# From PCI Headquarters

# King promoted to vice president of marketing and education

Becky King has been promoted to vice president marketing and education at PCI. In this new role, King will continue to oversee all PCI programs under the Marketing Council and Education Activities Council and education committees, serve as liaison to local PCI chapters and partner affiliates, and work with the PCI Foundation on its education efforts.

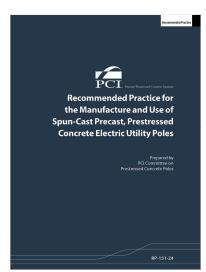


**Becky King** 

King, who started at PCI in 2016, most recently served as managing director of marketing and education. She has worked with the PCI Marketing Council and marketing committees and the PCI Education Activities Council and has led the PCI marketing and education staff and the PCI regional executive directors in increasing the market share and awareness of precast concrete.

She holds a bachelor of science degree in business management from Elmhurst College in Elmhurst, Ill.

## Spun-Cast utility pole recommended practice published



The PCI
Prestressed
Concrete Poles
Committee has published a new document,
Recommended Practice
for the Manufacture
and Use of Spun-Cast
Precast, Prestressed
Concrete Electric
Utility Poles.

Precast, prestressed concrete poles comprise two types: centrifugally cast (spun) and statically cast.

This new recommended practice reflects new technologies and knowledge for the proper design and use of centrifugally cast (spun-cast) prestressed concrete poles. Spun-cast poles are usually round, but they may also be hexagonal, octagonal, or other shapes. Because of the way they are made, spuncast poles will always have a hollow core, the size of which depends on the desired wall thickness.

Precast, prestressed concrete poles were among the first applications of prestressing tried in the 1930s. Prestressed concrete poles are used in most parts of the world as transmission and distribution structures, substation structures, lighting supports, highway sign and traffic signal structures, and communication structures. In some countries, such as India, concrete poles are used almost exclusively in these types of structures.

In North America, their use is generally confined to specific regions, such as the southeastern United States. Generally, where timber is plentiful, wood poles are used more often than precast, prestressed concrete ones. However, the increased cost of wood and the environmental issues regarding the preservation of trees have resulted in an increased use of precast, prestressed concrete poles. Therefore, the potential for a much greater use of precast, prestressed concrete poles in the United States and elsewhere is promising.

This new publication builds upon information previously published by PCI in the following documents, which all appeared in *PCI Journal*: "Guide Specification for Prestressed Concrete Poles" from May–June 1982, "Guide for Design of Prestressed Concrete Poles" from May–June 1983, "Guide for the Design of Prestressed Concrete Poles" from November–December 1997, "Specification Guide for Prestressed Concrete Poles" from March–April 1999, and "User's Guide for Handling, Storage, and Erection of Prestressed Concrete Poles" from March–April 2002.

The new recommended practice includes the following content: chapter 1, "Structural Configurations and Pole Applications;" chapter 2, "Initial Considerations;" chapter 3, "Materials;" chapter 4, "Design Loads;" chapter 5, "Design;" chapter 6, "Manufacturing and Quality Assurance;" chapter 7, "Structure Testing;" chapter 8, "Assembly and Erection;" and chapter 9, "Foundations;" along with several supporting appendices and design examples.

Comments and suggestions are invited from readers and users of this document to further improve any future revisions of this report. Correspondence may be sent to technical@pci.org.

## PCI releases precast, prestressed concrete piles specification

The American National Standards Institute (ANSI) has approved the new standard ANSI/PCI 142-24 Specification for Precast, Prestressed Concrete Piles. This publication, now available on the online PCI bookstore, outlines the essential practices for designing and constructing precast, prestressed concrete piles, drawing from both the latest research and the expertise of industry leaders.

ANSI/PCI 142-24 sets out the minimum requirements for designing and constructing precast, prestressed concrete piles. It covers both fully and partially laterally braced prestressed concrete piles and includes provisions for seismic design. This standard does not apply to the design or construction of precast concrete piles that are not prestressed or post-tensioned before installation.

The Piling Committee—a dedicated group of educators, researchers, manufacturers, suppliers, and engineers—has been working since 2018 to make this document accessible to the public. As part of its ongoing efforts, the committee is also updating the 2019 Recommended Practice for Design, Manufacture, and Installation of Prestressed Concrete Piling, chapter 20 of the PCI Bridge Design Manual, and the online Prestressed Pile Design Spreadsheet. In addition, the committee is publishing free webinars in the PCI eLearning Center to help the users of this new standard understand its requirements.

Committee members are actively collaborating with the American Concrete Institute (ACI) as they approach the end of this cycle for ACI 318 Building Code Requirements for Structural Concrete (ACI 318-25) and Commentary (ACI 318R-25). The upcoming version of the code will continue to include design guidelines for precast, prestressed concrete piles. PCI expects that ACI's future publication of the joint ACI-PCI publication of the Precast Structural Concrete Code ACI/PCI 319, also planned for 2025, will align with the ACI 318-25 pile design provisions. As of this printing, ACI 319 has not completed its public review period.

PCI is also working toward having PCI 142 recognized by the American Association of State Highway and Transportation Officials.

Catrina Walter is the current PCI Prestressed Concrete Piling Committee chair, and committee members and past committee leadership included Louis Klusmeyer, Roy Eriksson, JP Binard, and Richard Potts, among others. William Nickas, PCI's transportation systems managing director; Edith Gallandorm, PCI's codes and standards managing director; the committee's Technical Activities Council liaison, Steve Seguirant; and the committee vice chair, Mehedi Rashid, played key roles, too. The Pile Producers Committee, under leadership of current chair Jim Parkins, also contributed to

the successful publication of this standard. The standard's lead authors were Tim Mays and John Ryan.

The Piling Committee is actively seeking new members to help advance the mission. If you're interested in joining the committee, please attend the next meeting during the 2024 PCI Committee Days in Nashville, Tenn., in September.

—Catrina Walter

### PCI hiring vice president of technical services

PCI is hiring a qualified engineer to be the vice president of technical services for the institute. This role serves as the primary technical representative of PCI, responsible for processes to develop, review, and disseminate technical knowledge for the precast concrete industry and for specifying entities.

The vice president of technical services advises and assists the Technical Activities Council to maintain the credibility and consistency of technical information for the industry through strategic document development and critical, in-depth document review, supports and advises the director of codes and standards to assure strategic development of appropriate standards and to assure adherence to proper standards development processes as defined in the American National Standards Institute-accredited PCI standardization process, provides technical support for processing technical documents, advises and assists the Research and Development Council in developing strategic direction for identifying research needs, and acts as PCI representative to appropriate committees of the American Concrete Institute, American Society of Civil Engineers, Building Seismic Safety Council, Canadian Precast/ Prestressed Concrete Institute, fib, and other groups.

Applicants must have an MS in civil/structural engineering or equivalent and be a licensed professional or structural engineer. In addition, the new vice president of technical services should have a minimum 10 years of relevant engineering experience in precast, prestressed concrete, active participation on PCI technical committees with an emphasis on building and commercial projects preferred, familiarity with the U.S. model code and standards development process, and demonstrated experience in research of precast and precast, prestressed concrete.

## PCI proposal selected for EPA grant

The U.S. Environmental Protection Agency (EPA) has selected a joint proposal from PCI, the National Precast Concrete Association (NPCA), and the American Concrete Pipe Association (ACPA) for a \$9.97 million grant in the EPA's Reducing Embodied Greenhouse Gas Emissions for Construction Materials and Products Grant Program.

The grant will focus on updating the associations' existing product category rule (PCR) for precast concrete, developing tools for product-specific environmental product declarations (EPDs), developing an EPD generator, and providing training and support to member companies for producing EPDs. The grant also allows for creating EPDs under the current PCR while an update is conducted. EPCI expects this grant to significantly offset the costs for producer members to create or update EPDs for their precast concrete products.

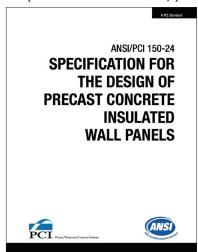
"We are very excited to have been selected by EPA to receive this grant," said PCI's president and CEO, Bob Risser. "The resources in this grant will allow us to create tools for generating EPDs that are specific to precast concrete and greatly accelerate our members' ability to create them for their specific plants and products. By combining efforts, we will gain efficiency, and avoid duplication of efforts. Together, we can help all our members move toward manufacturing more sustainable concrete products."

PCI's participation in this grant is just one way that PCI and its members have promoted sustainable construction and design. The industry is committed to continuously improving the sustainable aspects of its products and processes to make a greater contribution to sustainability.

Visit https://www.pci.org/howprecastbuilds/sustainability to learn more about how PCI and its members are working toward manufacturing more sustainable precast and prestressed concrete products.

## New wall panels design standard released

The recent issuance of the newly developed Specification for the Design of Precast Concrete Insulated Wall Panels (ANSI/PCI 150-24) reflects a critical milestone in the growing popularity and market size of the precast concrete insulated wall panels industry. Although the performance of these components has been extensively proved over several decades



through their use as architectural building facades and load-bearing structures, the design of insulated wall panels has historically been guided by vast industry experience, has relied on a variety of analysis approaches and test methods, and often has necessitated the implementation of conservative assumptions due to the lack of unified and codified

provisions. Therefore, the development of ANSI/PCI 150-24 began several years ago after the formation of the PCI Design Standard Committee.

Furthermore, an Insulated Wall Panels Task Group was formed within this parent committee with eight members from a variety of backgrounds and with decades of experience in the design and research of these components. The members include software analysis developers, academics with extensive experience in computational modeling and experimental testing of insulated wall panels, practicing design engineers, and representatives from suppliers of accessories used to fabricate these components. This team collaborated extensively to propose codified provisions that aligned with proven methods of design and analysis while also reflecting previously issued guidance on insulated wall panels in state-of-the-art reports by the PCI Precast Insulated Wall Panels Committee.

Member overlap between the Insulated Wall Panels Task Group and the Design Standard Committee ensured adequate cross collaboration in the development of the first edition of the specification and to mesh the issuance of future recommended practice with the newly codified design requirements. Following a comprehensive balloting process in PCI and in accordance with American National Standards Institute (ANSI) requirements, PCI 150-24 was completed in early 2024 and is targeted for adoption in a future issuance by the International Code Council.

In its final accepted form, the specification generally provides minimum requirements for the design of prestressed or nonprestressed precast concrete insulated wall panels. More specifically, these provisions include requirements for composite action, wythe connectors, reinforcement, strength evaluation, service-level analysis, earthquake resistance, and temperature effects, among others. The specification will be updated regularly to reflect the latest technological developments with respect to precast concrete insulated wall panels and continue to facilitate the safe and efficient design of these components as the demand for resilient and energy-efficient buildings continues to increase in coming decades.

— Matthew J. Gombeda

## Georgia/Carolinas PCI welcomes Gallagher as bridge consultant

eorgia/Carolinas PCI has appointed Patrick Gallagher as its new bridge consultant. In his new role, Gallagher will support Georgia/Carolinas PCI members in advocating for and expanding the use of precast concrete for bridges across the region. He will continue to maintain and foster key relationships with regional Departments of Transportation, the American Association



Patrick Gallagher

of State Highway and Transportation Officials, PCI, the Federal Highway Administration, and other stakeholders to provide technical expertise and guidance on concrete bridge

Gallagher brings more than 25 years of experience in bridge design and engineering, specializing in precast and prestressed concrete solutions. Gallagher is the bridge practice leader for Consor Engineers in Raleigh, N.C. His extensive career includes significant contributions to the field, particularly in the design of pretensioned I-girders and precast concrete substructures. Prior to Consor, Patrick worked for the Washington State Department of Transportation for 12 years.

Gallagher succeeds Reid Castrodale, who is transitioning to retirement.

### **PCI** names new Titans for 70th anniversary

his year, for PCI's 70th anniversary, 10 new precast concrete industry standouts have been recognized as PCI Titans of the Industry. The 2024 honors went to Roger Becker, Reid Castrodale, Pat Hynes, Jason Lien, Richard Miller, Andy Osborn, Sami Rizkalla, Steve Seguirant, Keith Wallis, and Gary Wildung.

The PCI Titans designation was created in 2004 when members and staff sought to recognize those individuals who had built the precast concrete industry from a fledgling idea in 1954 to the robust and growing industry it had become by selecting a group of 50 exceptional precast concrete producers, engineers, contractors, and



Roger Becker



Pat Hynes



**Richard Miller** 



Andy Osborn

Jason Lien

**Reid Castrodale** 

Becker has been instrumental in the advancement of precast concrete in multiple areas, including hollow-core, strand bond, concrete diaphragm design, and load distribution, in addition to his work in code and software development. Becker retired from his position as PCI's vice president of technical services in 2020. Prior to joining the institute, he had worked

others. In 2014, eight additional Titans were recognized.

for more than two decades as a consulting structural engineer specializing in precast concrete design and research. As vice president of Computerized Structural Design in Milwaukee, Wis., he engaged in developing state-of-the-art, code-conforming product design software for the precast and prestressed concrete industry. In 1999, Becker joined Spancrete Industries Inc. in Waukesha, Wis., specializing in the design, fabrication, shipment, and erec-



Sami Rizkalla



Steve Sequirant







**Gary Wildung** 

tion of hollow-core slabs. He remained with the company until 2010, when he became PCI's managing director of research and development. Becker's involvement in PCI committee work dates back to 1973. He has served on the PCI Board of Directors, chaired the Technical Activities Council and the Building Code Committee, and was a member of multiple committees, including the Research and Development, Hollow Core Slab Producers, Fire, Industry Handbook, and Journal Advisory Committees. He is a coauthor of the first and second editions of the PCI Manual for the Design of Hollow Core Slabs and has published several articles and papers in PCI Journal.

Castrodale has been a major contributor to both PCI and the precast concrete industry for more than 30 years. He completed his doctorate at the University of Texas-Austin in 1987 and began his career at Ralph Whitehead Associates (RWA) Inc. in Charlotte, N.C. Following a stint at the Portland Cement Association, where he taught seminars on concrete bridge technology, he returned to RWA as a senior engineer. In 2005, Castrodale moved to the lightweight aggregate manufacturer Carolina Stalite Co. in Salisbury, N.C., as director of engineering. Seven years later, he founded his own firm, Castrodale Engineering Consultants. He has also been the director of engineering for the Expanded Shale, Clay and Slate Institute since 2012. Castrodale's extensive PCI committee work includes chairing the Bridges Committee and cochairing the Bridge Design Manual Committee and the Technical Activities Council. He is a long-time consultant for Georgia/ Carolinas PCI and serves as a liaison between bridge producers and designers and between the precast concrete and post-tensioning industries. He has also been involved in several important National Cooperative Highway Research Program projects and has authored numerous journal articles and technical publications. Castrodale's work has informed the American Association of State Highway and Transportation Officials' AASHTO Bridge Design Specifications and advanced precast concrete bridge technology, including extended span ranges for girders, improved in-service performance, and the use of highstrength materials in concrete bridge construction. Castrodale is the managing technical editor emeritus of *Aspire* magazine, following years of service to the publication. He was named a PCI Fellow in 2001 and was awarded the Leslie D. Martin Certificate of Merit in 2021.

Hynes's decades-long involvement in PCI committee work includes chairing the Precast Sandwich Wall Panels, Student Education, and Journal Advisory Committees and serving on the PCI Board of Directors as chair of the Educational Activities Council. He was a dedicated member of Leadership PCI and served on the PCI Foundation Board of Trustees for many years, where he was integral in establishing the current Foundation Studio format. Hynes has been part of several major industry publications, including the PCI Design Handbook: Precast and Prestressed Concrete, PCI Manual for the Design of Hollow Core Slabs, and State of the Art of Precast/Prestressed Concrete Sandwich Wall Panels. On the local level, he has taken part in precast concrete education at universities and high schools in Oregon and Washington state, and hosted seminars for local engineers. In 2016, Hynes retired from Knife River Prestress in Harrisburg, Ore., after 31 years. He continues to serve PCI as a trustee emeritus on the PCI Foundation board and as a consulting member of the Student Education Committee and Leadership PCI. Hynes was named a PCI Fellow in 2006 and was awarded the PCI Medal of Honor in 2017.

Lien has played a crucial role in advancing innovations in the precast concrete industry and in keeping PCI on pace with new technologies. Lien is a graduate of the Colorado School of Mines and has more than two decades of experience in the design, manufacture, and delivery of precast concrete systems. He is currently executive vice president of EnCon United in Denver, Colo., parent company of the specialty contractor EnCon Companies. Previously, he was the president of StructureWorks, a software development company specializing in three-dimensional design and drawing automation. Lien was an early adopter of building information modeling (BIM), and his work revolutionized the speed and accuracy with which precast concrete shop drawings are developed. Lien has served on and chaired numerous PCI committees, including Connection Details, BIM, Industry Handbook, Marketing, and Student Education. He has served on the Technical Activities Council for nearly two decades and currently chairs the PCI Academic Advisory Board Subcommittee. Lien has played a major role in advancing PCI's educational mission through his contributions to the sixth and seventh editions of the PCI Design Handbook and his support of the PCI Foundation and online academy. He is passionate about promoting precast concrete construction and is a dedicated participant in PCI events and a supporter of the institute's marketing initiatives. He has served on multiple occasions as one of the lead instructors for PCI's Marketing and Sales School. He has also made numerous presentations locally in Colorado in support of precast concrete structures. Lien was named a PCI Fellow in 2011 and

is a two-time recipient of the Leslie D. Martin Certificate of Merit Award.

Miller is a professor emeritus at the University of Cincinnati, where he taught and conducted research for more than 30 years. His areas of interest include prestressed concrete structures and bridges, structural performance, nondestructive testing of concrete, and the performance of civil engineering materials. In 2019, he was named department head of Civil and Architectural Engineering and Construction Management in the College of Engineering and Applied Science. PCI has benefitted tremendously from Miller's expertise and numerous contributions, which include tenures on the PCI Boards of Directors and the PCI Foundation and chairing the Research and Development and Technical Activities Councils, as well as the Continuing Education, Student Education, Journal Advisory, and Concrete Materials Technology Committees. In addition, he is the founder of PCI's Engineering Student Design ("Big Beam") Competition and remains closely involved in this highly successful annual event. In 2003, Miller received the PCI Distinguished Educator Award, and he was named a PCI Fellow in 2004. He was a 2021 recipient of the Leslie D. Martin Certificate of Merit Award.

Osborn is well known as a pioneering researcher and prolific author of reports, articles, and reviews of technical publications. His broad expertise in many areas of structural design and forensics allows him to look critically at many technical topics regarding research and document development. Osborn has devoted countless hours to PCI committee work, including as chair of the Prestressing Reinforcement Committee, the Technical Activities Council, and the Research and Development Council. He has also served two terms on the PCI Board of Directors. He is widely praised for the generosity with which he shares his knowledge and for his ability to remain thoughtful, objective, and level-headed in all circumstances. Osborn was named a PCI Fellow in 2010.

A patent holder ("Precast Concrete Pile with Carbon Fiber Reinforced Grid," U.S. Patent number 8677720) and a prolific author, Rizkalla has nearly 300 publications to his name. A third of his journal publications are directly related to precast concrete. His work has been recognized by dozens of honors and awards, including two 2007 Martin P. Korn Awards, the 2012 Charles C. Zollman Award, and the 2013 T. Y. Lin Award. PCI honored Rizkalla with its Distinguished Educator Award in 2008. He was named a PCI Fellow in 2009. As a lead designer on the first North American bridge built with fiber-reinforced polymer (FRP) concrete, Rizkalla received PCI's Harry H. Edwards Industry Achievement Award, which honors those showcasing fresh, uninhibited concepts that hold the potential to move the industry to the next generation of technology for industry, materials, products, processes, and applications. Rizkalla's long history of involvement in PCI committee work includes founding and chairing the FRP Composites Committee. He was the recipient of the first Daniel P. Jenny Research Fellowship at the University of Manitoba, and his Jenny Fellowship research effort led to the construction of the lightest (at the time) 26-floor, total precast

concrete building, which used precast concrete wall panels that were vertically prestressed throughout the entire height of the high-rise building.

Seguirant has actively contributed to many PCI committees as both member and chair. He has a strong history of code work and as a precast concrete advocate. Many state departments of transportation model their practices after his pioneering work. Among his numerous technical achievements, Seguirant was heavily involved in the development of precast concrete supergirders with a current maximum length of 223 ft (68 m). As the author of a paper about extending Washington Department of Transportation standard section lengths, Seguirant was awarded both the Martin P. Korn Award and the T. Y. Lin Award in 1998. He subsequently won numerous other awards for his prodigious output of journal articles, including the 2005 Martin P. Korn and T. Y. Lin awards, the 2009 Charles C. Zollman and T. Y. Lin awards, the 2010 and 2012 Charles C. Zollman awards, the 2012 T. Y. Lin Award, the 2014 Martin P. Korn Award, and the 2015 and 2020 Robert J. Lyman awards. In 2014, Seguirant also was the first recipient of the Norman L. Scott Professional Engineer Award, which PCI gives to an engineer who exhibits the personal and professional traits that Norman Scott exemplified. Seguirant was made a Fellow of PCI in 2005.

Wallis is the general manager of Prestressed Casting Co. in Springfield, Mo., where he has worked for 44 years. Wallis

served as chair of the Quality Activities Council for five two-year terms and has played a vital role in the development and advancement of quality procedures and standards within the precast concrete industry. His passionate commitment to all quality aspects of prestressed concrete has inspired many young committee participants to likewise give of themselves in efforts to continually improve the industry. Wallis was named a PCI Fellow in 2011 and was the recipient of the 2019 T. Henry Clark Award. He is known for being an outspoken, integral contributor to PCI, and he has served on 40 PCI committees over the past 24 years. He was chair of the PCI Board of Directors in 2019, currently serves as the chair of the Tolerances Committee, and is an active member of other committees and task groups. In addition to his activities with PCI national, Wallis has been involved with PCI at the local and chapter levels.

Wildung was made a Fellow of PCI in 2011, and he was honored in 2023 with the prestigious T. Henry Clark Award in recognition of his outstanding contributions to PCI and the precast concrete industry. Among his many leadership roles within PCI, Wildung has chaired the Quality Activities Council and the Erectors Certification Committee. He also was one of the key developers of the Erector Certification Program. With an excellent knowledge of precast concrete and an informed approach to projects, Wildung in his retirement continues to be an active contributor and a champion of the precast concrete industry.

#### PCI's Calendar



#### **Events**

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

Architectural Precast Production Workshop Sheraton Music City, Nashville, Tenn.	September 4-6, 2024
2024 PCI Committee Days Conference Nashville, Tenn.	September 23-27, 2024
PCI Marketing and Sales School 2.0 Renaissance O'Hare, Chicago, III.	November 7-8, 2024

#### PCI personnel training and certification schools

Quality Control School event details are subject to change. If you have any questions about the Quality Control School schedule or need help completing a registration form, please contact PCI's continuing education coordinator, education@pci.org. Registration forms are available at https://www.pci.org/qc\_schools.

Levels I and II	October 23–25, 2024 November 11–14, 2024	Nashville, Tenn. online
Level III	October 22-25, 2024 December 9-12, 2024	Nashville, Tenn. online
CFA	September 9-12, 2024	online
CCA	September 13, 2024	online

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