Steeling the Green Show

BY GEOFF WEISENBERGER, LEED GA

Armed with Slinkies and CTA passes, AISC makes its presence known at the world’s largest gathering of green building professionals.

JUST IN CASE you haven’t heard of Greenbuild, it’s the largest green buildings conference and expo in the world. The most recent version, which took place at Chicago’s McCormick Place West in November, drew approximately 30,000 attendees (coincidentally, the building also uses approximately 30,000 tons of fabricated structural steel). This is a pretty big number, considering that the event has only been around for a decade, and its fast-paced growth is a reflection of the green buildings movement itself.

AISC and AISI (American Iron and Steel Institute) have been cosponsors of this event from nearly the beginning. At the 2010 show, the two organizations once again shared a booth in the exhibit hall where we talked to attendees about the sustainable benefits of structural steel, handed out hundreds of Slinkies (made in Pennsylvania from recycled steel) and, along with other structural materials industries, reminded people that green buildings also have skeletons—a very necessary thing at a show that seems saturated with building system and architectural product exhibitors. Besides the AISC booth, dozens of other steel-related companies and associations were dispersed throughout the exhibit hall.

Off the Floor

In addition to our presence on the show floor, AISC sponsored a number of events at the show: a full-day LEED workshop on building design and construction attended by approximately 90 people; a half-day educational tour of the new LEED Platinum (and steel-framed) patient tower at Advocate Lutheran General Hospital in Park Ridge, Ill., which drew 40 people; and a half-day tour of the Christy Webber Landscapes Rancho Verde headquarters (a 2008 AISI IDEAS² award winner), Chicago Center for Green Technology, and Center for Neighborhood Technology. Roughly 50 design professionals from all over the world, many of them architects, were present for this tour.

Both tours made strong statements for steel. During the opening presentation for the Advocate Lutheran General Hospital tour, Troy Hoggard, associate vice president of Cannon Design’s Chicago office and the lead architect on the project, told attendees, “Concrete is almost never used on healthcare projects anymore; it’s just not flexible enough.”

On the Christy Webber Landscapes tour, construction team members credited the diagonal steel bracing scheme used in the main office space for reducing the amount of steel needed, allowing more efficient support of the increased load of the green roof, and creating an attractive, open plan that allowed more daylight penetration. Exposed steel is on prominent display throughout the facility, and structural steel supports the sunshade/photovoltaic array on the front of the building. This exposure—in the form of both endorsement from building teams and attractive, sustainable utilization—can go a long way in getting steel specified on more LEED-hopeful projects.

In addition to sponsoring the workshop and tours, AISC/AISI also promoted green transportation at the show, sponsoring a free biodiesel trolley between McCormick Place and the nearest Chicago Transit Authority Red Line train (aka, the El) stop. We further encouraged attendee ridership of the CTA by distributing 200 free one-way tickets for the train to trolley riders and visitors at the booth. Approximately 850 attendees are estimated to have ridden the trolley during the three days of the exhibition, and the signage on the exterior of the bus promoted steel continuously throughout those three days.

It Bears Repeating

On the flip side of promoting our segment of the green buildings industry, it was also important to hear what the
green set had to say about it. I attended a session on embodied carbon of materials, and what’s interesting is that it actually reaffirmed a few points that AISC has been pushing for a while: 1) As building systems become more efficient, the embodied carbon of building materials becomes more of a factor in the overall carbon footprint of the building; 2) “There is nothing magic about 500 miles,” referring to the LEED MR5 mandate for materials to be manufactured and recovered from within 500 miles of a project site (from the steel side of things, it’s refreshing to hear others make this point!); 3) Don’t just reduce the carbon footprint of the materials themselves—also design better with them; and 4) Use building information modeling in your design work, which is a big plus for steel.

From Soldier to Eco-Soldier

I mentioned that the rate at which Greenbuild has grown mirrors the rate at which interest in green buildings has grown. Perhaps another indicator of growth was the conference’s keynote speaker. The 2009 keynote speaker was Al Gore, who many see as the spokesperson for the environmental movement. The 2010 speaker? Retired four-star general and former secretary of state Colin Powell. That’s pretty telling.

Regardless of the face(s) of the green buildings movement, AISC will continue to expand structural steel’s role within it.

Easing the Pain

One of the more interesting things I saw on the show floor was at the Nucor booth, where the steel producer highlighted its Green Building Scrap Calculator. This tool tracks recycled content and determines how much scrap is recovered within specific zip codes and uses these values to help designers, fabricators and others determine how much the steel portion of a project can contribute to LEED credits. It’s very useful in easing the pain of LEED paperwork for design and construction teams working with steel. While the tool isn’t open for public use, Nucor customers can go to www.nucor.com/responsibility/environment/leed to submit their steel tonnage for calculation.

Two other domestic wide-flange producers also offer scrap-tracking capabilities. Gerdau Ameristeel has made its own system available to its clients (the information is confidential; a client ID is required) at https://scraptrack.gerdauameristeel.com, and Steel Dynamics, Inc. posts mill-specific scrap/recycled content information on its site (www.steeldynamics.com). Whatever the method, your producers are willing to assist with regional materials-related and recycled content-related questions for purposes of LEED credits and in general.