

CERTIFICATION

AISC Certification to Update Audit Documents

AISC Certification will be updating its Audit Report and the Participant Corrective Action Request (CAR) Procedure. This update will apply to all audits as of March 30, 2015.

The Audit Report will be split into two separate documents: *Site Audit Scope* and *Site Audit Findings*. Although the two new documents will not be published on the Certification website (as they are auditing tools for recording scopes, findings and recommendations for on-site audits), they will be sent to applicants and participants post-audit. The changes are due to AISC Quality Management Systems (QMS) Certification conforming to ISO 17021:2011 requirements.

The first document is the *Site Audit Scope*, which includes confirmation of the site audit scope, certification scope, declarations for conflicts of interest, receipt of any corrective action requests and the need for submission of a Key Variables Change form.

The second document will be the *Site Audit Findings*, which is the second page of the current audit report. Separating the *Site Audit Findings* into its own document will allow for improved recording of site audit results. The audit findings are comprised of: Identified Strengths, Opportunities for Improvement and Areas of Concern, as well as details of the projects/jobs used to gather objective evidence. Site audit nonconformities will be recorded on the CAR form.

For the CAR Procedure, the instructions for completion and submission of evidence by the participants have been revised to require a file naming format when submitting evidence, which will improve the review and closure process. The instructions can be found at www.aisc.org/certification by clicking the “Participants” tag and looking under “Participant Forms.”

If you have any questions or comments, please contact AISC Certification at certification@aisc.org or 312.670.7520.

EVENTS

Chicago to Host International Construction History Conference

The Construction History Society of America is hosting the 5th International Congress on Construction History in Chicago June 3-7 at the Palmer House Hotel. The conference is open to all who share an interest in the history of construction—architects, engineers, contractors, preservationists, academics and a wide variety of trades, professions and interests associated with the construction industry.

Five keynote speakers will discuss various topics in construction history, and concurrent paper sessions will take place each day. The opening keynote address by Thomas Leslie, AIA, architecture professor at Iowa State University and author of *Chicago Skyscrapers, 1871-1934*, will specifically discuss construction history in

Chicago—known as the birthplace of the skyscraper and home of some of the first steel-framed structures that allowed the development of ever taller buildings.

Another keynote presentation, by William F. Baker, P.E., S.E., structural and civil engineering partner at Skidmore, Owings & Merrill, Chicago (and 2013 recipient of AISC’s T.R. Higgins Lectureship Award), will talk about Frank Lloyd Wright’s past proposal for a mile-high steel tower in Chicago.

The conference will also include tours highlighting historic construction techniques, builders and exemplary architectural and engineering works in the Chicago area. To register for the conference, visit www.5icch.org/register.

People and Firms

- **Scott M. Bauer, P.E.**, a 17-year employee of Philadelphia-headquartered consulting structural engineering firm **O’Donnell and Naccarato**, has been promoted from senior product executive to principal.



- **Bentley Systems, Inc.**, has acquired France-based **Acute3D**, provider of Smart3DCapture software for “reality modeling.” Through reality modeling, observations of existing conditions are processed into representations for contextual alignment within design and construction modeling environments. Rapid technology advancements in scanning and photography—and especially the burgeoning application of unmanned aerial vehicles (UAVs) for these purposes—are making the capture of such observations broadly and increasingly affordable in sustaining infrastructure.
- The **American Institute of Architects (AIA)** has launched a three-year public awareness campaign called “Look Up,” designed to reconnect the public with architecture and position new generations of architects as catalysts of growth and visionaries for renewal. Visit www.ilookup.org to learn more.

CODES

Industry Groups Collaborate to Streamline Green Building Code

Several associations that develop codes and standards to create green buildings are collaborating to align the International Green Construction Code (IgCC), the ANSI/ASHRAE/IES/USGBC Standard 189.1 and the United States Green Building Council's (USGBC) LEED green building program. The initiative is being welcomed by code officials, architects, engineers and contractors.

"In just a few years we progressed from developing the first model code for green buildings to a new cooperative document that will make it easier for owners, designers, builders and code officials to deliver sustainable, high-performing build-

ings," said International Code Council (ICC) CEO Dominic Sims.

Cooperating sponsors in the development of the IgCC are the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the American Institute of Architects (AIA), the Illuminating Engineering Society of North America (IES) and USGBC. All have agreed to collaborate on the development of the next edition of the IgCC, Standard 189.1 and the LEED program.

Standard 189.1 will continue to be produced as an American National Standards Institute (ANSI) consensus standard and then delivered to ICC to wrap

into its code-compliance frame and position it for adoption as a building code by states and municipalities.

The technical content of the IgCC will consist of the mandatory, prescriptive and performance-based requirements developed for Standard 189.1; an updated standard will be produced every three years to complement the three-year code cycle.

For AISC's perspective on these various green building entities, see "Sustainability 2015: What's New with Steel and Sustainability?" in the March 2015 issue (available at www.modern-steel.com).

MEMBERS

Biden Speaks at AISC Member Facility

Vice President Joe Biden and Secretary of Transportation Anthony Foxx visited AISC member Owen Steel recently to promote the Obama Administration's plan to improve the nation's infrastructure.

"The United States of America ranks 28th in the world in infrastructure," said Biden. "We should not rank 28th in anything. Modernization creates job growth. The question we have to answer both here and throughout the country is not what is the cost of doing this but what is the cost of doing nothing."

The Grow America Bill proposes \$317 billion in highway improvements, including \$18 billion for a multimodal freight system to enhance America's ability to transport goods.

To view Biden's entire speech, please visit <http://tinyurl.com/k7bx4tf>.

PUBLICATIONS

New Vertical Bracing Connections Design Guide Now Available

Design professionals now have a valuable new resource for vertical bracing connections. AISC Design Guide 29, *Vertical Bracing Connections—Analysis and Design*, authored by Larry S. Muir, P.E., and William A. Thornton, P.E., Ph.D., provides a comprehensive approach to the design of common bracing systems based on structural principles.

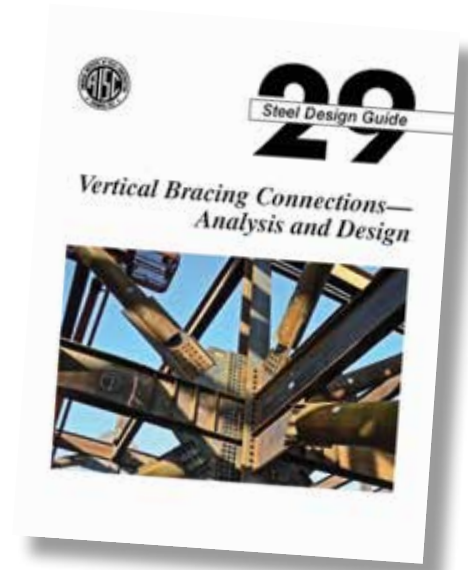
"Bracing connections have always appeared more complex than they really are," said Charlie Carter, S.E., P.E., Ph.D., AISC's vice president and chief structural engineer. "This design guide goes a long way towards demystifying these connections for the design community."

Using the Lower Bound Theorem of limit analysis and the Uniform Force Method, the guide addresses: brace-to-gusset connections, orthogonal and nonorthogonal connections, chevron or K-bracing, eccentric braces, connections at column base plates, both non-seismic and seismic conditions and gusset plate stability. It also includes more than a dozen complete design examples, with every applicable limit state addressed.

Both printed and downloadable PDF copies of Design Guide 29 are available via www.aisc.org/dg. The PDF down-

load is free for AISC members and can be purchased for \$60 by nonmembers. The printed copy is available for purchase online or by calling 1.800.644.2400 or 1.708.587.4177; the cost for the printed copy is \$40 for members and \$80 for nonmembers.

For a more in-depth look at this new publication, see "Brace Yourself" on page 58.



EVENTS

Steel Bridge Collaboration Meeting Coming to Raleigh

If you're a steel bridge professional interested in exchanging ideas with others in the industry, consider attending the next AASHTO/NSBA Steel Bridge Collaboration meeting, to be held in Raleigh, N.C., May 5-7 at the Hilton Garden Inn Raleigh-Cary.

All collaboration meetings are free and open to anyone interested in participating; however, registration is requested.

Scheduled meetings include:

- TG 1 Detailing (Tentative)
- TG 2/TG5 Fabrication Specification
- TG 4 QC/QA

- TG 8 Coatings
- TG 10 Erection
- TG 11 Steel Bridge Handbook
- TG12 Design for Economy and Constructability
- TG 13 Analysis of Steel Bridges
- TG 15 Data Modeling for Interoperability
- TG 16 Orthotropic Deck Panels

For meeting details, including registration and hotel information, visit www.aisc.org/nsba and click the "AASHTO/NSBA Steel Bridge Collaboration" link. To learn more about the Collaboration, visit www.steelbridges.org/collaboration.

SCHOLARSHIPS

AISC Accepting Applications for 2015-16 Scholarships

Full-time juniors, seniors and masters students enrolled in civil engineering, architectural engineering, construction engineering or construction management programs at U.S. universities are encouraged to apply for AISC Scholarships for the 2015-16 academic year. A total of \$65,000, provided by the AISC Education Foundation and various steel industry organizations, will be awarded to students.

For detailed information on the scholarship opportunities available, eligibility requirements and the online application, visit www.aisc.org/scholarships. Applications will be accepted until May 1, 2015.

BRIDGES

Ambassador Bridge Rehab Begins



Rehabilitation and new construction work has begun on the Ambassador Bridge, one of the most vital trade crossings in North America. More than 25% of all commerce between the U.S. and Canada crosses this 7,500-ft suspension bridge over the Detroit River, connecting Detroit and Windsor, Ontario.

The project is headed by bridge engineering firm Modjeski and Masters as part of a design-build delivery model, and includes bridge rehabilitation, new construction and inspection and evaluation of the main steel cables.

To ensure the bridge's safe, continued

use, the bridge's owner needed to assess the effect of decades of heavy use, a task complicated by the fact no load rating had been done since its completion in 1929. (At the time of its completion, the Ambassador Bridge was the longest suspension bridge in the world and used 21,000 tons of steel.)

Modjeski and Masters completed the task in several phases, beginning with the load rating. This resulted in additional contracts for structural steel repairs, replacement of suspender ropes and the main span deck and a main cable inspection.

SPECIFICATION

2016 Spec Draft Available for Review

The current draft of the 2016 AISC *Specification for Structural Steel Buildings* is available for public review until April 27, 2015. You can download both the draft and the review form at www.aisc.org/publicreview. Hard copies are also available (for \$35) by calling 312.670.5411. Please submit comments via the review form to Cynthia J. Duncan (duncan@aisc.org), AISC's director of engineering, by April 27 for consideration.