



THE STRUCTURAL ENGINEERS ASSOCIATION OF TEXAS

DALLAS CHAPTER
www.seaot.org

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April 2015 Newsletter

Meeting Info

Date: Tuesday,
April 21, 2015

Morning Session

Doors Open: **8:00 am**
Program: **8:15 to 10:15 am**
Break: **10:15 to 10:30 am**
Program: **10:30 to 11:30 am**

Lunch Session

Doors Open: **11:30 am**
Lunch Starts: **11:45 am**
Program: **12:00- 1:00pm**

Location:

Maggiano's Little Italy
205 North Park Center
Dallas, TX

Lunch Seminar

Members: \$25
Non-Members: \$35
Students: \$10
No Meal: \$0

Reservations

Please register by **Friday, April 17, 2015**.

[Click Here](#) to register on-line.

Cancellations must be made by **the same time** to be honored.

Offset Diaphragms and Shear Walls

*Presented by Terry Malone, PE, SE-Senior
Technical Director at Woodworks*

Morning sessions: (3.0 Professional Hours)

Part 1-Offset Diaphragms

- Develop a better understanding of code requirements regarding the distribution of discontinuous member forces within the diaphragm.
- Learn how to recognize areas within the diaphragm that require special analysis and detailing.
- Learn special analytical tools required to properly analyze complex diaphragms.

Part 2-Offset Shear Walls

- Provide information on how to simplify complex diaphragms into more manageable layouts.
- Learn how to analyze horizontally offset shear walls to act as a single line of lateral force resistance.
- Learn how analyze in-plane offset shear walls.
- Discuss common irregularities associated with these types of structures.

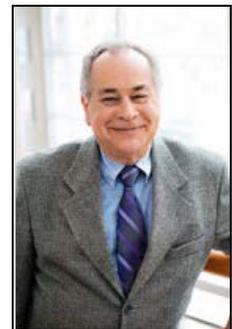
Part 3-Diaphragms with Large Openings

- Determine if the size of an opening requires special consideration and analysis.
- Discuss a method for analyzing a diaphragm with large openings, including pop-ups.
- Review three examples of diaphragms with large openings.

Lunch Session: (1.0 Professional Hour)

Part 4-Shear Walls

- Review how to develop complete load paths to and through shear walls
- Discuss the detailing required to maintain complete load paths
- Review how to analyze a FTAO shear wall with a special loading condition



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SEAOt Dallas Chapter Newsletter

President's Message

By John Turner, PE

Last month, we swapped a short, sporadic winter for a quickly warming spring. As storm season arrives, we are reminded that design wind loads are seldom experienced and all too often buildings fall short of design because of construction and aging. The building codes are minimum standards but most owners do not understand that they don't have to buy the least they can get. I have attended IBC code hearings where the reason for not making a change to better the code was the simple statement "minimum code." As a the developer of a quasi-governmental code, the ICC is charged with providing a guide to get the least expensive building that achieves a minimum level of life safety. A building designed to meet this minimum code is only expected to survive long enough to get people out safely. *There is little or no consideration in the Code for continued use of a building following a design-level event.*

While certain construction types and materials provide a greater margin of safety against storms than others, others may provide better resistance to damage in seismic events. Some materials endure better with exposure to the elements, insects, and microbes. Selection of the right materials and design to assure resilience in a certain exposure frequently falls to an architect or owner. As the structural designer, we are often uniquely positioned to provide guidance that may otherwise be unheard. AIA has begun doing more education on resilience with architects, which may lead to us getting more input (or possibly less.) It pays to consider resilience when selecting materials and projecting costs. Whether the concern is fire, flooding, storms, or another hazard, designing solely to code minimum may not be the best option for the owner. In many cases, a significant increase in resistance can be gained for slight cost increase. This might be placing a concrete roof on top of a concrete frame building. Or it might be increasing fastener counts or exchanging one type for another on a wood structure. In steel construction, it might be as simple as a different connection for spandrel elements. For tilt-up, increasing the strength of connections between wall panels and connections of roof elements may prevent catastrophic damage in high wind events. None of these results in a large additional first cost for buildings of moderate size but can be lifesavers at the time of a serious event. Another benefit to adding a little strength is the ability to re-task the structure in the future without expensive rework. This ability for reuse can save an owner significant cost.

We all know that owners typically buy the least expensive building that satisfies their current needs. As a source of trusted information, we are in a position to help owners make better decisions. Help them understand that the building codes are minimum standards, not the state of the art.

REMINDER

Renew your membership today at www.seaot.org.

NEW WEBSITE

Check out SEAOt Dallas Chapter

www.seaotdallas.org

SEAOt Dallas Chapter Newsletter

Upcoming Events

Next chapter meetings:

May 19, 2015

Larry Novak, SE
ACI 318-14

June 16, 2015

Timothy Mays, PE
Tilt-up Panel Presentation

September 15, 2015

Benchmark Harris, PE
Masonry Design

State Conference

October 22-23, 2015

Houston, TX

SEAOT Fort Worth

Pappas Burgers

April 21, 2015

May 26, 2015

June 23, 2015

September 22, 2015

November 17, 2015

Industry Events:

Upcoming Workshops at
Simpson Strong-Tie Training

Center in McKinney
April 8-9, 2015

[Click Here](#)

New NCSEA Structural
Engineering Summit

Red Rock Resort
Las Vegas, NV
Sept 30 – Oct 3, 2015

[Click Here](#)

Recap of February Meeting

During our March Meeting, Erika Winters Downey presented Framing Solutions for Steel Framed Office buildings where she helped us understand how structural steel framing system design techniques can help an office project be completed faster, cost effectively and with benefit to prospective tenants.

Welcome New Members

Mr. Hemachand Pallempti
Student member
University of Texas at Arlington

Mr. Cameron Anderson
Graduate Engineer
Raymond L Goodson Jr., Inc.

Mr. Matthew Klinger
Graduate Engineer
Stantec

Ms. Gabrielle Jai Westland
Structural Engineer
Nucor- Vulcraft TX Division

Mr. Conrad Lovejoy
Graduate Engineer
Parkin-Perkins-Olsen Consulting Engineering, Inc.

Recap – Younger Member Happy Hour

Approximately 23 people joined us at the Cold Beer Company on April 8, 2015. Thank you to everyone who attended and brought prospective members to the event.

Younger Member Event – May 9 – FC Dallas game in Frisco

SEAOt Dallas is partnering with ASCE Dallas to sponsor an event at the FC Dallas Premier Game against the LA Galaxy. The event will include an entire reserved section, free food and beverage buffet, and an opportunity to meet a variety of young engineers from across the DFW Metroplex.

Individual tickets are \$25 for members OR if you invite and register a prospective SEAOt member guest, you pay only \$10 each for you and your guest(s). Prospective guests will receive SEAOt membership information by email.

The registration deadline is Friday, May 1, and registration is limited.

Sponsors

The Dallas Chapter of SEAOt would like to thank all of the advertisers that have contributed to the newsletter. We appreciate your support.

You may support SEAOt by advertising in the newsletter. Space is available to structural engineering firms, vendors and suppliers starting at \$125.00 for one year of advertisement (8 newsletters). If interested, please contact David Parkin at (214) 221-2220 or via e-mail at dparkin@ppoinc.net.

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Chapter Director (2012-2014)	David Barrett, PE	(214) 221-2220	dbarrett@rlginc.com
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State Directors from the Chapter	John Turner, PE Lucas Ponce, PE Bradford Russell, PE (alternate)		

Selected State Positions:

State President	Lee Walden, PE
President Elect	Kerry Lee, PE
Secretary	William (Whit) Smith, PE
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Past President	Lewis Shrier, PE
Executive Director	Liz Stansfeld



Dallas Chapter
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