

# SEA-WI

# Newsletter



## ***The Moderne Tour, Milwaukee, Wisconsin by Jason Gross***

**Spring 2013**

In a joint construction tour with AIA-Milwaukee, the Southeast Branch of SEA-WI visited the newly constructed Moderne Tower, the tallest building in Wisconsin west of the Milwaukee river. The 32 story multi-use high rise is located at the corner of Juneau Avenue and Old World Third Street on the West side of Downtown Milwaukee. The structural tour was lead by project engineer Chris Bielefeld, Associate at GRAEF (sixth from right in neon vest, above). Also in attendance was the geotechnical engineer Al Wagner, who explained how a shallow foundation was possible for this building. The majority of Milwaukee has soil that was built up as a multi-layered swamp, but the particular site location of this building happened to be on a subsurface mount.

The building bears on this mount by use of a mat foundation that is 150 feet (east-west) by 93 feet (north-south) and is 6'-10" deep. The mat has two layers of mild reinforcement and was poured continuously for 18 hours. It took 375 truck deliveries with 32 different trucks to place the 3,750 yards of concrete required.

The floor plates are post-tensioned concrete slabs that range from 8" thick at the residential units, to 12" thick at the parking ramp levels. The lateral system consists of two stair towers that are each 21 feet by 27 feet, which have a consistent thickness of 16 inches reinforced concrete. This thickness allowed the use of a self-climbing formwork system that also included a boom crane for placing the concrete. The floor plates were designed absent of transfer girders and bear on building columns located along the exterior perimeter. The innovation in design and construction allowed the building to be built several hundred thousand dollars under budget and ahead of schedule.



**The Moderne**



**Spring 2013**

## ***President's Address***

***by Sam Rubenzer***

Hello Everyone,

Well, it's been nearly a year since I was nominated to serve as SEA-WI president, so before I leave the post I thought it would be good to reach out to members. We have a successful and growing organization with membership of 80 structural engineers, and we continue to look for more opportunities to serve our members. With membership level this year, I believe we can claim to be the largest collection of structural engineers in the state of WI. The influence and opportunities that come with the idea sharing and collective efforts of our organization will lead to benefits for all our members.

As president of a relatively new organization, we have seen more changes in the way of a refinement to the continuing education and other activities from SEA-WI.

If you are a member, I encourage you to get more involved. An organization like SEA can always benefit from strong committee members that are passionate about their profession. Currently we are seeking help in the following areas:

- Newsletter – Jason Gross (current chair), seeking a new chairperson and committee members
- Continuing Education - Susan Lasecki (current chair), seeking more committee members
- Annual Conference committee - Eric Fink (current chair), seeking new chairperson and more committee members

If you are not a member, I encourage you to consider the benefits. We have been making progress with city and state legislature that define the laws pertaining to structural engineers. Being a part of that progress for Special Inspections, separate licensure (SE), and other laws in the state of WI is a rare opportunity that affects all of us. Become a member, share your voice, and become active in defining these laws. Also, there are many continuing education opportunities that are available for free or a reduced rate for members. Some of you are members of larger companies that are able to run your own continuing education programs, in that case realize that the quality of the speakers our organization can reach out to is vast, and we have the budget to bring in some of the top speakers in our industry - something companies rarely provide.

We are also looking for younger members. There are great networking opportunities and plenty of possibilities for a younger generation of structural engineers at SEA-WI. We have been exploring ideas from NCSEA regarding a student chapter or younger members group. Possible benefits can be mentoring, networking, and simply learning from our group of structural engineers. Please let us know if you would like to lead this effort.

As I have been involved with the SEA-WI organization since a small band of engineers gathered in a smoky conference room in the basement of Mayfair mall, I can say I am proud of what we have accomplished and look forward to the future success of SEA-WI!



**Sam Rubenzer**





**Spring 2013**

***SEA-WI Luncheon - Liability & Simpson Strong-Tie***  
***by Susan Lasecki***



On January 17, 2013, SEA-WI provided a continuing education opportunity to members and non-members. The event provided each attendant up to five hours of continuing education credits at no cost. Although the event was free, the information provided was very valuable.

Reid Just, of Holmes Murphy and Associates, provided the first presentation liability concerns for engineers. The seminar was provided as a case study. We reviewed the historical information regarding an actual liability claim made against a structural engineer. The attendants discussed the scenario in groups and formulated their own opinions on what went wrong and what could have been done differently to reduce liabilities. Reid then guided to entire group through the process of developing a list of what can be done in the future to reduce the likelihood of a claim being made. In summary, a clear scope, a written contract and good communication go a long way in reducing the likelihood of a professional liability claim.

David Finkenbinder, from Simpson Strong Tie, provided the second presentation. David provided an in-depth discussion and review of lateral resisting systems for wood framed structures. His presentation focused on NDS and IBC design requirements. David presented several wood shear wall design examples and highlighted specific detailing requirements. David discussed anchorage design, multi-story systems, Simpson Strong Walls Panels, and Simpson Strong Frames. David's presentation provided a great overall understanding of the types of lateral resisting systems that are available to designers of wood structures. The advances made in proprietary systems can provide greater opportunities for open spaces while maintaining lateral stability.

The continuing education event was hosted at Erdman Associate's facility in Madison. More than forty people attended the event, making it a tremendous success. SEA-WI is looking forward to providing more continuing education events throughout the year. Please join us at the Annual conference on April 26, 2013.



**SIMPSON**  
**Strong-Tie**



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[www.sea-wi.org](http://www.sea-wi.org)



**Spring 2013**

***SEA-WI Annual Technical Conference***

***APRIL 26, 2013***

**Location:**

Holiday Inn Pewaukee  
N14 W24140 Tower Place  
Pewaukee, WI 53072



**Session 1**

Construction of the Wisconsin Avenue Marriott – Milwaukee, WI  
from Sarah Frecska, P.E., S.E.  
Pierce Engineers, Inc.

**Session 2**

I-35W Bridge Collapse Investigation  
from Jonathan McGormley, P.E., S.E. / Richard A. Walther, P.E., S.E.  
Wiss, Janney, Elstner Associates, Inc.

**Session 3**

Updates to ASCE 7-10 Wind Provisions (part 1)  
from Jason R Ericksen, S.E.  
S. K. Ghosh Associates Inc.

**Session 4**

Updates to ASCE 7-10 Wind Provisions (part 2)  
from Jason R Ericksen, S.E.  
S. K. Ghosh Associates Inc.

Lunch Session- with delicious buffet  
**Engineers Without Borders Presentation**

**Session 5**

Fiber Reinforced Concrete and its Applications in Structures  
from Gustavo J. Parra-Montesinos, Ph.D.  
University of Wisconsin-Madison

**Session 6**

Cross-Laminated Timber – A Wood Story  
from Archie A. Landreman, CSI  
WoodWorks-Central

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