reason developers chose a precast concrete solution for this 650,000 ft<sup>2</sup> (60,400 m<sup>2</sup>) office and retail complex in the heart of Reston Town Center, a planned mixed-use community in Reston, Va., 15 mi (24 km) from Washington, D.C. A composition of three varied-scale sister buildings host major-brand retailers and high-profile tenants who expect the architecture of the community to reflect that of an elegant East Coast town that developed over time.

The speculative development project from Boston Properties includes two ten-story buildings and one six-story building, all with ground-floor retail and offices above. The three buildings sit on top of a common, two-level, below-grade parking structure and appear as three buildings on a full block with a plaza one-third of the way along.

“With relating to the urban context of major importance, aesthetics were a primary consideration for the precast cladding design,” says Andy Rollman, architect for SmithGroup Inc. in Washington, D.C.

To contrast two gleaming precast concrete towers across the street, the design team chose an amber thin brick, which was embedded in the face of the precast concrete architectural panels and runs edge to edge in a running-bond pattern finished with rake joints. The windows are deeply inset with L-shaped thin bricks completing the recesses.

Aluminum channels, inserted through certain floors on the horizontal and vertical, break the facade of punch windows fitted with low-E (low emissivity) glass and provide a modern, engineered look. Vertical glass units at the top correspond to the precast concrete towers.

The \$140 million project took just under two years to complete, with erection of the precast concrete elements completed in five months.

“Precast gave us great design flexibility,” Rollman says. “We could introduce metal and brick where we wanted without having to worry about a complicated backup structure of metal studs or [concrete masonry units].”

### JUDGES' COMMENTS

*This project, which is a mixed-use development with retail on the first floor and offices above, was notable to the jury because of the way that the glass and the precast units meshed together. They're kind of in one plane and they give a very unified look, yet they are used in sympathy with each other to create a really pleasant visual image.*

**Owner**

Boston College,  
Chestnut Hill, Mass.

**Architect**

McGinley Kalsow & Associates Inc.,  
Somerville, Mass.

**Engineer of Record**

LeMessurier Consultants,  
Cambridge, Mass.

**Contractor**

Phoenix Bay State Construction  
Company Inc.,  
Boston, Mass.

**Precaster**

Bétons Préfabriqués du Lac,  
Alma, QC, Canada

**Precast/Caststone Consultant**

Building & Monument Conservation,  
Arlington, Mass.

# Best School, Co-Winner Restoration of Boston College's Gasson Hall Tower Chestnut Hill, Mass.

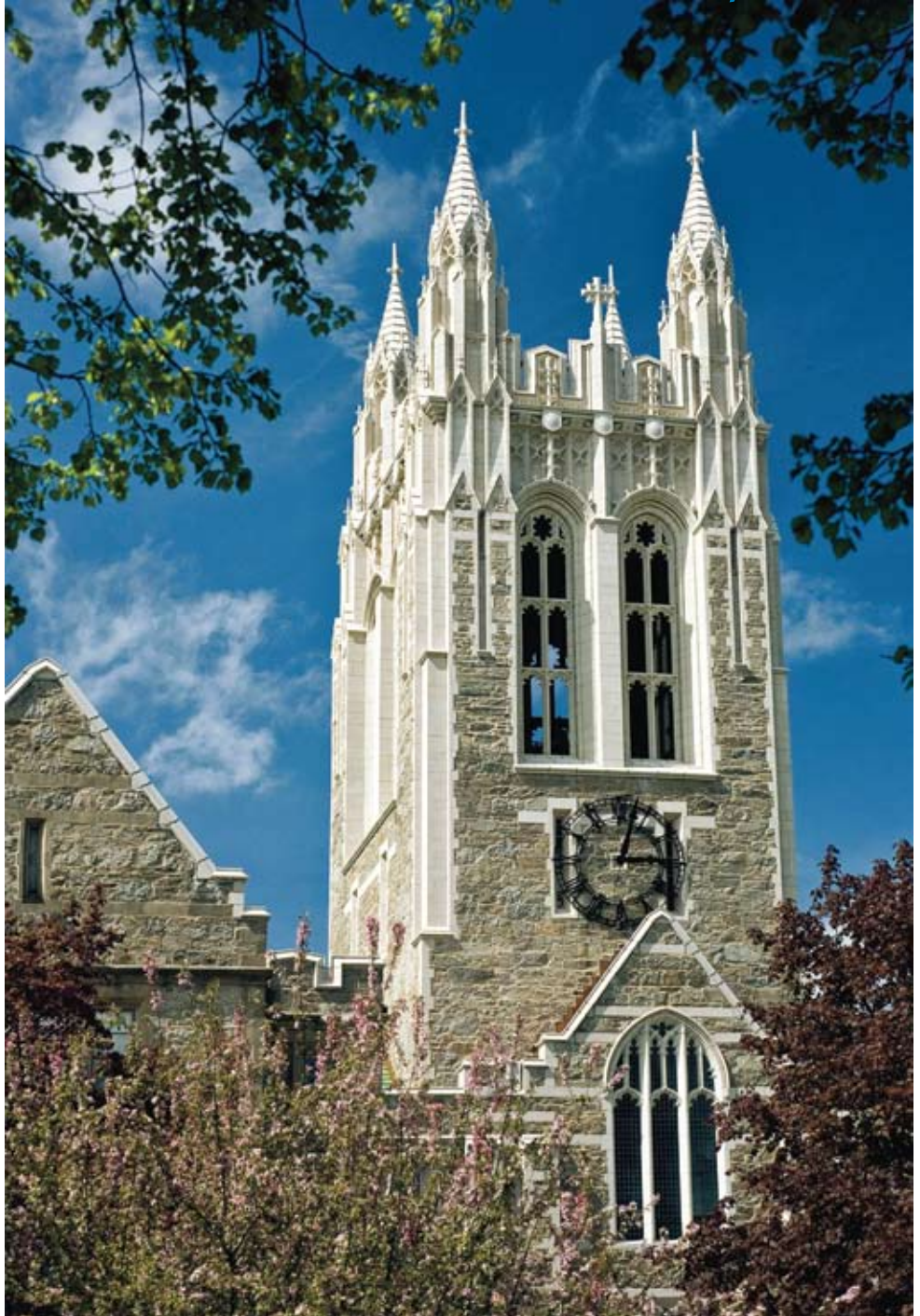
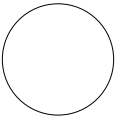


Photo courtesy of Lee Pellegrini.



Repairing and restoring Gasson Hall Tower on Boston College's historic Chestnut Hill, Mass., campus was no small feat. The 96-year-old hall was the first building constructed on the campus, and its 175-ft-tall (53 m) tower has become a landmark in the community. After nearly 100 years of exposure, the original cast stone was weathered and starting to fail.

Architects relied on the versatility of precast concrete to faithfully replicate the details of the tower, replacing the original cast stone with new matching cast stone. The walls were constructed of local puddingstone, while all of the original trim and ornamental details were fabricated from cast stone tinted to resemble limestone.

To compensate for the loss of detail due to weathering, each unit was refinished by hand to simulate natural stone tooling prior to making a mold from that unit. To improve durability and long-term performance, a new anchoring system was engineered and some small units were combined to create larger units with false joints.

Because the worksite was restricted and the geometry of the tower complex, each unit was numbered to identify its location in the wall and each stone was delivered to the jobsite in the sequence that it would be set.

Mold and pattern making took 11 months, and production of the nearly 3300 units took about a year, with the more than 450 unique shapes. The units were installed as they were cured, and installation took 14 months.

"For many years precast concrete has expanded its technical capabilities, increased its structural capacities, and improved durability and performance characteristics," says the architect, Wendall Kalsow of McGinley Kalsow & Associates in Somerville, Mass. "This project advances the aesthetic frontier of precast and cast stone and demonstrates its potential role in significant historic preservation projects."

## JUDGES' COMMENTS

*This project was cited because of its really unusual nature. It's a precast concrete solution to replace what was a cast stone product, and it really provided an example of how an architect can use precast concrete to really re-create an authentic gothic structure. The thoroughness of the detail and the cleverness of the connections and the effective form reuse were considered remarkable.*

Photo courtesy of Wendall Kalsow.



---

*Architects relied on the versatility of precast concrete to faithfully replicate the details of the tower.*

---

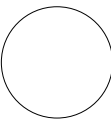


Photo courtesy of Chris Ripman.



Photo courtesy of Ed Film.

**Owner**

University of California Berkeley—Capital Projects, Berkeley, Calif., and College of Engineering, University of California, Berkeley

**Architect**

SmithGroup, San Francisco, Calif.

**Engineer of Record**

Forell/Elsesser, San Francisco

**Contractor**

Hathaway Dinwiddie Construction, San Francisco

**Precaster**

Willis Construction Co., San Juan Bautista, Calif.

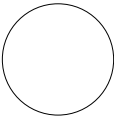
# Best School, Co-Winner Sutardja Dai Hall Technology Building Berkeley, Calif.



---

*Concrete slurry was sprayed into the mold to pick up the fine texture of the wood grain, allowing the precaster to fabricate 92 panels with a consistent design at a moderate cost.*

---



Sutardja Dai Hall, a seven-story technology center on the University of California's Berkeley campus, reflects the arts and crafts architecture of the surrounding buildings in a durable modern design.

Defying the conception that precast concrete-panel finishes are limited to a sandy, flat surface, the design team achieved this combination of form and aesthetics through the use of a precast concrete cladding system that mimics the rich texture of spruce across the 140,000 ft<sup>2</sup> (13,000 m<sup>2</sup>) building.

The team selected glass-fiber-reinforced-concrete (GFRC) panels, which easily adapt to shapes and textures, allowing for greater design possibilities. The GFRC skin is substantially thinner than traditional precast concrete panels, making it lighter and easier to handle during construction. However, imitating the texture of spruce on the GFRC turned out to be a challenge.

The precaster couldn't sample from the wood directly because the concrete stuck to the wood surface, damaging the texture when it was stripped and cleaned for reuse. Instead, the precaster created rubber, reusable liners from the wood.

Concrete slurry colored to match the spruce, was sprayed into the mold to pick up the fine texture of the wood grain, allowing the precaster to fabricate 92 panels with a consistent design at a moderate cost.

The rich brown color of the panels was maintained through the use of a heavy-duty concrete detergent that, when scrubbed on with a nylon brush, achieved a similar tone on each panel without damaging the wood detail.

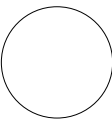
"The board form texture on the facade complements the wood exterior of its historic neighbors and creates a unique rustic feel," says project manager Johnny Wong of SmithGroup in San Francisco, Calif. "This solution helps create a warm humane character for a high-tech research building."

## JUDGES' COMMENTS

*This school stood out in the jurors' opinion because of the nature of the arts and crafts design and how it was set into context. And what really made it interesting was the creative use of precast and the texture and colors that were used to communicate that design as part of the overall solution. It was a panel finish I don't think anybody in the group had seen before and was extremely innovative, really called attention to the project, remarkable use of texture.*



Photographs © Tim Griffith.



**Owner** The City of Ontario, Ontario, Calif.

**Architect** Rossetti, El Segundo, Calif.

**Engineer of Record** Englekirk & Sabol Consulting, Los Angeles, Calif.

**Contractor** Turner Construction, Anaheim, Calif.

**Architectural Precaster** Clark Pacific, Fontana, Calif.

**Structural Precaster** Mid-State Precast, Corcoran, Calif.

# Best Stadium **Citizens Business Bank**



Photographs © Brett Drury, [www.architectural-photography.com](http://www.architectural-photography.com).

ST





---

*"This precast solution offered architectural design advantages over a typical post-and-beam design by allowing greater flexibility in how the interior spaces are configured." —Timothy Lambert, architect*

---

## Arena Ontario, Calif.



The Citizens Business Bank Arena in Ontario, Calif., is far more than a hockey arena. The 220,000 ft<sup>2</sup> (20,400 m<sup>2</sup>) facility accommodates sports teams, trade shows, concerts, and community events throughout the year. The vast and open floor plan offers seating for 10,000, and a soaring design that catches the light throughout the day.

All of these functional and aesthetic features were achieved through the use of an innovative, cost-effective system of precast concrete stadia, raker beams, and columns.

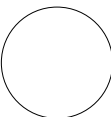
"This precast solution offered architectural design advantages over a typical post-and-beam design by allowing greater flexibility in how the interior spaces are configured," says the architect. "It was particularly helpful in gaining space in tight concourses, improved sightlines from fewer columns, and generally provided more usable square footage without expanding the building's footprint."

Along with creating open space, the precast concrete structural system was used to conceal the enormous mechanical system within a large cantilever, creating a column-free space in the end zone to accommodate a full-sized stage.

On the exterior, designers used precast concrete panels to create an elevation with a strong horizontal focus, using sharp lines to define the building.

The design suggests an airplane wing taking flight from the flat landscape, which was accomplished with a series of raised and recessed reveals in the elevations, producing a dynamic sense of movement. As the light shifts throughout the day, they create a continuous adjustment in the appearance of the arena, reducing the sensation of a static object.

"The use of exterior, precast architectural panels gave much more flexibility in expressing this idea," says Timothy Lambert, principal in charge.



### JUDGES' COMMENTS

*The building wasn't ashamed about using precast. It really understood that you need to cast this material, that you can form it, that you can shape it, you can use shade and shadow. One of the nicest things about it is that it understood light, whether it was daytime or nighttime, it really has a nice scale. So walking by this building, a windowless building, has a really nice quality regardless of the time of day, and it really settles itself into a neighborhood well.*

**Owner** City of Santa Monica, Santa Monica, Calif.

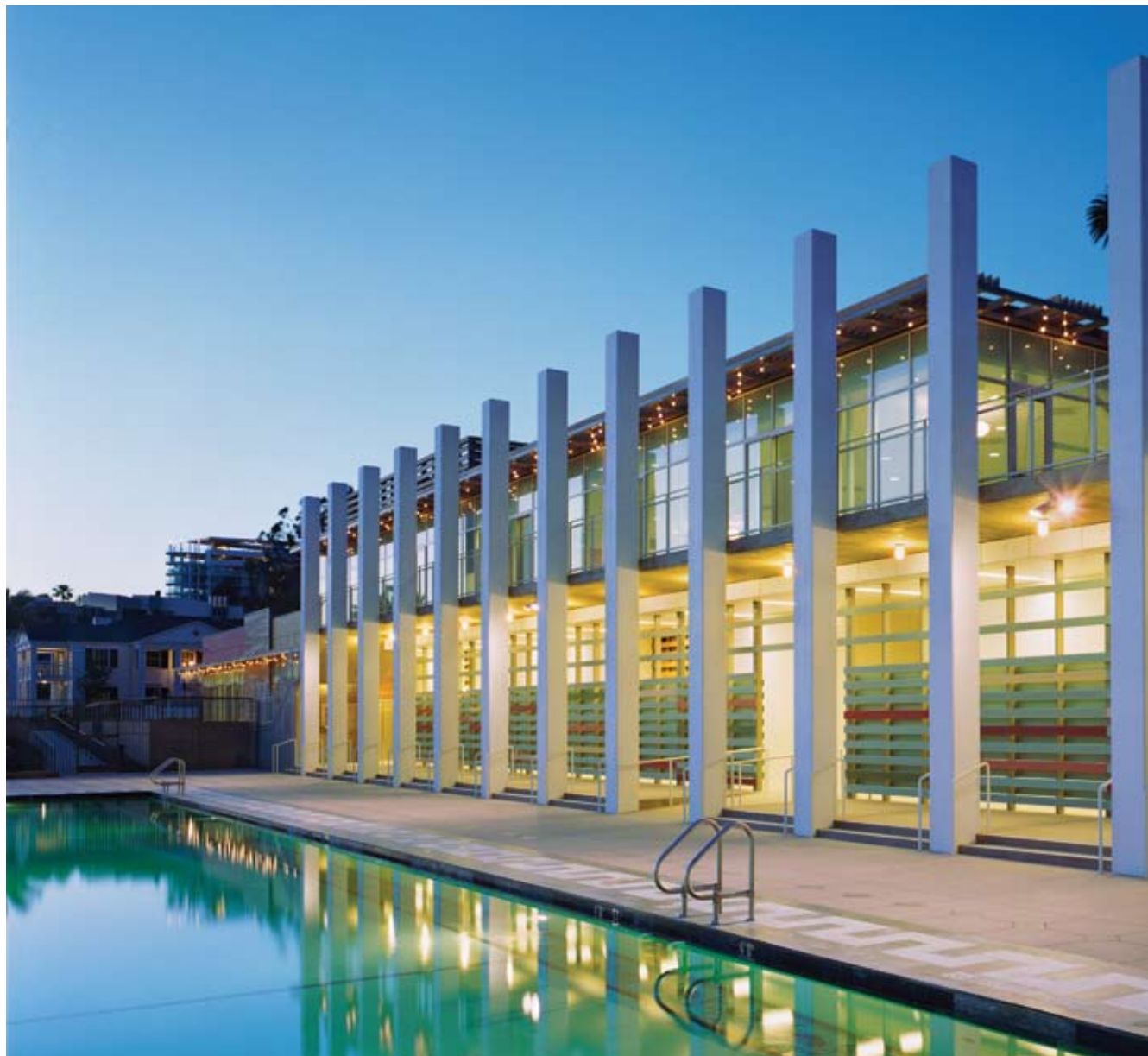
**Architect** Frederick Fisher & Partners, Los Angeles, Calif.

**Engineer of Record** KPFF Consulting Engineers, Los Angeles

**Contractor** Pankow, Pasadena, Calif.

**Precaster** Mid-State Precast, Corcoran, Calif.

**Precast Specialty Engineer** Mid-State Precast, Corcoran



ZZ

---

*"This could only be achieved with the use of architectural precast concrete."*

—Fred Fisher, architect

---

# Best Custom Solution

## The Annenberg Community Beach House

### Santa Monica, Calif.



Photos courtesy of Grant Mudford.

The adaptive reuse project to restore the Annenberg Community Beach House on the Marion Davies Estate in Santa Monica, Calif., demanded meticulous attention to historic guidelines. The Annenberg Foundation provided a grant of \$27 million to rehabilitate the beachfront estate, which was originally constructed in the 1920s by William Randolph Hearst and designed by Julia Morgan. The city's landmark commission had to review all final designs to ensure that the historicism of the site was preserved.

At the heart of the project was the installation of sixteen 29-ft-high (8.8 m) monumental pure white pillars that frame the pool house and evoke the iconic columns of the original mansion.

"This could only be achieved with the use of architectural precast concrete," says architect Fred Fisher of Frederick Fisher and Partners in Los Angeles, Calif.

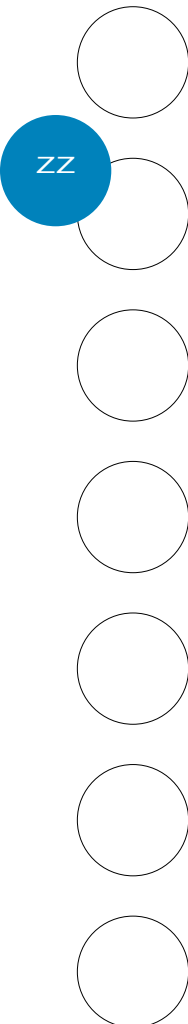
The pillars were cast off-site using a highly refined, brilliant white concrete and form system to symbolically replicate the columns of a different era. The pre-caster worked closely with the design team to develop samples of the concrete color and final texture as well as lift/brace points.

Once on-site, the purity of the white concrete pillars required constant protection from the ongoing surrounding construction activity. The project team went to great lengths to protect them, including wrapping them in white corrugated plastic during construction.

"As evolution of the property over the decades has left few remnants of historic significance, the soaring white pillars play an integral role in connecting new features with old site elements," Fisher says. "The 16 precast pure-white concrete pillars represent the project's marquee element."

### JUDGES' COMMENTS

*This project was recognized for being a custom solution, and what really distinguished it was its simplicity and its strength. You have some really outstanding elements with these vertical columns out of precast that are plain white, really stark white, that really add to the power of the setting that is created by the project. We have the white precast columns that are set in front of the rest of the beach house and really frames it and makes a very dramatic entry.*



## Best Custom Solution, Honorable Mention

# Colonnade at York University Performing Arts and Academic Building

### Toronto, ON, Canada

The addition of colonnaded walkways allowed York University to complete its network of enclosed walkways providing a safe method for moving between the various venues on campus without regard to weather. The V-shaped, precast concrete columns are unique not only for their shape, but also for their use of a dark-grey precast-concrete admixture, varying surface roughness, and LED-lighting integration.

- Owner** York University, Toronto, ON, Canada
- Architect** Zeidler Partnership Architects, Toronto
- Engineer of Record** Halsell Associates Ltd., Toronto
- Contractor** Bird Construction, Toronto
- Precaster** Tri-Krete Ltd., Toronto
- Precast Specialty Engineer** Hasell Associates Ltd. in association with Tri-Krete Ltd., Toronto



Photo courtesy of Zeidler Partnership Architects.

## Best Office Building, Honorable Mention

# U.S. Bank Tower at 621 Capitol Mall

### Sacramento, Calif.

This 25-story Sacramento, Calif., office tower is unique in its embrace of a transparent design theme while remaining sensitive to the surrounding historic brick and stone structures. By finding and maintaining ideal mixture proportions and sandblasting techniques, the designer and precaster were also able to achieve a remarkably inconspicuous balance between normal weight precast concrete and glass-fiber-reinforced concrete on the building's exterior.

- Owner** David S. Taylor Interests Inc., Sacramento, Calif.
- Architect** HOK, San Francisco, Calif.
- Engineer of Record** HOK, San Francisco
- Contractor** Hensel Phelps Construction Co., San Jose, Calif.
- Precaster** Willis Construction Co. Inc., San Juan Bautista, Calif.



Photo courtesy of HOK, photographer: John Swain.

HM

# Harry H. Edwards Industry Advancement Award, Honorable Mention

## Principal Child Development Center/Principal Parking Structure

### Des Moines, Iowa



Photo courtesy of Dennis Befeler.

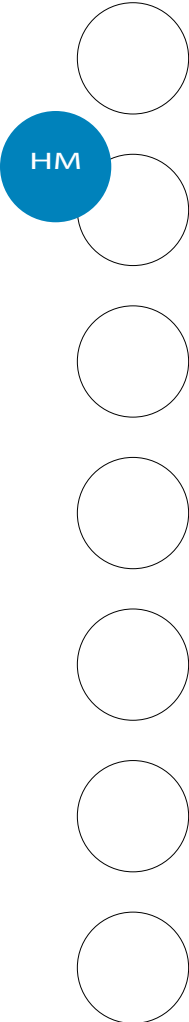
This innovative precast structure provides two great benefits: an early-child-care development center and a secure parking facility for all downtown employees. Because of precast concrete's inherent design flexibility, large structural revisions were possible while the structure was deep in the construction phase. This cost-effective structure achieved a LEED gold rating, proving that low cost and sustainability need not be opposing goals.

- Owner** Principal Financial Group, Des Moines, Iowa
- Architect** SVPA Architects, West Des Moines, Iowa
- Engineer of Record** Charles Saul Engineering, Des Moines
- Contractor** The Weitz Co., Des Moines
- Precaster** IPC Inc., Des Moines
- Precast Specialty Engineer** The Consulting Engineers Group Inc., San Antonio, Tex.

# Sustainable Design Award, Honorable Mention

## Mexico City Church of Jesus Christ of Latter-Day Saints

### Mexico City, Mexico



This 1979 Mexico City Church of Jesus Christ of Latter-Day Saints temple's tilting structure and harsh environmental conditions were the motivation for the complete replacement of all exterior panels and the recycling of the old panels. An extreme logistical challenge, the old panel removal and new panel replacement process had to be performed simultaneously on two opposing walls in an attempt to retain structural balance. Utilizing new lightweight precast concrete panels, the new exterior brings the building back to its original splendor.

- Owner** Church of Jesus Christ of Latter-day Saints, Salt Lake City, Utah
- Architect** Valentiner Crane Brunjes Onyon, Salt Lake City
- Engineer of Record** Reaveley Engineers + Associates, Salt Lake City
- Contractor** Jacobsen Construction, Salt Lake City
- Precaster** Pretecsa, S.A. de C.V., Atizapan de Zaragoza, Mexico
- Precast Specialty Engineer** Pretecsa, S.A. de C.V., Atizapan de Zaragoza



Photo courtesy of PRETECSA Archive.

## Best School, Honorable Mention **Henry Madden Library** at Fresno State University Fresno, Calif.

This California State University library in Fresno sought to embrace the design language of aboriginal central valley people through its synthesis of glass, metal, and precast concrete. The patchwork nature of the exterior precast concrete panels creates visual intrigue and conceals the breaks between the panels, evoking the notion that the entire wall is a single unique tapestry.

**Owner** California State University, Fresno State University, Fresno, Calif.

**Architect** AC Martin Partners, Los Angeles, Calif.

**Engineer of Record** AC Martin Partners, Los Angeles

**Contractor** Swinerton Builders, Oakland, Calif.

**Precaster** Clark Pacific—West Sacramento, West Sacramento, Calif.

**Additional Team Members** RMJM, Princeton, N.J.



Photo © Art Gray Photography.

## Best Stadium, Honorable Mention **Lucas Oil Stadium Indianapolis, Ind.** Indianapolis, Ind.

HM



This retractable-roof, multipurpose stadium calmly complements the surrounding downtown Indianapolis, Ind., manufacturing buildings through its use of color-matched, preinsulated, brick-inlay architectural precast concrete panels. In addition, the stadium made extensive use of a new type of specially designed gravity connection to support the arched precast concrete soffits over the main entrances.

**Owner** Indiana Stadium and Convention Building Authority, Indianapolis, Ind.

**Architect** HKS Inc., Dallas, Tex.

**Engineer of Record** Walter P Moore & Associates, Houston, Tex.

**Contractor** Hunt Construction Group, Indianapolis

**Precaster** Gate Precast Co., Ashland City, Tenn., and High Concrete Group LLC, Fishers, Ind.

## Best Public/Institutional Building, Honorable Mention **North Central College** **Wentz Concert Hall and Fine Arts Center** Naperville, Ill.



Photo courtesy of North Central College, Naperville, Ill.

Beyond the function of structure and an attractive design, the North Central College Wentz Concert Hall and Fine Arts Center in Naperville, Ill., utilized precast concrete as a significant form of acoustical dampening. This imaginative new use of precast concrete together with its distinctive design has propelled the hall to be hailed as a great success by community members and critics alike.

**Owner** North Central College, Naperville, Ill.

**Architect** Loebli Schlossman & Hackl, Chicago, Ill.

**Engineer of Record** Campbell & Associates, Naperville

**Contractor** Gilbane Co., Chicago

**Precaster** Dukane Precast, Naperville

**Precast Specialty Engineer** Dukane Precast, Naperville

**Additional Team Members** Dukane Precast, Naperville

## Best Public/Institutional Building, Honorable Mention **Harm A. Weber Academic Center at Judson University** Elgin, Ill.

By utilizing the unique benefits inherent in precast concrete—high thermal mass, minimal site disturbance, and freedom in prefabrication design—this ground breaking facility was able to become the first building of its type to utilize natural ventilation in the Midwest’s extreme humidity and temperature differentiation. This, coupled with a comprehensive system integration design methodology, aided the building in receiving a Leadership in Energy and Environmental Design gold rating.

**Owner** Judson University, Elgin, Ill.

**Architect** Burnidge Cassell Associates, Elgin

**Engineer of Record** KJWW Engineering Consultants, Naperville, Ill.

**Contractor** Shales McNutt, Elgin

**Precaster** Mid-States Concrete Industries, South Beloit, Ill.

**Precast Specialty Engineer** Losch Engineering Corp., Palatine, Ill.

**Additional Team Members** Short & Associates, London, U.K.



Photo © 2007 Bruce Starrenburg/www.bstarrenburg.com.

HM