

# STEEL NEWS & EVENTS

## AISC ENCOURAGES PARTNERSHIP IN WTC STUDY

In response to the collapse of the World Trade Center (WTC) and the damage to the surrounding buildings, AISC is participating in an ASCE/SEI-led Building Performance Assessment Team (BPAT). "In order to determine how best to direct this technical work, it is critical that the principal structural engineering and standard-setting organizations form a formal partnership with ASCE/SEI," said H. Louis Gurthet, P.E., President, AISC.



H. Louis Gurthet, P.E.  
President, AISC

Members of the WTC BPAT have already visited the site to examine the remaining structures. Team members include: William Baker (Skidmore Owings & Merrill), Jonathan Barnett (Worcester

Polytechnic Institute), David Biggs (Ryan-Biggs Associates), Gene Corley (Construction Technology Laboratories), Edward M. DePaola (Severud Associates Consulting Engineers), Robert Duval (National Fire Protection Association), John Fisher (Lehigh University), Richard Gewain (Hughes Associates, Inc.), Ramon Gilsanz (Gilsanz Murray Stefick), John Gross (National Institute for Standards and Technology), Ron Hamburger (ABS Consulting/EQE Structural Engineering Division), Nestor Iwankiw (AISC), Venkatesh Kodur (National Research Council of Canada), Jon Magnusson (Skillington Ward Magnusson Barkshire Inc.), Christopher Marion (Arup Fire),

James Milke (University of Maryland), James Rossberg (SEI), Saw-Teen See (Leslie E. Robertson Associates), Robert Smilowitz (Weidlinger Associates) and Charles Thornton (Thornton Tomasetti).

"It is important that we determine the actual mechanism of collapse," notes Gurthet. "Until the data collection and studies are complete, we will not be able to determine what-if any-modifications to building standards are necessary."

It is uncertain when additional information will be available to the public from BPAT efforts; however, a plenary session discussing the WTC is planned for the North American Steel Construction Conference (NASCC) in Seattle, April 24-27, 2002.

## SEISMIC DESIGN OF STEEL BUILDINGS

Plan now to attend this practical seminar on the design of steel moment-frame structures in seismic regions. Presented by Thomas A. Sabol, Ph.D., S.E., this seminar will familiarize the practicing engineer with the latest provisions on the use of steel in building structures in high-seismic applications, including the new FEMA 350 Guidelines, "Recommended Seismic Design Criteria for New Steel Moment-Frame Buildings," and the AISC "Seismic Provisions for Structural Steel Buildings" with Supplement No. 2. A short overview of FEMA 353 will also be presented. An extensive set of handouts will be given to each attendee and lunch will be provided. AISC will issue a certificate awarding 0.7 CEUs or 7.0 PDHs to each participant upon completion of the seminar.

Fees are \$170 for AISC members and \$200 for non-members. For more information, locations, and dates, as well as a downloadable registration form, visit:

[www.aisc.org/seminars.html](http://www.aisc.org/seminars.html)

Call 630.369.7784 for questions about registration. For questions about the seminars, please contact Carol Pivonka at [pivonka@aiscmail.com](mailto:pivonka@aiscmail.com).

## STEEL CONNECTION DESIGN SEMINAR

For those interested in learning more about the art and science of connection design, this 7-hour seminar will provide practical knowledge. For both connection design and the evaluation of connections that are shown on shop drawings, this course will help engineers understand the fundamentals of connection design, including bolting, welding, and connecting elements. This class will also give insight into the design of shear, moment, bracing, and other connections used in steel structures.

Speakers will vary from location to location, but will be selected among experts throughout the U.S. in the field of

connection design. The new AISC Specification and other handouts will be given to each attendee and AISC will issue a certificate awarding 0.7 CEUs or 7.0 PDHs to each participant. For locations, dates and times, please visit:

[www.aisc.org/seminars.html](http://www.aisc.org/seminars.html)

Fees are \$170 for AISC members and \$200 for non-members. Call 630.369.7784 for questions about registration. For questions about the seminars, please contact:

Eastern: Ron Hiatt, [hiatt@aiscmail.com](mailto:hiatt@aiscmail.com)

Central: Steve Ashton, [ashton@aiscmail.com](mailto:ashton@aiscmail.com)

Western: Carol Pivonka, [pivonka@aiscmail.com](mailto:pivonka@aiscmail.com)

## AISC STANDARDS FOR PUBLIC REVIEW

AISC is now requesting public review and comment on the following three specifications:

- *Load and Resistance Factor Design Specification for Steel Hollow Structural Sections*
- *Load and Resistance Factor Design Specification for Single Angle Members*
- *Seismic Provisions for Structural Steel Buildings*

These specifications are available for downloading on the AISC web site at

[www.aisc.org](http://www.aisc.org). Copies are also available (for a \$12 nominal charge) by calling 312.670.5410.

Please send your specific comments to Cynthia J. Lanz, Director of Specifications, at [lanz@aiscmail.com](mailto:lanz@aiscmail.com) or by fax to her attention at 312.644.4226. Negative comments must be accompanied by specific recommendations for revision. Comments must be received by December 22, 2001 for consideration.

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## CORRECTION

*Modern Steel Construction* unintentionally omitted Nucor-Vulcraft from the September Product Highlights for metal deck and steel joist products. We apologize for the error. A complete listing follows:

### Nucor-Vulcraft

web: [www.nucor.com](http://www.nucor.com)

Brigham City, UT  
Phone: 435.734.9433  
Fax: 435.723.5423  
Email: [roy@vulcraft-ut.com](mailto:roy@vulcraft-ut.com)

Florence, SC  
Phone: 843.662.0381  
Fax: 843.662.3132  
Email: [asears@vulcraft-sc.com](mailto:asears@vulcraft-sc.com)

Fort Payne, AL  
Phone: 256.845.2460  
Fax: 256.845.2823  
Email: [kgeesaman@vulcraft-al.com](mailto:kgeesaman@vulcraft-al.com)

Grapeland, TX  
Phone: 936.687.4665  
Fax: 936.687.4290  
Email: [mheine@vulcraft-tx.com](mailto:mheine@vulcraft-tx.com)

Norfolk, NE  
Phone: 402.644.8500

Fax: 402.644.8528  
Email: [swalker@vulcraft-ne.com](mailto:swalker@vulcraft-ne.com)

St. Joe, IN  
Phone: 219.337.1800  
Fax: 219.337.1988  
Email: [dpetersen@vulcraft-in.com](mailto:dpetersen@vulcraft-in.com)

Chemung, NY  
Phone 607.529.9000  
Fax: 607.529.9001  
Email: [sfitts@vulcraft-ny.com](mailto:sfitts@vulcraft-ny.com)

### Vulcraft Steel Joists

Vulcraft is the one of the largest producers of steel joists in the nation and has engineering expertise in the field of joists, joist girders and steel deck. Vulcraft offers a wide range of steel joists including K Series, KCS Series, LH Series, DLH Series, SLH Series (Super Long Spans), VC Series (Composite Joists), VLH Series (Non-composite Floor Joists) and Joist Girders.

Vulcraft is one of the best choices for joists because its large manufacturing capacity insures on-time completion of even the largest projects; on-time delivery due to a large inventory of steel, a sizable fleet of trucks and seven strategically located plants

efficiently serves every part of the country; and knowledgeable and experienced engineers from the nation's largest joist manufacturer lend valuable help to the specifying engineer. Volume is the greatest teacher.

### Vulcraft Deck

Vulcraft offers a complete range of steel decking at six strategically located manufacturing facilities. The deck is accurately roll formed in varying configurations on the most modern high-speed roll forming equipment available.

Steel roof and floor decks have long been recognized for their economy because of their lightweight and high strength-to-weight ratio. They provide a durable and attractive roof or floor system for fast all-weather construction. Steel decks also provide excellent lateral diaphragm action thus reducing the necessity for structural bracing. Their incombustible nature assures architects, engineers and owners of excellent fire ratings.

Vulcraft offers a selection of three finishes; prime painted, galvanized and black (uncoated).

## STRUCTURAL ENGINEERING REVIEW MANUAL, 2001 EDITION

The most comprehensive S.E. review manual, edited by Ben Yousefi, S.E. and James Son, S.E., is now updated to the 1997 UBC. The 600 page manual contains complete problem statements and solutions (except LRFD and bridge) for the California S.E. exam years 1990-1995 (six years).

Problem statements and solutions have been extensively modified to reflect the new 1997 UBC provisions for such items as: Load Combinations, Strength Level Base Shear, Redundancy, Overstrength, Drift, Non-Structural Components, Anchorage, Concrete Torsion and Shear Wall Design, and Steel Moment Connections per FEMA 350 Guidelines.

The manual, currently in its eighth year of publication, is mainly intended for engineers preparing to take the S.E. exam. However, it is also a useful reference for a methodical approach to solving many types of practical engineering problems encountered by engineers on a daily basis. Applicable codes and text books are referenced by section and page number for each step of the cal-

culations, which substantially increases the efficiency for users.

In addition to the main manual a brand new supplement (approx. 100 pages) is also available this year covering 18 new problems in all areas. The cost for the main manual is \$175 and for the supplement is \$45; plus applicable taxes, shipping and handling. For more information or an order form, please call BYA publications at 800.566.2906 or email to [byainc@aol.com](mailto:byainc@aol.com).

## ICBO RELEASES NEW STEEL DESIGN DUO

ICBO Publications has just released a two-volume set of manuals on structural steel design written by best-selling author Alan Williams, Ph.D., C.E., S.E. Volume 1 focuses on the Allowable Stress Design (ASD) method, and Volume 2 covers Load Resistance Factor Design (LRFD). The new set is co-sponsored by the National Council of Structural Engineers Associations (NCSEA).

*Structural Steel Design, Volume 1: ASD* contains 120 design examples, while *Structural Steel Design, Volume 2: LRFD* contains 100 design examples based on AISC's steel construction

manuals adopted by reference in the building code. The step-by-step solutions and applications provide an understanding and appreciation for each method of steel design. Both volumes reflect current design procedures and provide concise solutions techniques for design problems.

The books were developed for practicing engineers, professional examination candidates and students to use for self-study of AISC's manuals or as everyday desk references. Each volume retails for \$59. For more information, please call 800.284.4406, or visit [www.icbo.org](http://www.icbo.org).

# NEWS & EVENTS

## LINCOLN ELECTRIC PLANS SEISMIC WELDING SEMINARS

**A**s a part of its Professional Programs, Lincoln Electric is offering classes on the new seismic welding guidelines and its products. This course is for fabricators, erectors, engineers, inspectors, building officials, consultants and others involved with construction for seismic zones where the new FEMA 353 welding guidelines are applied.

This six-hour workshop is designed to equip the building industry with detailed information on the FEMA 353 guidelines. It is also a forum for information exchange on Lincoln Electric's testing program, its products and its newly released publications regarding FEMA 353 applications. Initially, there will be three locations to choose from, and the class will be offered twice in each city.

**November 29 & 30, 2001 San Francisco**  
Lincoln Electric Livermore office  
925.443.9353

**December 3 & 4, 2001 Seattle**  
Lincoln Electric Seattle office,  
206.575.2456

**December 5 & 6, 2001 Los Angeles**  
Lincoln Electric Santa Fe Springs office  
562.906.7700

Brochures and registration forms may be obtained from The Lincoln Electric Company, 22801 Saint Clair Avenue, Cleveland, Ohio, 44117-1199, Attn: Registrar, Professional Programs, tel: 216.383.2240. For technical information, contact Scott Funderburk at 216.383.8187.

Because FEMA 353 has very specific welding requirements (some of which are quite different from AWS D1.1 requirements), Lincoln has developed a *FEMA 353 Welding Manual*, available for downloading at [www.lincolnelectric.com](http://www.lincolnelectric.com). This periodically updated document contains information about FEMA 353 requirements as they relate to Lincoln Electric products.



kind. At least the public at large is convinced that we mean them no harm (in general).

So what's the big deal? In every industry journal published today, we are told that the plight of the wallflower structural engineer can in part be solved by being more outspoken. Are the remarks of these two individuals adding any true value or credibility to our profession? I clearly don't think so.

*Greg Reizian, P.E.*  
*Denver, Colorado*

### Dear Editor:

As I read your September editorial article, the similarities between it and the flow of information in our industry are too coincidental.

## CORRESPONDENCE

### Dear Editor:

In the TV media blitz that followed the terrorist attack, I watched three structural engineers explain the primary reasons for the collapse of the twin towers at the World Trade Center. Their explanations confirmed my assumptions regarding the failure mechanism and were adequate for the average lay viewer to follow. Unfortunately, two of the three couldn't keep their mouths shut beyond their initial dissertations.

One of the men, a university professor who is currently doing research for AISC, just couldn't help giving the steel industry a plug by comparing the superior performance of the twin towers' steel frame to the cast-in-place concrete frame at Oklahoma City. He essentially said that if only the ar-

chitect and structural engineer for the Murrah Building had chosen steel instead of concrete, the tragedy could have been minimized and our history would have been changed forever. Shame on this guy and on AISC for supporting him.

The second sell-out among the three made a feeble attempt to assert that (like physicians) the only thing on the minds of structural engineers is life-safety, and that we are incorruptible. His remarks were in response to the proposed theory that a dastardly structural engineer conspired with the terrorists by identifying target zones for the jetliners. I think that if the terrorists could brainwash kamikaze pilots to follow their cause, they could certainly have influenced one of our



As dependency upon the accuracy of computer program increases and the human element lessens, the end user is the one left to discover that things aren't correct. A thorough check of contract design drawings by a person who understands what's going on (a final proof read of an article) can go a long way to eliminating the user discovering and resolving (RFIs) problems that should not exist and which are very costly to our industry, the fabricator and detailer in particular. The same is true of shop detail drawings and the need for competent checkers is critical.

*Robert J. Petroski, P.E.*  
*Vice President*  
*General Manager—Chief Engineer*  
*Hercules Steel Company, Inc.*