

Agenda

Presented by Daniel P. Messmer, P.E., D. GE

Science of Structures and Soils

- Typical loads on shallow foundations
- Typical loads on slabs
- Soil mechanics and effects on structures
 - Soil properties
 - Bearing capacity
 - Soil settlement
 - Effects of water, frost and freeze/thaw cycle

Foundation Features, Materials and Functionality

- Design and construction of shallow foundations
- Design and construction of slab foundations
- Design and construction of basements and retaining walls
- Design and construction of specialty features:
 - walk-outs, partially exposed foundations

Evaluating Foundation/Retaining Wall/Slab Damage

- Inspecting, monitoring and assessing damage
 - Settlement
 - Expansive soils
 - Subsurface erosion
 - Cracking
 - Poor drainage
 - Frost heave
 - Shrinkage
 - Subsidence
 - Utility failures

Stabilizing and Repairing Foundations/Retaining Walls/Slabs

- Piers, piles
- Carbon fibers
- Crack repair
- Underpinning
- Soil tiebacks
- Soldier beams
- Secant-tangent walls
- Reconstruction

Case Studies

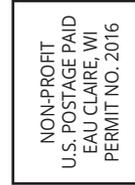
- Developing stabilization and/or repair strategies for real-life problems
- Registrants are welcome to bring their own foundation problems for discussion

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Recordings of this webinar are available for purchase. See course listing online 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.

Foundation and Retaining Wall Damage and Repair

Live, Interactive Webinar - Wednesday, November 29, 2023



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



Learning Objectives

You'll be able to:

Understand soil mechanics and effects on structures.

Discuss design and construction of shallow foundations, slab foundations, basements, retaining walls, and specialty features.

Inspect, monitor and assess damage from causes including settlement, frost heave, and poor drainage.

Apply techniques for stabilizing and repairing foundations, retaining walls and slabs.

Explore case studies of actual foundation problems, and bring our own foundation problems for discussion.



HalfMoon Education Live Webinars

Foundation and Retaining Wall Damage and Repair: Science, Materials and Techniques

Live, Interactive Webinar - Wednesday, November 29, 2023



Review soil mechanics and the impact of water and frost on foundations

Explore the design and construction of slabs and shallow foundations

Evaluate damage caused by expansive soils, shrinkage, utility failures, settlement and poor drainage

Stabilize and repair foundations and slabs using piers, piles, carbon fibers, crack repair and underpinning

Participate in a discussion of causes of foundation damage case studies

Continuing Education Credits

Professional Engineers

6.5 PDHs

Architects

6.5 HSW CE Hours

6.5 AIA LU | HSW

Landscape Architects

6.5 HSW CE Hours

6.5 LA CES HSW PDHs

International Code Council

.65 CEUs (Building)



Webinar Information

Log into Webinar

8:30 - 9:00 am CST

Break

12:15 - 12:45 pm CST

Morning Session

9:00 am - 12:15 pm CST

Afternoon Session

12:45 - 4:30 pm CST

Tuition

\$319 for individual registration.

\$289 for two 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
- Call customer service at 715-835-5900

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Faculty

Daniel P. Messmer, P.E., D. GE

Daniel Messmer has over 30 years of engineering experience in analysis, design, plan/specification development, and project management/personnel supervision for geotechnical, foundation and structural engineering projects in the transportation, industrial, municipal and commercial fields of civil engineering. Throughout his career he has placed an emphasis on quality control and staff training. Mr. Messmer is a member of the American Society of Civil Engineers, the American Concrete Institute, the American Society of Highway Engineers and the Society of American Military Engineers. He earned his B.S. degree in Civil Engineering from the University of Pittsburgh. Mr. Messmer was accepted into the Academy of Geo-Professionals in 2013.

Credit Information

This webinar is open to the public and is designed to qualify for 6.5 PDHs for professional engineers and 6.5 HSW continuing education hours for licensed architects and landscape architects in all states that allow this learning method. Please refer to specific state rules to determine eligibility.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP0000700) 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 American Institute of Architects Continuing Education System has approved this course for 6.5 HSW LUs (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The Landscape Architecture Continuing Education System has approved this course for 6.5 HSW PDHs. Only full participation is reportable to the LA CES.

The International Code Council has approved this event for .65 CEUs in the specialty area of Building (Preferred Provider No. 1232).

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the quiz that follows the course (multiple attempts allowed).

On-Demand Credits

The preceding credit information only applies to the live presentation. This course in an on-demand format may not be eligible for the same credits as the live presentation; please consult your licensing board(s) to ensure that a structured, asynchronous learning format is appropriate. The following pre-approvals may be available for the on-demand format upon request:

6.5 HSW LUs (AIA)

6.5 HSW PDHs (LA CES)

Additional Learning

Residential Provisions of the International Swimming Pool and Spa Code 2021

- Thursday, November 2, 2023 | 9:00 am - 4:30 pm CDT

Construction and Demolition Waste Management

- Friday, November 3, 2023 | 10:00 am - 12:00 pm CDT

LID and Rain Garden Basics: The 'What' and 'Why'

- Friday, November 3, 2023 | 10:00 am - 12:00 pm CDT

Commercial and High-End

Residential Deck Design and Construction

- Tuesday, November 7, 2023 | 9:00 am - 4:00 pm CST

Horticulture and Green Space Design for Construction Sites

- Wednesday, November 8, 2023 | 9:00 am - 4:00 pm CST

Masonry Veneer Design and Construction

- Thursday, November 9, 2023 | 8:30 am - 4:00 pm CST

The Tree Course:

Science, Design, and Sustainability

- Thursday, November 9, 2023 | 9:00 am - 4:30 pm CST

Soil Nail Retaining Wall Design, Construction and Maintenance

- Monday, November 13, 2023 | 9:00 am - 4:00 pm CST

How to Use Berms and Swales for Stormwater Infiltration

- Tuesday, November 14, 2023 | 9:00 - 11:00 am CST

Air-Source Heat Pumps for Residential and Small Commercial Buildings

- Tuesday, November 14, 2023 | 9:00 am - 4:50 pm CST

Managing Engineering Liability and Risk

- Wednesday, November 15, 2023 | 8:30 am - 4:30 pm CST

Living Soils: Science, Development and Preservation

- Monday, November 20, 2023 | 11:00 am - 2:00 pm CST

Solar Site Assessments

- Tuesday, November 28, 2023 | 1:00 - 3:00 pm CST

Handling Ethical Issues in Construction

- Thursday, November 30, 2023 | 2:00 - 4:00 pm CST

For more information and other online learning opportunities visit:

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