Bay Area Wood Solutions Fair

JANUARY 29, 2013
Oakland Marriott City Center
1001 Broadway, Oakland, CA 94607

Earn 6 AIA/CES CEHs or PDH credits free

Register at woodworks.org
# Bay Area Wood Solutions Fair Schedule

## Registration Check-in – Exhibit Hall Opens

<table>
<thead>
<tr>
<th>Time</th>
<th>Room 1</th>
<th>Room 2</th>
<th>Room 3</th>
<th>Room 4</th>
<th>Room 5</th>
<th>Room 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00 am - 9:10 am</td>
<td>Connection Solutions for Wood-frame Structures</td>
<td>Advantages of Wall Panelizing in Mid-rise Wood Construction</td>
<td>LCT ONE: Case Study of an Eight-story Wood Office Building</td>
<td>Structural Durability: The Proper Use of Preservative Treated Wood</td>
<td>Modular Wood Framing Goes Vertical</td>
<td>Meeting Fire Codes with Oriented Strand Board (OSB)</td>
</tr>
<tr>
<td>9:10 am - 9:45 am</td>
<td>Break – Exhibit Expo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:45 am - 10:45 am</td>
<td>Offset Diaphragms and Shear Walls (Part I)</td>
<td>Systemized Construction for Mid-rise Wood-frame Buildings</td>
<td>Using CLT in the US Today</td>
<td>Insulation Technologies and Installation Specifications for Better Energy Performance of Commercial Buildings</td>
<td>Wood Podiums in Mid-rise Construction</td>
<td>Sustainable Designs: Western Red Cedar</td>
</tr>
<tr>
<td>10:45 am - 11:00 am</td>
<td>Break – Exhibit Expo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noon - 1:15 pm</td>
<td>Lunch • Wood Design Awards • Exhibit Expo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:15 pm - 2:45 pm</td>
<td>Break – Exhibit Expo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:45 pm - 3:55 pm</td>
<td>Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Credit: HSW Credit: HSW Credit: HSW/SD Credit: HSW Credit: HSW Credit: HSW/SD*
Seminars and Speakers

KEYNOTE SPEAKER
MORNING SESSION 8:00 AM • AFTERNOON SESSION 1:15 PM
Connection Solutions for Wood-frame Structures
Michelle Kam-Biron, PE, SE, American Wood Council

One of the biggest eye openers for those new to the design of non-residential wood buildings is that designing and detailing the connections is not as complex as imagined. This seminar will feature an overview of common fastener types and the wood connection philosophies relevant to each. Topics will include techniques for designing efficient, durable and structurally safe connections, minimizing environmental effects on wood connections, simple design examples and available resources.

MORNING SESSION 9:45 AM (Part I) • AFTERNOON SESSION 3:55 PM (Part II)
Offset Diaphragms and Shear Walls
R. Terry Malone, PE, SE

This two-part presentation will provide a brief review of the method used to analyze offset diaphragms and shear walls. In Part I, topics will include code requirements, diaphragm irregularities and discontinuities, distribution of shears, transfer of forces across areas of discontinuity, and analysis of flexible wood sheathed or untopped steel decking diaphragms with horizontal offsets. Part II will cover how to conduct a preliminary breakdown of a complex diaphragm to better understand the distribution of forces and assure that complete load paths are being established.

MORNING SESSION 11:00 AM (Part I) • AFTERNOON SESSION 3:55 PM (Part II)
Building Height and Area Compliance with the California Building Code (Part I)
Allowable Building Height and Area Calculations Using Software (Part II)
Ara Sargsyan, CBO, PE, LEED AP, Los Angeles Department of Building and Safety

Part I is intended for design professionals who want to better understand how to successfully design multi-story wood buildings in compliance with the 2010 California Building Code (CBC). Focusing on allowable building height and area, it will cover Chapter 5 of the CBC with examples comparing buildings that are different in terms of their occupancy groups, construction types and design elements. Part II will focus on the “Check Height and Area” software application that analyses building height and area compliance with the 2007/2010 CBC for buildings up to six stories, with up to four occupancy groups at each level.

MORNING SESSION 8:00 AM • AFTERNOON SESSION 1:15 PM
Advantages of Wall Panelizing in Mid-rise Wood Construction
Brian Larrabure, Larrabure Framing

Wall panelizing can reduce the cost of mid-rise building projects, including those with complex architectural designs. This presentation will provide an overview of the benefits that can be achieved with the use of panelized walls in multi-story wood buildings, including reduced labor costs, faster erection times and overall value engineering.

MORNING SESSION 9:45 AM • AFTERNOON SESSION 2:45 PM
Systemized Construction for Mid-rise Wood Buildings
Dave Fisher, Mitsui Homes Canada Inc.

Five- and six-story wood buildings are gaining popularity as a way to achieve higher density at lower cost while reducing carbon footprint. This session will cover the latest systems and innovations that enable developers and builders to construct mid-rise wood-frame buildings efficiently and to the highest quality standard. Topics will include shrinkage and building compression, how to address increased dead, live, wind and seismic loads, fire protection requirements, how to ensure dryness at lock-up, and the benefits of computerized modeling during pre-construction.

MORNING SESSION 11:00 AM • AFTERNOON SESSION 3:55 PM

Efficient Use of Wood Framing in Retail Buildings
Archie Landreman, WoodWorks

This presentation will explain the advantages of various structural wood products when used in retail buildings. Products discussed will include: wood trusses, wall panels, I-joists, glued laminated timber (glulam), and structural insulated panels (SIPs). These products will be examined from a variety of perspectives, including cost savings, sustainability, labor and time savings, and availability. Specific applications and product differences will be discussed.

MORNING SESSION 8:00 AM • AFTERNOON SESSION 1:15 PM
LCT ONE: Case Study of an Eight-story Wood Office Building
Nabih Tahan, AIA, CREE

The Life Cycle Tower ONE (LCT ONE) is an eight-story wood office building recently built in Austria—and the culmination of a research development that preceded the construction of LCT ONE, as well as production of the floor and wall components and erection of the building envelope in just eight days.

MORNING SESSION 9:45 AM • AFTERNOON SESSION 2:45 PM
Using CLT in the US Today
Lisa Podesto, PE, WoodWorks

This presentation will focus on how cross laminated timber (CLT) can and should be used under current building codes and standards. Topics will include when specifying CLT. The latest resources available for design and construction professionals will be reviewed, including the US CLT handbook due for release in January 2013. Frequently asked questions related to CLT will also be addressed.
Seminars and Speakers (continued)

MORNING SESSION 11:00 AM • AFTERNOON SESSION 3:55 PM
Adventures in Engineering: Designing the Iconic Metropol Parasol
Jan-Peter Koppitz, Dipl-ing, Eur Ing, MstructE CEng, Ove Arup & Partners

In this session, project engineer Jan-Peter Koppitz will trace what he calls the “adventure” of engineering the iconic Metropol Parasol in Seville, Spain. From the first sketches to the turn of the last screw, the design team found itself on an expedition in new technological and architectural territory. This could only be managed with a great deal of knowledge, experience and creativity, as well as the courage to pursue never-tried solutions.

MORNING SESSION 8:00 AM • AFTERNOON SESSION 1:15 PM
Structural Durability: The Proper Use of Preservative Treated Wood
Tom Milton

Wood buildings can be highly durable, lasting hundreds of years, provided they are built in a way that minimizes moisture exposure and potential wood deterioration. Where moisture exposure to structural wood products cannot be prevented, preservative treated wood is required by building codes and must be specified. This presentation discusses how to specify and use preservative treated wood and illustrates relevant design details.

MORNING SESSION 9:45 AM • AFTERNOON SESSION 2:45 PM
Insulation Technologies and Installation Specifications for Better Energy Performance of Commercial Buildings
Steve Easley, Steve Easley & Associates

This interactive session will focus on the performance of different insulation technologies and the importance of a well designed air barrier system. Participants will learn how to sort through the myriad of insulation choices in order to match the best system to the type of structure. In addition, energy codes are for the first time requiring specific installation protocols for insulation. These requirements will be explained in order to help participants develop appropriate specifications—both to meet new codes and create buildings with better performance.

MORNING SESSION 11:00 AM • AFTERNOON SESSION 3:55 PM
Materials Matter: Design Trends for a Sustainable Future
Cheryl Ciecko, AIA, ALA, LEED AP, WoodWorks

Today, moving forward means looking back to traditional, natural materials and using them in new ways. Find out how wood materials provide solutions in terms of durability, fire, moisture and sustainability. Discover innovations that are allowing traditional wood materials and systems to be the solution of choice for a variety of building types, including four to six-story mid-rise buildings and CLT structures up to 15 stories. Topics will also include life cycle assessment, Environmental Product Declarations, green building rating systems, forest certification and biophilia.

MORNING SESSION 8:00 AM • AFTERNOON SESSION 1:15 PM
Modular Wood Framing Goes Vertical
Tray E. Bean, PE, SE, DCI Engineers

As with wood construction in general, innovative technologies are expanding the options for modular wood-frame buildings. No longer limited to one-story classrooms, work camps or single-family homes, there is a move to incorporate these factory-built units into applications such as hotels, dorms and condominiums that compete with four- and five-story podium design. This presentation will focus on techniques that differentiate modular wood-frame construction from conventional, panelized or prefabricated wood framing methods, as well as cost and other advantages.

MORNING SESSION 9:45 AM • AFTERNOON SESSION 2:45 PM
Wood Podiums in Mid-rise Construction
Karyn Beebe, PE, LEED AP, APA
Michelle Kam-Biron, PE, SE, American Wood Council

Mid-rise podium construction, with multiple stories of wood framing over a concrete first story, has been popular for many years as a way to take advantage of wood’s cost effectiveness for the superstructure while maintaining a more traditional commercial construction type below. Recently, some designers have chosen to forego concrete altogether and build the podium in wood—further decreasing their costs while speeding construction and creating less massive, more uniform buildings. This presentation will examine design considerations related to wood podiums such as durability, fire protection, sound transmission and seismic loads.

MORNING SESSION 11:00 AM • AFTERNOON SESSION 3:55 PM
Understanding the Design Requirements for Five-story Wood-frame Construction
Tim Smith, AIA, Togawa Smith Martin, Inc.

Unravel the mystery of how to design five-story wood-frame residential buildings and six-story mixed-use projects within the International Building Code (IBC). This session will provide an architect’s point of view on code requirements with an emphasis on height and area limitations. Topics will also include technical challenges such as how to design for wind and seismic forces, how to control shrinkage, and enhanced fire protection requirements.

MORNING SESSION 8:00 AM
Meeting Fire Codes with Oriented Strand Board (OSB)
Karsten Vardas, LP Building Products

This presentation will provide an overview of fire-rated cementitious coated oriented strand board (OSB) sheathing for wall and roof sheathing applications. Topics will include its structural and performance properties and contribution to enhancing the sustainable built environment.

MORNING SESSION 9:45 AM
Sustainable Designs: Western Red Cedar
Paul Mackie, Western Red Cedar Lumber Association

Attend this session for an overview of the features and benefits of Western Red Cedar products with an emphasis on grades, product specifications, installation, finishing, and maintenance. Participants can expect to gain a greater appreciation of Western Red Cedar’s versatility and the enhanced appeal it can bring to commercial and residential designs, as well as the latest design trends. Topics will also include forest certification systems and the attributes that make wood an inherently ‘green’ building material.
Who Should Attend?
With a full day of seminars and a trade exposition, the Bay Area Wood Solutions Fair will pack an informational punch for architects, engineers, developers, code officials and anyone else interested in wood’s exciting design possibilities. Register today if you’d like access to wood design experts for one-on-one support, informative seminars, technical information from manufacturers, engineering consultants and industry associations, and exhibits featuring a wide range of structural and finishing products.

How to Register
To register, visit woodworks.org and look under “Events” on the home page. As part of the registration process, you will be asked to choose which seminar you plan to attend in each time slot. Once your request has been processed, you will receive an email confirmation that your registration is complete. To help make your choices, speaker bios are available on the website.

Cost
There is no cost to attend and complimentary lunch will be provided.

Education Credits
Attendees can earn up to 6 AIA/CES CEHs or PDH credits (one per attended seminar). Please refer to the chart for HSW and HSW/SD details and visit woodworks.org for learning objectives. AIA/CES forms and professional development certificates will be available on site.

More Information
Visit woodworks.org

WoodWorks is an approved AIA provider.

WoodWorks
Free architectural and engineering support for wood buildings
WoodWorks provides free resources that can help you design and build non-residential and multi-family structures out of wood more easily and at less cost. For one-on-one project support, online training, CAD/REVIT details, case studies and more, visit woodworks.org.