Structural Engineers Association of Vermont
December 2015 Program

Design Considerations for Durable Wood Structures, and Mid-Rise Design: Detailing for Performance

(CO-SPONSORED BY WoodWorks AND SEAVT)

Thursday, December 3, 2015
Burlington, VT

Meeting Summary

Ricky McLain, Technical Director of Architectural and Engineering Solutions for WoodWorks – Wood Products Council will present a 2 hour program on the topics of Durable Wood Structures and Mid-Rise Detailing. Ricky is a licensed Structural Engineer and Professional Engineer in the states of New York, Massachusetts, New Hampshire and Vermont, and has extensive experience in lead engineer roles related to the structural design, project management and construction administration of new single-family, multi-family, municipal, industrial, and mixed-used buildings. Before joining WoodWorks, Ricky was a Senior Structural Engineer for a Montpelier, VT based consultant, working on projects in the Northeast from Maine to Maryland. He is Executive Director of the Structural Engineers Association of Vermont and is a member of the ASCE Structural Wind Engineering Committee. Ricky daily assists architects, engineers, and construction professionals across the country understand and implement successful wood solutions in commercial and multi-family projects. The following topics, intended for both architects and structural engineers, will be discussed during these presentations:

Design Considerations for Durable Wood Structures, Course Description:
With proper design, detailing and specification, wood structures can provide long and useful service lives while also offering a reduced environmental footprint. The key is careful planning and understanding of environmental loads and other external factors likely to impact a building over its lifetime. This presentation provides an overview of considerations related to durable wood design, including moisture management techniques, preservative treatment specification, and details for controlling termites.

Learning Objectives:
1. Determine methods for controlling moisture infiltration into the exterior wall assemblies.
2. Review good building envelope detailing practices including guidance on the use of water, air and vapor barriers.
3. Discuss specification of preservative treated and naturally decay resistant wood material.

4. Introduce termite prevention strategies.

Mid-Rise Design: Detailing for Performance, Course Description:

The detailing of mid-rise wood buildings plays a significant role in the ability to manage investment costs per unit and best use the lot configuration. Implementing a well-considered design requires understanding and coordination of several architectural and structural design aspects, such as fire/life safety, acoustics, building envelope and constructability. This presentation will discuss design and detailing considerations unique to mid-rise wood structures. Topics will include shrinkage (with an emphasis on detailing best practices to minimize its effects), structural detailing considerations related to lateral design, and acoustic performance of floor and wall assemblies. Examples of typical floor-to-wall intersection details will be presented demonstrating various ways design professionals can cost-effectively meet code requirements.

Learning Objectives:

1. Review International Building Code fire and life safety protection requirements for Type III and Type V mid-rise construction.
2. Discuss wood's shrinkage potential and causes, identify shrinkage effects on non-structural components, and review detailing best practices to minimize the effects of shrinkage.
3. Identify topics that impact detailing performance such as acoustics, structural design, and building envelope.
4. Recognize common detailing used for floor-to-wall intersections in multi-story wood-frame buildings.

Two Professional Development Hours or two AIA CES LU/HSW credits have been assigned for the full program, (however you do have the option of only attending the first section for One PDH/AIA CES credit).

Location

Sheraton Hotel and Conference Center
Diamond II Ballroom
870 Williston Road
Burlington, VT 05403
(802) 865-6600

Meeting Agenda

7:30 a.m. – Continental Breakfast Buffet
8:00 to 10:00 a.m. – Technical Presentation
10:00 to 10:15 a.m. – Question and Answer

Fee and Registration

Cost of seminar, including breakfast is as follows:

SEAVT Members:	$20
Non-Members:	$25

Please make checks payable to "SEAVT"
Registered folks that do not attend the event will be invoiced, as a final head count is needed by the hotel.

Please RSVP by Monday November 30, 2015 to Admin@seavt.org