

Agenda

Presented by Michael Drerup, P.E., F.ASCE

Examining the Role of Forensic Engineering

- Causes and consequences of structural failures
- Importance of good design
- Impact of codes and standards
- Legal and economic impacts of failures
- Results and consequences of forensic engineering

Understanding the Forensic Engineering Process

- Documenting the failure
- Conducting investigation and research
- Test protocols and tests
- Determining causation and responsibility
- Learning from failure

Preparing the Forensic Engineering Report

- Identifying the report's purpose and its audience
- Examining content
- Organizing the report
- Evaluating sample reports

Understanding Causes of Structural Failures

- Material deficiencies
- Design errors
- Construction errors
- Excessive loadings
- Deterioration and degradation

Forensic Examination of Structures

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

Using Forensic Engineering Information in Litigation

- Examining the nature of post-failure conflicts and disputes
- Understanding the use of forensic engineering information in arbitration, litigation and mediation
- Presenting forensic engineering information as an expert witness
- Expert witness qualifications
- Offering testimony as an expert witness

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Structural Forensic Engineering

Fairfax, VA or Online - Friday, June 10, 2022

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Learning Objectives

You'll be able to:

Discuss the importance of design standards and building codes.

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

Understand the forensic engineering process, including documenting failures, conducting investigation and research, and determining causation and responsibility.

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

Discuss the use of forensic engineering information in litigation.



Live, In-Person Seminar and Live Webinar

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Design and construct to prevent structural failures

Identify the causes of structural failures, including design and construction errors

Discuss the forensic examination of structures

Learn about using forensic engineering information in litigation

Continuing Education Credits

Professional Engineers
7.0 PDHs

International Code Council
.7 CEUs (Building)

Architects
7.0 HSW CE Hours
7.0 AIA LU | HSW

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Faculty

Michael Drerup, P.E., F.ASCE, has 25 years of structural engineering and building technology experience, with an emphasis on the performance, maintenance, repair and retrofit of existing buildings and structures. He has planned and directed field and laboratory studies to evaluate the performance and durability of a variety of building systems, components, and materials, including structural systems, facades, and flooring. Mr. Drerup often works closely with specialists in other disciplines to assemble and manage teams tailored for larger and more complex assignments. He has also investigated numerous damage claims resulting from a variety of natural and man-made causes, including earthquakes, weather events, explosions, fire, impact, construction activities, and defective design or construction. Mr. Drerup has served as an expert witness in numerous cases, and has testified at deposition, trial, and mediation. He has served on ASCE's Forensic Engineering Division since 2001, and recently completed his term as Division chair. During that time, he led the development of continuing education seminars for engineers and architects, and he chaired ASCE's Fifth Congress on Forensic Engineering in Washington, DC. Mr. Drerup has also represented ASCE internationally, including sponsored trips to forensic engineering conferences in India and Guatemala, and collaboration with the Institution of Forensic Engineers in the United Kingdom. He has served as a reviewer for ASCE's *Journal of Performance of Constructed Facilities* for more than 15 years, and he was guest editor for a special topic issue on non-destructive evaluation of existing buildings and infrastructure. Mr. Drerup regularly publishes and presents on a range of topics including technical issues, professional practice, and architectural and engineering history.

Seminar/Webinar Information

Hilton Garden Inn Fairfax
3950 Fair Ridge Drive
Fairfax, VA 22033
(703) 385-7774

Registration
8:00 - 8:30 am EDT

Morning Session
8:30 am - 12:00 pm EDT

Lunch (on your own)
12:00 - 1:00 pm EDT

Afternoon Session
1:00 - 5:00 pm EDT

Webinar Information:
Webinars are presented via GoToWebinar. Instructions and login information will be provided in an email sent close to the date of the webinar.
For system requirements, please visit the FAQ section of our website, or visit www.gotowebinar.com.

Tuition
\$319 for individual registration
\$289 for three or more registrants from the same company at the same time.
Included with your registration: PDF Seminar Manual.
A printed manual is available for an additional cost upon request. Please call to order.

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: Transfer from seminar to webinar or from webinar to seminar at any time without charge! Cancel at least 48 hours before the start of the seminar/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 seminar/webinar or the self-study package. You may also authorize another person to take your place.

Additional Learning

IBC Significant Changes: Administration and Building Planning
- Fri, April 29, 2022 | 11:00 am - 3:30 pm CDT

Construction Cost Estimating and Value Engineering
- Fri, April 29, 2022 | 8:30 am - 3:20 pm CDT

Reading, Interpreting and Writing Land Descriptions Workshop
- Fri, April 29, 2022 | 9:00 am - 4:00 pm CDT

HVAC Primer for Design Professionals
- Tues, May 3, 2022 | 8:30 am - 4:30 pm CDT

2020 National Electrical Code Update
- Fri, May 6, 2022 | 8:30 am - 4:00 pm CDT

IBC Significant Changes: Fire Protection and Means of Egress
- Fri, May 6, 2022 | 11:00 am - 3:30 pm CDT

Design Considerations and Mixed Occupancy Options for Speculative Buildings
- Tues, May 10, 2022 | 9:00 am - 3:40 pm CDT

Structural Design Loads under the ASCE 7-22 Standard
- Thurs, May 12, 2022 | 9:00 am - 4:30 pm CDT

IBC Significant Changes: Accessibility, Systems, and Materials
- Fri, May 13, 2022 | 11:00 am - 3:30 pm CDT

Revit Basics of Building Modeling
- Fri, May 13, 2022 | 9:00 am - 1:00 pm CDT
- Fri, May 20, 2022 | 9:00 am - 1:00 pm CDT

International Existing Building Code 2021
- Tues, May 17, 2022 | 9:00 am - 4:30 pm CDT

Managing Construction Projects
- Thurs, May 19, 2022 | 8:30 am - 5:00 pm CDT

Passive House: Planning, Design and Construction
- Tues, May 24, 2022 | 8:30 am - 4:30 pm CDT

For more information and other online learning opportunities visit:
www.halfmoonseminars.org

Continuing Education Credit Information
This seminar/webinar is open to the public and offers 7.0 PDHs to professional engineers and 7.0 HSW continuing education hours to licensed architects in Virginia. Engineers and architects seeking continuing education credit in other states will be able to claim the hours earned at this seminar/webinar, in most cases. Refer to specific state rules to determine eligibility.
The American Institute of Architects Continuing Education System has approved this course for 7.0 LU | HSWs (Sponsor No. J885). Only full participation is reportable to the AIA/CES.
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) and North Carolina (S-0130). 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 International Code Council has approved this event for .7 CEUs in the specialty area of Building (Preferred Provider No. 1232).
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.
Completion certificates will be awarded to participants who complete the webinar online, 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 program 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
Fairfax, VA or Online - Friday, June 10, 2022

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: _____ 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.
Fax: 715-835-6066	Code:	
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		
Complete the entire form. Attach duplicates if necessary.		

Tuition
Single Registrant - **\$319.00**. Three or more registrants from the same company registering at the same time - **\$289.00** each
() **Seminar:** I will be attending the presentation, live, in person, in CITYSTATE
No walk-in registrations will be accepted.
() **Webinar:** I will be attending the presentation live, online
() **I am not attending.** Please send me the seminar recording:
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Checks: Make payable to HalfMoon Education Inc.
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