



2012

DESIGN

AWARDS

AWARDS

AWARDS

DESIGN  
AWARDS

50<sup>TH</sup>

ANN  
IVER  
SARY

# Evolution in innovation

by Craig A. Shutt

For 50 years, the Precast/Prestressed Concrete Institute has showcased innovative projects through the PCI Design Awards. The world has greatly changed since that first competition in 1963, but one thing has not: precast/prestressed concrete continues to evolve to meet new challenges and help create aesthetically pleasing, quickly constructed, and cost-effective structures.

Beginning only a few years after PCI's formation, the competition has allowed owners, architects, designers, engineers, contractors, and precasters to showcase the creative ways that they use precast concrete to overcome design and construction obstacles. In the first contest, the judges selected one winner—the St. Richard Church in Côte St.-Luc, Montréal, QC, Canada—and eight awards of merit.

In this year's competition, three juries singled out eighteen buildings and six bridges to win awards. This expansion shows that innovative precast concrete concepts are being developed for more types of structures to meet more challenges.

The awards judges were impressed by the entries overall. "What we saw is that the precast concrete industry provides faster construction, quicker delivery of product, and economical solutions," says Kevin Eisenbeis, the director of bridges for Burns and McDonnell in Kansas

City, Mo., and a member of the transportation awards jury.

"Precast concrete applications offer more than cost savings today", says Wanda Lau, an associate editor at Hanley Wood in Washington, D.C., and a member of the buildings awards jury. "I saw precast concrete being selected intentionally as a design material because of the versatility, the level of finishes, and the design possibilities. Some of the examples of the textures we saw are just unbelievable. It is so much more advanced."

Those innovations continue across North America, with this year's winners located in Canada, Mexico, and throughout the United States. PCI-certified precasters' techniques continue to evolve to highlight advantages that include strength, durability, span length, and aesthetic options.

New concrete mixtures, new form designs, and new delivery and erection techniques are all showcased in the winning entries.

"I was fascinated with how designers are pushing the envelope in the use of precast concrete," says Debra Kunce, an associate with Schmidt Associates Inc. in Indianapolis, Ind., and a member of the buildings awards jury. "It was a wonderful selection of materials. These projects show that designers should think of precast in new ways."



After 50 years, the PCI Design Awards continue to showcase the ways that precast concrete can adapt to solve new design challenges for buildings and bridges.



## Table of Contents

### Special Awards

Harry H. Edwards Industry Advancement Award and Best Theater: <i>Kauffman Center for the Performing Arts</i>	18
Harry H. Edwards Industry Advancement Award and Best Bridge with a Main Span Greater than 150 ft (46 m): <i>I-25 Trinidad Viaduct Replacement</i>	20
Sustainable Design Award and Best University Project: <i>William H. Neukom Building at Stanford Law School</i>	22
All-Precast Concrete Solution: <i>CTA Beach Comfort Stations</i>	24

### Building Awards

Best Parking Structure (0–999 Cars): <i>New York Botanical Garden</i>	28
Best Parking Structure (1000+ Cars): <i>Ruppert Plaza Garage and Macombs Dam Rooftop Park</i>	30
Best Office Building (Low-Rise 1–3 Stories): <i>PBS 39 Public Media and Education Center at SteelStacks</i>	32
Best Office Building (High-Rise 4+ Stories): <i>Place de l'Escarpement</i>	34
Best Retail Facility: <i>Paseo Altozano</i>	36
Best Mixed-Use Building: <i>City Creek Center</i>	38
Best K–12 School: <i>Exelon Gymnasium</i>	40
Best Justice and Correctional Structure: <i>U.S. Federal Courthouse</i>	42
Best Government or Public Building: <i>Perot Museum of Nature and Science</i>	44
Best Military Project: <i>711th Human Performance Wing Complex</i>	46
Best Religious Structure: <i>Kansas City Temple</i>	48
Best High-Tech or Laboratory Facility: <i>Lorry I. Lokey Stem Cell Research Building at Stanford University</i>	50
Best Hotel: <i>The Crash Pad: An Uncommon Hostel</i>	52
Best Data Center: <i>SV5 Data Center</i>	54
Best Custom Solution: <i>Cityplace Uptown Station</i>	56

# Special Awards Jury



Dennis Andrejko, FAIA, is chair of the master of architecture program in the Golisano Institute for Sustainability at the Rochester Institute of Technology in Rochester, N.Y. His work centers on architecture and the built environment, renewable energy and high-performance build-

## Dennis Andrejko

ings, and regional design and ecological literacy.

He also serves as principal of Andrejko + Associates in Buffalo, N.Y., and has been a professor of architecture at the University at Buffalo, State University of New York.

Andrejko was elected vice president of the National Board of the American Institute of Architects in June 2010, and he heads the Board Knowledge Committee that oversees the knowledge portfolio of the institute. He also has received the group's Richard Upjohn Medal.

He is the recipient of a number of other awards, most recently the AIA New York State President's Citation and the AIA New York State Matthew W. Del Gaudio Award for distinguished service.



Jeffrey R. Carlson, PE, SE, is executive vice president and chief operating officer for The Consulting Engineers Group Inc. in Mount Prospect, Ill.

## Jeffrey R. Carlson

He is a Fellow in the International Concrete Repair Institute and a member of the International Parking Institute and the American Society of Civil Engineers.

As a member of PCI, he serves as vice chair of the Parking Structures Committee and as a member of the Total Precast Systems Committee.

Carlson received a bachelor's degree in civil engineering in 1979 and a master's degree in civil engineering in 1986, both from the Illinois Institute of Technology. He is a licensed structural engineer in Illinois, Nebraska, Nevada, and Oregon and a licensed professional engineer in Alaska, the District of Columbia, Illinois, Iowa, Minnesota, Mississippi, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Washington, and West Virginia.



Harry H. Edwards Industry Advancement Award and Best Theater:  
Kauffman Center for the Performing Arts

Harry H. Edwards Industry Advancement Awards and Best Bridge  
with a Main Span Greater than 150 ft (46 m):  
I-25 Trinidad Viaduct Replacement



Gil Heldenfels is vice president at Heldenfels Enterprises Inc. in San Marcos, Tex., a manufacturer of precast, prestressed concrete structures for the highway, marine/industrial, commercial, and sports-construction markets.

**Gil Heldenfels**

He also is general manager of the company's Building Systems Division, which offers a variety of precast concrete building solutions.

Heldenfels serves as vice president of the Precast Concrete Manufacturers Association of Texas and is vice chair of the Patrons Committee for the Concrete Industry Management program at Texas State University in San Marcos.

His other activities include active membership in PCI, Association of General Contractors, and the Texas Association of Business.

He is a graduate of Texas A&M University in College Station, Tex.

Sustainable Design Award and Best University Project:  
William H. Neukom Building at Stanford Law School

All-Precast Concrete Solution: CTA Beach Comfort Stations

The goal for the new performing arts center in Kansas City, Mo., was to create "the perfect instrument." That meant providing amazing acoustics and great sightlines. It also meant designing a structure that inspires visitors and gives them a sense of the ceremony inherent in attending a performance.

The project team achieved these goals and more with the help of architectural precast concrete panels as the building's cladding. "This project took the aesthetic, the design, and the architectural opportunities to create an evocative design that spoke the language of the performing arts," says Dennis Andrejko, one of the special awards judges. "Precast, because of its moldability, was an appropriate material choice. It gave them the flexibility to explore that design opportunity in a technological way."

The building features two standalone performance halls within a shell consisting of a glass roof and glass walls that provide sweeping views of the city. The geometry of the project was based on arcs, radii, and cones on both horizontal and vertical planes. There are few 90-degree angles.

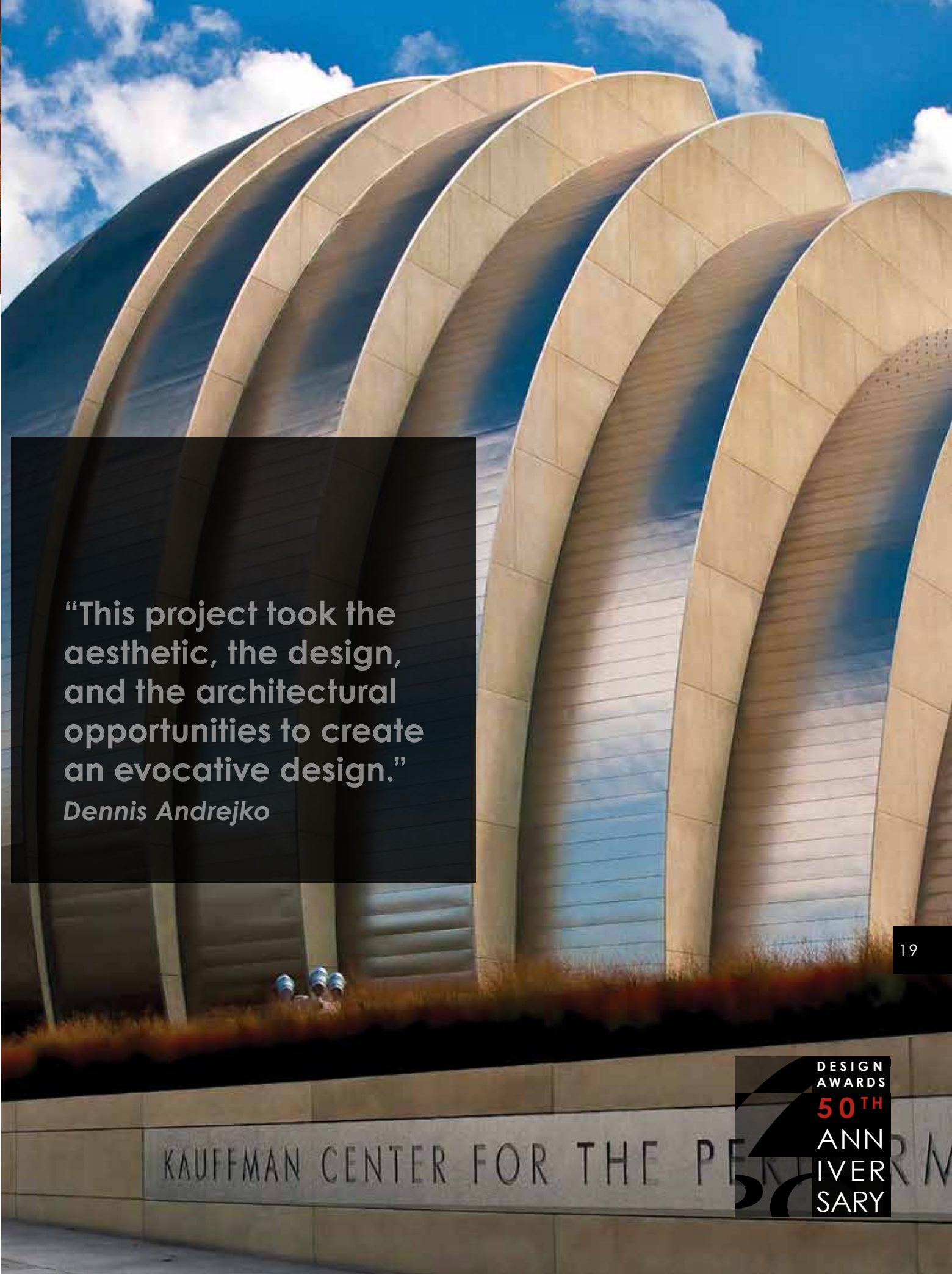
Approximately 89,000 ft<sup>2</sup> (8300 m<sup>2</sup>) of architectural precast concrete panels were cast as complex panels with little repetition. Most of the walls are straight but not parallel. The curved panels on the south facade were cast using one oversized form. Blockouts specific to each panel were placed into the form to achieve the desired shape and curvature.

Building information modeling (BIM) aided in designing the panels and served as the primary communication tool among the design architect in Massachusetts, the local design team, and all subcontractors.



- Owner: The Kauffman Center for the Performing Arts, Kansas City, Mo.
- Architect: Safdie Architects, Somerville, Mass., with BNIM Architects, Kansas City, Kans.
- Engineer: Arup, New York, N.Y., with Structural Engineering Associates, Kansas City, Mo.
- Contractor: JE Dunn Construction Co., Kansas City, Mo.
- Precaster: Enterprise Precast Concrete Inc., Omaha, Neb.
- Precast specialty engineer: Rupprecht Engineering, Omaha, Neb.
- Project size: 356,000 ft<sup>2</sup> (33,000 m<sup>2</sup>)
- Project cost: \$304 million
- Photos: Tim Hursley

Harry H. Edwards  
Industry Advancement Award  
and Best Theater  
**Kauffman Center**  
**for the Performing Arts**  
Kansas City, Mo.



“This project took the aesthetic, the design, and the architectural opportunities to create an evocative design.”

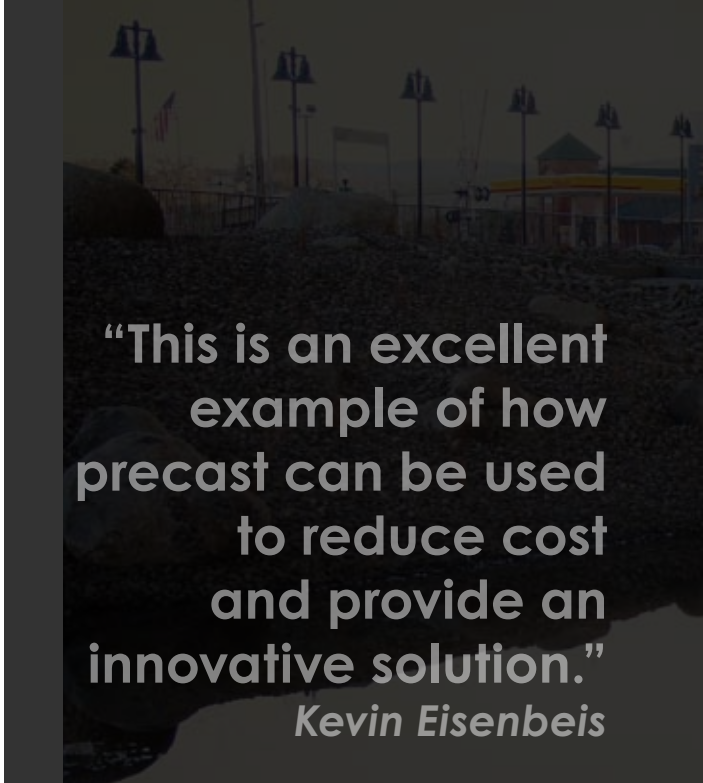
*Dennis Andrejko*

Replacing the Interstate 25 (I-25) Trinidad Viaduct in Colorado required spanning a variety of obstacles along a long, curved path. The resulting design used precast concrete tub girders and deck panels to span the Purgatoire River, three existing rail lines, a planned rail line, and four city streets.

The alignment required a variety of skewed substructure elements and reversing superelevated curves. The tub-girder design was selected after a second round of bids that was opened to alternative-structure designs. This design resulted in an \$8 million savings over the engineer's estimate. The design features four bridges over the river (two for the interstate mainline and two on/off-ramp bridges), two viaducts carrying the interstate over the city streets and rail lines, and two on/off ramps connecting into the viaducts.

The partial-depth, prestressed concrete deck panels played a key role in minimizing costs. The panels were used for both the interior panels and the deck overhangs, which varied by as much as 6 ft (1.8 m) between sections. They would have required costly formwork, especially for the deck portions within the curves. The overhang panels were supported over the exterior girder's two flanges while cantilevering to match the overhang length.

"Precast concrete overcame this project's challenges in a unique way," says Dennis Andrejko, a member of the special awards jury. "The fact that this project could use precast puts it at a stage where it can be competitive with other approaches that have been more traditionally used."



**"This is an excellent example of how precast can be used to reduce cost and provide an innovative solution."**  
*Kevin Eisenbeis*

- Owner: Colorado Department of Transportation, Pueblo, Colo.
- Engineer: Tsiouvaras Simmons Holderness Inc., Greenwood Village, Colo.
- Contractor: Lawrence Construction, Littleton, Colo.
- Precaster: Plum Creek Structures, Littleton, Colo.
- Bridge length: 855 ft (260 m)
- Project cost: \$79.5 million
- Photos: Tsiouvaras Simmons Holderness (TSH) Inc. 2012







Harry H. Edwards Industry Advancement Award  
and Best Bridge with a Main Span  
Greater than 150 Ft (46m)

## **I-25 Trinidad Viaduct Replacement**

Interstate 25 over the Purgatoire  
River, Trinidad, Colo.





“What really got our attention was precast’s help in achieving the Architectural 2030 goal for 2015.”  
*Jeff Carlson*



# Sustainable Design Award and Best University Project

## William H. Neukom Building at Stanford Law School

### Palo Alto, Calif.

Owner:	The Board of Trustees of the Leland Stanford Junior University, Palo Alto, Calif.	Precaster:	Walters and Wolf Precast, Fremont, Calif.
Architect:	Ennead Architects, New York, N.Y.	Project size:	65,000 ft <sup>2</sup> (6000 m <sup>2</sup> )
Engineer:	Degenkolb Engineers, Oakland, Calif.	Project cost:	\$40 million
Contractor:	Dome Construction, South San Francisco, Calif.	Photos:	Walters and Wolf

Prominently sited south of the existing law school complex at Stanford University, the 65,000 ft<sup>2</sup> (6000 m<sup>2</sup>) expansion creates a new focal point along the principal circulation route linking the campus's residential and academic precincts.

The building's appearance, designed to maintain continuity with the university's master plan, features architectural precast concrete panels for its cladding. The panels helped achieve the project's goals of minimizing the energy footprint with their thermal mass and of maximizing the building's aesthetic uniformity by combining limestone-clad and exposed-aggregate precast concrete panels.

"We selected this project due to its many sustainable aspects," says Jeff Carlson, a member of the special awards jury. "The precast concrete offered high thermal efficiency to help the building control heat gain and other sustainable-design concepts. What really got our attention was precast's help in achieving the Architectural 2030 goal for 2015."

The 153 panels feature pieces of limestone from the St. Maximin area in France, which were integrated into the large panels.

The stone pattern was created using surface stones and blockouts to fit the available stones. The projecting stones were then hand set into blockouts by the precaster.

To continue the limestone appearance on the interior, stone-clad precast concrete panels were installed on both the exterior and interior sides along the window system, with limestone hand set at the intersections.

"The jury was quite impressed with the level of finish and detail," says Dave Craddock, a member of the special awards jury. "The precast allowed the designers to express themselves artistically and achieve a high level of finish."



**“This project was an excellent example of an all–precast concrete solution.”**  
*Gil Heldenfels*

# All-Precast Concrete Solution CTA Beach Comfort Stations Biloxi, Miss.



Having seen seven comfort stations destroyed by Hurricane Katrina, officials at the Coast Transit Authority in Gulfport, Miss., leveraged federal funds to create four structures that improve on the existing amenities and resist storm-force winds and surge.

"This project was an excellent example of an all-precast concrete solution," says Gil Heldefels, a member of the special awards jury. "It helped meet challenging design requirements while providing a functional and attractive building for the beach-going public."

The new stations include handicapped-accessible restrooms, waiting areas, decks, bicycle racks, and covered areas for beach use (provided by the new height requirements).

The stations feature hip roofs with different pitches, which were cast with an integral terracotta color. The integrated roof battens feature an acid-etched finish to create a sugar-cube appearance on front and back surfaces.

The large number of molds needed to cast the 52 precast concrete elements resulted from each station's variety of shapes. These included hip roofs, archways with recessed trim, and wall panels with integral cornices and windows.

Upkeep will be minimal regardless of weather conditions. No painting is required, and no roofing or siding will need to be replaced if high winds occur, which often happens with other designs.

"Precast provided the durability and the resiliency to sustain this design concept in the future and help the owner meet its need for comfort stations while still withstanding all the environmental conditions," says Jeff Carlson, a member of the special awards jury.

Owner: Coast Transit Authority,  
Gulfport, Miss.

Architect: Eley Guild Hardy Architects,  
Biloxi, Miss.

Engineer: Simpkins and Costelli,  
Gulfport, Miss.

Contractor: Roy Anderson Corp,  
Gulfport, Miss.

Precaster: Gate Precast Co., Hillsboro,  
Tex.

Project size: 20,000 ft<sup>2</sup> (1900 m<sup>2</sup>)

Project cost: \$4.8 million (\$1.2 million per  
station)

Photos: Gate Precast Co.

# Building Awards **Jury**



Tom Brock, AIA, is the principal at Thomas Brock Architect in Chicago, Ill., and associate studio professor at Illinois Institute of Technology (IIT) in Chicago, where he has taught since 1999.

**Tom Brock** He teaches advanced and graduate-level design studios, thesis studios, and advanced technology courses. In 2011, he was appointed director of IIT's master of integrated building delivery degree program.

His firm, now in its 12th year, produces work for a variety of residential, institutional, and commercial clients.

His association with PCI began in 2008, when he submitted a proposal to conduct the first PCI Foundation Studio. The program promotes classes in building design using precast concrete as the principal material. PCI has since funded four studios at IIT and has expanded the program to five other universities. In 2010, he was named PCI's Young Educator of the Year.

Brock holds a bachelor's degree in architecture from the University of Cincinnati in Ohio and a master's degree in architecture from the University of Pennsylvania in Philadelphia.



David Craddock, Ontario Architects Association (OAA), Fellow of the Royal Architectural Institute of Canada, is a project manager with NORR Ltd. Architects Engineers Planners in Toronto, ON, Canada, with more than 33 years of experience as an architect. He is the 2012 president of the Royal Architectural Institute of Canada/Architectural Canada. In 2007, he served as president of OAA.

**David Craddock**

He is an expert in design, contract documents, and contract administration in the sectors of restoration, renovation, and adaptive reuse. Many of the restorations he has been involved with helped rehabilitate heritage buildings. He joined NORR in 2008 after serving as principal at his own firm for 27 years.

His experience includes a range of projects in categories that include commercial properties, educational facilities, sports and entertainment centers, residences, and renovations.

He holds a bachelor's degree in business administration from Pennsylvania State University in University Park and a bachelor's degree in architecture from the University of Toronto.



- Best Parking Structure (0–999 Cars): New York Botanical Garden
- Best Parking Structure (1000+ Cars): Ruppert Plaza Garage and Macombs Dam Rooftop Park
- Best Office Building (Low-Rise 1–3 Stories): PBS 39 Public Media and Education Center at SteelStacks
- Best Office Building (High-Rise 4+ Stories): Place de l'Escarpement
- Best Retail Facility: Paseo Altozano
- Best Mixed-Use Building: City Creek Center
- Best K–12 School: Exelon Gymnasium



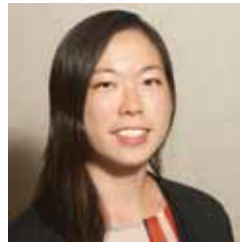
Debra Kunce, FAIA, LEED AP, is an associate with Schmidt Associates Inc. in Indianapolis, Ind., which provides planning, design, and construction services to the K-12, higher-education, and urban markets. She works in program management, serving clients through the

**Debra Kunce**

execution of large capital programs. She is also responsible for the strategic and daily coordination of the Schmidt Strategies division of the firm.

Kunce has been active in the American Institute of Architects for more than 16 years. She served as Ohio Valley regional director to the AIA national board from 2009 to 2011 before her election as 2012-2013 vice president. She also served as treasurer for the Indiana Architect Political Action Committee.

She earned bachelor's degrees in architecture and environmental design from Ball State University in Muncie, Ind. In 2011, she was recognized by Midwest Construction as one of the top 20 young professionals, and in 2010 she was awarded the Edward D. Pierre Award for civil leadership by AIA Indiana.



Wanda Lau, LEED AP, is an associate editor at Hanley Wood in Washington, D.C. She covers technology, products, and design for *Architect*, *Eco-Structure*, and *Architectural Lighting* magazines.

**Wanda Lau**

Her experience spans the fields of architecture, engineering, and media. She has worked as a building owner's representative, consulting building and construction engineer, and communications director.

She holds a bachelor's degree in civil engineering from Michigan State University in Lansing; a master's degree in building technology from the Massachusetts Institute of Technology in Cambridge, where she was a Presidential Fellow; and a master's degree in journalism from Syracuse University in Syracuse, N.Y., where she was a Newhouse Minority Scholar.



Bob Powers, AIA, LEED AP, is a senior associate with HOK Architects in St. Louis, Mo. He has more than 30 years of experience working on projects both in the United States and abroad. His work includes the design of healthcare, science, academic, museum, hotel, and commercial facilities across the country.

**Bob Powers**

In addition to his professional practice, Powers has frequently been a guest critic for the Architecture School at Washington University in St Louis.

Best Justice and Correctional Structure: U.S. Federal Courthouse

Best Government or Public Building: Perot Museum of Nature and Science

Best Military Project: 711th Human Performance Wing Complex

Best Religious Structure: Kansas City Temple

Best High-Tech or Laboratory Facility: Lorry I. Lokey Stem Cell Research Building at Stanford University

Best Hotel: The Crash Pad: An Uncommon Hostel

Best Data Center: SV5 Data Center

Best Custom Solution: Cityplace Uptown Station

# Best Parking Structure (0–999 Cars)

## New York Botanical Garden

### New York, N.Y.

To preserve valuable landscape at the New York Botanical Garden in the Bronx, designers located the new all-precaster concrete parking structure and intermodal facility just outside the facility's walls. The designers combined precast concrete with channel glass featuring a metal-trellis infill to create a vertical garden on all four sides.

A series of forked elements, symbolic of a branch, envelops the building, forming an overall enclosure and vertical trellised landscape. Interstices between the forked elements are covered with a wire trellis planted

with flowering vines. These design elements are accented by ribbed precast concrete panels that form the base of the building.

The structure features 1159 precast concrete components. Due to the unusual shape of the site, which features only one 90-degree corner along the perimeter, standard forms could be used only in a few locations.

Many of the precast concrete elements had to be modified at the ends to adjust to the irregular geometry and to produce an efficient layout that accommodated 825 parking spaces. A light well brings day-



**“We liked this entry because it exhibited a very strong, structural statement that will basically improve over time.”**

*Dave Craddock*



Owner:	The New York Botanical Garden, New York, N.Y.	Precast concrete specialty engineer:	Stango Consulting Engineers, Chesterton, Md.
Architect:	Ennead Architects, New York, N.Y.	PCI-certified erector:	Jemco Erectors, Shamong, N.J.
Architect of record and engineer:	Desman Associates, New York, N.Y.	Project size:	300,000 ft <sup>2</sup> (28,000 m <sup>2</sup> )
Construction manager:	E.W. Howell, New York, N.Y.	Project cost:	\$35 million
Precaster:	Unistress Corp., Pittsfield, Mass.	Photos:	Aislinn Weidele/Ennead Architects

light into the center of the building.

For the three-dimensional forked components, the precaster designed adjustable hinged steel forms to provide the appropriate mirrored shape for each leg.

"This parking structure had a nice balance of the structural aspect of precast concrete with a nice, delicate application that allowed the precast to become ornamental," says Debra Kunce, a member of the buildings awards jury. "This is a new way to look at precast on parking structures."



A variety of challenges arose in creating a parking structure that encompassed nearly 1 million ft<sup>2</sup> (93,000 m<sup>2</sup>), provided 1700 parking spaces on three supported levels, and was capped by a 7-acre (2.8 hectare) rooftop park.

The original concept called for a steel-frame structure, but the design-build team quickly recognized that an all-precaster concrete structural solution better met the design needs and construction schedule.

The rooftop park is a key reason for its unobtrusiveness, but it also created a number of challenges, including the need to design for heavier loads and to upgrade waterproofing and fire separation. The site is wedged between subway lines, Interstate 95, a bridge, and local street traffic. Despite these obstructions, construction continued even during the World Series.

Spandrels were custom designed to suggest a grove of trees. Embedded thin brick in four shades of green was laid into the forms. A contrasting gray was used for the spandrels to suggest tree trunks.

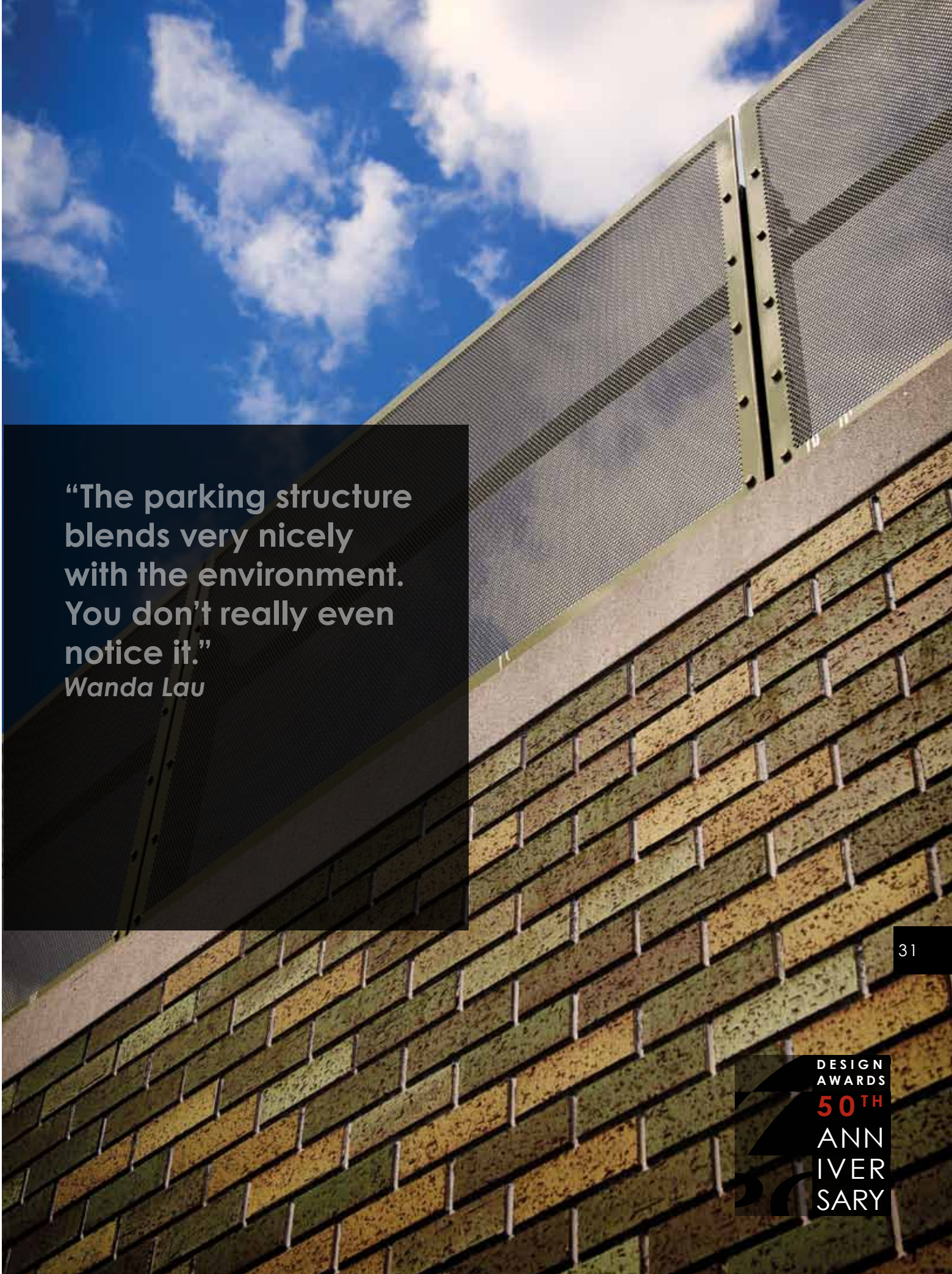
The spandrels were designed to cover only the ends of the tees, allowing thin cables to stretch from column to column. This maximized daylight that entered the building. The cables were posttensioned through the precast concrete columns.

"We were most impressed with the care taken to select the four colored bricks and the obvious integration of those into precast panels," says Dave Craddock, a member of the buildings awards jury. "It offers a graceful and elegant solution to the programming needs. It is very much a piece of art in the final installation."



Owner:	New York City Department of Parks and Recreation, New York, N.Y.
Architect:	Clarke Caton Hintz, Trenton, N.J.
Engineer:	Fay Spofford Thorndike, New York, N.Y.
Contractor:	Prismatic/Hunter Roberts, Fairfield, N.J.
Precaster:	Unistress, Pittsfield, Mass.
Precast concrete specialty engineer:	Hoch Associates, Fort Wayne, Ind.
Project size:	914,760 ft <sup>2</sup> (84,980 m <sup>2</sup> )
Project cost:	\$157 million
Photos:	Jeffrey Totaro for Clarke Caton Hintz Architects

# Best Parking Structure (1000+ Cars) Ruppert Plaza Garage and Macombs Dam Rooftop Park New York, N.Y.



“The parking structure  
blends very nicely  
with the environment.  
You don’t really even  
notice it.”

*Wanda Lau*

# Best Office Building: Low-Rise (1–3 Stories)

## PBS 39 Public Media and Education Center at SteelStacks

### Bethlehem, Pa.

Locating this new broadcast facility and office building on the site of a former steel mill provided a strong symbol for the residents of Bethlehem, Pa.

“This was a relatively simple program that could easily have been just a box,” says Tom Brock, a member of the buildings awards jury. “They were very clever in how they articulated the form, breaking it up so it related to its surroundings in a better way than a box ever could. The way precast played into that was the cleverest part.”

The interior sides of the precast concrete, along with the building’s steel frame, were designed to be left exposed. Backlit graphic panels accent the space.

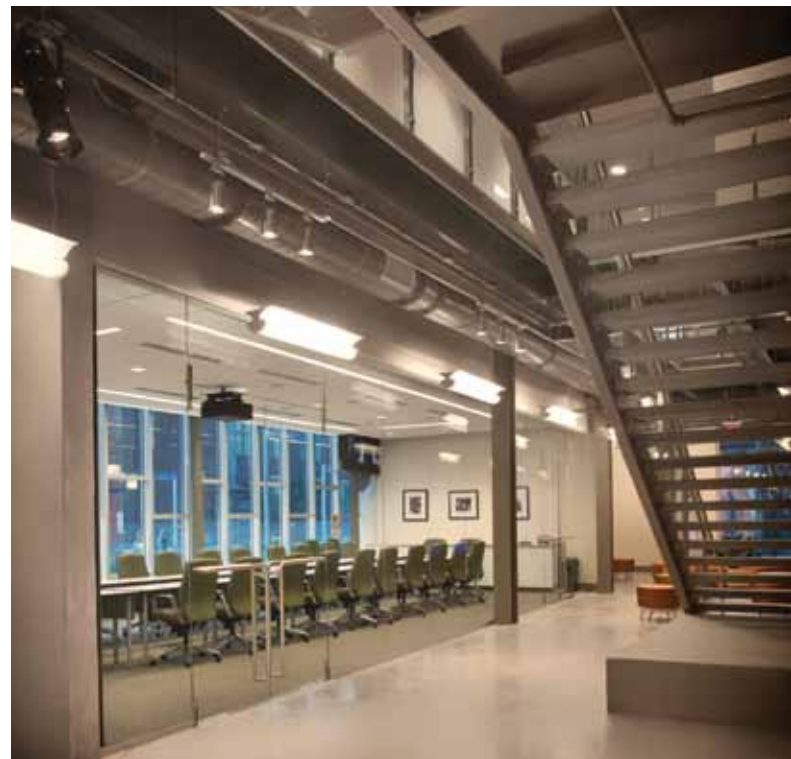
Specifying precast concrete allowed the designers to provide strong aesthetics while remaining within the budget required for a

nonprofit media organization. Thirty-five load-bearing, insulated precast concrete composite sandwich panels were used for the walls of the broadcast studios, while 57 panels were used to construct the nonstudio exterior walls.

The insulated panels provide continuous insulation and high thermal mass while offering durability, quick erection, and low maintenance.

The composite construction and mass of the precast concrete panels also helped achieve the required sound transmittance reduction needed for the broadcast studios.

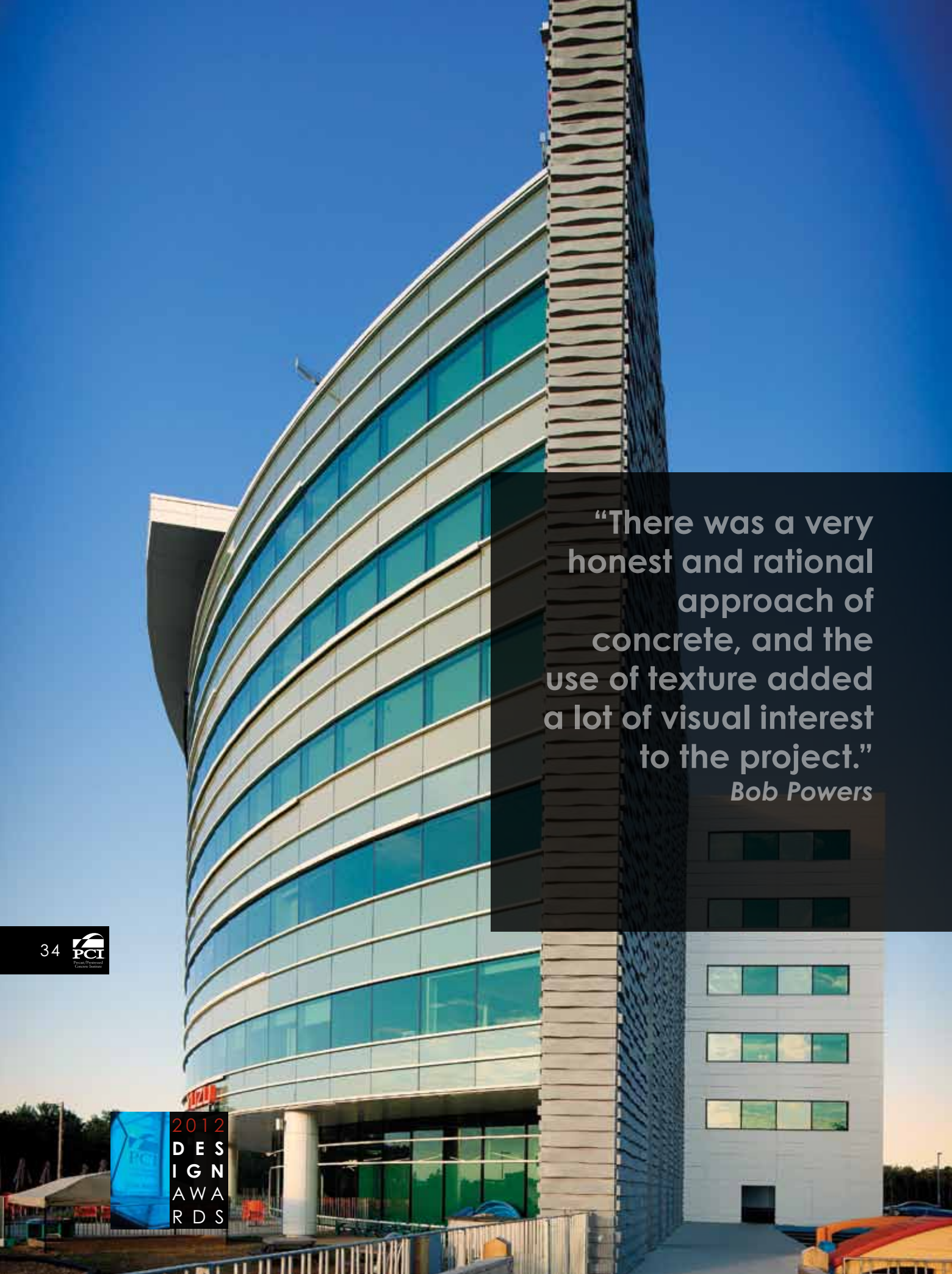
“We especially liked the building’s sophisticated use of finishes,” says Wanda Lau, a member of the buildings awards jury. “The designer juxtaposed the precast against other finishes and, by doing so, showed that precast can be used as a very elegant finish material.”



Owner: PBS 39, Bethlehem, Pa.  
Architect: URS Corp., Columbus, Ohio  
Structural and electrical engineer: URS Corp., Columbus, Ohio  
Fire protection and mechanical engineer: Brinjac Engineering, Allentown, Pa.

Contractor: Alvin H. Butz Inc., Allentown, Pa.  
Precaster: High Concrete Group LLC, Denver, Pa.  
Project size: 28,488 ft<sup>2</sup> (26,800 m<sup>2</sup>)  
Project cost: \$8.8 million  
Photos: Maguirephoto.com

**“They were very clever in how they articulated the form, breaking it up so it related to its surroundings in a better way.”**  
*Tom Brock*



“There was a very honest and rational approach of concrete, and the use of texture added a lot of visual interest to the project.”  
*Bob Powers*

# Best Office Building: High-Rise (4+ Stories)

## Place de l'Escarpement

### Quebec, QC, Canada



Employee satisfaction was a key goal for the owners of this commercial building in a newly developing area of Quebec. So were achieving LEED-NC gold certification and a strong, aesthetically pleasing appearance.

The designers worked closely with the pre-caster, using building information management software to devise the shapes and depths to create the undulating pattern. The software allowed the architect, engineer, and pre-caster to make adjustments as needed.

An artist collaborated with the designers and pre-caster to achieve the best look for the waves. The shapes were created with formliners, and the panels were cast with large joints to create the final look. Gray concrete with black pigment and a light sandblast added contrasting shades.

"What we all liked was the very strong planar qualities of the precast concrete," says Bob Powers, a member of the buildings awards jury. "It provided a nice contrast to the curving glass forms."

The precast concrete panels also helped achieve LEED certification, thanks to their high thermal mass, local manufacture, and recyclability.

The project won the ENERGIA award from the Institute of Urban Development and became the first commercial building in Quebec City, QC, Canada, to be certified LEED-NC gold. The building was designed to reduce energy consumption by 50% in relation to the national code of energy for commercial buildings.

"The program aimed from the beginning to make a great working environment," says Dave Craddock, a member of the buildings awards jury. "From a visual and artistic point of view, this building is a great success."

Owner: Immostar, Quebec, QC, Canada  
Architect: Pierre Martin Architecte, Quebec, QC, Canada  
Engineer: Cime Consultants, Quebec, QC, Canada  
Contractor: Ogesco Construction, Quebec, QC, Canada

Artist: Florent Cousineau, Quebec, QC, Canada  
Precaster: Bétons Préfabriqués Du Lac, Alma, QC, Canada  
Project size: 295,600 ft<sup>2</sup> (27,462 m<sup>2</sup>)  
Project cost: \$35 million  
Photos: BPDFL