



Wind, Seismic, & Software

TUESDAY, DECEMBER 5, 2017

AL & FL Approved 7 PDHs

Alabama AGC Conference Center

5000 Grantswood Road

Irondale, AL 35210

(205) 451-1422

REGISTRATION DETAILS ON BACK

SEAOAL all-day member price: \$185 early registration/ \$205 late registration

Non-member all-day price: \$205 early registration/ \$225 late registration

***Associates \$25 — 8:30—10:00 only**

8:00 a.m. — 8:30 a.m.	Registration
*8:30 a.m. — 10:00 a.m.	*Validating Software Results: Garbage in – Garbage out, Matt Brown
10:15 a.m. — 11:45 a.m.	Lateral Design of Buildings with Software, Matt Brown
11:45 a.m. — 12:30 p.m.	Lunch sponsored by Parrot Structural Services, thank you Mike Maas
12:30 p.m.— 2:15 p.m.	ASCE 7-16 Wind Load Design, Bill Coulbourne
2:30 p.m. — 3:20 p.m.	ASCE 7-16 Component & Cladding Wind Design, Bill Coulbourne
3:30 p.m. — 4:30 p.m.	ASCE 7-16 Tornado Shelter Design, Bill Coulbourne

Matt Brown, P.E. is a licensed Structural Engineer with more than 11 years of experience in the design of commercial and industrial structures, including steel framed hospitals, concrete high rises, and manufacturing plants. He spent 9 years as an engineer for RISA Technologies, where he taught accredited courses on structural modeling and design, provided high level technical assistance on difficult structural problems, and provided guidance to RISA developers on how to implement new structural codes and features. This led him to become one of the most recognized structural software experts in the industry. His engineering consulting firm, Newport Structural Design, provides other structural engineers with expertise and modeling for difficult problems or tight schedules.

***Validating Software Results: Garbage In – Garbage Out—** It is nearly impossible to design structures and meet all code requirements without software. The software is only as good as the engineer operating it. This presentation focuses on common mistakes engineers make in modeling and analysis using any engineering software. Learn fast and simple methods of validating the output of the software so you can feel confident your results are accurate and correct. Also, learn what you might be missing if you assume the software is doing everything for you!

Lateral Design of Buildings with Software— Walk through the complete design of a multi-story steel frame commercial building, with special emphasis on analysis and design for wind and seismic per ASCE 7-10 and the AISC Seismic Provisions. Special Concentric Braced Frames and Special Moment Frames will be used, with emphasis on connection design. Learn what code provisions can be easily met with software, and which typically require supplemental hand calculations.

William Coulbourne, P.E., F. SEI, F. ASCE, SECB, has a BS in Civil Engineering from Virginia Tech and a Masters in Structural Engineering from the University of Virginia. He is a national expert in wind and flood mitigation and has been involved in FEMA Mitigation Assessment Teams for nearly 20 years. Having been involved in every major hurricane and flood disaster since 1995, Bill has investigated failures and mitigation design techniques for thousands of buildings, including residential structures, schools used as shelters, hospitals, and other critical facilities.

ASCE 7-16 Wind Load Design— This session will cover the changes in wind design that have been made for the ASCE 7-16 edition of the Minimum Design Load Standard. These changes include revised wind speed maps, inclusion of canopies, solar panels, and bins, tanks and silos. There are improvements in the description of how to determine exposure, a new elevation factor, and a new online load determination tool.

ASCE 7-16 Components and Cladding Wind Design— This session will review changes in wind design procedures for components and cladding that are included in the ASCE 7-16 edition. These changes are primarily to roof external pressure coefficients but all slopes of gable and hip roofs have revised coefficients. We will look at these revised coefficients in the context of how to minimize the effects of the changes.

ASCE 7-16 Tornado Shelter Design— This session will review the new ASCE 7-16 design guidance on tornado design. This new guidance is in the new commentary. The design guidance will be used to illustrate designs for wood, masonry and concrete shelters. Dealing with tornado-generated debris and missiles will be discussed as, frequently, resistance to these missiles can dictate the design.

REGISTRATION FORM

Please print legibly. Companies with multiple attendees, please fill out a form for each person.

Name	Company	
Address	City	Zip
Email	Phone	Cell

Registration received *by* Friday, November 27, 2017

<input type="checkbox"/> SEA Member (all day)	\$ 185	X _____ =	\$ _____
<input type="checkbox"/> Non Member (all day)	\$ 205	X _____ =	\$ _____
TOTAL			\$ _____

A special registration is available for Associate level Engineers. Associates who only attend the 8:30-10:00 class do not receive lunch.

<input type="checkbox"/> Associate (8:30-10:00)	\$ 25	X _____ =	\$ _____
TOTAL			\$ _____



Late Registration: received *after* November 27, 2017

<input type="checkbox"/> SEA Member (all-day)	\$ 205	X _____ =	\$ _____
<input type="checkbox"/> Non Member (all-day)	\$ 225	X _____ =	\$ _____
TOTAL			\$ _____

Full Registration includes **YUMMY** breakfast, snacks and lunch.

LUNCH SPONSORED BY PARROT STRUCTURAL SERVICES

***TO PAY BY CREDIT CARD www.seaoal.com**

To join SEAoAL

SEAoAL Membership Registration

<input type="checkbox"/> Professional	\$ 95	X _____ =	\$ _____
<input type="checkbox"/> Associate	\$ 40	X _____ =	\$ _____
<input type="checkbox"/> Student	\$ 25	X _____ =	\$ _____
<input type="checkbox"/> Affiliate	\$150	X _____ =	\$ _____
TOTAL			\$ _____

**If paying by check, make checks payable to:
SEAoAL**

Mail check and registration form to:
Structural Engineers Association of Alabama
P.O. Box 660584, Birmingham, AL 35266-0584

SEMINAR LOCATION

Alabama AGC Conference Center
5000 Grantswood Road
Irondale, AL 35210
(205) 451-1422

HOTELS NEAR ALABAMA AGC

Hampton Inn & Suites
3930 Grants Mill Road
205-933-0444
Holiday Inn Express
811 Old Grants Mill Road
205-957-0555

SEAoAL membership is open to all structural engineers and companies affiliated with the structural engineering profession. For more information about SEAoAL membership: professional, associate, student, retired or affiliate, please contact Rhea Williams, Executive Director, 205-601-2345 or email: rhea@karmamanagementinc.com