Structural Forensic Engineering
Norfolk, VA - Tuesday, May 19, 2020

Understand causes and consequences of structural failures
Explore the forensic engineering process
Identify key points in forensic engineering reports

Learning Objectives

You’ll be able to:
Understand the importance of good design and the impact of codes and standards as tools to minimize structural failures.
Discuss how forensic research and investigation can be used to determine the causes of failures.
Evaluate the format and content of forensic engineering reports.
Identify the causes of structural failure including material deficiencies, deterioration, and design and construction errors.
Compare forensic investigation procedures for various types of structures including steel, wood, and concrete.
Discuss the use of forensic engineering information during the litigation process.

Professional Engineers
6.5 Continuing Ed. Hours

Architects
6.5 Continuing Ed. Hours
6.5 AIA LU|HSW

Contractors
Non-Credit Continuing Ed.

Presented by Michael J. Drerup, P.E.

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
Michael Drerup, P.E., F.ASCE, has nearly 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 he has testified at deposition, trial, and mediation.

Mr. Drerup has served on ASCE's Technical Council on Forensic Engineering for 15 years, and recently completed his term as council chair. During that time, he has led the development of continuing education seminars for engineers and architects, chaired ASCE’s Fifth Congress on Forensic Engineering in Washington, DC, and served on the steering committee for the Sixth Congress in San Francisco. Mr. Drerup has also represented ASCE internationally, including two sponsored trips to forensic engineering conferences in India, 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 10 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.

Testimonials from Recent HalfMoon Education Seminars Taught by Michael Drerup:

“Well presented with numerous examples” – Engineer  “Very passionate about subject matter” – Engineer  “Good speaker, knowledgeable” – Civil Engineer  “It was a very great and informative class” – Architect/Engineer

Seminar Information

Doubletree by Hilton
1500 North Military Highway
Norfolk, VA 23502
(757) 466-8000

Tuition

$599 for individual registration  $297 for three or more simultaneous registrations

Included with your registration:
Complimentary continental breakfast and printed seminar manual

Receive a reduced tuition rate of $101 by registering to be on our e-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 $59 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the self-study package. You may also send another person to take your place.

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 continuing education hours to professional engineers and architects in all states. Educators and courses are not subject to preapproval in Virginia.

The American Institute of Architects Continuing Education System has approved this course for 6.5 LU/HSW (Provider No. HBS). Visit www.halfmoonseminars.org for complete AIA information under this course listing. Only full attendance is reportable to the AIA/CES.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE27700039), Maryland, New Jersey (Approval No. 24H000007000), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects.

This seminar offers a non-credit continuing education opportunity to construction contractors. It has not been approved by any state contractor licensing entity for continuing education purposes.

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

Additional Learning

Webinar Series
Structural Forensic Engineering

- Overview of the Role of Forensic Engineering
  Thurs., April 16, 2020, 11:00 - 12:30 PM CDT
- Forensic Engineering Process and Forensic Engineering Report
  Thurs., April 16, 2020, 1:00 - 3:30 PM CDT
- Causes of Structural Failures
  Fri., April 17, 2020, 11:00 - 12:30 PM CDT
- Forensic Examination of Structures and Use in Litigation
  Fri., April 17, 2020, 10:00 - 3:00 PM CDT

Water Conservation

- Reviewing the Owner’s Commitment to Water Conservation and Applicable Codes and Standards
  Thurs., April 16, 2020, 11:00 AM - 12:30 PM CDT
- Assessing the Building Site
  Thurs., April 23, 2020, 11:00 - 2:00 PM CDT
- Conserving and Reducing Water Use
  Fri., April 24, 2020, 11:00 AM - 1:30 PM CDT
- Onsite Water Recycling and Minimizing Water Use
  Fri., April 24, 2020, 1:30 - 5:30 PM CDT

Special Inspections

- Special Inspections under the IBC Chapter 17
  - Part I
  Wed., April 29, 2020, 11:00 AM - 2:15 PM CDT
  - Part II
  Thurs., April 30, 2020, 11:00 AM - 3:30 PM CDT

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

Can’t Attend? Order the Manual and the Audio from the Live Seminar as a Self-Study Package!
An audio recording of this seminar is available for $279. Allow four weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

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.

Registration Information

Name: __________________________
Address: __________________________
City: __________________________ State: __________ Zip: __________
Phone: __________________________
Email: __________________________

Tuition

- I will be attending the live seminar. Single Registrant - $299.00
- Three or more registrants from the same company registering at the same time - $279.00 each.
- I am not attending.

I need special accommodations. Please contact me.

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

Credit Card Information

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