

AISC NEWS

AISC Joins American Scrap Coalition

AISC and the Concrete Reinforcing Steel Institute (CRSI) have joined the American Scrap Coalition (ASC), and both institutes urged strong, immediate government action to eliminate the taxes and other market barriers that numerous offshore governments maintain on their exports of steel scrap. The American Scrap Coalition (www.scrapcoalition.com) now includes industry associations representing more than 3,200 companies.

“Rising scrap costs are beginning to have a chilling effect on the construction industry and the U.S. economy in general,” stated Roger E. Ferch, president of AISC. “The growing use of steel scrap export taxes by foreign governments is artificially increasing the cost of steel scrap in the U.S. and driving up domestic costs unfairly and in an anti-competitive way.”

“Our fabricator members are being squeezed by scrap and other raw material costs,” said Bob Risser, president and CEO of CRSI. “They have long-term projects with established pricing, but their costs have increased tremendously. They are not only losing money, but in some cases their companies are threatened.”

The American Scrap Coalition is calling on Congress, the U.S. Trade Representative, and the Commerce Department to immediately address scrap trade barriers. The Coalition has identified several priority issues:

→ Identification and removal of barriers to trade in steel scrap, which hinder U.S. companies and global competition.

→ The U.S. carbon steel industry recycled approximately 75 million tons of ferrous scrap last year, with approximately 80% of that scrap consumed in Electric Arc Furnaces. Recycling scrap metal is the most efficient way to make steel, and therefore results in the lowest level of greenhouse gas emissions. The American Scrap Coalition will support and promote policies to encourage the recycling, recovery, and use of recycled scrap material in production of new steel products.

→ Consider actions by Congress, the Commerce Department, and the Office of the U.S. Trade Representative to remove trade barriers.

Companies and industries wishing to join the American Scrap Coalition can register at www.scrapcoalition.com. The web site contains additional information on scrap trade barriers, import and export levels, and prices.

In July, ASC released its newly compiled list of foreign trade barriers to steel scrap and called for the removal of these barriers. The Coalition identified more than 25 countries that have imposed barriers on the trade of steel scrap and other raw materials, harming U.S. companies and their workers.

According to Tom Danjczek, president of the Steel Manufacturers Association, the U.S. government has long rejected imposing export restrictions on U.S. scrap and has instead focused on removing foreign trade barriers. “If that is still the case, it is now time for the U.S. Government to get serious,” Danjczek stated in an ASC release.

In particular, the Coalition singled out Russia’s recent announcement that it plans to raise export tariffs on steel scrap from the current 15% level to 120-130 euros (\$191-\$207) per metric tonne.

Other countries imposing scrap export bans or particularly heavy export taxes include: Indonesia, Saudi Arabia, Vietnam, Pakistan, Argentina, India, and Ukraine. The Coalition’s complete list of barriers is available at www.scrapcoalition.com under “Latest News.”

PUBLICATIONS

Façade Attachment Guide Now Available

Design Guide 22: *Façade Attachments to Steel-Framed Buildings*, by James C. Parker, P.E., is now available. This new AISC design guide addresses the design of façade attachments to steel-framed buildings.

“Structural engineers will find this to be a practical resource when designing the interface between the façade system and a steel structure,” says Cynthia Duncan, AISC’s director of engineering. The objective of the design guide, according to the Introduction, is to “assist the practicing engineer in achieving economical slab edge details for steel frames that are structurally sound, durable, and accommodating of the performance requirements of the particular façade system.”



Façade system fundamentals are discussed, along with building performance issues that influence attachment design. The details of various façade systems are exemplified, including masonry cavity wall systems with concrete-block or steel-stud back-up, precast concrete wall panels, aluminum curtain walls with glass and/or metal panels, glass-fiber-reinforced concrete panels and other lightweight panels, and exterior insulation-and-finish-system panels. Design examples for the various systems are also provided.

For more information or to order the guide, visit www.aisc.org/epubs or www.aisc.org/bookstore.

PUBLICATIONS

Brochure Touts Green Aspects of Galvanizing

The American Galvanizers Association has released *Sustainable Solutions for Corrosion Protection*, a free brochure detailing new research regarding the strength and sustainability of hot-dip galvanized steel in the alternative energy market.

Sustainable Solutions explores how using hot-dip galvanized steel in biofuel, wind, hydroelectric, and solar structures not only protects them from the effects of corrosion, but also is highly sustainable and earth-friendly. Highlighting the inevitability of corrosion, this brochure stresses the importance of making intelligent environmental and economic decisions, supported by real-life case studies from each sector of the alternative energy market. It also explains how the natural, recyclable zinc coating created in the galvanizing process will provide superior corrosion protection without requiring the costly carbon footprint of maintenance.

Learn how to further the earth-friendly efforts of alternative energy sources by incorporating hot-dip galvanizing. Request a free *Sustainable Solutions* brochure by visiting www.galvanizeit.org.

AISC SPECIFICATION

Tracking the Progression of the AISC Spec

BY JAMES FALLS AND JIE ZUO

Every few years, AISC releases a new specification for steel buildings. New research often breeds significant improvements to the specification, and it is important to understand what changes were made and how they affect the design of future steel buildings.

Several major changes have been made between the 1989 *Specification for Structural Steel Buildings—Allowable Stress Design and Plastic Design* and the ASD side of the newer 2005 *Specification for Structural Steel Buildings*, which also contains LRFD. (An extensive look at the detailed changes between the two specifications can be viewed online at www.aisc.org/crossrefASD.)

First, it is important to understand what sparked the industry to switch from *allowable stress design* to *allowable strength design*, a change reflected in the 2005 *Specification*. Allowable strength provisions are based on forces and moments that are absolute capacities; units are usually in kips or kip-ft. On the other hand, allowable stress works with proportional stress capacities, which usually indicates units in kips per unit area. By eliminating allowable stresses and introducing the safety factor, Ω , the provisions in the 2005 *Specification* can be applied to both ASD and LRFD, unifying the two design philosophies with each producing similar results.

Another important update is the introduction of the term *limit state* to the 2005 *Specification*. Since previous LRFD specifications have always used the term *limit state* to define the boundaries of which a building is adequate for its intended use, it was only fitting that it should be incorporated into the 2005 *Specification*. Interestingly, traditional allowable stress design was also formulated based on limit state principals, but the term was never used.

Globalizing Measurement

One problem with the 1989 *Specification* was that it dealt exclusively with U.S. customary units. Since most countries use metric units, this hindered the use of the specification outside of the U.S. Now that many design firms are working on international projects, the inclusion of metric units into the 2005 *Specification* facilitates design outside the U.S. by avoiding pesky conversions. For example, in Table J2.4, Minimum Size of Fillet Welds, millimeters are provided in parentheses next to inches. This is typical throughout the 2005 *Specification*.

Taking it one step further, all ratios in the 2005 *Specification* were non-dimensionalized by factoring out the modulus of elasticity of steel, E . Once again, this change allows flexibility for designers to use either U.S. customary or metric units in their calculations. High-temperature design, which allows for a smaller E value, has also benefitted from this change.

On that Note...

Although not considered part of the 2005 *Specification*, User Notes were inserted throughout, with useful information to assist users. The content of these User Notes consists of helpful design tips, general rules-of-thumb, approximations, recommendations, and references to relevant documents. To avoid confusion, they appear in shaded boxes to help segregate them from the actual specification.

In addition, several important topics were added to the 2005 *Specification*, most notably Chapter K, Design of HSS and Box Member Connections. Originally, the provisions that governed HSS design were included in a separate specification titled *AISC Specification for the Design of Steel Hollow Structural Sections*, which was last published in 2000. The provisions were abridged and combined with the 2005 *Specification*. The appendices were completely revamped, and the most obvious change is the addition of six entirely new appendices, some of which reflect new research and newly developed methods, such as the appendices on structural design for fire conditions and the direct analysis method.

While new content accounts for the majority of the differences between the 2005 and 1989 *Specifications*, some parts of the 1989 version were entirely removed, most notably Chapter N, Plastic Design and Appendix F, Beams and Other Flexural Members, which covered the design of web-tapered members.

Besides the removal and addition of content, the actual organization of the specification was overhauled. Some sections moved from one chapter to another, while others were combined into a single section. For example, former Sections B4 and C1 were combined into C1.1, General Requirements.

James Falls is an undergraduate student at the University of Florida in Gainesville, and Jie Zuo is an undergraduate student at the University of Illinois at Urbana-Champaign. Both were 2008 summer interns with AISC.

AISC NEWS

Prequalified Moment Connection Standard Supplement Now Available for Public Review

Supplement No. 1 to the 2005 AISC *Standard Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications* (ANSI/AISC 358-05) is now available for a second public review. This supplement includes limited revisions to existing provisions for End-Plate and Reduced Beam Section (RBS) Connections, and provides design provisions for additional moment connection technologies, including the Bolted Flange Plate (BFP) Moment Connection, the Welded Unreinforced Flange-welded Web (WUF-W) Moment Connection, and the Kaiser Bolted Bracket (KBB) Proprietary Cast Moment Connection. The Supplement also includes an appendix for cast steel material and quality.

The only item to be reviewed in this ballot is Section A.2.4(2)b. The proposed revision increases the sampling to 50% of the production castings from 25% in the previous ballot. This change was made as a result of negative comments received on the first ballot and the committee's determination that this rate would be more consistent with that necessary to assure a quality product.

The complete supplement is available for your review by downloading the document at the links provided below. A hard copy of the supplement can also be requested for a fee of \$15 by e-mail to cummins@aisc.org.

Please submit your comments electronically to cummins@aisc.org using the comment form available at the links below, or mail to:

Janet Cummins
AISC
One East Wacker Drive, Suite 700
Chicago, IL 60601

All comments are due by October 20, 2008.

To download the public review document, visit www.aisc.org/358s2. To download the comment form, visit www.aisc.org/358s2PRcomments. To download the existing 2005 ANSI/AISC 358 Standard visit www.aisc.org/AISC358.

AISC Certification Releases Draft Standard for Public Review

The AISC *Certification Standard for Bridge and Highway Metal Component Manufacturers* will be available for a second period of public review beginning October 7, 2008 and concluding after 21 days on October 28, 2008. This standard has completed balloting by the AISC Certification Committee. A copy of the approved draft standard dated August 19, 2008 will be available from the AISC web site www.aisc.org with instructions for submitting comments.

This second review period provides individuals and organizations that may be affected by implementation of the standard, an opportunity to share concerns and offer value-

enhancing suggestions and recommendations on changes made since the first public review, which concluded on July 27, 2007. The draft available from the AISC web site will include indication of the substantial changes made since the first public review. Comments submitted during this second public review period will be given full consideration by the AISC Certification Committee.

The standard will support the new Component Manufacturer Certification, a new AISC Certification program. The Component Manufacturer Certification will confirm to owners, design professionals, and the construction industry that a firm has the person-

nel, organization, experience, procedures, knowledge, equipment, and commitment to produce components of the quality required for normal bridge and highway construction. It is anticipated that the Component Manufacturer Certification program will provide a valuable means for qualifying firms, and serve as an effective way for steel bridge fabricators and manufacturers participating in the program, to communicate their commitment and capability with respect to quality.

The Component Manufacturer Certification program is expected to become available to the industry by the beginning of 2009.

TAUC Leaders Tackle Tough Questions

Some of the country's top union leaders recently took part in a town hall-style forum that is now available for viewing on The Association of Union Constructors' (TAUC) web site, www.tauc.org.

Never before have such prominent labor leaders gathered for such a unique discussion that included an audience of several hundred contractors from around

the nation. The five general presidents responded to hard-hitting questions at TAUC's 2008 Leadership Conference, an annual event that attracts leading union contractors, labor representatives, employer associations, and construction users from around the country to discuss the future of the union construction industry. The forum was moderated by construc-

tion industry strategist and speaker, Mark Breslin.

"This was a critical step in the ongoing path to improving the dialogue between the building trades and contractors. Ensuring a viable working relationship between both groups means high-quality and affordable industrial construction," said TAUC CEO, Stephen Lindauer.

Disaster Site Safety Considerations

With hurricane season in full throttle, the National Association of Tower Erectors (NATE) has issued a safety bulletin outlining considerations when performing disaster relief work on broadcast and wireless communication towers. The bulletin

includes bid considerations as well as advice on safe working conditions. "Do not be pushed to complete tasks faster than you can safely [do]," the bulletin advises. "Safety needs to remain the number one priority on all job sites, even more so regarding di-

saster relief work. Please ensure that, when pricing the work to be performed, you can do the job safely and for a reasonable price. And if you accept the bid, please work safely." To view a copy of the bulletin, visit www.natehome.com.

INDUSTRY EVENTS, EDUCATIONAL OPPORTUNITIES, AND NEWS

Engineering Home Runs in Houston

The Structural Association of Texas (SEAO T) will hold its 2008 State Conference in Houston, November 6-8 at Houston's Minute Maid Park, home of the Houston Astros. It's a big event in a state known for doing things big; according to SEAO T, it's the largest gathering of structural engineers in the state. The theme

of this year's conference is "Engineering Home Runs" and speakers will cover topics ranging from business management to structural engineering technical issues. Professional attendees can expect to attain up to eight PDHs by attending the conference sessions. For more information, visit www.seaot.org.

Steel Structures Technology Center's Fall Lineup

The Steel Structures Technology Center has announced three one-day, seven-hour seminars on the inspection of steel construction and structural welding, and a two-hour evening seminar on structural steel plan reading. All four seminars are conducted in cooperation with the International Code Council (ICC).

The "Structural Steel and Bolting Inspection" seminar includes International Building Code (IBC) special inspection requirements, steel materials, steel fabrication and erection, and high-strength bolting.

The "Structural Welding Inspection" seminar includes IBC special inspection requirements and welding inspection under American Welding Society (AWS) Structural Welding Codes D1.1-Steel, D1.3-

Sheet Steel, and D1.4-Reinforcing Steel.

The "Inspection of Seismic Steel Frames" includes AISC, IBC, and AWS requirements for connection details, welding, bolting, inspection, and nondestructive testing for steel buildings designed to the AISC *Seismic Provisions*.

"Plan Reading for Steel Construction" includes structural steel design and shop drawings.

Seminars are scheduled in the following cities:

South San Francisco	Nov. 5, 6, & 7
Los Angeles/Buena Park	Nov. 11, 12, & 13
Las Vegas	Dec. 1, 2, & 3
Phoenix/Scottsdale	Dec. 4 & 5

For more information, visit www.steel-structures.com.

Green in D.C.

The Ecobuild Fall conference will bring its green message to the nation's capital this December. The goals of the show, running Dec. 8-11 in Washington, D.C., are:

1. Educating the entire building industry about designing and building sustainable projects
2. Promoting the use of energy-efficient products
3. Providing updates on the newest and best green and sustainable products to the end users and specifiers

4. Promoting all rating systems that improve sustainability compliance
5. Providing information on the latest information technology that advances the sustainable movement in building and construction.
6. Protecting the environment's natural resources

For more information, visit www.ecobuildfall.com.

Ample Online Learning Opportunities

For the time being, the International Association for Bridge and Structural Engineering's (IABSE) E-Learning Platform is accessible for free for Members and Non-Members at www.iabse.org/publications/elearning.

Fifteen lecture series—including web-casting of lectures, short courses, videos,

and animations on the construction of structures—are currently available online.

And if that's not enough online educational information for you, you can also check out AISC's online offerings at www.aisc.org/elearning or www.aisc.org/seminars.

FMI Releases 2009 Schedule of Events

Building and construction management consulting firm FMI has unveiled its schedule of programs and workshops for late 2008 and 2009. This year's lineup includes 15 programs in seven disciplines:

Business Development

- Contractor Selling Skills
- Marketing and Selling Strategies for 2009

Compensation

- Contractor Compensation and Rewards

Investment Banking

- 31st Annual Conference on Acquisitions in the Building and Construction Industry

- Mergers and Acquisitions Forum
- Ownership Transfer and Management Succession

Leadership

- Leadership Institute

Project Execution

- Improving Construction Productivity
- Project Manager Academy

Strategy

- Contractor Strategies for 2009
- Executive Program for Senior Managers
- 2009 Seminar Digest

Talent

- Emerging Managers Institute

- Financial Management for Non-Financial Managers
- Pricing and Bidding Strategy

The programs and workshops range in length from two to four days. Each program is designed for individuals to sharpen their knowledge and skills, stay informed of industry trends, and leave with applicable and valuable tools and techniques all while interacting with, and learning from, industry peers.

For a copy of the calendar, go to www.fmiresources.com/pdfs/SCOCALEN-DAR0809V2.pdf.

Dowco Unites with FabTrol

FabTrol Systems, a provider of steel fabrication management software recently announced that it has been purchased by the Dowco Group, a Canadian-based provider of 3D modeling and steel detailing services. According to FabTrol, the merger will allow both of these AISC Associate Member companies to expand their international presence, especially in the growing economies of India, China, and the Middle East. Terms of the sale were not disclosed.

Douglas and Gerry Diane Cochrane, founders of Eugene, Ore.-based FabTrol, say the decision to sell was difficult, but necessary "in order for the company to live

beyond a single generation."

"When we began seeking a buyer we knew they had to share our corporate values," said Gerry Diane Cochrane, CEO of FabTrol. "Our success has been built upon providing superior service to our clients before and after the sale. Our software is considered 'mission-critical' to the success of our clients' operations, and providing a high level of training and technical support has to be part of our deliverables. We feel that Dowco has been built upon the same principles and will continue to care for our clients and staff as we have."

Dowco president Ewen Dobbie agreed

with Cochrane, saying, "Both FabTrol and Dowco are proven brand names in the steel fabrication industry and have earned their excellent reputations through hard work and good service. Adding FabTrol Systems to the Dowco Group provides good synergy and enhances our long-range goal of being a global provider of comprehensive services from engineering to detailing to fabrication management."

Dobbie also said that FabTrol's headquarters would remain in Eugene, where Cochrane founded the company with her husband, Douglas Cochrane, more than two decades ago.

MEMBER NEWS

Tubular Expansion

Hollow structural section (HSS) producer Independence Tube Corporation (an AISC Active Member) has announced the expansion of its manufacturing facility in Marseilles, Ill.; the company currently has operations in Decatur, Ala., Chicago (headquarters), and Marseilles.

This green-field, 170,000-sq.-ft ex-

pansion will include a new manufacturing mill capable of producing HSS tubing 1.66 in. OD through 5.00 in. OD. This expansion will give Independence Tube the full-size range on pipe tubing from 1.66 in. OD through 12¾ in. OD and complement its 2-in. SQ through 12-in. SQ tube sizes.

Steel for Peddinghaus' New Building Fabricated on Trusted Equipment: Its Own

Peddinghaus Corporation (an AISC Associate Member) has added a new 45,000-sq.-ft facility to its manufacturing operation in Bradley, Ill. The new facility (at right) will employ ap-

proximately 400. Erected in only five months, all of the building's structural steel was fabricated with, of course, Peddinghaus equipment by Peddinghaus customers.



Fourth Quarter 2008 Article Abstracts

The following papers appear in the fourth quarter 2008 issue of AISC's *Engineering Journal*. EJ is available online (free to AISC members) at www.aisc.org/epubs.

Cyclic Behavior and Seismic Design of Bolted Flange Plate Steel Moment Connections

ATSUSHI SATO, JAMES D. NEWELL, AND CHIA-MING UANG

The AISC Connection Prequalification Review Panel (CPRP) is currently reviewing the bolted flange plate moment connection for inclusion in the next edition of the AISC *Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications*. To expand the experimental database for prequalifying the bolted flange plate (BFP) moment connection for special moment frames, cyclic testing of three full-scale BFP steel moment connection specimens has been conducted. Beam sizes for these specimens (W30x108, W30x148, and W36x50) were larger than previously tested to extend the range of available experimental results. All three specimens performed well and met the Acceptance Criteria of the AISC *Seismic Provisions*. The specimens achieved an inter-story drift angle of 0.06 radians before failure. **Topics:** Connections-Moment, Seismic Design, Lateral Systems

Simplified LRFD Design of Steel Members for Fire

TAI-KUANG LEE, AUSTIN D.E. PAN, AND KEN HWA

This paper proposes a simplified design methodology for steel members under fire in accordance with LRFD provisions. The fire design criterion compares the required design strength ratio with the design strength reduc-

tion ratio. Design strength ratios are derived from the required strength factor and the overstrength factor. Simplified formulas for member strength at elevated temperatures, as well as their corresponding critical temperatures, are derived for steel members under tension, compression and flexure, for unrestrained boundary conditions. An illustrative example is presented and comparisons are made with experimental data.

Topics: Fire and Temperature Effects, Tension Members, Columns and Compression Members, Beams and Flexural Members

Quantifying and Enhancing the Robustness in Steel Structures:

Part 1 – Moment-Resisting Frames

CHRISTOPHER M. FOLEY, CARL SCHNEEMAN, AND KRISTINE BARNES

Quantifying and Enhancing the Robustness in Steel Structures:

Part 2 – Floor Framing Systems

CHRISTOPHER M. FOLEY, KRISTINE BARNES, AND CARL SCHNEEMAN

The objective of this two-part manuscript is to provide information that can lead to: (a) better understanding of disproportionate collapse in structural steel framing systems; (b) improved understanding of secondary load paths that form within structural steel framing systems in the event of a localized failure; (c) development of minimum general structural integrity provisions for structural steel framing systems analogous to those present in ACI 318; (d) recommendations for minimum tie forces that can be used as the basis of indirect design methodologies for structural steel framing systems; (e) an understanding of the

distribution of tensile forces within typical steel floor framing systems to facilitate compartmentalization damage or collapse; and (f) identification of simple and economical means with which to enhance the robustness in the typical structural steel framing system.

Topics: Blast, Physical Security and Progressive Collapse, Lateral Systems

Current Steel Structures Research

REIDAR BJORHOVDE

This regular feature of the *Engineering Journal* provides information on new and ongoing research around the world. In the 16th installment, research projects are summarized on the following topics: Behavior and Strength of Link-to-Column Connections in Eccentrically Braced Frames (University of Texas-Austin), Use of Cast Steel Connectors for Bracing Connections in Special Concentrically Braced Frames (University of Toronto), Minimizing the Strength of Bracing Connections (Canam Corp.), Block Shear Evaluation for Members with Uncommon Failure Paths (University of Alberta), Testing of Shear Lugs for Column Bases (Technical University Federico Santa Maria, Valparaíso, Chile), Punching Shear Resistance of Tension Bolts (University of Thessaloniki in Greece and University of Pécs in Hungary), Three-Dimensional Web-Based Semi-Rigid Steel Frame Analysis with Graphical Interface (University of Texas at Arlington), Monitoring of Crane Girders in Actual Structures (University of the Witwatersrand in Johannesburg, South Africa), and Cold-Formed Stainless Steel HSS (University of Hong Kong).

Topics: Research

letters

The Wrong Path

Regarding Steven Lang's "Growing a Detailer" (August, p. 78), I agree with his assessment 100%. I've been in the profession for 50 years. I started in the drawing room of a fabricator, and I guess I will always lean toward on-the-job training by the fabricator. Each fabricator has their own set of shop standards to live by and their own type of work that they go after.

I have worked for a heavy structural fabricator and a light miscellaneous fabricator, and now work for a machine shop that also does movable bridges and very heavy fabrication for the Army Corps of

Engineers. Different types of fabrication demand their own special sets of required information that must be shown on the shop drawings. I wish anyone luck in training new detailers. Please tell them that it takes ten years to be a detailer and that every day, for the rest of their life, they will learn something new.

I believe our schools have lowered the standards too much. They allow calculators in class and think that the student will learn it next year. I wish that high schools would require four years of math, English, history, and science for a diploma. When my son graduated high school

in the late 1980s, he was told that "you don't need to know that now, you can get that in collage if needed." I could not convince him otherwise.

If we continue on the path we are on now, all of our engineering will be done offshore.

**Eugene Krutsch, Senior Detailer
Steward Machine Co., Inc.**

Steven Lang, did you ever hit the nail on the head! I've been detailing for 21 years now (joists and deck), and it seems the design drawings get worse and worse every year. It would be nice if the industry

could hold the architects and engineers to a higher standard. Our job is difficult enough without having to help finish the design of the building.

I also totally agree with your comments on the training and development of a detailer. Back when I first got into this profession, it was still being done with pencil and paper, calculators, and good math skills. To this day, I still have a Smoley's book sitting on my shelf to remind me where I started. Nowadays, with AutoCAD and office information systems, there is so much more to learn than just the detailing part of it, which is enough in itself.

Kurt A. Shatto
Detailer
Nucor-Vulcraft-SC

My hat goes off to Steven Lang. His article explains one of the problems why the industry is in short supply of detailers. From the wording of the article, I can only say that Mr. Lang speaks the detailers' language. Good job!

Patrick J. DePaul
Project Coordinator
BDS Steel Detailers

Steel Inspiration

We really appreciated Steve Kurtz's article "Learning By Doing" (April, p. 66) and we of course got even more inspired about our Canadian Institute of Steel Construction structural steel teaching aid project. So thanks to you, CISC, AISC, Steve Kurtz, and Dr. Duane S. Ellifritt, we are planning more sub-fabrications for our students. This is a great idea and we envision taking it out to our high schools partners as a smaller version of the CSIC donation we erected here at Kwantlen and even a little smaller than the one in your article. This next phase will start this fall and we are hoping to have some smaller units done by spring 2009. We will be incorporating it as part of our metal fabrication, welding, and CAD drafting students' projects. Thank you for the inspiration!

See the following story about our own structural steel teaching aid: www.kwantlen.bc.ca/news/2008/072908.html.

Robert A. Finlayson
Metal Fabrication and
Welding Instructor
College of Trades and Technology
Kwantlen Polytechnic University

Depends on the Source...

Mr. Gebremeskel's answer regarding the $\frac{1}{3}$ stress increase for wind and seismic loads (May 2008 Steel Interchange) was only partially correct.

Section 1605.3.2 of the Ohio Building Code, which is based on IBC 2006, permits the use of $\frac{1}{3}$ stress increase for the dead and live load portions of the equation when combined with wind.

The equation becomes:

$$\frac{3}{4}(D + L + 1.3W) \text{ for wind, and}$$
$$\frac{3}{4}(D + L + E/1.4) \text{ for seismic}$$

This is only permitted for ASD design. Unless this is a combination only permitted in the Ohio version of the code, the $\frac{1}{3}$ stress increase is allowed in a somewhat reduced amount.

Raymond Blinn
Eeman and Blinn, Inc.

Response from Amanuel Gebremeskel:

Various sections of Chapter 16 in IBC 2006 reference AISC 360 for steel design. I am afraid it is not permitted to use the $\frac{1}{3}$ stress increase under any condition, according to AISC 360. This practice was stopped with Supplement #1 of the 1989 specification.

It is quite possible that the Ohio Building Code takes exception to this IBC/AISC requirement. However, we at the Steel Solutions Center try to limit our answers to only addressing AISC publications and rarely the specific governing building codes.

IN MEMORY

Former Indiana Fabricators Association President Dies

Former Indiana Fabricators Association president Sterling C. Phillips passed away on August 3, 2008. He was 76. Phillips was the president and owner of AISC Active Member General Steel Fabricating in Indianapolis. He is survived by his wife of 58 years, Audrey Phillips; his children, Elaine (Donald) Lee and Douglas C. (Janet) Phillips; his grandchildren, Brian Lee, Adam Lee, Bradley Phillips; his great grandchildren, Makenzie and Makayla Lee; and his brothers, William, Ray, Chuck, and Don Phillips.