

# Agenda

Presented by James D'Aloisio, P.E., SECB, LEED AP

## Structural Forensic Engineering Day One

Wednesday, January 13, 2021 | 10:00 am - 1:45 pm CST (including a 15-min. break)

### Designing and Constructing to Prevent Failures

- Building codes - history and relevance
- Design standards
- Contemporary, archaic, and uncommon structural systems
- Hierarchy of authority
- Design engineering vs. forensic engineering

### Understanding Causes of Structural Failures

- Lessons learned from historic failures
- Design errors
- Material deficiencies
- Improper usage or modification
- Combination of causes
- Defective construction
- Excessive loading
- Deterioration and degradation

### Understanding the Forensic Engineering Process

- Definition of forensic engineering
- Documenting the failure
- Conducting investigation and research
- Test protocols and measurements
- Determining causation and responsibility
- Learning from failure

## Structural Forensic Engineering Day Two

Thursday, January 14, 2021 | 10:00 am - 1:45 pm CST (including a 15-min. break)

### Understanding the Forensic Engineering Process, Continued

#### Forensic Examination of Structures

- Investigation of steel structures
- Investigation of wood structures
- Investigation of concrete structures
- Investigation of masonry and building facades
- Investigation of foundation failures
- Load testing and instrumentation

#### Using Forensic Engineering Information

- Examining the forensic engineering report
- Impact of forensic engineering information on post-failure disputes
- Use of forensic engineering information in mediation, arbitration and litigation
- The forensic engineer as consultant, expert and witness

#### Ethical Issues in Structural Engineering

- NSPE Code of Ethics for Engineers
- Ethical Dilemmas

Structural Forensic Engineering  
Online - Wed., January 13 and Thurs., January 14, 2021

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## Learning Objectives

### You'll be able to:

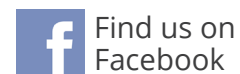
**Discuss** the importance of design standards and building codes.

**Evaluate** causes of structural failures, including defective construction, material deficiencies, and excessive loading.

**Understand** the forensic engineering process, from documenting failures and doing investigation and research, to determine causation and responsibility.

**Utilize** forensic investigative techniques for steel, wood, and concrete structures.

**Explore** the use of forensic engineering information in litigation.



# HalfMoon Education Online Learning Structural Forensic Engineering

Live, Interactive Webinar Series  
Wednesday, January 13 and Thursday, January 14, 2021



**Discuss** how to design and construct to prevent failures

**Explain** the causes of structural failures, including design and construction errors

**Discuss** the forensic examination of wood, steel and concrete structures

**Understand** the use of forensic engineering information in litigation

**Explore** ethical issues in structural engineering

### Continuing Education Credits

**Professional Engineers**  
7.0 PDHS

**Architects**  
7.0 HSW CE Hours

**AIA**  
7.0 LU | HSW

**International Code Council**  
.7 CEUs (Building)



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# Faculty

**James D'Aloisio, P.E., SECB, LEED AP** *Principal with Klepper, Hahn & Hyatt in Syracuse*

Mr. D'Aloisio is a principal with Klepper, Hahn & Hyatt, a structural engineering, landscape architecture, and building envelope services firm in East Syracuse, New York. A graduate of Rensselaer Polytechnic Institute, Mr. D'Aloisio is a registered professional engineer in New York and Massachusetts, and he has been certified by the Structural Engineering Certification Board (SECB) since its inception in 2007. He is a member and past president (1997-1998) of the American Society of Civil Engineers (ASCE) Syracuse Section, and a member of the American Institute of Steel Construction (AISC), the American Concrete Institute (ACI), the National Society of Professional Engineers (NSPE), and the Structural Engineers Association of New York State (SEAoNY). Mr. D'Aloisio is a member of ASCE/SEI's Frost-Protected Shallow Foundations Committee, the Structural Condition Assessment of Existing Buildings Committee, and the Sustainability Committee, and he is a member of Committee ACI 318-N. He is a trained infrared thermographer. Mr. D'Aloisio received the Order of the Engineer at Syracuse University in 1997. His 30-plus years' experience as a consulting structural engineer has primarily involved the design of new building structures, additions, and modifications, and analyses, assessments, and investigations of structures and facades. Specialties include detailing to minimize structural thermal bridging, the use of alternative structural systems and design approaches that can reduce the CO2 emissions of structures and foundations. Mr. D'Aloisio has been involved in numerous special inspection projects, including developing statements of special inspections, performing inspections, and facilitating discrepancy resolutions. He has also performed over 150 structural forensic investigations, and he has presented over 300 times.

# Webinar Information

**Day One: Wednesday, January 13, 2021**

10:00 am - 1:45 pm CST (including a 15-min. break)

**Day Two: Thursday, January 14, 2021**

10:00 am - 1:45 pm CST (including a 15-min. break)

*(please log into the webinar 15 - 30 minutes before start time)*

## Tuition

**\$299** for individual registration

**\$199** for three or more registrants from the same company at the same time.

**Included with your registration:** PDF seminar manual.

## How to Register

- Visit us online at [www.halfmoonseminars.org](http://www.halfmoonseminars.org)
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

Webinars are presented via GoToWebinar. Instructions and login information will be provided in an email sent close to the date of the webinar. For more information, please visit our FAQ section of our website, or visit [www.gotowebinar.com](http://www.gotowebinar.com).

**Cancellations:** Cancel at least 48 hours before the start of the webinar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another webinar or the self-study package. You may also authorize another person to take your place.

# Additional Learning

**International Existing Building Code 2018**

- Wed, Dec 16, 2020 | 8:30 am - 4:30 pm CST

**International Residential Code 2018**

- Fri., Dec 18, 2020 | 8:30 am - 4:45 pm CST

**Pavement Design**

- Fri., Dec 18, 2020 | 9:00 am - 4:30 pm CST

**Preventing and Addressing Construction Defects and Failures**

- Mon, Dec 21, 2020 | 8:30 am - 5:00 pm CST

**Special Inspections under the International Building Code Chapter 17**

- Mon, Dec 28, 2020 | 9:00 am - 4:30 pm CST

**Residential and Small Commercial International Energy Conservation Code**

- Tues, Dec 29, 2020 | 9:30 am - 4:30 pm CST

**Deep Foundations and Excavations**

- Wed, Dec 30, 2020 | 9:00 am - 4:30 pm CST

For more information and other online learning opportunities visit: [www.halfmoonseminars.org](http://www.halfmoonseminars.org)

## Continuing Education Credit Information

This webinar offers 7.0 PDHs to professional engineers and 7.0 HSW continuing education hours to architects licensed in all states.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina (S-0130), and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved this course for 7.0 LU | HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

This course is approved by the International Code Council for .7 CEUs in the specialty area of Building (Preferred Provider No. 1232).

Completion certificates will be awarded to participants who complete this event, respond to prompts and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).


## Can't Attend? Order the Webinar as a Self-Study Package!

Recordings of this webinar are available for purchase. See registration panel for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

# Registration

## Structural Forensic Engineering

Live, Interactive Webinar - Wednesday, January 13 and Thursday, January 14, 2021

How to Register		Registrant Information
<b>Online:</b> <a href="http://www.halfmoonseminars.org">www.halfmoonseminars.org</a>		Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip: _____ Occupation: _____ Email: _____ Phone: _____
<b>Phone:</b> 715-835-5900	<b>Code:</b>	<b>Additional Registrants:</b> Name: _____ Occupation: _____ Email: _____ Phone: _____
<b>Fax:</b> 715-835-6066		Name: _____ Occupation: _____ Email: _____ Phone: _____
<b>Mail:</b> HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		Name: _____ Occupation: _____ Email: _____ Phone: _____
<b>Complete the entire form.</b> 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 webinar.** Single Registrant - **\$299.00**. Three or more registrants from the same company registering at the same time - **\$199.00** each.

( ) **I am not attending.** Please send me the webinar recording:

Streamable MP4 Video/PDF Manual for **\$279.00**.

USB Video/PDF Manual for **\$279.00**.

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

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

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