

# Agenda

*Presented by Scott Hamel*

**Understanding Structural Loads**

- Probability and reliability
- Types of structural loads and load combinations
- Load path and structural systems
- Importance factor and occupancy category
- Reliability-based design

**Dead Loads, Soil Loads, and Hydrostatic Pressure**

- Weight of materials and structure
- Soil loads and hydrostatic pressure

**Live Loads**

- Distributed and concentrated loads
- Live load reduction

**Snow Loads**

- Ground snow loads in Alaska
- Flat roof snow loads
- Unbalanced, drifting and sliding loads
- Preview of the ASCE 7-22 Standard

**Wind Loads**

- Wind speed, importance factor, exposure, enclosure classifications
- Allowed procedures (methods 1, 2 and 3)
- Main wind force resisting system
- Components and cladding

**Earthquake Loads**

- Introduction to seismic design philosophy
- Seismic ground motion values and geotechnical investigation
- Seismic design category
- Base shear and load distribution
- Design criteria for bearing walls and building frame systems

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## Alaska Structural Design Loads under ASCE 7-16 Standard

Live, Interactive Webinar - Thursday, November 18, 2021

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



## Learning Objectives

**You'll be able to:**

- Understand** structural loads and discuss the importance of building classification and occupancy.
- Explore** dead loads, soil loads and hydrostatic pressure.
- Examine** live loads, including uniformly-distributed loads and concentrated loads.
- Calculate** unbalanced, sliding, and drifting snow loads.
- Discuss** main wind force resisting systems.
- Review** seismic design philosophy and seismic design categories.



## HalfMoon Education Live Webinars

# Alaska Structural Design Loads under ASCE 7-16 Standard

Live, Interactive Webinar - Thursday, November 18, 2021



- Understand** different types of structural loads
- Review** snow, wind and earthquake loads
- Discuss** dead loads, soil loads and hydrostatic pressure
- Understand** seismic design categories and design criteria
- Learn** about live loads including distributed and concentrated loads

**Continuing Education Credits**

<b>Professional Engineers</b>	<b>AIA</b>
7.0 PDHs	7.0 LU   HSW
<b>Architects</b>	<b>International Code Council</b>
7.0 HSW CE Hours	.70 CEUs (Building)



# Faculty



**Scott Hamel** *Professor and Chair, University of Alaska Anchorage*  
Originally from New Hampshire, Dr. Hamel completed a B.S. degree in Civil Engineering at Worcester Polytechnic Institute in Massachusetts and a master’s degree in Civil Engineering with an emphasis in structures at the University of Colorado at Boulder. Between degrees he worked as a bridge inspector, roadway designer, and bridge engineer in Boston and as a structural engineer in Denver designing hospitals, museums, and courthouses. After earning his license as a professional engineer in Colorado, he returned to school and completed his doctorate in Structural Engineering at the University of Wisconsin-Madison. Dr. Hamel’s research was located at the USDA Forest Products Laboratory in Madison and included a three-year long creep study of wood-plastic composites (WPCs). Dr. Hamel joined the faculty at the University of Alaska Anchorage in 2011, where his current research includes the performance of plywood/polyurethane structural insulated panels (SIPs), the strength of accreted ice on piles at the Port of Alaska, and a reliability analysis of flawed wood-frame structures during seismic events. At UAA, he teaches undergraduate courses in mechanics, structural analysis and steel design, and graduate-level courses that cover loads on structures, structural reliability, advanced structural analysis, finite-element analysis, and advanced steel design.

# Webinar Information

Log into Webinar 8:30 - 9:00 am AKST	Break 11:30 am - 12:00 pm AKST
Morning Session 9:00 - 11:30 am AKST	Afternoon Session 12:00 - 4:50 pm AKST

**Tuition**  
**\$289** for individual registration  
**\$239** for three or more registrants from the same company at the same time.  
**Included with your registration:** PDF seminar manual.

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

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# Additional Learning

- AIA Contract Document Workshop**  
- Mon, Oct 18, 2021 | 5:30 am - 1:30 pm AKDT
- Handling Ethical Issues in Construction Contracting**  
- Mon, Oct 18, 2021 | 7:00 - 8:00 am AKDT
- SketchUp for Building Professionals**  
- Tues, Oct 19, 2021 | 8:00 - 11:45 am AKDT  
- Wed, Oct 20, 2021 | 8:00 - 11:45 am AKDT
- Focus on Passive House and Reducing Carbon Footprint**  
- Wed, Oct 20, 2021 | 8:00 - 10:00 am AKDT
- Retaining Walls and Lateral Earth Pressure**  
- Wed, Oct 20, 2021 | 7:00 - 9:00 am AKDT
- Residential Structural Design**  
- Mon, Oct 25, 2021 | 5:30 am - 1:30 pm AKDT
- How to Analyze Common Construction Defects and Failures**  
- Tues, Oct 26, 2021 | 11:00 am - 1:00 pm AKDT
- Handling Ethical Issues Associated with Construction Defects and Failures**  
- Wed, Oct 27, 2021 | 6:00 - 7:00 am AKDT
- Internal Design of MSE Walls and Geosynthetics**  
- Wed, Oct 27, 2021 | 7:00 - 10:15 am AKDT
- Infrastructure: Structural Analysis and Sustainability**  
- Fri, Oct 29, 2021 | 10:30 am - 3:00 pm AKDT  
- Fri, Nov 5, 2021 | 10:30 am - 3:00 pm AKDT
- Unreinforced Slope Stability Analysis**  
- Wed, Nov 3, 2021 | 7:00 - 9:00 am AKDT
- Best (and Worst) Practices for Retaining Wall Success and Interactive Workshop**  
- Wed, Nov 17, 2021 | 7:00 - 10:15 am AKST
- 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 most states, including Alaska. Educators and courses are not subject to preapproval in Alaska.

Engineers and architects seeking continuing education credit in other states will be able to claim the hours earned at this course, 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 | HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The International Code Council has approved this event for .7 CEUs in the specialty area of Building (Preferred Provider No. 1232).

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

# Registration

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<div><b>How to Register</b></div> <div><b>Online:</b> <a href="http://www.halfmoonseminars.org">www.halfmoonseminars.org</a></div> <div><b>Phone:</b> 715-835-5900</div> <div><div><b>Fax:</b> 715-835-6066</div><div><b>Code:</b></div></div> <div><b>Mail:</b> HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278</div> <div><b>Complete the entire form.</b> Attach duplicates if necessary.</div>	<div><b>Registrant Information</b></div> <div>Name: _____</div> <div>Company/Firm: _____</div> <div>Address: _____</div> <div>City: _____ State: _____ Zip _____</div> <div>Occupation: _____</div> <div>Email: _____</div> <div>Phone: _____</div> <div><b>Additional Registrants:</b></div> <div>Name: _____</div> <div>Occupation: _____</div> <div>Email: _____</div> <div>Phone: _____</div> <div>Name: _____</div> <div>Occupation: _____</div> <div>Email: _____</div> <div>Phone: _____</div> <div>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.</div> <div>( )  I need special accommodations. Please contact me.</div>
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