



Practical Applications of TPI 1 for the Design Professional of Record – July 12

Building codes recognize numerous documents and standards for structural design and analysis. Because these standards may become part of the building code by reference, it is imperative that the design professional have a basic understanding of their content and use. The Truss Plate Institute (TPI) has created the National Design Standard for Metal Plate Connected Wood Truss Construction, typically abbreviated as TPI 1. Although construction documents frequently specify TPI 1 when using wood trusses, rarely do design professionals know or fully understand the standard's content as it pertains to them. The objective of this webinar is to provide insight into the truss industry while answering three critical questions:

- 1) What in the TPI 1 Standard applies to the project design professional?
- 2) What is the purpose for these requirements in the standard?

- 3) How can the design professional of record gain confidence that wood trusses meet the structural design intent of the building?

Scott Coffman has 30 years in structural wood design experience, predominantly in wood building components. Upon receiving a BS degree in Civil Engineering from Purdue University, he was an engineer for Trus Joist MacMillan and the Director of Engineering for Builders FirstSource. Mr. Coffman served on the TPI 1 Project Committee that developed the ANSI/TPI 1 Standard for metal plate connected wood trusses. He has authored articles published in *Structural Building Components*, is licensed in eight states, and currently assists Motley Structural Design in wood truss engineering.



Externally Applied Fiber Reinforced Polymers (FRP) for Structural Strengthening – July 26

This webinar will discuss the state of the art design and application methodologies for externally applied FRP for strengthening existing concrete and masonry structures, including wet-layup FRP, pre-cured laminates, and near surface mounted (NSM) bars. Available FRP strengthening material types will be discussed, structural members that can be upgraded will be presented, and limitations of FRP use will be identified. FRP design methodologies will be outlined for flexure, shear, and axial enhancement, several case studies will be presented, and available sources of information will be provided.

André G. Garner, P.E., Principal of Garner Consulting Group, has over 20 years of experience in the design and construction of repairs to existing structures using state of the art methodology, such as FRP strengthening, and innovative conventional methods, including in place self-supporting formwork. Active in the design of retrofits to structures for repair of distress, change of use, code compliance, and blast loading, Mr. Garner is also a member of ACI committees 302, 342, 440, and ACI Subcommittee 440-F "FRP Repair Strengthening".



The cost is \$250 per internet connection. Several people may attend for one connection fee. Each course will award 1.5 hours of continuing education. The times will be 10:00 am Pacific, 11:00 am Mountain, 12:00 pm Central, and 1:00 pm Eastern. Approved in All 50 States.



Webinar Series: NEHRP Seismic Design Technical Briefs

- August 4 Jack Moehle: *Concrete Moment Frames*
- August 11 Jack Moehle: *Concrete Diaphragms, Chords and Collectors*
- August 25 Greg Deierlein: *Nonlinear Structural Analysis*
- September 8 James Malley: *Steel Special Moment Frames*

The National Earthquake Hazards Reduction Program (NEHRP) Technical Briefs are published by NIST, the National Institute of Standards and Technology, as aids to the efficient transfer of NEHRP and other research into practice. Topics of the briefs are selected to address design issues and structural systems that are commonly encountered by practicing structural

engineers. The briefs, intended to help reduce the nation's losses from earthquakes, were produced under contract to NIST by the NEHRP Consultants Joint Venture, a joint venture of the Applied Technology Council (ATC) and the Consortium of Universities for Research in Earthquake Engineering (CUREE).

Cost: \$250 per internet connection per session or \$750 for all four sessions on the NEHRP Seismic Design Technical Briefs. Each webinar awards 1.5 hours of continuing education. Several people may attend for one connection fee. There will be a \$5 fee for each continuing education certificate requested. Approved in all 50 states.

Note: The times for the NEHRP webinars will be 12:00 pm Pacific, 1:00 pm Mountain, 2:00 pm Central, and 3:00 pm Eastern.



Call for Entries

NCSEA 14th Annual Excellence in Structural Engineering Awards

The NCSEA Excellence in Structural Engineering Awards celebrates the greatest structural engineering achievements in the United States and throughout the world.

Entries are due July 22. Awards will be presented at the Renaissance Hotel in Oklahoma City on October 22, at the conclusion of the NCSEA Annual conference; and winning projects will be featured in future issues of STRUCTURE magazine. For awards program rules and eligibility, as well as entry forms, see the Call for Entries on the NCSEA website: www.ncsea.com.

Entries are welcome, and awards will be presented, in the following award categories:

- New Buildings under \$10 Million
- New Buildings \$10 Million to \$30 Million
- New Buildings \$30 Million to \$100 Million
- New Buildings over \$100 Million
- International Structures over \$100 Million
- New Bridge and Transportation Structures
- Forensic/Renovation/Retrofit/Rehabilitation Structures
- Other Structures

NCSEA Nineteenth Annual Conference

October 20-22, 2011

Oklahoma City, Oklahoma

Oklahoma City is proud to host this year's NCSEA Annual Conference. Held at the Renaissance Convention Center, the program will include the following:

Thursday, October 20: Committee meetings, two forums (one on media relations and one on ethics), trade show, and reception

Friday, October 21: Presentations by NCSEA Past Presidents from across the country

Friday night: Dinner at the Oklahoma City Museum of Art

Saturday, October 22: NCSEA committee and business reports, lunch and speaker, followed by discussion and workshops on NCSEA's proposed position statement on separate licensing

Saturday night: NCSEA Reception and Awards Banquet, honoring the finalists of the 2011 NCSEA Excellence in Structural Engineering Awards, as well as those individuals receiving the NCSEA Cornforth, Delahay, and Service Awards



Oklahoma City Museum of Art, courtesy of Joseph Mills Photography.

NCSEA's 2012 Winter Institute – Save the Date

February 10-11 at the Hotel Monteleone in New Orleans, LA

Tour: Inner Harbor Navigation Canal (IHNC) and the Lake Borgne Surge Barrier

Lectures: Geotechnical Engineering and Pile Load Test Program for the Inner Harbor, Design of Gate Structures, ASCE 7-10 Wind Loading and Design, Hurricane and Tornado Shelter Design, Retaining Wall Design – Soil Improvement Methods in Soft and Challenging Soils, and More... Don't miss it!

NCSEA/Kaplan SE Exam Review Course

Taking the Structural Engineering Exam in the Fall? Don't miss your opportunity to take the NCSEA/Kaplan SE Exam Review Course: July 23-24 and August 6-7. More information is available on page 11 and at www.ncsea.com.