

BIM NEWS

BIM Use Up Among GCs

BIM adoption by general contractors has skyrocketed from 28% to 74% since 2007, according to a recent market report published by McGraw-Hill Construction. These same general contractors point to structural steel fabricators and erectors as the most BIM-savvy of trade contractors, indicating that 62% have high or very high BIM skills compared to only 13% for concrete and masonry contractors.

While experiencing a positive return-on-investment for their BIM activities, general contractors point to BIM as an effective means of reducing errors, omissions, rework and cost on construction projects. The independent report states that “the steel fabricators/erectors stand out as the leaders in BIM proficiency... It stands to reason that as more general contractors expand their BIM programs, these two categories of specialty contractor (steel and HVAC) will rise in esteem and value for their BIM capabilities.” You can read the full report at tinyurl.com/globalbim.

AISC president Roger Ferch commented, “It is rewarding to see our indus-

try’s long-term commitment to develop BIM tools and expertise recognized by the contractors we work with on a daily basis. Clearly, if a general contractor wants to get the most out of their BIM investment, they will select structural steel as a framing system and work with the steel fabricator early in the project’s life.”

“We didn’t get here by accident,” added Chris Moor, AISC’s director of industry initiatives and chair of the National BIM Standard-United States Project Committee. “AISC and the structural steel industry have been leading this effort for almost two decades.”

In its ongoing effort to analyze the industry and identify opportunities to increase the efficiency of its members and their clients, AISC has introduced BIM-steel, a series of interoperability initiatives with the aim of developing new processes and providing new solutions that help the industry take advantage of these opportunities and ensure that we achieve the potential this new era promises. Find out more at www.aisc.org/BIMsteel.

PROJECTS

Steel Work Complete on Haiti Health Center

The new Gheskio Family Health and Nutrition Center in Port-au-Prince, Haiti, has reached a significant project milestone: The steel frame is complete. It was erected by Haitian workers together with a small American crew.

Designed by NYC-based firm Tonetti Associates Architects, the new health center represents Gheskio’s comprehensive approach to nutrition, clinical care and community development by combining healthcare and family planning departments within a single complex.

The design team undertook this project as an opportunity to help the people

of Haiti after the devastation they experienced in the 2010 Haiti earthquake.

“We chose a steel-framed building because of the lower mass of the building as compared to the standard Haitian concrete and masonry construction, and because of the great control of the detailing of the structure,” said Andrew Wright of Tonetti Associates.

Construction is expected to be complete this fall. The August 2011 *Modern Steel* article “Assurance of Quality” (available at www.modernsteel.com) discusses the project team’s choice of steel for the health center.

NEW SECTION: NEW PRODUCTS

This month, MSC has introduced a New Products page, which will run periodically. See page 61 for this month’s new products and contact Lou Gurthet at louisgurthet@centurytel.net if you’re interested in having your company’s new product or system featured in an upcoming section.

People and Firms

- **D. Kirk Harman, S.E., P.E.**, president and managing principal of **The Harman Group**, has been appointed city leader for the **Council on Tall Buildings and Urban Habitat**, which involves starting a new chapter and leading CTBUH initiatives in the City of Philadelphia and surrounding areas.
- **Brian McElhatten, S.E., P.E.**, has joined Arup as an associate principal and the structural lead in the firm’s Chicago office. In this new role he will be responsible for the day-to-day involvement of all structural projects, with the major goal of continuing to develop and grow the Chicago office. He was previously an associate director of structural engineering for **Skidmore, Owings & Merrill**.



- To help business owners and contractors assess and prepare for construction-related risks and take steps to prevent and mitigate losses, **ACE USA** has launched a video podcast series on construction risks. The three new videos address risks in today’s marketplace and provide information to consider when preparing for on-site safety hazards and overall construction industry exposures. Visit www.acegroup.com to find out more.

BRIDGE PROJECTS

Stan Musial Veterans Memorial Bridge Opens

The new Stan Musial Veterans Memorial Bridge made its public debut in February with various celebratory events and a ribbon-cutting ceremony.

The 1,500-ft cable-stayed bridge connects Illinois with Missouri over the Mississippi River near downtown St. Louis and is the third-longest bridge of its kind in the U.S.

The \$230-million bridge was built to alleviate traffic on the nearby Poplar Street Bridge, which carries Interstates 55, 64 and 70 as well as U.S. 40, and runs between downtown St. Louis and East St. Louis, Ill. I-70 traffic has been rerouted to the new bridge, which accommodates two lanes in each direction (with the ability to expand to three lanes). Construction on the project started in February 2010.

HNTB Corporation, the bridge's structural engineer, created a design that employed steel anchor boxes inside of the pylons for the stay cable anchorages instead of using formed concrete corbels. The use of steel anchor boxes eliminated the need for complex forming of concrete inside the bridge's delta-shaped pylon legs; it also saved time, reduced cost, increased

accuracy in the tight tolerances of the cable geometry and reduced the amount of post-tensioning needed around the perimeter of the pylon legs.

The bridge uses 8,000 tons of structural steel in all, which was fabricated by W&W/AFCO Steel (an AISC/NSBA member and AISC Certified fabricator). Tensor Engineering (an AISC/NSBA member) was the project's steel detailer.

"The Stan Musial Veterans Memorial Bridge is a significant and iconic addition to this nation's infrastructure and to the skyline of St. Louis, and W&W/AFCO Steel takes great pride in witnessing its grand opening," said Deane Wallace, senior vice president at AFCO Steel. "We appreciate the cooperation of the HNTB design team in helping translate their vision to workable solutions. Massman, Traylor, Alberici, a Joint Venture, planned and labored for five years to build this massive structure, and we congratulate them on the success of their great efforts. AFCO Steel spent two years fabricating 8,000 tons of steel to form the strong and elegant backbone of the bridge. MoDOT and ILDOT bring this iconic bridge to the

public and we expect them to take great pride in their new steel Centurion for the next 100 years. The 'Stan Span' is truly a 'Grand Slam!'"

The new bridge got its name from a compromise between politicians on both sides of the Mississippi River, who had different ideas for naming the bridge. The Missouri side wanted to name the bridge after the St. Louis Cardinals' legendary outfielder and first baseman Stan Musial, who died last year, and the Illinois side wished to honor military veterans. In the end, both sides won.

You can read more about the Stan Musial Veterans Memorial Bridge project in the November 2013 article "Thinking Inside the Box" (at www.modernsteel.com).



▲ Government officials from both Illinois and Missouri came together to celebrate the completion of the new bridge during a ribbon-cutting ceremony. Pictured left to right: (bottom row) Charlie Dooley, St. Louis County Executive; Alvin Parks, East St. Louis Mayor; Francis Slay, St. Louis Mayor; Stan Musial Family members; (top row) Dan McLaughlin, St. Louis Cardinals Broadcaster; Jerry Costello, Former Ill. Congressman; William Enyart, Ill. Congressman; Dick Durbin, Ill. U.S. Senator; Pat Quinn, Ill. Governor; Anthony Foxx, U.S. Secretary of Transportation; Jay Nixon, Mo. Governor; Lloyd Carmichael, MoDOT Commissioner; Claire Mckauskill, Mo. U.S. Senator; Wm. Lacy Clay, Mo. Congressman; Ann Wagner, Mo. Congresswoman. (Both photos: Tim Parker Photography, courtesy of HNTB)