

Provider:		American Institute of Steel Construction		GBCI CE HOUR APPROVALS					
Conference:		Sustainable Steel Conference/North American Steel Construction Conference							
Date:		April 18-20, 2012							
Session Number (User created)	Session Title:	Total minutes of instruction:	GBCI Topic Category (Pick one only)	Session Description (100 words):	Learning Objectives (Minimum of three)	Approved GBCI CE Hours	Is session LEED-specific?	Session meets LEED-specific requirements for the following LEED AP Specialties:	COMMENTS
G1	Strategies to Minimize Thermal Steel Bridging	60	<i>Project systems and Energy impacts</i>	Steel elements that bridge across the insulation in a building enclosure can cause significant heating and cooling energy loss—but they don't have to. There are several mitigation techniques that have been used in Europe, as well as other systems that are currently being developed. As buildings become tighter and more insulated, it becomes increasingly important to address thermal steel bridging. This seminar will explain the issue and present solution strategies. These include the use of manufactured structural thermal break assemblies, proprietary support systems, thermal "shims," isolation techniques and others.	<ol style="list-style-type: none"> 1. Understand the concept of thermal bridging and how it applies to building materials like steel. 2. Learn about technologies that have been used to combat thermal bridging via steel assemblies that penetrate exterior walls. 3. Learn ways to design for minimal thermal bridging. 4. Quantify the effects of thermal bridging of sample envelope assemblies. 	1	No	N/A	
G2	Steel Sustainability Toolkit	90	<i>Acquisition, installation and management of project materials</i>	The role of the structural engineer in contributing to sustainable buildings seems to have been diminished to that of simply being a specifier of construction materials rather than a designer of sustainable structures. The real issue for the structural engineering profession is determining what role the structural engineer should play as green building evolves into a collective design and construction consciousness. This course gives engineers a taste of the many factors that come into play when designing a LEED or otherwise green building, and explains how they can contribute to a green project beyond simply gaining LEED points.	<ol style="list-style-type: none"> 1. Learn ways in which materials can have an impact on a building's greenness beyond simply acquiring LEED credits. 2. Understand the benefits of structural steel when it comes to adaptive reuse projects, via a case study. 3. Learn the sustainable aspects of and opportunities with structural steel, including improvements to the steel production process, recycling rate and recycled content, strength-to-weight ratio, water usage in production and potential areas of improvement for steel fabricators. 4. Learn how a life-cycle assessment (LCA) of a building or material works, and identify environmental impact categories it can measure. 	1.5	No	N/A	
G3	Lean and Green	90	<i>Project systems and Energy impacts</i>	This session will explain the different levels and critical components of IPD and Lean practices and how attendees can use these methods to avoid traditional project delivery problems. It will also explore the concept of "cluster groups" and how the structural cluster group, IPD and Lean practices achieved value and green goals for the owner on the Van Ness Medical Office Building project in San Francisco.	<ol style="list-style-type: none"> 1. Learn how to minimize a framing system's environmental impact through more efficient project delivery methods, such as integrated project delivery. 2. Understand how to develop a cluster group and get the most out of it. 3. See a successful IPD implementation via a medical office building case study. 	1.5	No	N/A	
G4	The Fabricator's Role in Sustainability	90	<i>Acquisition, installation and management of project materials</i>	When you hear about steel and sustainability, you generally hear about how steel helps buildings obtain a LEED certification through the process of steel production. But how can the steel fabrication process influence the sustainability of steel buildings? This session will show how the application of Lean Production Management can be applied to the steel fabrication process increasing the sustainability of the steel building. Also, this session will explore why these fabrication methods should be recognized by the U.S. Green Building Council when setting the LEED rating for steel buildings.	<ol style="list-style-type: none"> 1. Learn how steel fabricators can contribute to greener steel framing systems. 2. Understand the Lean Production Management process. 3. Explore opportunities for steel fabricators to green their operations. 	1.5	No	N/A	
G5	What is "Green" Steel?	60	<i>Stakeholder involvement in innovation</i>	Green labels seem to be on just about every type of project and run the gamut from legitimate to highly suspect. Nevertheless, the design and construction community is increasingly demanding products that are "certified" as green. Structural materials are no exception, and the wood and concrete industries have established their own green certification programs. Is a green certification for steel coming? This session offers a preview of what it might entail.	<ol style="list-style-type: none"> 1. Learn how green measurement tools for materials have evolved. 2. Become familiar with green "labeling" systems such as certification, environmental product declarations and product category rules. 3. Learn how green certification for steel might be implemented. 	1	No	N/A	
G6	Gaining a Green Advantage	60	<i>Stakeholder involvement in innovation</i>	Green Advantage Certification is specifically for construction field personnel, including general contractors, steel fabricators and erectors. Similar to the LEED program and recognized by the USGBC, it is a foundational certification that verifies demonstrated knowledge in best practices, techniques, approaches and materials needed to improve the green construction process and desired results, as well as the rationale of green building. This session provides an overview of the program and how it can help staff to better understand the why's and how's of any green building projects.	<ol style="list-style-type: none"> 1. Become familiar with the Green Advantage program. 2. Learn how your role in a building's construction can become more environmentally friendly. 3. Learn how to prepare for and take the Green Advantage exam. 	1	No	N/A	

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G7	Green Engineering	60	Project systems and Energy impacts	When it comes to structural design of green buildings, the environmental impact of individual framing materials is a common consideration. However, the role of the structural engineer is much more than that of simply a material specifier. Efficiencies in the design process, including the use of BIM, can have a significant impact on the environmental footprint of the framing system. Two representatives from Thornton Tomasetti will discuss the sustainability goals of their firm and the practices they use to help reduce the carbon footprint of their projects.	1. Understand how various structural design decisions impact the carbon footprint of a building. 2. Learn about Thornton Tomasetti's interactive early-design tool that evaluates how material selection, footprint and bay size affect structural embodied energy and carbon efficiency. 3. See a comparison of various framing system options and how they vary in terms of environmental impact.	1	No	N/A			
G8	LEED Issues for the Steel Industry	90	Stakeholder involvement in innovation	This program will focus on the relationship between the structural steel industry and LEED and the forthcoming International Green Construction Code, and will examine some of the unique green building issues with respect to potential owner, prime contractor and steel contractor liability and how such potential liability is being allocated in construction contracts and subcontracts. The goal of the presentation is to enable steel contractors to better understand and manage the potential risk of engaging in a green project.	1. Learn about the relationship between LEED and the IGCC. 2. Understand the legal issues involved with green building projects. 3. Learn how potential adoption of the IGCC will affect the steel supply chain.	1.5	No	N/A			
G9	Designing Green by the Book: The IGCC	90	Stakeholder involvement in innovation	The International Green Construction Code, to be published in 2012, adds a whole new element to the construction world by incorporating environmental goals into enforceable code language. This session will describe the areas of the code that affect structural materials and will also look at other prevalent green codes and standards, such as CALGreen and ASHRAE 189.1, and how they all treat materials differently. In addition, updates to the next version of LEED, also due in 2012, will be discussed.	1. Become familiar with the IGCC and how it works. 2. Learn how steel and other building materials are addressed in the IGCC and the process by which the decisions were made. 3. Learn about the different green building codes and standards and how they differ. 4. Learn about how materials are addressed in the latest draft of LEED 2012.	1.5	No	N/A			
G10	Carbon Footprint—What's in a Number?	60	Project systems and Energy impacts	Carbon footprint is often the first attribute that is brought up in discussions of construction materials and their environmental ratings. This session provides a look at how the carbon footprint for domestic structural steel is calculated—using the most current data available—how the various points along the steel supply chain contribute and the various tools and databases where it is used. It also explores studies comparing various construction materials, based on carbon footprint and other environmental attributes, and how these materials have different impacts at different points in the life of a building.	1. Learn how the environmental impact for materials is calculated and the various impact categories that can be measured. 2. Understand the various elements along a material's supply chain and how making changes at each point in the supply chain can change the impact. 3. Examine various LCA studies to see how each one comes up with different environmental impact results. 4. Become familiar with the World Steel Association's methodology for compiling and distributing environmental information on steel and the current status of information specific to North American Steel.	1	No	N/A			