



Codes and standards

One of the most important things PCI does for the industry and the general public is to participate actively on various code-writing bodies. Codes matter to our members because until a material, design method, structural system, or connection is enshrined in a code, it is considered experimental technology and will not be widely specified or used.

Almost 10 years ago, while working for a testing laboratory, I was asked to persuade local engineers to accept the use of 4 × 8 in. (100 × 200 mm) cylindrical specimens in lieu of the then-standard 6 × 12 in. (150 × 300 mm) cylinders for verifying concrete compressive strength. At the time, the relevant American Society for Testing and Materials (ASTM) standard allowed the use of 4 × 8 in. cylinders "when specified." Some engineers were willing to specify them at our request because they trusted us, recognizing the benefits to our technicians of using specimens weighing 10 lb (4.5 kg) rather than 30 lb (14 kg). However, a sizeable minority would have none of it. I duly visited the design firms where no one had yet specified 4 × 8 in. cylinders and asked why not. The best answer came from one of the older engineers, clearly speaking from bitter experience when he said that he would never specify anything that was not in a recognized code or standard. "Even if it has nothing to do with it, if anything goes wrong on the job, they'll point to that one nonstandard item as the cause, and then it will be my fault." Clearly there was no other way than to change the standard to put 4 × 8 in. cylinders on equal footing with 6 × 12 in. cylinders.

The PCI staff and our members are actively engaged in the work of ASTM; the American Concrete Institute; the American Society of Civil Engineers; the American Society of Heating, Refrigerating, and Air-Conditioning Engineers; and the International Code Council to make sure that precast concrete is appropriately represented in the codes and standards they develop. The peer-reviewed papers published in *PCI Journal* support this work by providing a sound basis for code provisions related to precast concrete.

PCI also retains Emily Lorenz, S. K. Ghosh, and Steve Skalko as consultants to monitor the status of precast concrete in sustainability, building, and fire codes, respectively. All three have contributed to this issue. Lorenz discusses the role of life-cycle assessments (LCAs) in building codes and presents the executive summary of PCI's LCA project. Ghosh discusses changes in the seismic provisions of ASCE 7. Skalko summarizes fire-related changes to the 2015 *International Building Code*.

Up to now, PCI's publications have not had the status of design codes because PCI is not accredited by the American National Standards Institute (ANSI) to publish codes. PCI applied for ANSI accreditation in the fall of 2013.

The first issue of 2014 is the one in which we thank the reviewers of our peer-reviewed papers. This year we also describe our peer-review process so you can better appreciate what a valuable service these dedicated volunteers perform. Reviewers serve anonymously to allow them to comment freely on the merits and deficiencies of the manuscripts submitted for possible publication. We thank them by name once a year to give them some much deserved recognition. ▮

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