



THE STRUCTURAL ENGINEERS ASSOCIATION OF TEXAS

FORT WORTH CHAPTER

www.seaot.org

President	Brian Graves, P.E.
President-Elect	Brad Watson, P.E.
Secretary	Steven Hodridge, P.E.
Treasurer	William (Bill) Gigl, P.E.
Past-President	John Tornberg, P.E.

Volume 10, Issue 8

SEAoT Fort Worth News

November 2017

Wednesday, November 15, 2017

Presentation:

Load Bearing Structural Assembly – The ForceGenie

Speaker: Bradford Russell, AIA, P.E., SECB

The patents Load Bearing Structural Assembly aka ForceGenie were developed as an additional option of force mitigation on structures. Ironically, the concept behind these patents originally came from thoughts / ideas of creating a mechanism which changed a horizontal deflection, i.e. seismic excitation on structures, moving components of machinery, etc. into a rotation as a form of dampening.

The ForceGenie is an Assembly which is focused on new ideas of framing / connections to resolve forces so the rigidity between members can be minimized and the Assembly can expect performance under a longer duration and more unique loadings. This Assembly was developed from the understanding of member's (structural member's) curvature during a loading event will reduce the member section's exposure to bending and shear in relation to the member's points of

Continued on page 2

President's Message

Brian Graves, P.E.

As the outgoing president of the Fort Worth SEAoT Chapter, I would like to take this opportunity to reflect on my involvement with the Chapter. By involvement, I mean participation as a member who regularly attends Chapter meetings and as a member of the Chapter Board. I have been attending Chapter meetings since the Chapter began in 2008 and plan to continue to support the chapter in the future. For many years, I would attend meetings but, as a non-social person, would not engage in conversation with other attendees beyond my coworkers. I benefitted from the technical presentations, but there were other benefits that I was missing out on and it took me until a few years ago to realize it. These benefits all come from talking to the other attendees: the

Continued on page 3

Lunch Meeting Information

November 15, 2017

809 at Vickery
809 W. Vickery Boulevard
Fort Worth, TX 76104

Meeting Sponsor:

Simpson Strong-Tie

Catering:

Coburn's Catering

Check-In:	11:30 AM ó 11:50 AM
Chapter News:	11:50 AM ó 12:00 AM
Lunch & Program:	12:00 PM ó 1:00 PM

*Map to 809 at Vickery is provided at end of newsletter.
Additional Catering information is on page 2.*

INSIDE THIS ISSUE

PAGE

- 1, 2 Program and Speaker Bio
- 1, 3 President's Message
- 2, 3 Meeting Reservation Policy/Cancelations/
Editor's Notes/Membership Announcements
- 3 Calendar

curvature. This can be achieved by adding pin connections along the length and / or forcing a change in member curvature.

The uniqueness of the ForceGenie is its ability to change members' curvature during an extreme loading event, i.e. seismic, and create a rotation thus dampening the deflections / forces and limiting the effect of the loading on the structural system. On top of this, the ForceGenie can be created with a predetermined response through the selection of its web and ring arrangement and properties, thus creating a rotation about its center when loaded with an eccentric and / or variable force.

SPEAKER BIO:

Brad Russell is a 1992 graduate of Texas Tech University with a Bachelor of Science in Civil Engineering and a Bachelor of the Arts in Architecture (dual degree). He earned his Master of Science in Structural Engineering in 2002 from the University of Texas at Arlington, and he also earned a Doctor of Philosophy in Structural Engineering from Southern Methodist University in 2015.

Brad Russell went to work for some of the upstanding A&E firms in Dallas soon after graduating with his bachelor's degree. After achieving his architectural license and while completing his engineering licensure requirements, Mr. Russell secured his master's degree. He currently holds professional licenses in both fields and was one of the first LEED Accredited Professionals in Texas and one of the initial-fifty LEED AP's in the US. In the late '90's, Mr. Russell started Bradford Russell Architects which has evolved to BR Architects & Engineers working on a wide variety of project types. Mr. Russell studied for his doctorate under Bijan Mohraz, PhD, P.E. who has published extensively on studies with seismic force mitigation. It was here Mr. Russell initially developed his work on the ForceGenie patents.

Lunch Catering

This month's meeting will be catered by Coburn's Catering. They will be serving smoked turkey breasts, cranberry sauce, mashed potatoes, and green beans. Bread rolls will be offered as well. Chocolate cake and pumpkin pie will be the dessert options. Water and tea will be the drink options available.

Newsletter Advertisement Policy

The Fort Worth Chapter of SEAoT would like to invite all prospective advertisers to contribute to the newsletter. We will definitely 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 the newsletter editor, Steven Hodridge, via email at FTW@SEAoT.org.

The newsletter editor is also looking for articles and announcements for publication. Submissions may be sent to the editor via email at FTW@SEAoT.org. Articles and ads to be included in the newsletter must be received by the first Wednesday of the month the article or ad is to first appear. The newsletter is loaded on the SEAoT website, so you will get exposure to the entire state of Texas and more.

Reservations for Lunch Meeting

To reserve a place at this month's meeting, please **RSVP by 5:00 PM on Friday, November 10, 2017**. You may make your reservations via email at FTW@SEAoT.org or by phone to Steven Hodridge at (817) 649-1544. Indicate the name of each attendant when making a reservation for several people. Also, specify if vegetarian meals are required. Lunch will be served at the meeting.

The cost is \$20.00 for members and \$35.00 for non-members. The cost for students is \$10.00. Reservations are required to ensure adequate seating. A map of the location of 809 at Vickery is included at the end of the newsletter for your use.

President's Message continued from page 1

Chapter members, presenters, and meeting sponsors. As I made friends and acquaintances, the meetings became much more enjoyable and I was able to take insights which were beyond the scope of the technical presentation away from each meeting. Sure, we are competitors in the same business, but we are also professionals working together to make our profession better. SEAOt meetings are a time where we can put aside business and discuss engineering, whether that means a new tip you can pass on, relate an experience (good or bad), or simply comment on the state of construction in the area. I have been so much more in touch with the local goings-on in construction since I figured this out. I also know people who can help me out, and hopefully people that I can help. I know who is doing delegated design work, peer reviews, and who I can contact if I have questions about products. These things open up new options for design solutions and helps projects run smoother. I hope my experiences help you realize what took me too long to figure out.

I have sincerely enjoyed my time with the Board and look forward to the continued success of the Chapter in the coming years. Also, the State Conference will be in Dallas next year, so set aside some vacation time now so we can have a large Fort Worth presence!

Brian Graves, PE
President

Cancellations

Please note that cancellations must be made by **9:00 a.m. on Monday, November 13, 2017**, to be honored. SEAOt reserves the right to decline cancellations made after the cut-off and to invoice no-shows.

Editor's Notes

Reminder: Please make sure you RSVP by the deadline so we can ensure there is enough food for everyone.

Membership Announcements

Current SEAOt members who would like to be transferred to this chapter are invited to do so by logging in with their user name and password and updating their chapter selection from their membership profile. Please email FTW@SEAOt.org for additional information. ❖

CALENDAR OF EVENTS

SEAOt FORT WORTH LUNCH MEETINGS FOR 2017:

809 AT VICKERY - FORT WORTH, TX
November 15, 2017

Upcoming Seminars:

- [SJI Seminars](#)
- [ACI/PCA Seminars](#)
- [AISC Seminars](#)

ADVERTISEMENTS

8,600 ft. lb. Rating

Patent#
6514012,
6931805,
7024827,
7073296

Helical Pile

Deep Driven Steel Pile

THE FIRST AND ONLY HAS ARRIVED

ICC-ES Recognizes RAM JACK®

The **[first]** to complete and receive an evaluation service report per AC358.

ESR-1854
IBC Compliant
Scan this QR code to read the full ESR-1854 article.

800.969.2255
ramjack.com



Clay Broyles
Sales Representative
N. TX & Oklahoma
The Euclid Chemical Company
1835 Upper Montague Road
Bowie, TX 76230
cbroyles@euclidchemical.com
Cell: 318.471.1131
Fax: 855.382.5436

www.euclidchemical.com



James Robbs
Manager Construction Products
Texas, Oklahoma, & Louisiana
The Euclid Chemical Company
3308 Brookhaven Club Dr.
Dallas, TX 75234
jrobbs@euclidchemical.com
Cell: 214-325-4936
Fax: 855-382-5436

www.euclidchemical.com

An **FCM** Company

ISO 9001 Certified UL File #A3129

An **FCM** Company

ISO 9001 Certified UL File #A3129

ADVERTISEMENTS



TSSI
TEXAS STRUCTURAL STEEL INSTITUTE

**SUPPORTING AND PROMOTING THE
STRUCTURAL STEEL INDUSTRY SINCE 1928**

TSSI-TEXAS.ORG



C

CANTEY HANGER LLP

A T T O R N E Y S

2017 Officers, Directors, Committee Chairs

Chapter Positions

President	Brian Graves, P.E.	(817) 335-3909	bgraves@callahaneng.com
President-Elect	Brad Watson, P.E.	(817) 735-7416	bbw@freese.com
Treasurer	William Gigl, P.E.	(817) 294-4141	wjgigl@sbcglobal.net
Secretary	Steven Hodridge, P.E.	(817) 649-1544	Steven@IllingworthEngineers.com
Past President	John Tornberg, P.E.	(817) 569-0070	j.tornberg@structuralsolutionsinc.com
State Director	Brian Graves, P.E.	(817) 335-3909	bgraves@callahaneng.com
State Director	John Tornberg, P.E.	(817) 569-0070	j.tornberg@structuralsolutionsinc.com
Membership	Open	(817) 735-7416	=
Political Action Liaison	John Tornberg, P.E.	(817) 569-0070	j.tornberg@structuralsolutionsinc.com
Young Members	William Bishop, E.I.T.	(817) 569-0070	w.bishop@structuralsolutionsinc.com

Map to 809 at Vickery

809 West Vickery Boulevard

Fort Worth, TX 76104

