

Detwiler named editor-in-chief of *PCI Journal*



Rachel Detwiler

Rachel Detwiler joined the PCI staff in January as editor-in-chief of *PCI Journal*.

Detwiler most recently served as engineering editor for ACI's *Concrete International* magazine. She is a well-published concrete materials engineer with experience in forensic engineering, research and development, and troubleshooting in the construction industry.

Detwiler previously held positions at Braun Intertec Corp. in Minneapolis, Minn., where she designed and executed improved laboratory test programs and operating procedures; and Construction Technology Laboratories (CTL) in Skokie, Ill., where she led and participated in a number of forensic engineering projects.

As an assistant professor at the University of Toronto, Detwiler taught graduate and undergraduate courses in civil engineering and supervised academic research. She has a BS in civil engineering, an MS in structural engineering, and a PhD in civil engineering materials from the University of California at Berkeley and was a postdoctoral fellow at the Department of Building Materials of the Norwegian Institute of Technology in Norway.

PCI sends team to investigate New Zealand earthquake aftermath

PCI sent a team of four to Christchurch, New Zealand, on March 27, 2011, to investigate the results of the earthquake that occurred on February 22, 2011. The team includes team leader Robert Fleischman, Joe Maffei, Jose Restrepo, and Kim Seeber. A report from the team's findings is expected by the PCI Annual Convention/Exhibition in Salt Lake City, Utah.

Krohn named ACI Fellow

PCI's managing director of technical activities, Jason Krohn, was one of 30 ACI members honored with the rank of Fellow of the American Concrete Institute (FACI). The new Fellows were introduced at the ACI Spring 2011 Convention in Tampa, Fla.

An ACI Fellow is defined as "an individual who has made outstanding contributions of the production or use of concrete materials, products and structures in the areas of education, research, development, design, construction or management."

Including the new honorees, 761 members have attained the rank of FACI, established by ACI in 1973.

New *PCI Bridge Design Manual* coming soon



The *PCI Bridge Design Manual* is being updated to conform to the fifth edition of the *AASHTO LRFD Bridge Design Specifications* including the *2010 Interim Revisions*.

In the third edition, 11 new design examples will provide solutions using various precast, prestressed concrete bridge beams and products. The examples will illustrate all of the various new alternate code provisions, including prestress losses, shear design, and transformed sections.

The manual will be available in both print and fully searchable PDF versions, and a substantial discount will be available for registered holders of the second edition. Webinars will also be available to help orient owners of the third edition.

Nickas discusses institute quality assurance

William Nickas, PCI's managing director of transportation systems, made a presentation at the University of Buffalo's Bridge Engineering Distinguished Speaker Series on February 7, 2011. His presentation, "Influence of Professional Associations in Policy Making," focused on key elements of how balanced institute-based quality assurance systems contribute to the overall body of knowledge within the industry.

Changes made to audits for Certified Erectors

The PCI Board of Directors recently approved changes that affect internal and external field audits for Certified Erectors. The changes are intended to reduce issues associated with locating and managing external Certified Field Auditors (CFAs) for Certified Erectors and provide an incentive for new erector applicants or existing Qualified Erectors to become Certified Erectors.

For Qualified Erectors, at least one of the two annual field quality audits for each primary crew is to be performed by an external CFA; this requirement has not changed. However, the number of external CFA field quality audits may now be reduced for Certified Erectors.

The new requirement states that "on a rotating basis, a minimum of one or 10 percent (rounded up to the nearest whole number, whichever is greater) of the Field Quality Audits for all crews shall be performed by an external CFA; all remaining Field Quality Audits may be performed by an internal CFA."

The Board of Directors also specified that PCI staff members would select the 10% of the crews to be audited by independent external CFAs.

It is important to note that a CFA may be an employee of the erector. However, a crew foreman may not perform an internal audit of his own crew.

These new requirements for Certified Erectors are now in effect. If you are interested in upgrading your erector qualifications, please contact Dean Frank, PCI's quality programs director, at dfrank@pci.org or (312) 583-6770 or Jessica Burnett, PCI's quality programs manager, at jburnett@pci.org or (312) 583-6774.

PCI Foundation keeps members informed



Jim Voss

Your foundation is doing exciting things to help grow our industry. But as with many of the fine works done by PCI and the PCI Foundation, we've failed to communicate our successes. At our recent foundation trustees meeting in San Antonio, Tex., we addressed this issue and decided to do something about it.

Henceforth, we will use *PCI Journal* to convey our activities directly to you. These messages may include updates on the successful Studio educational programs at six—soon to be seven—universities around the country, or explain the various financial ways an individual can support the foundation, or feature guest authors writing about a wide range of foundation-related topics, or include letters to the foundation from supporters wanting to know more about what the foundation actually does and responses to those letters. Well, you get the idea.

The goal is to brief members on all of the foundation's current activities and its plans to help shape the future of our great industry.

With this kick-off column, it seems appropriate to remind us all exactly why the PCI Foundation exists, what it is attempting to accomplish, and how it plans to do so. Here for your consideration are our four core initiatives:

- Cultivate productive relationships between the industry and the academic community.
- Develop and attract high-potential students to productive careers within the industry.
- Facilitate the inclusion of precast concrete systems and technologies in college and university curricula.
- Foster the development of sustainable, protective, and constructive precast concrete.

Indeed, these are lofty goals, but I am pleased to tell you that the grand adventure of implementing these goals is a continuing success story, and *you* can be a part of it, not only with your financial support (which we dearly appreciate), but also with your participation.

Beginning in 2011, the PCI Foundation is initiating the PCI Foundation Legacy Society, honoring members who have made estate or other planned gifts to support the ongoing efforts to grow our industry. They will be recognized throughout the year at all PCI events for their proactive stance in supporting a strong growth-oriented precast/prestressed concrete industry. What a great way to give back to the industry that has provided our livelihood!

More on this and other opportunities to support *your* foundation can be found on our website at www.pci.org/foundation.

If you are already supporting the foundation, we sincerely thank you for your commitment to the future. If you haven't yet "taken the plunge . . . or the pledge," may I invite you to take a look-see at the good things that are happening through foundation efforts.

—Jim Voss

DISTINGUISHED EDUCATOR AWARD CALL FOR NOMINATIONS

The PCI Student Education Committee invites nominations from PCI members for PCI's 2011 Distinguished Educator Award. The objective is to recognize distinguished educators in the fields of engineering, architecture, and construction technology who have made significant contributions to the precast/prestressed concrete industry. Nominations must be received at PCI headquarters by July 1, 2011. For nomination forms and additional information, contact PCI's learning and performance management director, Alex Morales, at amorales@pci.org or (312) 360-3219.



From left, Jason Krohn, Nick Kolar, John Sullivan, and Paul Mlakar walk between the Civil Mahan Hall and Thayer Hall while at West Point to deliver a presentation. Courtesy of Jim Schroder.

Krohn, others present at West Point

Jason Krohn, PCI's managing director of technical activities, recently presented at West Point along with John Sullivan, director of federal infrastructure markets for the Portland Cement Association (PCA) and retired Navy commander from the Seabees; Nick Kolar, operations manager for Aditya International and retired lieutenant colonel from the U.S. Army Corps of Engineers; and Jim Schroder, technical and marketing consultant at Schroder and Associates.

Schroder gave the lunch presentation "Precast Military Structures," and Krohn, Sullivan, and Kolar shared a session on PCI, PCA, and continuing education as well as what young lieutenants could expect as graduate professional engineers in the corps in visiting lecturer Paul Mlakar's Professional Practice Course.

The group received a personal tour of the engineering facilities from Colonel Fred Meyer. Schroder says that both the students and staff came away with an understanding of the virtues of precast concrete military structures' past, present, and potential future applications in addition to gaining an understanding of PCI and PCA and their membership, activities, and research.

Members of the group were presented with a book on West Point history and unit coin (crest of arms).

Becker gives talk on connection materials

Roger Becker, PCI's managing director of research and development, made a presentation titled "Connection Materials for Precast Concrete Construction" on February 9, 2011, at the Structural Engineering Institute Illinois Chapter dinner meeting in Chicago, Ill. His presentation focused on the materials used in connections for precast concrete construction. The emphasis included the importance of project specifications and a review of hardware and available finishes, with discussion of the attributes or limitations of each.

Precast concrete production workshop to focus on lean manufacturing

Lean manufacturing has become the improvement method of choice for precast concrete producers. Lean Manufacturing for Precast Production is a specialized workshop designed specifically for architectural and structural precast concrete producers and will describe the use of lean manufacturing methods and best practices to achieve industry-leading gains in productivity, quality, and turnaround times.

In this workshop, participants will learn how to apply cutting-edge production productivity best practices. The course is structured to provide a blend of highly effective learning methods:

- presentations on lean and productivity best practices for precast concrete production
- case studies from producers that have achieved impressive gains using lean methods
- hands-on exercises that will teach participants how to use lean methods in their operations
- open-forum discussions to provide an opportunity for participants to ask questions and share best practices

The course content is suitable for producers at all phases of a lean transformation, from those just beginning to those experienced with lean methods. The material from this course is designed to help producers accelerate their lean and continuous improvement efforts.

The Lean Manufacturing for Precast Production workshop will be May 11–13, 2011, at the Renaissance Denver Hotel in Denver, Colo. For more information, contact Sid Freedman, PCI's architectural systems, industrial operations, and safety director, at (312) 360-3203.

Lanning new PCI events manager



Megan Lanning

Megan Lanning, CMP, joined the PCI staff in January as events manager. Lanning has more than eight years of experience with corporate and association events and comes to PCI from Experian, where she served as corporate events coordinator.

Prior to that, she served as convention and trade show coordinator for Smith Bucklin Corp. and as exhibitor services specialist at the National Restaurant Association.

Lanning has a BS in recreation, park and tourism administration from Western Illinois University.

ARCHITECTURAL DESIGN COMPETITION CALL FOR ENTRIES

PCI invites entries from architectural students for its 2011 Student Architectural Design Competition. The program includes cash prizes. This year's competition will be the design of multiunit total precast concrete housing. The design project must be completed and submitted by May 27, 2011. The entries will be judged by a special jury in Chicago, Ill., and the winners will be recognized at the 2011 PCI Annual Convention/Exhibition in Salt Lake City, Utah. PCI Producer Members are urged to encourage their local architectural schools to participate in this program. Competition information and submittal requirements, site-specific layout plans, and additional competition information is posted at www.pci.org/cms/index.cfm/education/arch_design. For more information, contact Roger Becker at (312) 360-3213 or rbecker@pci.org.



Mack Truck and McNeilus Co. donated the signature mixer truck for the sixth annual Concrete Industry Management CIM auction. Courtesy of Concrete Industry Management.

CIM raises more than \$500,000 at auction

The National Steering Committee (NSC) for the Concrete Industry Management (CIM) program raised more than \$500,000 in gross revenue at its sixth annual auction, held January 20, 2011, in conjunction with the World of Concrete in Las Vegas, Nev.

Brian Gallagher, chairman of the Marketing Committee for the NSC, says that this year's auction totals are nearly \$120,000 more than last year's.

"The attendance at the auction was greater than ever before, both on-site and online. The expanded participation this year from internet bidders was a key, as we sold \$97,000 worth of items through online bidding," Gallagher says.

The signature item this year was a Mack Truck model GU713 equipped with a McNeilus 11 yd³ (8.4 m³) Bridgemaster concrete mixer donated by Mack Trucks Inc. and McNeilus Companies Inc. The winning bidder for the mixer truck was San Benito Supply from California.

Eugene Martineau, executive director of the NSC, says, "The money raised will benefit the National Steering Committee and support the current CIM program as well as help fund future program expansion."

Grigonis named director, publishing and art direction



Paul Grigonis

Paul Grigonis will serve as director, publishing and art direction.

Grigonis has been employed in PCI's production department for more than five years.

Grigonis has been involved in the advertising and graphics arts field for more than fifteen years prior to joining PCI. With experience as a graphic designer, art director, and photographer, Grigonis will continue to fulfill PCI's publishing, marketing, and branding needs.

Grigonis has been a part-time instructor at Columbia College Chicago for the past 17 years. He studied music at Northwestern University in Evanston, Ill. and graphic design, fine art, and photography at Columbia College.

eLearning Center launches

The newly launched PCI eLearning Center is the first education management system dedicated to the precast concrete and precast concrete structures industries. Users create a PCI eLearning Center profile to obtain access to a number of online courses. All courses offered through this system provide continuing education credit to engineers and architects.

The goal of the new PCI eLearning Center is to provide quality education on precast, prestressed concrete topics.

Courses will be added to the PCI eLearning Center frequently. Following is a list of current course offerings:

- Designing with the 7th Edition *PCI Design Handbook: An Introduction* (1 PDH)
- Life-Cycle Assessment and How It Can Contribute to Sustainable Design (1 GBCI CE/1 PDH/1 LU)
- Parking Structures: Best Practice to Design, Build, and Maintain (1 PDH/1 LU)
- Quality Assurance—Your Lifeline to a Better Project (1 PDH/1 LU)
- Precast Concrete—Providing Aesthetic Versatility in Color, Form, and Texture (1 PDH/1 LU)
- Designing Building Envelopes to Meet Sustainable and Aesthetic Goals—Part I (1 PDH/1 LU)
- Designing Building Envelopes to Meet Sustainable and Aesthetic Goals—Part II (1 PDH/1 LU)

Visit the PCI eLearning Center at www.pci.org/elearning.

PCI-IW hosts new lunchtime seminars

PCI of Illinois & Wisconsin has started a new series of lunchtime seminars called Technology Tuesdays. On the first or second Tuesday of each month, at various locations around the region, the group will present technical precast concrete topics of interest to the design and building community.

The lunchtime programs give attendees an opportunity to learn about precast concrete design issues in sessions that are slightly longer and more in-depth than a typical office lunch and learn.

The first programs covered precast concrete parking decks and were led by Tom Brock, associate professor of architecture at the Illinois Institute of Technology. The next programs were on the new IgCC green building codes and were presented by experts Donn Thompson of the Portland Cement Association and Emily Lorenz of CTLGroup.

About 20 to 25 professionals have attended each event. Future program topics will include architectural finishes and design ideas, precast concrete structures and frames, and sustainable design using precast concrete. For more information and registration, go to the PCI-IW website at www.pci-iw.org.



Donn Thompson of the Portland Cement Association presents a program on Green Building Codes at the Urban Ecology Center in Milwaukee, Wis. Courtesy of Marty McIntyre.

Plant certification makes updates

Effective January 1, 2011, the Plant Certification Committee is requesting that precast concrete manufacturers start asking for prestressing steel strand pull-out test results from their strand supplier if test results are available. As background, the U.S. strand producers have performed pull-out testing on ½ in. (12.7 mm) strand only using a test procedure commonly referred to as the NASP test, so results are not currently available for other sizes.

The ½ in. strand results provided should be representative of the manufacturing process used for the strand shipped. At this time, there is no industry recommendation for testing frequency. Therefore, any test results representative of the current manufacturing process used to produce the strand being supplied shall satisfy this recommendation. This request is intended to start a dialog within the industry and prepare both precast concrete manufacturers and strand producers for possible future industry standard requirements.

For more information, contact Dean Frank, PCI's quality programs director, at dfrank@pci.org or (312) 583-6770.

Stephens named communications manager



Whitney Stephens

Whitney Stephens joined the PCI staff in January as communications manager.

Stephens has more than four years of communications and PR experience and comes to PCI from Fishman Public Relations in Northbrook, Ill., where she was an account executive. Prior to that, she served as senior marketing communications coordinator at executive search and staffing firm The Jacobson Group in Chicago.

Stephens has a BA in English writing from DePauw University in Greencastle, Ind., and is working toward an MA in public relations and advertising from DePaul University in Chicago.

Miller, Frank author certification article in *Construction Specifier*

Two PCI staff members wrote the January 2011 cover story in *Construction Specifier*. Authored by Brian Miller, business development managing director, and Dean Frank, quality programs director, "Certification Programs: Creating the Right Environment for Quality and Safety" discusses the importance of the development and management of certification programs by technical organizations such as PCI.

FELLOWS OF PCI CALL FOR NOMINATIONS

Fellows of PCI will be awarded in October during the 2011 PCI Convention in Salt Lake City, Utah. Nominations should be submitted to PCI Headquarters, Attn: President's Office, 200 W. Adams Street, Suite 2100, Chicago, IL 60606 by May 15, 2011, for consideration. Please contact Rebecca Coleman at bcoleman@pci.org to obtain a nomination form or if you have any questions regarding the nomination process.

PCI new continuing education provider with USGBC

PCI is now a registered continuing education provider with the U.S. Green Building Council (USGBC). On December 21, 2010, PCI's course "Life-Cycle Assessment and How It Can Contribute to Sustainable Design" was successfully reviewed and approved by USGBC for 1 GBCI CE hour.

The course was approved for online delivery and was presented online during the first quarter of 2011. PCI's Continuing Education Committee will continue its work to identify additional courses that qualify for GBCI CE credit and will periodically submit courses to the USGBC for consideration and approval. If you have any questions about this development or have suggestions for courses the committee should consider, contact PCI's learning and performance management director, Alex Morales, at amorales@pci.org. 

PCI MEDAL OF HONOR AWARD CALL FOR NOMINATIONS

Nominations for the PCI Medal of Honor award, which will be presented in October during the 2011 PCI Annual Convention and Exhibition in Salt Lake City, Utah, should be submitted to PCI Headquarters, Attn: President's Office, 200 W. Adams Street, Suite 2100, Chicago, IL 60606 by May 15, 2011, for consideration. Nominations should be submitted in letter format, with appropriate biographical and support information attached. Endorsements from others supporting the nomination are encouraged as part of the support information. Please contact Rebecca Coleman at bcoleman@pci.org or (312) 583-6783 if you have any questions regarding the nomination process.

YOUNG EDUCATOR ACHIEVEMENT AWARD CALL FOR NOMINATIONS

The PCI Student Education Committee invites nominations from PCI members for PCI's 2011 Young Educator Achievement Award. The objective is to recognize young educators in the fields of engineering, architecture, and construction technology who have made significant contributions in their early careers to the precast/prestressed concrete industry. Nominations must be received at PCI headquarters by July 1, 2011. For nomination forms and additional information, contact PCI's learning and performance management director, Alex Morales, at amorales@pci.org or (312) 360-3219.

PCI Personnel Training and Certification Schools

If you have any questions about the Quality Control School schedule, would like information on any of our Spanish-language exams, or need help completing a registration form, please contact PCI's learning and performance management director, Alex Morales, at amorales@pci.org or (312) 360-3219. Registration forms are available at www.pci.org/schools.

Level I/II

September 14–16, 2011
Chicago, Ill.

Level III

September 13–16, 2011
Chicago, Ill.

PCI Calendar

Events

For the most current information on PCI events, visit www.pci.org/events. For industry events, visit www.pci.org/news/events.

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| Precast Concrete Structural Design Seminar | May 11, 2011 |
| Waukesha, Wis. | |
| Lean Manufacturing for Precast Production Workshop | May 11–13, 2011 |
| Renaissance Denver Hotel, Denver, Colo. | |
| Zone 4 Meeting | May 25, 2011 |
| TopGolf, Wood Dale, Ill. | |
| Georgia/Carolinas PCI Annual Meeting | June 16–19, 2011 |
| Sea Pines Resort, Hilton Head Island, S.C. | |
| 2011 Summer Conference | July 7–9, 2011 |
| James Hotel, Chicago, Ill. | |
| PCI-IW Member Meeting | July 26–27, 2011 |
| Lake Geneva, Wis. | |
| PCINE Annual Meeting | September 15–16, 2011 |
| Cranwell Resort, Lenox, Mass. | |
| Productivity Tours | September 20–23, 2011 |
| Minneapolis, Minn. | |
| PCI-IW Member Meeting | September 21, 2011 |
| Prairie Grove, Ill. | |
| Western Bridge Engineers' Seminar | September 25–28, 2011 |
| Arizona Grand Hotel, Phoenix, Ariz. | |
| PCI Annual Convention and Exhibition and National Bridge Conference | October 22–25, 2011 |
| Salt Lake City Marriott Downtown and Salt Palace Convention Center | |
| PCI-IW Member Meeting | December 7, 2011 |
| Prairie Grove, Ill. | |
| 2012 PCI Winter Conference | January 19–22, 2012 |
| San Antonio Marriott Rivercenter, San Antonio, Tex. | |
| PCI Annual Convention and Exhibition and National Bridge Conference | September 29–October 2, 2012 |
| Gaylord Opryland Resort and Convention Center, Nashville, Tenn. | |
| PCI Annual Convention and Exhibition and National Bridge Conference | September 21–September 24, 2013 |
| Gaylord Texan Resort and Convention Center, Grapevine, Tex. | |

Errata



Thomas H. Kelley

Page 7 of the Winter 2011 issue of *PCI Journal* should list Tomas H Kelley as being with Gage Brothers and Christopher J. Pastorius with Metromont Corp.

Figures 11 through 15 on pages 103 through 105 of the Winter 2011 issue of *PCI Journal* did not show the load-displacement plots correctly due to a printing error. Included here are the correct figures. The updated article can be viewed at www.pci.org/publications/journal/.

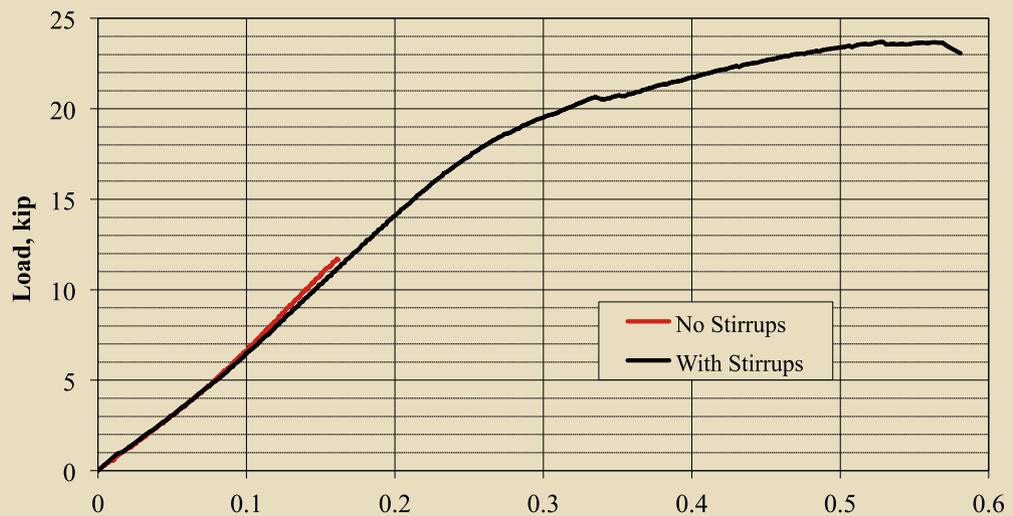


Figure 11. This graph shows the shear behavior of girder B-79. Note: 1 in. = 25.4 mm; 1 kip = 4.448 kN.

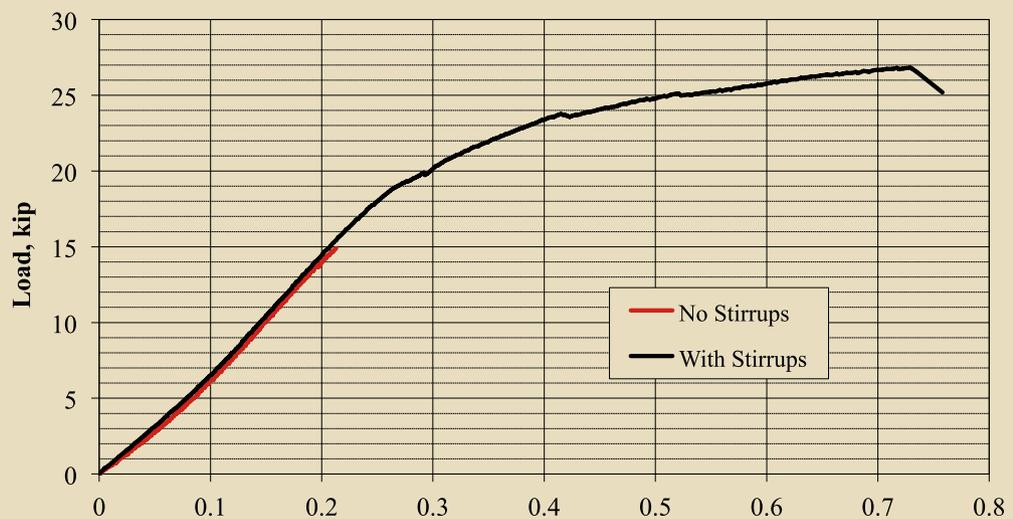


Figure 12. This graph shows the shear behavior of girder B-71. Note: 1 in. = 25.4 mm; 1 kip = 4.448 kN.

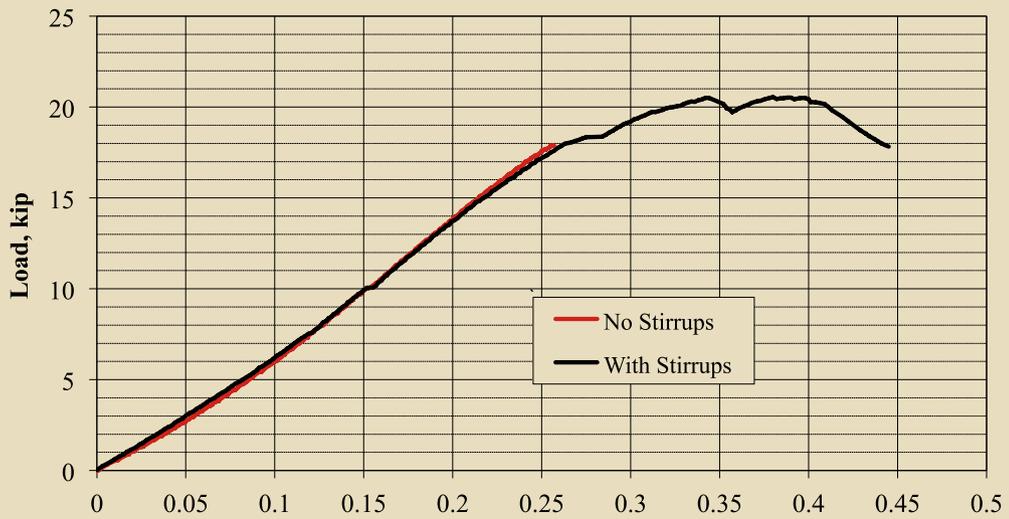


Figure 13. This graph shows the shear behavior of girder B-65. Note: 1 in. = 25.4 mm; 1 kip = 4.448 kN.

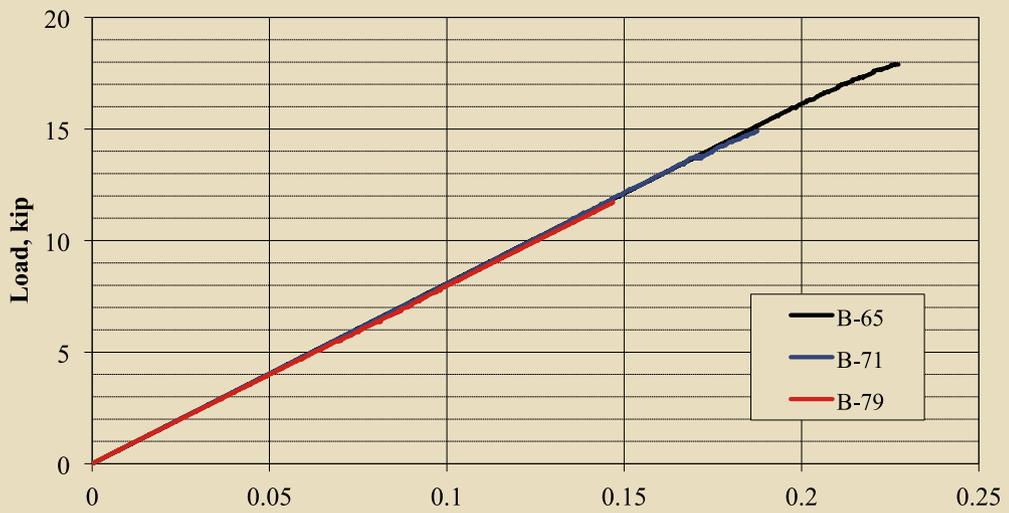


Figure 14. This figure compares the load-displacement relationship for the ends of the girders without shear reinforcement. Note: 1 in. = 25.4 mm; 1 kip = 4.448.

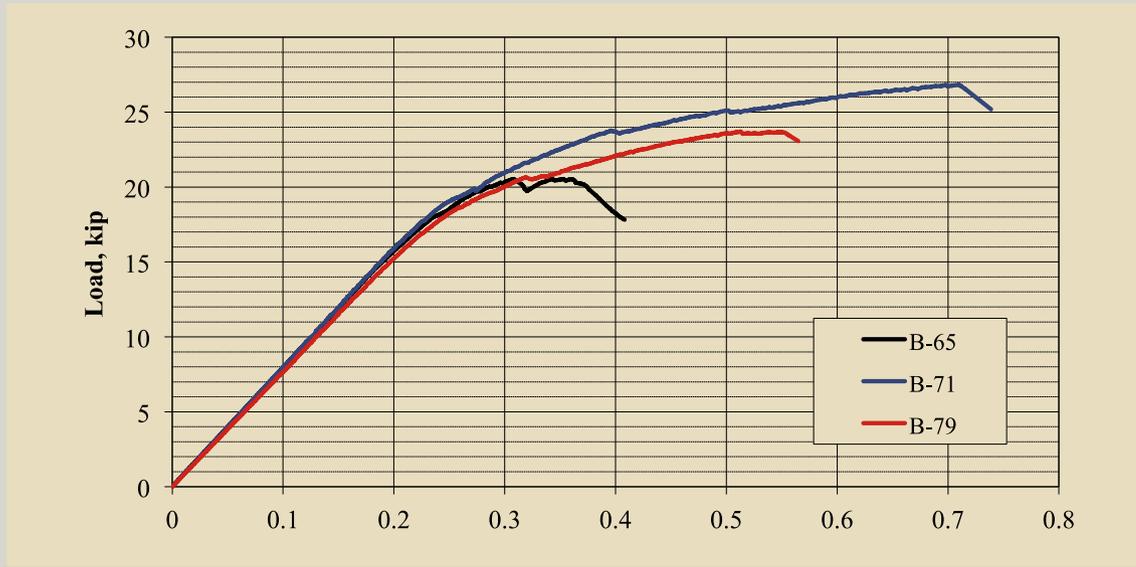


Figure 15. This figure compares the relationship for the ends of the girders with shear reinforcement. Note: 1 in. = 25.4 mm; 1 kip = 4.448 kN.

Compiled by K. Michelle Burgess (mburgess@pci.org)

Survey on high-priority topics for research at PCI

To: PCI Producer, Associate, and Professional Members

Do you know that each year PCI allocates 7% of Producer Member and Associate Member dues for projects conducted under the auspices of the PCI Research and Development Committee? Despite this commitment by PCI, total industry expenditures for research conducted on topics of specific interest to the precast concrete industry are still relatively low compared with those for competitor industries. It is especially important that we spend PCI's research dollars wisely. Accordingly, we are asking for your help.

Periodically, we solicit input from the entire PCI community regarding your opinions on technical research activities that could produce knowledge that would benefit your organization and the industry's market share. We then summarize these data in the form of a prioritized listing titled "Top 10 PCI Research Topics." This list is shared with prospective researchers to assist them as they develop research proposals to be funded as regular PCI (major) projects and/or PCI (Daniel P. Jenny) Research Fellowships, as well as those to be funded entirely or in part by other research agencies, such as the National Science Foundation, the National Institute of Standards & Technology, and the Federal Highway Administration.

We have designed a survey form to facilitate your providing us with your opinions regarding current technical research needs. In addition, we are requesting that you tell us about your company's current and recent (nonproprietary) research and development activities.

Please send your response to Roger Becker at PCI as indicated on the survey form.

Harry Gleich
Chair, PCI Research & Development Committee

Research & Development Survey

Please list below the four most pressing technical problems that, in your opinion, confront the precast/prestressed concrete industry today. Provide a brief statement of scope and objective(s) of research that would address each proposed topic. Attach additional sheets as required.

1. _____

2. _____

3. _____

4. _____

Please describe your company's current and recent (past 5 years) nonproprietary research and/or testing. Attach additional sheets as required.

Additional comments. Attach additional sheets as required.

Please mail/email/fax this sheet to

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Name (please print)

Position

Company

Telephone

Fax

Email