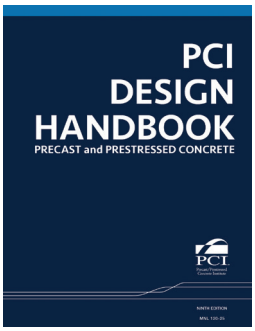
Ninth edition of *PCI Design Handbook* now available

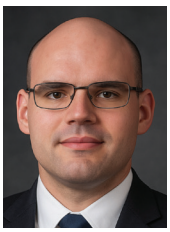


The ninth edition of the *PCI Design Handbook: Precast and Prestressed Concrete* is available for purchase from the PCI bookstore. This ninth edition design guide for precast and prestressed concrete provides design procedures, new and updated numerical examples, and both new and updated design aids. It provides designers with comprehensive procedures for code-compliant and efficient design of both architectural and structural precast and precast, prestressed concrete products. To purchase the new *PCI Design Handbook*, which is available in hard copy and ebook format, go to https://www.pci.org/bookstore.

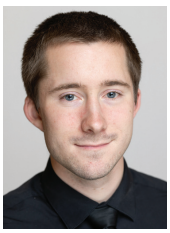
PCI Jenny and Mertz research fellowships announced for 2025

The PCI Research and Development Council awarded four Daniel P. Jenny Research Fellowships and one Dennis R. Mertz Bridge Research Fellowship in the fall of 2025. The students who were awarded Jenny Fellowships are Mehdi Faeli of Northern Arizona University in Flagstaff; Dalin Knowles of Brigham Young University in Provo, Utah; Jesse Porter of Ohio State University in Columbus; and a to-be-named student from the University of Louisville in Louisville, Ky. Edward Zarmbinski of St. Martin's University in Lacey, Wash., received the Dennis R. Mertz Bridge Fellowship. The programs connect professors and students with industry experts to advance research in precast concrete.


Mehdi Faeli


Jesse Porter


Dalin Knowles


Edward Zarmbinski

3D Scanning to Verify Pre-pour and Post-pour Precast Element Geometry and Hardware Locations

University: Northern Arizona University
Student: Mehdi Faeli
Faculty advisor: Benjamin Z. Dymond
Supporting producers: Tpac and EnCon United
Supporting body: PCI Innovation Committee

The application for the fellowship says this project will "investigate the feasibility of conducting 3D scans to verify pre- and post-pour precast element geometry and hardware locations."

In his student statement, Faeli writes, "I am interested in the proposed Jenny Fellowship project related to 3D scanning of precast elements because this tool can provide faster inspection and higher quality control, which is very helpful to the precast concrete industry. Using this technology can provide a new method of documentation for future references. As a PhD student interested in new technologies, I believe we can significantly enhance many facets of 3D scanning precast elements to impact the market in the U.S. industry."

Shifting the Focus to Eccentric Loading in Concrete Corbel Design

University: Brigham Young University
Student: Dalin Knowles
Faculty advisor: Taylor Sorensen
Supporting producer: Contech Engineered Solutions LLC

In his application, Knowles writes, "The objective of this research is to experimentally investigate how transverse eccentricity affects the strength, stiffness, and failure mode of reinforced concrete corbels. The project will also assess the influence of chamfered and nonchamfered bearing surfaces and key geometric variables (corbel width and span) and will generate critical data to validate whether concrete corbel capacity diminishes parabolically with increased transverse eccentricity. Ultimately, the findings will support the development of strut-and-tie-based interpretations and inform future design recommendations for eccentrically loaded corbels."

Capacity of Welded-Bar Design in Reinforced Concrete Corbel

University: Ohio State University
Student: Jesse Porter
Faculty advisors: Carolin Fink and Natassia Brenkus
Supporting producer: Metromont
Additional support: S. K. Ghosh Associates LLC

In his application, Porter writes, "This research program will evaluate the weldability, strength, and overall structural behavior of cross-welded anchorage commonly used in reinforced concrete corbels. The goal of this project is to establish that the weld detailed in R16.5.6.3b of ACI 318-25 can develop the strength specified in the code design provision, and to develop design parameters for this weld detail for inclusion in AWS D1.4."

Reducing Minimum Concrete Strength Requirement for Prestressing Force Release in Precast/Prestressed Concrete

University: University of Louisville
Student: to be selected
Faculty advisor: Young Hoon Kim
Supporting producers: Coreslab Structures (INDIANAPOLIS) Inc., Fabcon, Prestress Services Industries LLC, Thomson Prestress, and Wells
Additional support: PCI Central Region

The application for this fellowship says, "The primary objective is to reevaluate the minimum concrete strength for releasing prestress forces in concrete members using Type III and Type 1L cement. The goal is to facilitate prestress release, aligning with standard precast production cycles. The research program includes 1) parametric study using the feasible domain constructed by five fundamental inequality equations; 2) holistic review on the extreme concrete fiber stresses, prestressing forces, prestress losses, and transfer and development length (bond performance) in analytical and experimental program; 3) evaluate the level of lowering concrete stresses and its impact on the experimental program to determine the safe margin of lowering stresses. The outcomes can be used to add additional data to determine the required compressive strength limit to release the prestressing force."

Life-cycle Cost Assessment for Pretensioned Concrete Bridges

University: Saint Martin's University
Student: Edward Zarmbinski
Faculty advisor: Jill Walsh
Supporting producers: Concrete Technology Corp.
Additional support: T. Y. Lin and Washington State Department of Transportation

In his student statement, Zarmbinski writes, "Our research comparing the life-cycle cost of pretensioned superstructures versus reinforced concrete or steel is especially interesting because it offers insight into the longevity and sustainability of these types of structures. It supports more informed decision-making to meet future infrastructure needs. Additionally, as a beginner bridge inspector, I find this topic engaging because it highlights how the work done by inspectors contributes to both maintaining bridges and informing designers."

2025/26 Big Beam Contest call for entries

The PCI Student Education Committee is inviting entries from students to participate in the Engineering Student Design (Big Beam) Competition for the 2025/26 academic year. Each student team must work with a PCI producer member to build a precast, prestressed concrete beam that is 20 ft long. The beams will be tested and prizes awarded for best performance in the stated areas. Students must discuss both the structural design and the concrete mixture proportions for the beam. For more information, visit https://www.pci.org/BigBeam. Interest forms must be submitted by May 26, 2026, and final reports are due to PCI by June 5, 2026. The winning team will be recognized at the 2027 PCI Convention at The Precast Show in Salt Lake City, Utah.

2026 T. Henry Clark Award call for nominations

Nominations for the T. Henry Clark Award, to be presented at the 2026 PCI Committee Days Conference, September 9–12, in San Antonio, Tex., should be submitted to qualityprograms@pci.org by June 1, 2026. The T. Henry Clark Award nomination form is available at https://www.pci.org/PCI/About/Awards/Clark.

The T. Henry Clark Award was established to recognize an individual, group of individuals, or firm that has delivered a resource that improves or enhances the quality of precast concrete products or processes. T. Henry Clark believed in quality and quality processes, and this award is to recognize those who create or promote quality in a way that would have made him proud.

For more information, contact Mike Wolff, the PCI Quality Activities Council chair, at mike@basin-precast.com or Bartlomiej Krol, PCI managing director of quality programs, at bkrol@pci.org.

Northern Arizona University captures first place in Big Beam Contest

Northern Arizona University has won the 2025 PCI Engineering Student Design Competition, also known as the Big Beam Contest, a nationwide challenge that encourages college students to demonstrate excellence in structural design, teamwork, and innovation using precast, prestressed concrete.

The winning Northern Arizona University team was led by faculty advisor Ben Dymond with support from PCI producer TPAC. Team members included Payton Correia, Zachary Fukumoto, Isabella Velasco, and Caitlin Yazzie. "The PCI Big Beam Competition has provided me with an invaluable, hands-on introduction to civil engineering that I would not have gained elsewhere," says Yazzie. "I'm grateful for this opportunity. The skills and insights I've gained will have a lasting impact on both my academic and professional journey."

The national competition, which is now in its 25th year, teaches college students important structural engineering skills in an applied learning environment.

Northern Arizona University won the 2025 PCI Engineering Student Design Competition. From left are team members Caitlin Yazzie, Isabella Velasco, and Payton Correia. Team member Zachary Fukumoto is not pictured.

Teams of students and a faculty advisor design, build, and test a 20 ft (6 m), precast, prestressed concrete beam. Local PCI-certified precast concrete producers mentor and fabricate the beams for the teams. Entries are judged on a variety of criteria, including the beam's load-resisting performance in tests that simulate real-life conditions structural building and infrastructure components must endure to ensure life safety, as well as the quality of their analysis and reports, and a video overview of their project.

The winning team will be recognized in February at the 2026 PCI Convention at The Precast Show in Kansas City, Mo.

ALP Supply and *Aspire* magazine sponsored the 2025 Big Beam competition. Cash prizes of up to $3000 per team were awarded to the top performers in efficient design, highest load capacity, and other categories.

First place: Northern Arizona University; Flagstaff, Ariz.

Faculty advisor: Ben Dymond
PCI producer: Tpac and EnCon United; Phoenix, Ariz.
Student team: Payton Correia, Zachary Fukumoto, Isabella Velasco, and Caitlin Yazzie
Award: $2000

Keith Kaufman Award for Best Report and Best Video: North Carolina State University; Raleigh, N.C.

Faculty advisors: Gregory Lucier
PCI producer: Tindal Corp.; Spartanburg, S.C.
Student team: Paul Acuna, Anindya Samya Saha, and Khaled Al-Sakaji
Award: $500 for each award

The remaining finishers are listed in alphabetical order. All teams received awards of $1250 and $1500.

California State University, Sacramento; Sacramento, Calif.

Faculty advisor: Eric Matsumoto
PCI producer: Clark Pacific; Woodland, Calif.
Student team: Kaitlin Ballisty, Joshua Mentukh, and Dag Seyoum

University of Western Ontario; Waterloo, ON, Canada

Faculty advisor: Maged Youssef

2026 Sidney Freedman Craftsmanship Award call for entries

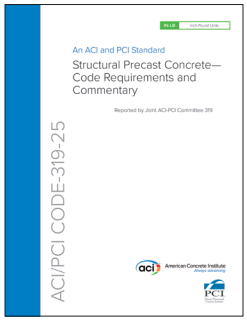
PCI is accepting entries for the 2026 Sidney Freedman Craftsmanship Award. Launched in 2012, the award recognizes PCI-certified plants for excellence in manufacturing and craftsmanship of architectural precast or glass-fiber-reinforced concrete structures and individual components.

Any kind, size, or type of structure and/or element may be entered. Judging is based on success in overcoming obstacles to production, solutions to formwork or finishing challenges, and quality of individual components. Therefore, entries should include source documents, shop drawings, production photos as well as finished project photos to fully demonstrate the complex solutions implemented for the project.

For more information, visit http://www.pci.org/SFCA. The deadline for all entries is June 1, 2026.

PCI producer: Stubbe's Precast Construction Ltd.; Harley, ON, Canada
Student team: Malcolm Ahsan, Hoor Almohamad, Isak Hirsch, Laura Kalab, Timothy Kerkhoff, Sourav Roy, and Owen Van Voorst

ACI/PCI 319 code recognized with Leslie D. Martin award



Members of the Design Standard Committee, which authored ACI/PCI 319 code *Structural Precast Concrete—Code Requirements and Commentary*, received the 2025 Leslie D. Martin Certificate of Merit Award, which recognizes a PCI-published document judged to be technically outstanding and worthy of special commendation.

The PCI Design Standard Committee was established to develop a precast concrete code, and the committee played an integral part in the development of ACI/PCI 319. Members were committee chair Ned Cleland, vice chair Paul C. Arthur, Suzanne Aultman, Sergio Breña, Harry Gleich, Matthew Gombeda, Mohammad Habib, Jon Mohle, Carin I. Roberts-Wollmann, Andrea Schokker, Perry Schram, Roksana Taghizadeh Daloui, and Heidi R. Ziemann. The group met a daunting schedule to create content that had not been previously addressed in a concrete code. Members also collaborated with the American Concrete Institute to create this landmark document.

ACI/PCI 319 provides minimum requirements for the materials, design, and detailing of structural precast concrete buildings and, where applicable, nonbuilding structures. This code was developed using a consensus process, and it addresses plant-produced and site-produced structural precast concrete that contains nonprestressed reinforcement, pretensioned reinforcement, or both.

"The Design Standard Committee was instrumental in the development of ACI/PCI code 319," says Rich Miller, PCI's Technical Activities Council chair. "Their diligence and commitment has resulted in an excellent document that will serve the industry well and which accomplished the strategic goal set by the PCI Board of Directors."

The Leslie D. Martin Certificate of Merit Award was established in 2006. Martin pioneered the development of technical information for plant-cast, precast concrete, and served as the technical editor of the first three editions of the *PCI Design Handbook*: *Precast and Prestressed Concrete*. The PCI Technical Activities Council presents the Leslie D. Martin Certificate of Merit Award to a PCI-published document judged to be technically outstanding and most worthy of special commendation for its merit as a contribution to the advancement of precast and prestressed concrete. The award was presented in September at the 2025 PCI Committee Days in Rosemont, Ill.

Taghizadeh Daloui 2025 recipient of Speyer award


Roksana Taghizadeh Daloui

Roksana Taghizadeh Daloui is the recipient of the 2025 Irwin J. Speyer Young Professional Engineer Award, recognizing a PCI member who serves on at least one PCI committee and is a registered professional engineer or structural engineer for less than 15 years.

Taghizadeh Daloui is currently a principal with AG&E in Austin, Tex., where she manages a team of 28 engineers and drafters. Throughout her career, she has gained extensive experience across various areas, including engineering and design, production, marketing, erection, and sales.

She has been involved in the precast and precast, prestressed concrete industry since 2007 and has been a member of PCI since 2013. In 2015, she graduated from the Leadership PCI (LPCI) program and joined several PCI committees with the goal of sharing her knowledge while also gaining experience and learning from others. She is the founder and past chair of the PCI Industry Diversity Committee, and she is currently a member of the Data Center Task Group, as well as the LPCI Alumni, Design Standard, Industry Handbook, and Professional Member Committees. She has also participated in the PCI Foundation and local PCI Foundation studios, and she served as a PCI Design Awards judge in 2019 and 2020. When Taghizadeh Daloui was named a PCI Fellow in 2024, she became the youngest fellow in PCI history.

Norman L. Scott Professional Engineer Award call for nominations

The Norman L. Scott Professional Engineer Award honors the legacy of Norman L. Scott by recognizing professional engineers who have made significant contributions to PCI, the American Concrete Institute, the precast concrete industry, and the engineering profession at large.

The award will be presented at the 2026 PCI Committee Days Conference, September 9–12, in San Antonio, Tex. Complete award details and the official nomination form are available at http://pci.org/PCI/About/Awards/Norman_L_Scott. Nominations must be submitted by June 1, 2026.

The Irwin J. Speyer Award honors the legacy of Irwin J. Speyer by recognizing engineers who have made significant contributions to PCI during their early careers, and who demonstrate their intent to continue serving the precast concrete industry. The award was presented in September at the 2025 PCI Committee Days in Rosemont, Ill.

2025 Norman L. Scott Professional Engineer Award goes to Seshappa

Venkatesh Seshappa

Venkatesh Seshappa is the 2025 recipient of the Norman L. Scott Professional Engineer Award, which recognizes a professional engineer who has made significant contributions to PCI, the precast concrete industry, and the engineering community.

Early in his career, Seshappa worked at consulting engineering firms, where he gained valuable knowledge in both building and bridge design using cast-in-place concrete, precast concrete, steel, and timber materials. During this period, he worked with local precast concrete producers to provide shop drawings and stressing calculations. After a dozen years working with Thermomass (now Leviat), Seshappa joined GATE Precast (now a part of Wells) as an engineering manager. During his career, Seshappa has led research projects and testing of new products to provide essential technical data. He has also managed engineering departments and advanced concrete product testing. He holds multiple U.S. patents, including one for insulated precast concrete wall panel lifting without thermal bridging and another for insulated wall panel wythe connections.

Seshappa joined PCI in 2008 and has served on the Precast Insulated Wall Panels, FRP Composites, and Blast Resistance and Structural Integrity Committees and chaired the Precast Insulated Wall Panels Committee for six years. He is also a member of the Technical Activities Council.

Seshappa was presented with the award in September at the 2025 PCI Committee Days in Rosemont, Ill.

Martin receives PCI Marketing Individual Achievement Award

Jane Martin

Jane Martin is the recipient of the 2025 PCI Marketing Individual Achievement Award. The PCI Marketing Individual Achievement Award is given to visionaries and creators who shape the marketing of the precast concrete industry. This award celebrates those whose tireless dedication and novel contributions have positively contributed to our industry's marketing evolution.

Martin is the director of marketing for Wells, where she leads a small team dedicated to producing high-impact campaigns, driving social media strategy, supporting sales with dynamic proposals and presentations, and overseeing professional-quality video and photography efforts.

Martin is widely recognized for being a mentor and trainer for other marketers and an advocate for women in the precast concrete industry. Among her many accomplishments, she has elevated the perception of the precast concrete industry through her work on the annual PCI Design Awards. Since she started with GATE Precast, she has been involved in the submission of more than 100 award-winning projects.

During her more than 25-year-long career in the precast concrete industry, Martin has been active in numerous PCI committees, councils, and initiatives. She served as chair of the Ascent Advisory Committee from 2014 to 2021 and was chair of the Marketing Council from 2021 to 2024. As chair of the Marketing Subcommittee on Sustainability, Martin continues to lead efforts to educate and promote sustainable practices in the industry. Her contributions align with the core values of PCI and have made a lasting, positive impact on the future of precast concrete. Her dedication was previously recognized as a PCI Fellow in 2024.

Martin was presented with the award in September at the 2025 PCI Committee Days in Rosemont, Ill.

Irwin J. Speyer Young Professional Engineer Award call for nominations

The Irwin J. Speyer Young Professional Engineer Award honors the legacy of Irwin J. Speyer by recognizing young professional engineers who have made significant contributions to PCI during their early careers and who demonstrate their intent to continue serving the precast concrete industry as Speyer did during his career. The award will be presented at the 2026 PCI Committee Days Conference, September 9–12, in San Antonio, Tex.

Complete award details and the official nomination form are available at http://www.pci.org/PCI/About/Awards/Speyer-Award. Nominations must be submitted by June 1, 2026.

Finfrock takes home PCI Marketing Company Achievement Award

Finfrock of Apopka, Fla., is the recipient of the 2025 PCI Marketing Company Achievement Award. The PCI Marketing Company Achievement Award celebrates outstanding achievements and innovations transforming the marketing sector in the precast concrete industry. This award recognizes companies that exemplify excellence in year-over-year marketing strategies and campaign-focused initiatives, elevating the industry's standards and driving meaningful change.

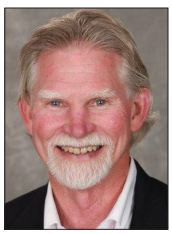
Finfrock, which has been a part of the precast concrete industry for more than 50 years, specializes in being the single source for precast concrete building solutions, guiding projects from initial architectural planning to final building acceptance. Finfrock is an industry leader in the marketing and promotion of precast concrete as a safe, durable, sustainable, and cost-effective building material. In recent years, Finfrock's marketing team has elevated the company's brand visibility, industry presence, and community impact through strategic campaigns, partnerships, and public relations initiatives.

Finfrock frequently participates in industry events, trade shows, and thought leadership opportunities. The company has received multiple exhibitor awards at the Associated Builders and Contractors of Central Florida's Construction Expo, and its innovative approaches to precast concrete design, modular construction, and multifamily housing solutions have been featured in local, national, and industry media, including *PCI Journal*.

In the construction industry, Finfrock is a digital and social media influencer of note. One of its Instagram reels had more than 140,000 views, and a Finfrock viral social media video in 2025 creatively showcased precast concrete's strength through Super Bowl predictions. In addition, the company's website includes a visually compelling services page that guides clients through the design-manufacture-construct process. Finfrock uses its marketing know-how to grow its business while also extending its influence for the good of PCI, the precast concrete industry, and local communities.

Frinfrock was presented with the award in September at the 2025 PCI Committee Days in Rosemont, Ill.

Knowles named 2025 T. Henry Clark Award recipient



Edward Knowles

Edward S. Knowles was presented with the 2025 T. Henry Clark Award in September at PCI's awards luncheon during PCI Committee Days in Rosemont, Ill. The T. Henry Clark Award is given to an individual, group of individuals, or a firm that has delivered a resource that improves or enhances the quality of precast and precast, prestressed concrete products or processes. T. Henry Clark was an advocate for quality and quality processes. This award recognizes those who create or promote quality in a way that would have made Clark proud.

Knowles joined Lafayette Manufacturing Inc. as a design engineer in 1979. He rose through the ranks to become vice president. Then, in 1994, Walters & Wolf acquired Lafayette Manufacturing and renamed the company Walters & Wolf Precast. Knowles remained as vice president for three decades until his retirement in 2023. During his distinguished career, Knowles helped develop and promote glass-fiber-reinforced concrete (GFRC) panels and the technology of GFRC panel design, the steel-stud framed panel system.

An active PCI member since 1983, Knowles has made numerous contributions to the PCI body of knowledge, plant certification, and industry research. He served as zone 1 director on the PCI Board of Directors for four years and is the past president of the PCI West chapter. Currently, he chairs the Glass Fiber Reinforced Concrete Panels Committee; he has also served on the Architectural Certification Subcommittee, the Plant Certification Committee, and the Architectural Precast Concrete Committee.

Knowles has been a major contributor for several PCI publications, including *Architectural Precast Concrete, Recommended Practice for Glass Fiber Reinforced Concrete Panels, Manual for Quality Control for Plants and Production of Glass Fiber Reinforced Concrete Products*, and *Specification for Glass-Fiber-Reinforced Concrete Panels*. He has also authored several articles on GFRC and architectural precast concrete. Knowles was named a PCI Fellow in 2015 and received the Mario J. Bertolini Leadership and Innovation Award in 2021.

Exceptional Precast Practices particpants recognized at Committee Days

Nine PCI-certified member plants were recognized for their commitment to continuous quality improvement through participation in PCI's Exceptional Precast Practices (EPP) program in September at PCI's awards luncheon during PCI Committee Days in Rosemont, Ill.

The EPP program is a voluntary, continuous quality improvement tool developed specifically for the precast concrete industry by PCI's Quality Enhancement Committee. The program offers both a road map for improvement efforts and milestones for measuring progress.

Here is how this voluntary program works: a plant fills out the self-assessment survey for each of the seven sections/modules: productivity, personnel, safety, field operations,

sales and marketing, sustainable plant, and concrete. This process allows the plant not only to benchmark where they are today but also to review programs of proven worth that other PCI plants find valuable.

That process allows plant personnel to decide on a road map for the future. If this process is managed well, that road map becomes the goals and programs for improvement and it provides the basis for accountability for achievement. The plant's benchmark score allows plant personnel to actually measure progress from year to year. There is no minimum score required. This is not a contest. Scores will not be published. There is no overall winner. All participating plants are provided with an annual certificate of participation and are recognized at the PCI Committee Days.

The 2025 participating plants were Basin Precast, Inc., Sidney, Mont.; Clark Pacific–Woodland, Woodland, Calif.; International Concrete Products Inc., Germantown, Wis.; International Precast Solutions LLC, River Rouge, Mich.; Mid-States Concrete Industries LLC, South Beloit, Ill.; Nitterhouse Concrete Products Inc., Chambersburg, Pa.; Northeast Prestressed Products LLC, Pottsville, Pa.; Prestressed Casting Co.–Ozark plant, Ozark, Mo.; Prestressed Casting Co.–Springfield plant, Springfield, Mo.; and Rinker Materials Billings, Billings, Mont.

Tindall courthouse project wins Sidney Freedman Craftsmanship Award

The Spartanburg County Courthouse in Spartanburg, S.C., has been honored with PCI's 2025 Sidney Freedman Craftsmanship Award. The annual award recognizes PCI-certified plants for unique solutions and excellence in manufacturing and craftsmanship of architectural precast concrete and glass-fiber-reinforced concrete (GFRC) structures and individual components.

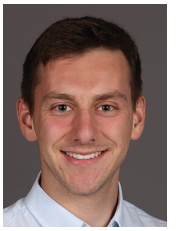
Judges recognized Tindall Corp.–South Carolina Division for its work on the new seven-story, approximately 340,000 ft^2 (32,000 m^2) Spartanburg County Courthouse, which features an architectural precast concrete facade designed to resemble marble. The project used more than 1000 precast concrete components, including columns with Romanesque-patterned bases and capitals; five styles of cornices with monolithic corner cornice pieces that range in size from 3 ft 0 in. to 10 ft 10.5 in. (1 to 3 m) and weigh approximately 25,000 to 40,000 lb (11,400 to 18,100 kg) each; and architectural wall panels with projecting window surrounds averaging 12 ft (3.7 m) in width and weighing approximately 15,000 lb (6800 kg) each.

Tindall Corp., a company with deep roots in the Spartanburg community, was a major contributor to the success of this project. Tindall's engineering team was responsible for the precast concrete design, drafting, details, connection technology, product configuration, and layout. To achieve the intricate design details required for this project, the production facility constructed 76 different molds. The production processes were supported by PCI associate members Architectural Polymers, which supplied the polymer formliner, and Leviat, which provided galvanized inserts and lining inserts.

The award is named after Sidney Freedman, retired PCI director of architectural systems, who was a leading voice in precast concrete architectural design for more than 43 years with the organization.

Korn award goes to paper on shear wall connections


Baha'a Al-Khateeb


Christopher Garcia


Mark P. Manning


Jon Mohle


Yahya C. Kurama

The 2025 Martin P. Korn Award was presented to Baha'a Al-Khateeb, Christopher Garcia, Mark P. Manning, Jon Mohle, and Yahya C. Kurama for their paper "Seismic Precast Concrete Shear Walls with Short-Grouted Ductile Reinforcing Bar Connections," published in the January–February 2025 issue of *PCI Journal*. The Martin P. Korn Award is given to the best design or research paper appearing in *PCI Journal* during a single year.

This paper presents results from the experimental testing of three precast concrete shear wall specimens that used nonproprietary, short-grouted corrugated steel straight duct connections for ductile energy-dissipating reinforcing bars crossing horizontal joints. The specimens outperformed a previously tested precast concrete wall in terms of drift capacity and energy dissipation; however, only one wall satisfied the maximum lateral strength loss limit at the validation-level drift specified by ACI 550.6-19, *Acceptance Criteria for Special Unbonded Post-Tensioned Precast Structural Walls Based on Validation Testing and Commentary*. The results demonstrate that nonproprietary, short-grouted connectors using materials readily available in the construction industry can achieve ductile behavior of special precast concrete shear walls for use in high-seismic regions. This research was conducted with funding from the Charles Pankow Foundation, PCI, Clark Pacific, and

Metromont Corp., with test specimens donated by Clark Pacific and Metromont.

Al-Khateeb is a PhD candidate in the Department of Civil and Environmental Engineering and Earth Sciences at the University of Notre Dame in Notre Dame, Ind.; Garcia is a former MS student in the Department of Civil and Environmental Engineering and Earth Sciences at the University of Notre Dame.; Manning is a former research scientist in the Department of Civil and Environmental Engineering and Earth Sciences at the University of Notre Dame; Mohle is a senior product and market manager at Clark Pacific in Sacramento, Calif.; and Kurama is a professor in the Department of Civil and Environmental Engineering and Earth Sciences at the University of Notre Dame. They were presented with the award in September at the 2025 PCI Committee Days in Rosemont, Ill.

Paper on hybrid beam-column connections wins Lyman award


Mustafa Mahamid


Ines Torra-Bilal


Eray Baran

Mustafa Mahamid, Ines Torra-Bilal, and Eray Baran received the 2025 Robert J. Lyman Award to for their paper "An Investigation and Design of Novel Moment-Resisting Beam-Column Connections for Precast Concrete Construction." The paper was published in the July–August 2024 issue of *PCI Journal*. The Robert J. Lyman Award recognizes papers dealing with construction, production, and/or erection of precast concrete.

This study investigated the behavior of hybrid beam-column connections with numerous detailing methods to be incorporated into precast concrete moment-resisting frames under simulated reversed cyclic loading. The investigators used simulated reversed cyclic load tests to evaluate the seismic performance of moment-resisting precast concrete beam-column connections, and they also carried out nonlinear finite element analyses of typical monolithic and precast concrete connections using a modified concrete damage plasticity model. Good agreement was achieved between the experimental and numerical results. Simple detailing modifications resulted in major improvements in the performance of connections in terms of load-displacement curves, stiffness, and energy dissipation. The authors also developed a design procedure for the investigated connections based on failure modes and investigated limit states.

Mahamid is an associate research fellow at Technion-Israel Institute of Technology in Haifa, a research associate professor at the University of Illinois Chicago, and a structural engineering consultant for multiple structural engineering firms; Torra-Bilal is a consulting senior engineer at ComEd in Oak Brook, Ill.; and Baran is a professor of structural engineering at the Middle East Technical University in Ankara, Turkey. They were presented with the award in September at the 2025 PCI Committee Days in Rosemont, Ill.

Mostafa, Sevenker paper receives Nasser award


Mostafa Abo El-Khier


Adam D. Sevenker

The 2025 George D. Nasser Award goes to Mostafa Abo El-Khier and Adam D. Sevenker for their paper "Measurements of Rotational Stiffness for Precast Concrete Girder Transport Vehicles, Part 2," which was published in the July–August 2024 issue of *PCI Journal*. This award is given to a young author, or authors, for the best design, research, or state-of-the-art paper on precast concrete appearing in *PCI Journal* during a single year.

This paper presents field measurements of the rotational stiffness of three transport vehicles equipped with different types of suspensions: leaf, combined air and leaf, and hydraulic. The rotational stiffness was determined by measuring the tilts of the vehicles when a girder or known weights were placed on them at various eccentricities. One of the tested vehicles, which featured transversely expandable wheel spacings varying from 6 to 18 ft (2 to 5.5 m), exhibited an increase in rotational stiffness of nearly 75%. This paper summarizes the rotational stiffness for all of the vehicles tested by the authors. The field measurements conducted have enriched the existing database on vehicle rotational stiffness in the United States. PCI supported the research upon which this paper and part 1 are based.

Abo El-Khier is a structural engineer at e.construct.USA in Omaha, Neb., and Sevenker is a partner at e.construct.USA in Omaha, Neb. They were presented with the award in September at the 2025 PCI Committee Days in Rosemont, Ill. C. Shawn Sun, assistant professor in the Department of Civil Engineering and Construction Management at California State University in Northridge, coauthored this paper.

Charles C. Zollman award recognizes paper on bridge beam prestress loss


Alla Eddine Acheli


Hema Jayaseelan


Bruce W. Russell


Walter Peters


Chris Filip

The winners of the 2025 Charles C. Zollman Award are Alla Eddine Acheli, Hema Jayaseelan, Bruce W. Russell, Walter Peters, and Chris Filip for their paper "Assessment and Validation of Prestress Loss Prediction Models Using Real-Time Prestress Loss Measurements," which was published in the September–October 2024 issue of *PCI Journal*. The Zollman Award honors an author, or authors, for the best design, research, or state-of-the-art paper on precast concrete in the area of transportation infrastructure appearing in *PCI Journal* during a single year.

This study investigated prestress loss measured on precast, prestressed concrete bridge beams for a bridge in Oklahoma. The researchers examined the effects of including mild reinforcing steel in the bottom flange of precast concrete girders and the alternative prestressing pattern on the prestressing losses of pretensioned bridge girders. Measurements were from a structural monitoring system that has been providing an ongoing stream of data since beam fabrication. In addition to the measured data, the investigators used five methods to predict the prestress losses at the girder midspan. The data show that current equations overestimate the concrete elastic modulus at early ages, leading to an underprediction of elastic shortening losses.

Eddine Acheli is a graduate engineer with Walter P Moore in Houston, Tex.; Jayaseelan is an assistant professor of civil engineering at Cedarville University in Cedarville, Ohio; Russell is a professor of civil and environmental engineering at Oklahoma State University in Stillwater; Peters is an assistant bridge engineer for the Oklahoma Department of Transportation; and Filip is a structural engineer in training at the Wallace Design Collective in Tulsa, Okla. They were presented with the award in September at the 2025 PCI Committee Days in Rosemont, Ill.

PCI website resources address construction industry mental health crisis

The construction sector continues to experience one of the highest suicide rates in the United States, according to "Suicide Rates by Industry and Occupation—National Violent Death Reporting System, 32 States, 2016" on the Centers for Disease Control and Prevention website, with rates surpassed only by those in the mining and oil and gas extraction industries.

"This is an epidemic that is being ignored by most all of the member companies within PCI," says Todd Adams, chair of the PCI Mental Health Task Force.

Although physical-safety procedures are well established across manufacturing and construction environments, comparable systems for supporting mental and emotional well-being remain limited in the industry. To help address this gap, PCI maintains a dedicated hub of mental-health and wellness resources at PCI.org/wellness. The site provides guidance for employers and employees, including information on recognizing warning signs, reducing stigma, and connecting teams with professional support services.

"I see so many proactive steps securing the physical safety of our plant and field workers, yet very little for their emotional safety," Adams says.

Individuals or organizations seeking assistance implementing mental-health initiatives in their workplaces may contact Todd Adams at todd@jvi-inc.com for additional guidance. The 24-7 U.S. national suicide hotline number is 988.

"We lose too many good people because they think they must carry everything alone. None of us do," Adams says.

Events

PCI event details are subject to change. For the most current information, visit https://www.pci.org/events.

2026 PCI West Annual Board Meeting Las Vegas, Nev.	January 21, 2026
2026 PCI Convention at the Precast Show Loews Kansas City, Kansas City, Mo.	February 2–6, 2026
2026 PCI Mid-Atlantic Winter Membership Meeting Location TBD	March 5–6, 2026
Technical Activities Council Meeting Westin, Nashville, Tenn.	March 19–20, 2026
2026 PCI Gulf South Spring Meeting Lake Charles, La.	April 7–8, 2026
2026 PCINE Spring Meeting Saybrook Point, Conn.	April 22–23, 2026
PCI Productivity Tour Sheraton Waterside District, Norfolk, Va.	May 4–7, 2026
2026 PCI West Summer Board Meeting Woodland, Calif.	May 20, 2026
PCI Foundation Professors Conference Salt Lake City, Utah	May 26–29, 2026
2026 Precast Concrete Manufacturers Association Summer Meeting Location TBD	May 28–30, 2026
PCI Board of Directors Meeting Kimpton Arras Hotel Asheville, N.C.	June 24–26, 2026
2026 Florida Prestressed Concrete Association Summer Meeting Hyatt regency Coconut Point, Bonita Springs, Fl.a	July 23–26, 2026
2026 PCI Committee Days San Antonio Marriott Rivercenter, San Antonio, Tex.	September 8–12, 2026

PCI personnel training and certification schools

PCI School event details are subject to change. If you have any questions about the quality control school schedule or need help completing registration, please contact PCI's continuing education coordinator at education@pci.org. Register at https://www.pci.org/qc_schools.

Levels I and II	January 12–15, 2026 March 16–19, 2026 April 20–22, 2026 May 20–22, 2026 June 15–18, 2026 October 21–23, 2026 November 16–19, 2026	online online Harrisburg, Pa. Chicago, Ill. online Nashville, Tenn. online
Level III	February 23–26, 2026 May 19–22, 2026 July 13–16, 2026 October 20–23, 2026	online Chicago, Ill. online Nashville, Tenn.
Certified Field Auditor	April 13–16, 2026 September 28–October 1, 2026	online online
Certified Company Auditor	April 17, 2026 October 2, 2026	online online