CERTIFICATION

Certification Bulletins Coming

In an effort to better communicate with its existing participants, AISC Certification will begin releasing Certification Bulletins communicating program updates and changes.

Certification Bulletin 2013-1: *Current Participant Conversion to Standard Based Bridge Certification Program* provides information required to convert bridge-certified facilities whose certification is expiring in August 2013 or after to the new standard-based AISC certification program for steel bridge fabricators. Conversion is mandatory for all participants.

The bulletin can be found at **www.aisc.org/bridgecertification**. If you have specific questions or concerns regarding Bulletin 2013-1, please contact us directly at **conversion@aisc.org**.

CONTINUING EDUCATION

New AISC Night School Course: Fundamentals of Stability for Steel Design

Looking for an educational program that enhances your professional development and accommodates your busy schedule? AISC offers Night School, an evening curriculum of online courses that focus on relevant structural steel design and construction topics. Registration is open for the second course in the program, "Fundamentals of Stability for Steel Design," which begins June 3.

The course will provide a comprehensive overview of the behavior and design of compression, flexural, beam-column and bracing members, as well as an introduction to system stability. Examples illustrating stability analysis and design concepts will also be included.

The course consists of eight 1.5-hour webinar sessions on Monday evenings, beginning at 7 p.m. Eastern Time:

- **Session 1:** June 3 - Course Introduction and Behavior of Compression Members
- **Session 2:** June 10 - Design of Compression Members
- **Session 3:** June 17 - Behavior of Flexural Members
- **Session 4:** June 24 - Design of Flexural Members
- **Session 5:** July 8 - Stability of Structural Systems
- **Session 6:** July 15 - Design of Members Subject to Compression and Flexure
- **Session 7:** July 22 - Fundamental Concepts of Bracing Compression and Flexural Members
- **Session 8:** July 29 - Design of Bracing for Columns and Beams

For registration details and additional information about the course, visit **www.aisc.org/nightschool**.

MEMBER NEWS

Steel Company Certified as Cradle-to-Cradle

ConXtech, Inc. (AISC member fabricator) announced that its ConXR and ConXL Chassis Based Modular structural steel building systems have been Cradle to Cradle Certified (CM).

CM is a multi-attribute program that assesses products for safety to human and environmental health, design for future use cycles and sustainable manufacturing processes.

Both ConXR and ConXL can be designed as special moment frame (SMF) or ordinary moment frame (OMF) structures. The systems offer architects and engineers the opportunity to design multi-story structures for future disassembly and reuse without compromising structural integrity.

"This product represents innovative systems thinking and provides not only a fantastic assembly system, but also a brilliant way to eventually disassemble a building to recover materials that are precious for our future," said Bridgett Luther, president of the Cradle to Cradle Products Innovation Institute, which administers CM.

People and Firms

- **A new website, www.cranebuzz.com**, provides an interactive online community, technical information, industry standards and news related to overhead cranes and hoists. The website is designed to help users specify, buy, sell, operate and maintain overhead cranes and hoists. Users can also contribute their own blogs, submit videos or recommend their favorite engineer.
- **Carney Engineering Group (CEG)**, a multi-discipline structural engineering firm serving the Mid-Atlantic region, has named **Joshua Geimecke** a BIM technician. In this capacity, Geimecke will develop complete structural models using BIM software—including Revit Structure, Navisworks and AutoCAD—create construction documents and coordinate structural models with other building disciplines such as architectural, mechanical and plumbing.

- **The Instituto Mexicano de la Construccion en Acero, A.C.** (Mexican Institute of Steel Construction, also known as IMCA) has become a member of the Short Span Steel Bridge Alliance (SSSBA).
- **High Steel Structures, Inc., Lancaster, Pa.** (AISC Member/NSBA Member/AISC Certified Fabricator and Advanced Certified Erector), has named **Brian W. LaBorde** to serve as the company's president. Prior to joining High Steel, LaBorde was general manager at Greenbrier Companies in Lake Oswego, Ore., where he was responsible for its rail car fabrication operation in Monclova, Mexico.

SAFETY

AISC Safety Winners

AISC has named its 2012 Safety Award winners for safety and safe operating practices at structural steel facilities and construction sites. The award is presented to companies with a perfect safety record of zero disabling injuries in the categories of "Shop and Office" and "Field Erection." The winners are listed at **www.aisc.org/content.aspx?id=604**.

AISC's annual Safety Awards program recognizes good records of safety performance. Periodic recognition of safety in the workplace has been demonstrated to provide worker incentive and a reminder of the importance of safe practices.

More information about the awards program and other AISC safety resources can be found at **www.aisc.org/safety**.

RELIEF FUND

CTIW Establishes Fund for West, Texas, Victims

Robert and Doug Snokhous, two employees of AISC member fabricator Central Texas Iron Works (CTIW) who were also volunteer firefighters, sacrificed their lives trying to extinguish the fire that led to the explosion at the West, Texas, fertilizer plant last month. Fourteen people in all, including first responders, died in the explosion.

In honor of Robert and Doug, CTIW has established the Steel Industry West Relief Fund for victims of the disaster and the West community. Interested individuals and companies can make contributions payable to the Steel Industry West Relief Fund, c/o Central Texas Iron Works, Inc., P.O. Box 2555, Waco, Texas 76702-2555.

CTIW has also joined with the Waco Foundation to accept donations for the West Volunteer Fire Department. Checks can be made payable to Waco Foundation, West, Texas Disaster Relief Efforts Fund/Firefighter Relief (in Honor of Robert and Doug Snokhous), 1105 Wooded Acres Dr., Waco, Texas 76710.

For more information, contact CTIW at 254.776.8000.

HSS

New Standard Enhances HSS

ASTM has released a new HSS standard, A1085 - 13 *Standard Specification for Cold-Formed Welded Carbon Steel Hollow Structural Sections (HSS)*, which will result in the production of improved hollow structural sections (HSS). By increasing the performance of HSS, the specification is a big step in simplifying HSS design, thereby making it a more desirable option for clients. Benefits include:

Tighter material tolerances and a single minimum yield stress of 50 ksi. More stringent wall tolerances and the addition of a mass tolerance mean the full nominal wall thickness can be used for design of HSS. This means no longer needing to reduce the nominal wall thickness by 0.93 as prescribed in the AISC *Steel Construction Manual* for both member selection and connection design. And more area available for design and a higher minimum yield mean that HSS will become a more economical and efficient design option.

Maximum specified yield stress of 70 ksi. This increased maximum yield will result in a lower expected yield strength and reduce capacity design requirements and column-required strengths in seismic designs. ASTM A1085 is the only specification used in North America or Europe that limits the maximum yield stress.

Standard requirement for Charpy notch toughness. The specification will require all HSS to meet a minimum CVN value of 25 ft-lb at 40 °F, which corresponds to AASHTO Zone 2. Having the minimum CVN required makes HSS more suitable for use in dynamically loaded structures.

"We were committed to the development of the new ASTM A1085 specification, as it was needed to improve the performance of HSS used in structural applications such as seismic load resisting systems, bridge structures and other dynamically loaded structures," said Brad Fletcher, senior sales engineer with Atlas Tube (AISC member), noting that round and square members from 6 in. and up will likely be the main shapes Atlas initially produces under the new specification.

"A1085 makes designing with HSS easier and more efficient for both building and bridge construction," said John Simon, vice president of sales with EXLTUBE (AISC member). "We are hearing a great response from structural engineers who have begun to learn about this new spec through efforts at NASCC and other communications, and we're working closely with AISC and the Steel Tube Institute to begin promoting A1085 to our customers."

"We will be manufacturing and inventorying the product as the need arises," said John Tassone, marketing manager for Independence Tube (AISC member), adding that the company will likely concentrate on squares and rounds 4 in. and above to start.

ASTM A1085 will be referenced in AISC's upcoming Technical Bulletin #4 and is available for purchase for $41 at **www.astm.org/Standards/A1085.htm**. You can inquire with domestic HSS producers and service centers about price and availability at **www.aisc.org/hss.**

BIM NEWS

Call for BIM Ballots

The buildingSMART alliance will soon be accepting proposed changes, known as ballot submissions, to the National BIM Standard–United States (NBIMS-US).

All building professionals are invited to participate in the development process of NBIMS-US Version 3, and buildingSMART is looking to every sector of the industry to submit ballots. Ballots can amend or revise current NBIMS-US content or they can address the latest technologies, processes and practices not yet included in the standard.

The Ballot Submission Period for NBIMS-US V3 begins June 3 and ends August 19. For information about NBIMS-US and how to get involved in the Version 3 standards development process, visit **www.nationalbimstandard.org/about.php**.

letter to the editor

Be Professional

As an experienced steel detailer and professional engineer with years of experience designing connections and stairs for fabricators, I immensely enjoyed reading Ted Hazledine's article ("Miscellaneous Metals—The Devil is in the Details, Part II: VUCA Prevails," 03/2013).

To the matter of low fees for the design engineer, I think your assessment of my profession is too kind. An engineer that asserts low fees as justification for incomplete contract drawings is analogous to a patient suffering a tumor but receiving a diagnosis of the flu because the doctor claims there were insufficient fees for the tests required.

This brings me to a brief point about the owner. It is curious to me that we talk so much of cooperation between the design and construction teams but do not expect the same consideration from the money side. An owner comes to us with a project in need of our expertise and instead of telling him what, in our experience, needs to be done, we ask what he wants us to do. We are intimidated by the money, yet claim to be professionals. Curious indeed.

I worked several years for a miscellaneous steel shop in central Texas—undoubtedly much smaller than Ted's, yet we saw the same shoddy behavior that he writes about: GCs "shopping" our price after contract award, architects and engineers who manage the RFIs by not responding at all and late award of the miscellaneous package. (My favorite on this last item is stair openings framed too small because nobody thought to first work out the code-mandated stair rise and run.)

With that, I am keen for your message to smartly and aggressively point out problems and inconsistencies in the drawings. It is professional to propose realistic solutions for the problems found. My experience in this matter is the same as yours in that creative problem solving on the fly will not only make the current job better, but also tends to build long-term relationships with the better GCs. There is nothing quite as depressing as a subcontractor sitting in a pre-con meeting pointing out problem after problem and pouting, "Somebody needs to tell me what to do."

Thank you for the insightful article, and I sincerely hope that you [Ted] will continue to write and share your knowledge and experience with our mutual industry.

—Timothy Eugene Pugh, P.E., Ph.D.
Rainshadow Engineering Co. P.S.
Port Hadlock, Wash.

MEMBER NEWS

Steel Fabrication Begins for B2 in Brooklyn

Banker Steel (AISC member/AISC Certified fabricator) has begun fabricating the steel-framed modules for the world's tallest modular high-rise building.

Banker expanded its Lynchburg, Va., facility earlier this year to create a purpose-built workshop solely dedicated to the fabrication of these rectangular modules for the project—a 32-story residential tower named B2—which broke ground late last year at the $4.9 billion, 22-acre Atlantic Yards development in Brooklyn, N.Y.

The modules will use a combination of HSS and wide-flange beams, and approximately 4,000 tons of structural steel will be used in all. B2 is expected to be available for occupancy in the summer of 2014 and is one of 15 modular buildings planned at the Atlantic Yards site.

For more information, go to **www.modernsteel.com** and see our Steel in the News item "World's Tallest Modular Building Breaks Ground." You can also learn more about the project and view an architectural rendering on Banker's website, **www.bankersteel.com**.

CONSTRUCTION MARKET

Construction Employment Up, Driving Need for More Skilled Workers

Construction employment increased in 145 out of 339 metropolitan areas between January 2012 and January 2013, declined in 141 and was stagnant in 53, according to a new analysis of federal employment data released recently by the Associated General Contractors of America. AGC officials noted that after years of declining construction employment, contractors in some metro areas are beginning to worry about the availability of skilled workers now that they have resumed hiring.

"Not only are a slight plurality of metro areas adding construction jobs, but those areas appear to be adding jobs at a faster rate than places where construction employment continues to decline," said Ken Simonson, AGC's chief economist. "Considering the already-released national construction employment figures for February, we are likely to see more metro areas adding jobs in the next report."

Pascagoula, Miss. added the highest percentage of new construction jobs (45%), followed by Brownsville-Harlingen, Texas and Cheyenne, Wyo. (both 19%) and Haverhill-North Andover-Amesbury, Mass.-N.H. (18%). Dallas-Plano-Irving, Texas (10,100 jobs) added the most jobs. Other areas adding a large number of jobs included Los Angeles-Long Beach-Glendale, Calif. (9,600 jobs), Houston-Sugar Land-Baytown, Texas (8,700 jobs) and Phoenix-Mesa-Glendale, Ariz. (6,000 jobs).

Charleston, W.V. lost the highest percentage of construction jobs (-20%), and other areas experiencing large percentage declines in construction employment included Atlantic City-Hammonton, N.J., and Detroit-Livonia-Dearborn, Mich. (both -19%), Kankakee-Bradley, Ill. (-18%) and Akron, Ohio (-17%).

Association officials noted that after years of declining construction employment, many former construction workers have left for other industries or retired. They added that the industry's dire conditions have deterred many graduates from pursuing careers in construction and as a result, the industry is likely to face a shortage of available skilled workers in some parts of the country if the industry continues to add jobs.

"Between the challenges of attracting new recruits and retaining out-of-work ones, there aren't that many skilled workers waiting for a callback in many parts of the country," said Stephen E. Sandherr, AGC's CEO. "If the industry continues to add jobs, it won't be long before contractors in some parts of the country are scrambling to find enough skilled workers to meet demand."

View construction employment figures by state and rank at AGC's website, **www.agc.org**.