

Practical Design of Structures for Blast Effects

by Jon A. Schmidt, PE, SECB, BSCP



Tuesday, April 8th, 2014
Alabama Sports Hall of Fame
2150 Richard Arrington Jr. Blvd. North
Birmingham, AL 35203
(205) 323-6665

SEAoAL member seminar price: \$185 early registration
Non member price: \$215 early registration
\$225 SEAoAL member late registration/\$245 non member late registration

Total of 8 PDHs (FL & NY approved)

Seminar Price Includes: Delicious breakfast, breaks and lunch. Presentation will be available electronically prior to the seminar.

Seminar Instructor: Jon A. Schmidt, PE, SECB, BSCP is the featured presenter. He is an associate structural engineer and the Director of Antiterrorism Services at Burns & McDonnell in Kansas City, Missouri. Mr. Schmidt is a nationally recognized expert on the design of buildings to mitigate terrorist attacks and other threats, and a frequent author and speaker on this topic. He is a leader in the development of standards and guidelines for facility security and blast resistance, serving as a member of the Board of Directors of the Building Security Council (BSC) and vice-chair of the SEI Codes & Standards Committee on Blast Protection of Building

Abstract

Various terrorist attacks over the last 30 years have considerably increased the perceived risk of similar incidents at other facilities, and a vehicle bomb has often been the weapon of choice. In the past, mitigation of this threat has been the exclusive domain of a handful of expert firms and individuals utilizing highly specialized techniques and tools. Today it is important that "ordinary" structural engineers have at least some awareness and capability in this area – something that is now possible, thanks to simplified analysis and design methodologies and user-friendly computer programs.

This one-day seminar will address the following topics, with detailed design examples illustrating the procedures discussed:

- ASCE/SEI 59-11, *Blast Protection of Buildings*
- Other applicable guidance from DoD and DHS
- Risk assessment to establish appropriate blast design criteria
- Non-structural strategies for effective risk reduction
- Progressive collapse resistance using tie forces and alternate load paths
- Uncertainties and assumptions inherent in blast effects analysis and design
- Characterization of blast loading on affected elements
- Selection of applicable response limits based on the desired level of protection
- Vulnerability assessment using pressure-impulse diagrams
- Dynamic and equivalent static analysis using single-degree-of-freedom models
- Glazing hazard evaluation using software or equivalent wind pressures

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

To charge your registration fee, please go to **www.seaoal.com**. On the right side of the site's front page, the April 8th seminar is listed. Click on the seminar link and register through PayPal. If you have any questions, please call Rhea Williams@ 205-601-2345.

Registration received by March 31st, 2014

SEA Member \$ 185 X _____ = \$ _____

Non Member \$ 215 X _____ = \$ _____

Late Registration received after March 31st, 2014

SEA Member \$ 225 X _____ = \$ _____

Non Member \$ 245 X _____ = \$ _____

Seminar Schedule

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|--------------------|--------------|
| 7:45 am - 8:00 am | Registration |
| 8:00 am - 12:00pm | Seminar |
| 12:00 pm - 1:00 pm | Lunch |
| 1:00 pm - 4:45 pm | Seminar |

SEMINAR LOCATION

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2150 Richard Arrington Jr. Blvd North
Birmingham, AL 35203 (205)323-6665

Westin

2221 Richard Arrington Blvd. N, 35203
www.westin.com/Birmingham

Sheraton

2101 Richard Arrington Blvd. N 35203
www.Sheraton.com/Birmingham

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

Email registrations to:

rhea@karmamanagementinc.com
Rhea Williams
Executive Director, SEAoAL



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