

SEAW ROAD MAP

[WWW.SEAW.ORG](http://www.seaw.org)



Structural Engineers
Association of Washington

The Formation of SEAW

The structural engineers association of Washington has been **officially active since 1950**. After the Seattle Earthquake of 1949 the building department struggled to access the extent of damage to buildings in the surrounding area. So in response, a group of motivated engineers came together to answer this call to service. By 1950, 28 structural engineers had joined the organization in effort to not only access the damage, but to also discuss, research, and develop ways of improving building codes and standards for the benefit of the community.

HISTORY & BACKGROUND

What is the mission of SEAW?

SEAW's mission is to advance the practice of structural engineering and insure public safety through code advisory, continuing education, mentoring, and disaster preparation. This is accomplished through the organization's many varied activities including:

- Holding regular technical meetings on specific issues.
- Providing continuing education opportunities
- Participation in local and national code advisory/development processes.
- Providing input to legislative bodies and regulatory agencies

State Board of Trustees

Comprised of representatives of all four chapters that meet 5 times a year to discuss and consolidate issues and policies that affect more than one chapter.

<http://www.seaw.org/statewide>

Chapters

Each Chapter operates independently and manages membership, continuing education, and other events for engineers in their specific region:

Seattle - <http://www.seaw.org/seattle>

South Central - <http://www.seaw.org/south-central>

Southwest - <http://www.seaw.org/southwest>

Spokane - <http://www.seaw.org/spokane>

ORGANIZATION & PROCEDURES

Committees

Committees serve interests in Seattle and across the state on specific technical topics (see list at right, under "Committee Involvement"). Each committee holds separate meetings to discuss issues, technical advancements, and propose changes to legislation and current building codes.

Monthly Dinner Meetings

SEAW hosts monthly dinner meetings to welcome experts on relevant and interesting structural engineering topics. Events include a networking reception, a dinner, and a presentation. The topics vary widely and are a great chance to learn from an expert about a unique project and/or a useful subject.

<http://www.seaw.org/events>

BENEFITS OF SEAW

Congrats! Now you have the resources to get involved with SEAW. This organization is a great way to establish yourself in the local engineering network, to contribute to the professional body of knowledge, and to learn from your fellow engineers in the community. For more information about committee chair contacts see SEAW website, and read **SEAW Equilibrium newsletter**.

Membership

A full description of membership levels and dues can be found here: <http://www.seaw.org/membership-application>. The 'Equilibrium' newsletter is sent monthly to SEAW members and posted to the SEAW website with updates on upcoming events.

Committee Involvement:

SEAW Technical Committees are always looking for new members with any level of experience. Each committee holds regular meetings, typically monthly, where members can learn about new topics/advancements in the industry. Members can also get involved in a subcommittee to achieve a specific task such changing a changing provision, or researching/investing a new topic of interest.

- Earthquake
- Wind
- Sustainability
- Disaster Preparation/Response
- Legislative
- Existing Buildings
- Snow Load Engineering
- Education
- Public Information

HOW CAN I GET INVOLVED?

Young Members Group (YMG)

SEAW is committed to ensuring that the organization's collected knowledge, experience, and legacy is passed on to the next generation of engineers. In 2007 the YMG (Young Members Group) was established to introduce engineers and students (35 and under) to SEAW, while also providing leadership and networking opportunities.

YMG activities include:

- Monthly social networking activities between YMG and SEAW members, (including the annual YMG golf tournament)
- Participating and organizing outreach events within community.
- Providing continuing education seminars and demonstrations.
- Mentoring and developing SEAW student chapters.

The YMG is open to current and non-members, for more information please contact the YMG leadership on the SEAW website:

<http://www.seaw.org/ymg>

I AM INTERESTED IN SEAW!

SEAW is a not-for-profit professional organization dedicated to the advancement of excellence in structural engineering through building code advocacy, continuing education, research, emergency preparedness, exchange of ideas, and mentoring, to ensure the highest standards of practice are upheld and to guard public safety.

1. Earthquake Engineering

- Focusing on the current advances in seismic design and construction of building structures, this earthquake committee is currently one of the most active SEAW committees. This committee hosts meetings every other month which often include discussion and presentation of a particular seismic design topic. They have welcomed academic presenters to discuss relevant items from around the world, most recently a professor with experience in New Zealand and Canada.

2. Wind Engineering

- Another of the most active SEAW committees, the Wind Committee seeks to put together relevant information for designing in the Seattle Area. Committee members have been reviewing and discussing the wind chapters of the new ASCE 7-16 with the intent to compile and publish their comments. Additionally, they hold discussion on various White papers throughout the year. After reviewing White Papers and discussing within the committee, papers are either approved or rejected to be forwarded to the SEAW State Board for approval to post to the SEAW website. Members have also worked to develop wind maps for the city of Bellevue and have completed sample problems to test how the building code is worded and how different engineers might interpret it.

3. Sustainability (<http://seawsustainability.blogspot.com>)

- The SEAW Sustainability Committee meets monthly in various member offices downtown. The committee seeks to educate the members of the SEAW in the aspects of sustainable design that impact structural engineering. Being a member offers an opportunity to be on the cutting edge of topics that will soon become common place in our industry. Past and current efforts include exploring structural implications of the new Seattle Energy Code (specifically as it pertains to thermal bridging), research on the latest trends in timber engineering, and understanding the embodied environmental impact (largely focusing on embodied carbon/Global Warming Potential) of our buildings. The latter topic has been the

largest focus of late as the new LEED v4 includes credits for Life Cycle Analysis (LCA). Members have the opportunity to expand their understanding of sustainability, with the potential to participate in research projects and participate in writing papers to help educate the community at large.

4. Disaster Prep/Response

- Meeting monthly, the DP/R committee prepares and positions the structural community to be ready for and respond to a significant seismic event. Working with multiple NGO's (Non-Government Organizations, such as the Red Cross) as well as some government agencies, the committee is organizing the structural engineers to fit into the flow chart of "Action items" for after the seismic event. Building the list of available volunteers, establishing communication protocols for post-event scenarios, and advocating for the legal protection of volunteer engineers are some of the priorities. DP/R members have also arranged ATC-20 training and SAP analysis training courses. A large effort is going into the preparation for a regional exercise called *Cascadia Rising 2016*. Participation from NGO's, engineers, governments, military, and other stakeholders will exercise their full response plan for a M9.0 seismic event. They also hold conversation and circulate materials regarding local or national forums that discuss disaster preparation and response.

5. Legislative

- This committee is unique in that it serves as a liaison to the AELC (Architects and Engineers Legislative Council), which represents the design and construction industry in this region. There is support given to a lobbyist in pursuit of legislative representation and protection for the engineering and construction industry. This group is pursuing the amendment of current laws to reduce the personal liability of volunteer structural engineers who assess damages after a seismic event. The Legislative committee regularly holds teleconferences, reviews drafts of law, and lobbies for the adoption of changes to protect engineers.

6. Snow Load Engineering

- This committee has traditionally been a small one but as a result, presents immediate opportunity to take on responsibility. Led by Matt Leslie, this committee is based in Yakima but can hold teleconferences for any Seattle

engineers interested. The primary goal of this committee is to develop updated snow load maps for the state.

7. Education

- The education committee organizes seminars and at current stages. Historically, they have coordinated seminar topics, pricing structures, contact hours, breakeven points, marketing, fliers, venues, and registrations. The goal is to educate engineers while running profitable seminars to put funds back into the SEAW organization and grow the opportunities it can lend to its members. This committee formerly offered a full day seminar/program/conference but the next step for this committee would be evaluate how SEAW fits into the "webinar world" (AISC, ASCE, and other online sources) of engineering education.

8. Existing Buildings

- The existing buildings committee works to advance the knowledge and technology related to existing structures in Washington and how to economically retrofit them for improved performance. Tasks include reviewing new codes (e.g. International Existing Building Code), advising Seattle DCI (Department of Construction and Inspection) on code issues, and developing seismic evaluation/retrofit examples and seminars

9. Public Information

- This committee is working to inform and educate the public about what structural engineers are working on in the state of Washington. Informing people of their need to be prepared for earthquakes, answering questions about the performance of buildings, and helping to inform general public opinion of the profession and the products/buildings produced by our industry is the goal of the public information committee. This committee seeks to spread this work through the SEAW website and with a new push to utilize social media as a way to spread information about structures.

10. Building Engineering Committee

- Covers building code issues that are not directly related to earthquake, wind, snow, or existing structures.

11. Professional Practices Committee

- This committee covers risk, liability, standard of care, and other factors which influence industry standards and decisions related to project delivery and stakeholder risk.