

Agenda

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

Understanding Structural Loads

Types of structural loads
General structural integrity
Classifying buildings and structures
Modifying and expanding existing structures

Dead Loads, Soil Loads and Hydrostatic Pressure

Weight of materials and structure
Soil loads and hydrostatic pressure

Live Loads

Uniformly-distributed loads
Concentrated loads
Required live loads
Impact loads

Flood Loads

Design loads
Loads on breakaway walls
Hydrostatic and hydrodynamic loads
Wave loads

Rain, Ice and Snow Loads

Calculating rain, ice and snow loads on roofs
Design coefficients
Unbalanced, drifting and sliding loads

Wind Loads

Wind speed, importance factor, exposure, enclosure classifications
Allowed procedures (methods 1, 2 and 3)
Basic definitions and requirements
Main wind force resisting system vs. components and cladding

Earthquake Loads

Scope and applicability
Seismic ground motion values/geologic hazards and geotechnical investigation
Importance factor and occupancy category
Seismic design category
Simplified structural design criteria for bearing walls and building frame systems
Design requirements for non-structural components

Structural Design Loads under the ASCE 7-16 Standard
Cincinnati, OH - Thursday, June 28, 2018



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

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Learning Objectives

You'll be able to:

Identify various types of structural loads.

Define design standards for live loads, dead loads, and soil loads.

Learn how to design for loads resulting from flood waters and waves.

Calculate rain, ice and snow loads on roofs.

Determine wind loads, factoring in wind speed, exposure, and enclosure classifications.

Explore earthquake loads and seismic design criteria.



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Learn how to design for live loads, dead loads, and soil loads

Understand how to design for loads resulting from flood waters and waves

Calculate rain, ice and snow loads on roofs

Explore wind load factors including wind speed, exposure, and enclosure classifications

Receive design guidance related to earthquake loads

Continuing Education Credits

Professional Engineers
7.0 CPD Hours/PDHs

Architects
7.0 HSW Continuing Ed. Hours
7.0 AIA HSW Learning Units

International Code Council
.7 CEUs (Building)

**Ohio Building Officials,
Master Plans Examiners,
Building Inspectors,
Residential Plans Examiners,
Residential Building Officials,
Residential Building
Inspectors**
7.0 CE Hours



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Faculty

Vincent F. Fratinardo, P.E., S.E., RRC
Mr. Fratinardo is a civil/structural engineer and roof consultant. His 19 years of experience includes civil and structural engineering analysis, design, construction administration, field investigation, and project management, and includes 11 years 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 24 different tornado events, and Hurricanes Irene, Sandy and Matthew. He has legal experience in depositions, arbitration hearings and trials, and he has 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.

Testimonials from recent HalfMoon Education seminars taught by Vincent F. Fratinardo:

“Vince is well spoken & easy to understand.” - *Architect*
“The course was very helpful in identifying the different effects seen by structures. Sometimes they are things you may not always consider. Presenter did a great job and was very personable.” - *Project Manager*

Seminar Information

Holiday Inn Eastgate (I-275E)
4501 Eastgate Blvd.
Cincinnati, OH 45245
(513) 752-4400

Tuition
\$279 for individual registration
\$259 for three or more registrations.
Each registration includes a complimentary continental breakfast and printed seminar manual. Registration does not include a copy of ASCE 7.
Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

How to Register
• Visit us online at www.halfmoonseminars.org
• Mail-in or fax the attached form to 715-835-6066
• Call customer service at 715-835-5900

Cancellations: Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the CD/manual package. You may also send another person to take your place.

Continuing Education Credit Information
This seminar is open to the public and offers 7.0 PDHs to professional engineers and 7.0 HSW continuing education hours to architects in most states, including Ohio. Educators and courses are not subject to preapproval in Ohio.

This seminar is approved by the American Institute of Architects for 7.0 HSW Learning Units (Sponsor No. J8850). Only full attendance can be reported to the AIA/CES.
HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, New Jersey (Approval No. Approval No. 24GP00000700), New York (NYSED No. 35), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York architects.
The Ohio Board of Building Standards has approved this course for 7.0 continuing education hours for Building Officials, Master Plans Examiners, Building Inspectors, Residential Plans Examiners, Residential Building Officials, and Residential Building Inspectors. **Please Note: The ASCE-7-16 is not the current standard in Ohio.**

The International Code Council has approved this event for .7 CEUs in the specialty area of Building.
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.

Additional Learning

Webinar Series

National Electrical Code: Onsite Power Generation and Distribution

- National Electric Code: Onsite Power Generation and Distribution Part 1**
Weds., June 6, 2018, 11:00 AM - 2:15 PM CDT
- National Electric Code: Onsite Power Generation and Distribution Part 2**
Thurs., June 7, 2018, 11:00 AM - 2:15 PM CDT

HVAC Series

- Heating, Ventilation and Air Conditioning Principles**
Thurs., June 7, 2018, 11:00 AM - 1:00 PM CDT
- HVAC System Design Considerations**
Thurs., June 7, 2018, 1:30 - 2:30 PM CDT
- Evaluating HVAC Systems and Equipment**
Fri., June 8, 2018, 11:00 AM - 12:00 PM CDT
- HVAC System Controls and Techniques**
Fri., June 8, 2018, 12:30 - 2:30 PM CDT

Introduction to Vibrations

- Introduction to Vibrations**
Thurs., June 14, 2018, 11:00 AM - 1:00 PM CDT
- Eigenvalues, Eigenvectors and Motion**
Thurs., June 14, 2018, 1:30 - 3:00 PM CDT
- Analysis and Test Methods**
Fri., June 15, 2018, 11:00 AM - 12:30 PM CDT
- Designing for Vibration and Failure Analysis**
Fri., June 15, 2018, 1:00 - 2:30 PM CDT

Pedestrians and Bicycle Transport Planning

- Introduction to Current Conditions and Trends in Biking and Walking**
Thurs., June 21, 2018, 11:00 AM - 12:30 PM CDT
- Engineering and Infrastructure: Design for Walkability and Bikeability**
Thurs., June 21, 2018, 1:00 - 2:30 PM CDT
- Developing a Walking and Biking Plan, Part I**
Fri., June 22, 2018, 11:00 AM - 12:30 PM CDT
- Developing a Walking and Biking Plan, Part II**
Fri., June 22, 2018, 1:00 - 2:30 PM CDT

For more information visit:
www.halfmoonseminars.org/webinars/

Can't Attend? Order the CD/Manual Package:
A full recording of this seminar is available for \$289, which includes shipping and handling. This learning method does not qualify for the continuing education requirements of Ohio engineers, AIA members or architects. No contractor credit available. Please allow five weeks from the seminar date for delivery.

Registration

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How to Register		Registrant Information
Online: www.halfmoonseminars.org		Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip _____ Occupation: _____ Email: _____ Phone: _____
Phone: 715-835-5900		Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____
Fax: 715-835-6066		
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		
Complete the entire form. Attach duplicates if necessary.		Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.
I need special accommodations. Please contact me.		

Tuition

() **I will be attending the live seminar.** Single Registrant - **\$279.00**. Three or more registrants from the same company registering at the same time - **\$259.00** each.

() **I am not attending.** Please send me the CD manual package for **\$289.00**. (S&H included. Please allow five 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: _____
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