

Design methodology for slender spandrel beams



Congratulations to the “Development of a Rational Design Methodology for Precast Concrete Slender Spandrel Beams: Part 1, Experimental Results and Development of a Rational Design Methodology for Precast Concrete Slender Spandrel Beams: Part 2, Analysis and Design Guidelines” authors, Gregory Lucier, Catrina Walter, Sami Rizkalla, Paul Zia, and Gary Klein, for translating into a force approach the otherwise relatively simple, logical notion of providing tension reinforcement where principal tensile stresses exceed concrete tensile strength.



The stress approach, applied in this case to L beams, also would not be aspect-ratio specific, resulting in a general, fundamental mechanics-of-materials approach that would yield meaningful *comparative* stress values to the designer rather than *noncomparative* force values, dictated by *Building Code Requirements for Structural Concrete (ACI 318-08) and Commentary (ACI 318R-08)*, which are a function of scale only.

We still calculate stresses in prestressed members. Isn't it time for ACI 318 to go back to stresses versus forces?

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ERRATA

An article on page 25 of the Spring 2012 *PCI Journal* should say that Finfrack is not the only company to use 3-D modeling and laser technology in the manufacture of precast/prestressed concrete structural members. Fabcon has used 3-D modeling and BIM software in the manufacture of precast/prestressed concrete structural members for more than 10 years.

COMMENTS?

The editors welcome comments on the contents of this issue and on general matters related to the precast/prestressed concrete industry. Letters should include the writer's name, title, company, city, and email address or phone number. All letters become the property of *PCI Journal* and may be edited for space, clarity, and style. Letters are limited to 250 words and are published at the discretion of the editorial staff. The opinions expressed are those of the writers and do not necessarily reflect those of PCI.

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