Agenda

Presented by Vincent F. Fratinardo, P.E., S.E., RRC

Engineered Lumber Design and Construction
Springfield, IL - Wednesday, August 7, 2019

Learning Objectives

You’ll be able to:
Comply with building codes and design specifications for engineered wood construction.
Identify design values for bending members, compression members and columns.
Utilize engineered wood products, including glued-laminated timber, timber poles and piles, and pre-fabricated wood I-joists.
Understand how to properly use connectors and fasteners with engineered wood products.
Discuss roof and floor framing.

Continuing Education Credits

Professional Engineers & Structural Engineers 7.0 PDHS
Architects 7.0 HSW Contact Hours 7.0 AIA HSW Learning Units

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Examining types of engineered lumber products
- Structural and non-structural
National design specification for wood construction
ASCE standard for load and resistance factor design for engineered wood construction
Building codes Design criteria

Design Values for Structural Engineered Lumber
Reference design values and adjustments
Bending members Compression members
Solid columns Tension members
Combined loads Bearing capacity
Flitch beams

Structural Glued Laminated Timber
Types of members Applications and design values
Adjustments and special considerations

Timber Poles and Piles
Types of members Applications and design values
Adjustments and special considerations

Pre-fabricated Wood I-Joists
Types of members Applications and design values
Adjustments and special considerations

Structural Composite Lumber and Wood Structural Panels
Types of products Applications and design values
Adjustments and special considerations

Connectors and Fasteners
Mechanical connections Dowel fasteners
Split ring and shear plate connectors Timber rivets

Structural Design
Roof framing Beams and joists
**Faculty**

Vincent Fratinardo, P.E., S.E., RRC  Glen Ellyn, IL

Mr. Fratinardo is a civil structural engineer and roof consultant. He has over 20 years of experience includes civil and structural engineering analysis, design, construction administration, field investigations, and project management, and 13 years of experience specific to forensic engineering and the investigation and analysis of building damage and failures. Mr. Fratinardo has designed numerous new buildings, building additions, building renovations, and mechanical platforms and supports. He has designed and analyzed roof, wall and floor framing systems utilizing steel, concrete, masonry, and wood construction. Mr. Fratinardo has vast expertise in commercial, industrial, agricultural, municipal, educational and residential building damage investigations, including on-site investigations after 25 different tornado events, and Hurricanes Irene, Sandy, Matthew, Harvey, Irma, Maria and Florence. He has legal experience in depositions, arbitration hearings and trials. He is prepared and performed numerous continuing education presentations, including on an array of topics in forensic engineering, structural engineering and building codes for Halfmoon Education Inc. in multiple states since 2014. Mr. Fratinardo graduated from Michigan State University with a bachelor of science degree in Civil Engineering, and he also holds a master of engineering degree in Civil Engineering from Texas A&M University. He is a registered professional engineer in multiple states and a licensed structural engineer in Illinois.

Here’s what past attendees had to say about the program and presenter Vincent Fratinardo:

"Did a great job of moving the class along and keeping me involved." — Engineer

"Very good presenter with interesting & applicable information. The day went quick!" — Structural Engineer

**Additional Learning**

**Webinar Series**

**International Existing Building Codes**

- **Working with the International Existing Building Code**
  - Chapters 3, 4 & 6
  - Thurs., June 20, 2019, 11:00 AM - 12:30 PM CD
  - Fridays, June 21, 2019, 11:00 AM - 12:00 PM CD

- **Chapters 7-10: Mitigations and Occupancy**
  - Fri., June 21, 2019, 11:00 AM - 12:00 PM CD
  - Fri., June 21, 2019, 1:00 - 2:30 PM CD

- **Chapters 11, 12 and 14: Additions and Historic Buildings**
  - Fri., June 21, 2019, 1:30 - 5:00 PM CD

**Industrial Stormwater**

- **Understanding the Federal Industrial Stormwater Program**
  - Thurs., June 27, 2019, 11:00 AM - 12:30 PM CD

- **Examining Stormwater Pollutants and the Development of Total Maximum Daily Loads (TMDLs)**
  - Thurs., June 27, 2019, 1:00 - 2:00 PM CD

- **Creating Stormwater Pollution Prevention Plans (SWPPP)**
  - Fri., June 28, 2019, 11:00 AM - 12:00 PM CD

- **Implementing Best Management Practices (BMPs), Sampling and Reporting**
  - Fri., June 28, 2019, 12:30 - 2:00 PM CD

**Retaining Structures**

- **Earth Pressures and Surcharges**
  - Wed., June 26, 2019, 11:00 AM - 12:30 PM CD

- **Cantilever & Apparent Earth Pressures**
  - Wed., June 26, 2019, 1:00 - 2:30 PM CD

- **Apparent Earth Pressures**
  - Thurs., June 27, 2019, 11:00 AM - 12:30 PM CD

**Continuing Education Credit Information**

This seminar is open to the public and offers 7.0 PDHs to professional engineers and structural engineers and 7.0 HSW contact/CE hours to architects in all states. Educators and courses are not subject to preapproval in Illinois. The American Institute of Architects has approved this event for 7.0 HSW Learning Units (Sponsor No. 1885). Only full attendance can be reported to the AIA/CES. Halfmoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE17050059), Maryland, New Jersey (Approval No. 24EC00000700), North Carolina, and North Dakota. Halfmoon Education is deemed an approved continuing education sponsor for New York architects. This seminar also offers a non-credit continuing education opportunity to construction contractors. It has not been submitted to any state contractor licensing board for continuing education approval.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

**Registration**

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**How to Register**

- **Online:**
  - www.halfmoonseminars.org
  - Phone: 715-835-5900
  - Fax: 715-835-6066

**Mail:**

- HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278

Complete the entire form. Attach duplicates if necessary.

**Tuition**

- **$289.00**
- **$269.00**

Three or more registrants from the same company registering at the same time - **$209.00** each.

**I am not attending.**

Please send me the self-study package:

- [ ] Downloadable MP3 Audio/PDF Manual for $269.00
- [ ] CD/Manual Package for $289.00

(Please allow four weeks from seminar date for delivery)

**Checks:** Make payable to HalfMoon Education Inc.

**Credit Card:** Mastercard, Visa, American Express, or Discover

**Credit Card Number:**

**Expiration Date:**

**CVV2 Code:**

**Cardholder Name:**

**Billing Address:**

- City: 
- State: 
- Zip: 

**Signature:**

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