MINNESOTA STRUCTURAL ENGINEERS ASSOCIATION 2021 VIRTUAL SPRING SEMINAR MAY 25, 7:30AM-12PM

ASCE 7-16 Wind Provisions & Their Often Misunderstood Applications

- ASCE 7-16 Wind Provision Updates & What's Coming in ASCE 7-22, Donald Scott, PCS Structural Solutions
- Frequently Misunderstood Wind Provisions, Emily Guglielmo, Martin/Martin, Inc.
- Wind Loads on Non-Building Structures, Emily Guglielmo, Martin/Martin, Inc.

<u>Click here</u> to register

MN

SEA

Via Zoom | 3 PDHs \$80 MNSEA members \$120 non-members

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MINNESOTA STRUCTURAL ENGINEERS ASSOCIATION 2021 VIRTUAL SPRING SEMINAR:

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Schedule of Events:

| 7:30-8:00AM | MNSEA General Meeting |
|---------------|---|
| 8:00-8:15AM | Sponsor Introduction & Break |
| 8:15-9:15AM | Session 1: ASCE 7-16 Wind Provisions & What's |
| | Coming in ASCE 7-22 |
| 9:15-9:30AM | Break |
| 9:30-10:30AM | Session 2: Frequently Misunderstood Wind Provisions |
| 10:30-10:45AM | Break |
| 10:45-11:45AM | Session 3: Wind Loads on Non-Building Structures |
| 11:45AM | Adjourn |
| | |

ASCE 7-16 Wind Provision Updates & What's Coming in ASCE 7-22: 8:15-9:15AM

Donald Scott, PCS Structural Solutions

As an integral part of the building codes in the United States, the currently adopted ASCE/SEI 7-16: Minimum Design Loads and Associated Criteria for Buildings and Other Structures describes the means for determining natural hazard loading, including wind loads, on buildings and other structures. Current efforts are nearing completion of the first-ever tornado loading for buildings for incorporation into the 2022 edition of the ASCE 7 standard, along with the use of Performance-Based Wind Design principles being added to the standard. This presentation will look at the current major provision updates that have been incorporated into the ASCE 7-16 provisions as well as what is being incorporated into ASCE/SEI 7-22.

Frequently Misunderstood Wind Provisions: 9:30-10:30AM

Emily Guglielmo, Martin/Martin, Inc.

This seminar will focus on wind provisions of ASCE 7/ IBC that are frequently misunderstood or incorrectly applied, including building enclosure classification, torsional wind design, effective wind area, and wind load analysis methods. It will also highlight areas where the code does not offer guidance on frequently encountered situations, including irregular building configurations. Lastly, this webinar will focus on ASCE 7-16 and look to the future of wind design.

Wind Loads on Non-Building Structures: 10:45-11:45AM

Emily Guglielmo, Martin/Martin, Inc.

This session will focus on wind loads on non-building structures, including rooftop equipment, screenwalls, solar PV, canopies, and signs. The session will discuss ASCE 7 wind load provisions for non-building structures and how to correctly apply them through examples. An in-depth exploration for engineering commonly encountered situations that are not directly addressed in the code will follow.

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Presenter Biographies:



Emily Guglielmo, PE, SE.

Emily Guglielmo earned her Bachelor's Degree in Civil Engineering from UCLA, and her Master's Degree in Structural Engineering from UC Berkeley. She has nearly 20 years of structural engineering experience, all with Martin/Martin, Inc. She began her career in their Denver, CO area office, and is currently a Principal with the firm, managing their San Francisco Bay Area office.

She has lectured on wind provisions across the nation and internationally. Emily is the Chair of the NCSEA Wind Engineering Committee and serves as a voting member on the ASCE 7 wind committee. A licensed SE, Emily has received a number of awards, including SEI Fellow and the Susan M. Frey NCSEA Educator Award, for effective instruction for practicing structural engineers.



Donald R. Scott, SE.

Donald R. Scott is a Senior Principal with PCS Structural Solutions. Mr. Scott has over 38 years of experience in the design, evaluation, and rehabilitation of building structures. He was the principal investigator for the ASCE/SEI Prestandard for Performance-Based Wind Design. Mr. Scott is Chair of the SEI Codes and Standards Executive Committee, Chair of the ASCE 7 Wind Load Subcommittee, member of the ASCE 7 Main Committee and past Chair of the NCSEA Wind Engineering Committee.

Mr. Scott is a member of the SEI Board of Governors and a past President of the Board of Directors of the Applied Technology Council.

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Gary Hahn, North Central Region Business Development Manager gary.hahn@subsurfaceconstructors.com

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