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Seattle June Chapter Social



Patrick Lindblom
Seattle Chapter

Date: June 26, 2025

Time: 5:00-8:00 PM PT

Location: Eventide Lake
Union at Tyee, 3229
Fairview Ave E, Seattle,
WA 98102



The University of Washington is investing heavily in its medical education program, and the new University of Washington Health Sciences Education Building is a state-of-the-art facility that will house the UW's dentistry, medicine, nursing, pharmacy, public health, and social work programs. The unique programming brings together different uses including lab, classroom, library, student lounge, study and wellness spaces. These different uses create different layouts and the associated structural challenges. Jessica Westermeyer P.E., S.E., Associate at KPFF, was the project manager for the UW Health Sciences Education Building and will share some of those structural challenges that her team faced.

[View on map](#)

Parking:

There is limited venue parking, and ample free street parking.

Registration Fees:

Students - \$40
SEAW Members - \$80
Non-Members, & Guests - \$90
Life & Honorary Members - FREE

Agenda:

5:00 pm - No-Host Cocktail Networking
6:00 pm - Dinner
6:30 pm - Program (Welcome, Awards, Presentation)

[Register Today!](#)

2025 SEA NW Conference



Brian Parsons
SEAW Planning Committee Chair



The detailed conference schedule for the 2025 SEA Northwest Conference is now posted on the website! We look forward to seeing you all in Spokane! Please see the links below for registration and hotel information. We are also excited to announce that CSi, Inc., will be hosting an unforgettable social event

after the conference on Thursday evening that you won't want to miss! More information to come soon.

View Conference Schedule

Date: September 25-26, 2025

Location:

DoubleTree by Hilton Hotel Spokane City Center
322 North Spokane Falls Court
Spokane, WA 99201

Reserve your special SEAW room rate here at \$170/night!

Sponsor and Exhibitor Opportunities:

There are limited sponsorships and only a few exhibitor tables remaining so purchase yours today!

Breakfast Sponsorship | \$2,500

Lunch Sponsorship | \$2,500

Coffee Break Sponsorship | \$2,000

Additional Representative Registration | \$400

Exhibitor Table Only | \$1,500

Conference Rates:

- SEA Members: \$575
- Non Members: \$675
- YMG*: \$300
- One-Day Members: \$325
- One-Day Non Members: \$375
- Students: \$150

**Young Member Group registrants are SEA members of the age 35 and under*

Register Today!

Chapter Check-In



SOUTHWEST
Jared Plank

The SW Chapter hosted architects from AIA SWW at the Tacoma Rainiers game on Wednesday May 28th as they faced the Salt Lake Bees. SEAW rented out a luxury suite for the event which included dinner, snacks, and beverages. We filled the space with 50 attendees, both architects and structural engineers.

It was fun to see everyone in a relaxed environment enjoying a perfect 80-degree day. The Rainiers put on a show after being down by as much as 5 points. Rallying in the middle innings the home team routed the Bees with a final score of 19-8, which is their highest score in the last 20 years! It was a fun game to watch and experience "live".

Some of the noted events of the evening included a visit by Rhubarb (the Rainier's mascot) and drawings for several swag items from Simpson Strong-Tie and Verco. Thanks to our sponsors for making this event possible and priced well. Our goal with this event is to break even and celebrate the great year the chapter has enjoyed.

If you didn't make it make sure to put this event on your calendar for next year! It's definitely one you don't want to miss.



A group of SEAW SW and AIA SW members get a tour of the infield during their Tacoma Rainiers event last month. Image by Jacob Baker.



A group of SEAW SW and AIA SW members pose with Rhubarb, the Tacoma Rainiers mascot. Image by Tom Reiger.



SEATTLE

Owen Kohashi

As we come to a close on the 2024-25 year, I would like to thank the Seattle Chapter Board for being on this journey with me. I really appreciate the collaboration and thank you for all being actively engaged. Serving on the board or volunteering for an SEAW committee may take a few hours of your time each month, but your participation is invaluable, and I would encourage all members to step up and get involved! Even if you don't feel that you have any particular knowledge to contribute, it's a great opportunity to learn more, build expertise, and network with other structural engineers.

One of the big accomplishments this past year was taking a hard look at our financial situation at a chapter level and making budget adjustments, in conjunction with similar efforts at the state level. We also had a varied and engaging slate of technical presentations at our monthly chapter meetings, and held joint meetings with the Southwest Chapter, ACI, and ASCE. Our Younger Member Group planned and held the January Student Showcase chapter dinner meeting that brought together YMG and not-so-Y members to see presentations by students from the University of Washington and Seattle University. They also engaged the younger members at happy hour sessions at different companies, technical presentations and tours, and their summer cruise is coming soon.

Going forward, a lot of great things are in the works at the Seattle Chapter including our upcoming June Social, where we will welcome in our new board leadership as well as present and celebrate awards and scholarships, and the 75th Anniversary Event in October where we will celebrate the history of SEAW as we reach this milestone. Please mark your calendars for both (see the announcements in this newsletter for details), and I hope to see you there! We have also been working in conjunction with the State Board on a new online membership platform which should roll out in the coming months, so be on the lookout for that as well.

We have recently concluded the election of Seattle Chapter board members. Thank you for voting! Typically, SEAW Seattle Chapter Board elections include candidates for President and Vice-President along with two board members who serve three-year terms. This year, there were more positions than usual and positions with varying term lengths on the ballot, due to the following:

- A board member resigned last year with two years remaining on that term, therefore, per the bylaws the board appointed Linda Ji to fill that position for this past year. The bylaws also state that the final year must be filled during the next election, and Doug Smith was nominated for the one-year term.
- Kyle Johnson was nominated to be Vice-President, which opened his board position, and Jerry Lee was nominated for the two years remaining on that term. Note that Jerry Lee has been serving on the board this past year as he was appointed to fill the final year of another vacant board position.
- Finally, the nomination of Evan Jordan for one of the three-year positions was announced in the Equilibrium but was omitted from the ballot. Evan is extremely qualified to be on the board except that his PE license is issued in California and not in Washington, which was discovered after the

nomination process. The Seattle Chapter board will be appointing a board member for a one-year term to fill the vacancy, and you'll see a two-year position in next year's election for the remainder of that term (see previous bullets and save this for future reference...). Evan is applying for comity, so I hope to see him on the board in the near future!

I would like to thank the Nomination Committee and the Election Committee for their efforts to get qualified and engaged chapter board members and for ensuring that the elections are conducted according to the bylaws.

I am looking forward to the accomplishments of the new Seattle Chapter board in the coming year, led by your new President Patrick Lindblom. He has done a great job as Vice President and Program Chair this past year, and I will be assisting him as much as I can as Past President. Thank you to outgoing board members Linda Ji and Violeta Tihova, and to everyone that contributed to addressing the challenges and achieving the many successes of the past year!



*The Seattle Chapter had many great events this past year, such as the Student Showcase in January.
Photo by Xiao Xiao Wen.*



SPOKANE

Parker Spotts

The Spokane Chapter concluded its 2024-2025 season with its annual May Social hosted at Dryfly distillery on May 22. The event was sponsored by Simpson Strong-Tie, Redbuilt, Knife River, MiTek, and White Block Company. Thank you to our sponsors and all those who came out to enjoy the festivities.

Another highlight of our 2024-2025 season was a tour of the Knife River precast plant, where we were able to see a few long span precast bridge girders for the North Spokane Corridor project.

We will take a short break over the next couple of months and will jump back into our regularly scheduled programming with a site visit of The Falls development led by DCI Engineers in August.

In September, Spokane hosts the 2025 SEA Northwest Conference. The conference will be packed with great presentations and networking events. The full schedule is now available, with other registration information. [Please check out everything at this link](#) We hope to see you there!



SEAW Spokane members toured the Knife River plant recently. Photo by Parker Spotts.

SEAW Letter to NCEES: SE Exam Computer-Based Testing



Jared Plank
Southwest Chapter

SEAW has been in communication with NCEES regarding the computer-based testing for the Structural Engineering exam. We wrote a letter outlining concerns surrounding resources, exam setup, time, and probability of passing. NCEES in turn responded to our letter acknowledging some concerns, but not fully addressing them. We will continue to advocate for our members regarding this matter. Please reach out to a member of the board if you would like to discuss or provide general feedback. Note that we cannot and never will ask for proprietary information regarding the exam. As was announced in last month's Equilibrium, there will be an increase of 1 hour to the depth exams starting April 2026, which may help increase the probability of passing the exam. NCEES does not plan to change the current format or time limits of the exam for October 2025. Keep these things in mind if you are preparing to take and pass the SE exam.

SEAW LETTER TO NCEES

Dear Mr. Dekle,

The Structural Engineers Association of Washington Board of Directors (SEAW) is reaching out regarding the new computer-based testing (CBT) for the Principles and Practice of Engineering Structural Exam. After seeing results from the last two offerings of the depth sections in April and October of 2024, we have significant concerns.

SEAW's main concerns with the current exam are that fewer individuals will be willing to take the exam, knowing the low probability of passing and that the current exam format does not reflect real practice. This could lead to a decline in the number of people that eventually become licensed structural engineers at a time when structural engineers are in demand. We believe a generation of potential structural engineers will not pursue full licensure if changes to the exam and improvement of probability of passing is too slow.

NCEES RESPONSE TO SEAW

Heather,

Thank you for your thoughtful and constructive letter. I apologize for my delay in responding.

NCEES has interacted in recent months with examinees, technical societies, and NCEES member boards about points similar to those outlined in your letter. We have been actively working to address some of the issues you noted, in compliance with the NCEES policies and procedures, and in cooperation with our member boards and internal oversight committees.

We attempt to focus our resources on exam development and interacting with examinees and our member boards, so I will not address all the issues you raised in depth. I will, however, address the three specific questions you asked about how the PE Structural standard settings were conducted.

We agree with NCEES that we should not adjust passing scores to provide a particular passing rate. However, the current pass rate of 14-20% compared to 35-44% for the past written exam indicates that the new testing environment is negatively affecting examinees. Based on these values, it appears to us that an engineer who passed the past written exam may not be able to pass the current CBT exam.

The current test environment, we believe, has discouraged many of our members from even attempting the exam. When weighing whether to take the exam or not, individuals need to overcome many hurdles including: cost, significant study time, more trips to testing centers, longer total time of tests, difficulty with accessing reference material, and others. This is in addition to their professional and personal commitments.

We recognize that this is a critique of a process that has had energy and investment. We appreciate NCEES's efforts to provide a secure and reliable testing environment for test takers, and we believe we can collaborate to improve outcomes. We have identified areas of improvement for the testing format to provide a more realistic chance of passing the exam in the allotted time. We are eager to participate in an open dialogue and offer our expertise, assistance, and feedback to NCEES. We are confident that doing so will benefit structural engineering candidates in our state and others, encourage a healthy pool of examinees, and maintain testing rigor.

SEAW has received feedback from our members regarding the general conditions of the exam environment. To date, we have received general feedback from 28 examinees. To the best of our knowledge, we have not asked for, nor received, proprietary information about specific questions, answers, or approaches that are contrary to the nondisclosure agreement examinees agreed to.

The following are some areas of concern, suggestions, and potential changes for which we would appreciate your earnest review and consideration.

References – Digital reference use during the exam is problematic and was a principal concern of test takers. We believe that this testing set up does not adequately simulate standard engineering practice and presents an institutional hurdle for an examinee who may otherwise pass. With the current exam conditions, there is a new emphasis on memorizing which is not what structural engineers do in practice. Unlike other PE exams, the Structural Engineering exam has a plethora of reference material, and at times requires use of multiple references at once. We understand the current testing environment does not allow examinees to have multiple references open at once. Even if that was possible, having one monitor makes navigating between the references and exam difficult to manage during a timed exam.

SUGGESTIONS: We urge you to allow examinees to bring in code book references and notes, but continue to only allow whiteboard markers and notebooks to discourage writing in reference materials. This is currently being done with success in California for their Engineering Surveying/Seismic Principles exam. If code references continue to not be allowed, examinees should have the opportunity to review the arrangement of the digital reference material and understand how search features work prior to commencement of the exam. NCEES could also consider offering a digital exam simulator in conjunction with the

Were past successful SE candidates utilized in beta testing?

Yes. Licensed engineers practicing in structural engineering are utilized in every step of the exam development process, including in the setting of the passing standard. Many of them are licensed under the jurisdiction of boards requiring an SE license to practice structural engineering.

Did those beta test environments match the current exam conditions as are present in the testing centers?

Yes. The practicing structural engineers involved setting the passing standard utilized a computer setup as similar to the testing center setup as we could replicate. The intent was for them to work under conditions similar to actual examinees. Likewise, our NCEES exam development volunteers – also licensed engineers – utilize machines and software configured to mirror the actual testing experience.

Were they similarly successful at passing the exam?

While on its surface this question appears reasonable, volunteers who participated in the standard setting had a specific role: to recommend the passing standard, not necessarily to pass the exam (for which they had not actively prepared as an examinee would have). They did take the actual exam under simulated testing conditions as described above, and while their performance was reported to them, they were not required to pass the exam. This is standard practice for high-stakes testing.

NCEES staff are actively engaged all our member boards regarding these matters. We encourage you and your members to interact directly with NCEES and with the Washington State Board. Licensed engineers interested serving as NCEES exam development volunteers will find information at <https://ncees.org/volunteer/>. Exam committee needs vary over time, but we would welcome their potential involvement.

Regards,
Lehmon

J. Lehmon Dekle, P.E.
Chief Officer of Examinations

current practice exam to better prepare examinees for the process.

Number of Questions/Time – Examinees were concerned that the difficulty accessing referencing materials cut into the time necessary to answer the number of questions in the exam. Examinees were also concerned that they could not access all questions for the exam simultaneously. This limited their ability to prioritize effort and manage their time based on their strengths and weaknesses as takers of the previous exam format were able to do. We note that the depth exams for buildings is approximately 60 items, but only 40 are counted.

SUGGESTIONS: We understand the need for pretest questions, but the time for answering these questions should not penalize test takers. Consequently, we propose the time be extended and/or pretest questions be limited. We have noted that Washington State Board of Registration for Professional Engineers and Land Surveyors has issued a memo stating that NCEES will extend the test period by 1 hour for depth sections starting in spring of 2026. We are concerned that this time extension may be too little, too late. An extension of up to 3 hours should be considered if the same number of pretest questions are present. We also suggest all problem types (steel, concrete, analysis, etc.) to be viewed at the beginning of the exam. Limit the number of total exam questions to ensure an average of six minutes per question is possible for the breadth exam, similar to previous versions of the exam. For the depth exam, limit the number of questions within each section to ensure adequate time to answer, or provide additional time to answer questions.

We would like NCEES to provide clarity for how cut scores are derived and to better understand how the testing environment has been accounted for. We believe a structural engineer who passed the exam in October of 2023 also should be able to pass the exam now. Some of the questions our board and members have include:

- Were past successful SE candidates utilized in beta testing?
- Did those beta test environments match the current exam conditions as are present in the testing centers?
- Were they similarly successful at passing the exam?

We believe further scrutiny of the process may be warranted if these questions cannot be affirmed. Since this test environment is new, we had hoped for a well-vetted process to ensure a smooth transition for test-takers. Structural engineers have a great impact on the life-safety of buildings and infrastructure. Proper representation of structural engineers in the process and advocacy for the exam and future changes to the exam are needed for the success of Structural Engineering licensure going forward.

We want more professional engineers to become licensed structural engineers and believe that this will result in a safer world. Ensuring the testing process does not discourage this goal cannot be overstated. If the perception of an unfair test and testing environment continues as represented by the low passing rates, it will decrease the pool of examinees in the future and reduce the total number of licensed structural engineers practicing in the United States. States that have not adopted SE licensure may be further discouraged from adoption should the license be deemed too difficult or unnecessary. Rectifying this issue is especially vital in a time when more engineers are needed to keep up with the

economic demands and retiring generations. It is essential that we ensure, going forward, the reliability and applicability of the SE exam.

We know that NCEES and associated organizations are diligent. We are equally so and believe there is a need for improvement in the examination process. To this end, we have offered feedback on necessary changes. We appreciate the hard work already put forward by NCEES and would appreciate an opportunity to talk to representatives of your organization. May we help organize a meeting as soon as possible to discuss our concerns and how we can assist?

Thank you for your time and consideration.

Sincerely,
Heather Kline, SE
President

Lifetime Service Awards Announced



Ed Huston

The SEAW State Board of Trustees has named Joyce Lem and Scott Douglas as the latest recipients of the SEAW Lifetime Service Award. Instituted 2002, the Lifetime Service Award recognizes a member's sustained, multiple, nurturing contributions to SEAW and/or committee service of statewide significance. The recipients will be presented with a unique trophy at the Seattle Chapter Spring Social in June.

This award is the highest honor granted by SEAW. It is not awarded annually or frequently. Joyce and Scott are the eleventh and twelfth recipients of this award, since the award was first made in 2003. It is presented to those SEAW members who have exhibited sustained, significant and multiple contributions to the organization, provided service to committees, and have mentored other members.

Previous Awardees were:

- Bruce Olson 2003
- Jim Carpenter 2003
- Don Northey 2004
- Skip Bush 2004
- Bill Mooseker 2005
- Ed Huston 2006
- John Tate 2014
- Jill Shuttleworth 2024
- Ted Smith 2024
- Chun Lau 2024
- Joyce Lem 2025
- Scott Douglas 2025



JOYCE LEM

A few examples of Joyce's service to SEAW include:

- Member Disaster Preparedness and Response Committee, 2011 to 2025
- Chair – Disaster Preparedness and Response Committee, 2012 to 2025
- Worked to establish WAsafe Building Safety Evaluators Coalition, 2014 to 2015
- Chair – WAsafe Coalition Steering Committee, 2018 to 2025



SCOTT DOUGLAS

A few examples of Scott's service to SEAW include:

- Wind Engineering Committee 2012 to 2025
- Chair – Wind Engineering Committee 2014 to 2025
- Co-Chair – General Code Requirements Committee Education Committee 2025 to present
- Northwest Conference Committee (twice when Seattle Chapter was host)

- Helped shepherd WAC 70.15.110 amendments through the State Legislature
- Has managed most of the SEAW post-disaster building safety evaluation classes since 2012
- SEAW Seattle Chapter Board of Directors – 2015 to 2018
- Legislative Committee 2000 to 2010
- SEAW 75th Anniversary Committee, 2025
- SEAW Seattle Chapter Board of Directors, Vice President, President – 2006 to 2009
- Engineer of the Year Committee 2009 to 2014
- Education Committee 2017 to present

Please join me in congratulating Joyce and Scott!

SEFW's Spring Fundraiser & 2024 Annual Report



Katie Bohocky
SEFW

Springtime is the [Structural Engineers Foundation of Washington](#)'s annual fundraising time! SEFW is SEAW's Foundation, a 501(c)3 nonprofit organization dedicated to charitable activities. Founded in 2010, SEFW has a mission to advance the profession of structural engineering through scholarships, education, research, and outreach. We are hoping you will help further our mission by [donating to SEFW](#) today!

Interested in knowing how your donations were used in 2024? SEFW releases an annual report that summarizes the organization's activities, accomplishments, and financial performance over the past fiscal year. [Click here](#) to check out our [2024 Annual Report](#), and see what your donations supported!

Structural engineering is a respected profession and SEFW has been proud to share that message for the past 15 years. SEFW is always looking for additional pathways for education and outreach, and we welcome ideas from anyone at SEAW and the community on this mission. Are there sites around your city that could have structural engineering tours? Do you have contacts in Washington classrooms and ideas of how to present structural engineering? What would you like to see out in the community? Please share your thoughts with us at admin@sefw.org.

Thank you again for considering making a donation during our [annual fundraising campaign](#). [Click here](#) to make a donation, or visit our website at www.sefw.org today!



WAsafe Building Safety Evaluation Trainings Scheduled for August



Joyce Lem
DPRC

WAsafe Building Safety Evaluations (ATC 20/45 Plus) will be taught at the Tacoma Public Utilities Auditorium on Monday, August 18, 2025, 8:30am – 4:30pm. Those who complete the class have the training necessary to join the WAsafe registry. our database for WAsafe Building Safety Evaluators. Price is \$135 and includes morning coffee and pastries, lunch, and afternoon snack. More details and registration links are at [WAsafe BSE - Tacoma](#). This full-day class is based on ATC 20 (earthquake) and ATC 45 (windstorms and floods), with emphasis on the natural disasters likely to occur in Washington State and the types of building damage associated with them. The class is eligible for 0.7 ICC Preferred Provider CEUs, or 7.0 PDHs for engineers.

A 4-hour long, online **ATC-20 Postearthquake Safety Evaluations of Buildings** class will be taught on July 15. The class will be free of charge. The time of the class is yet to be determined. SEAW's Ed Huston will be the instructor. Check out this [Get Training](#) webpage where registration links will be posted as soon as we have the details. Completing a separate online module covering the **WAsafe Program and Processes** in addition to the ATC-20 class are sufficient training for first-time enrollment in the WAsafe registry.

On July 17, Ed Huston will teach **FEMA P-2055 Post-disaster Building Safety Evaluation Guidance** on Zoom. The class will also be free and the time for the 4-hour class is still to be determined. The class uses case studies and example buildings to illustrate how to do building safety evaluations and to provide guidance to the agencies and their managers on the post-disaster building evaluation process. Check out the same [Get Training](#) webpage where the registration links will be posted. (This class is not the same as, nor an alternative to, ATC-20. For more information about FEMA P-2055, please see the [P2055 webpage](#).)

WAsafe is the Washington State program that organizes and trains a cadre of engineers, architects, and other industry professionals so they can assist local jurisdictions with the field work following a major disaster, determining whether buildings are safe for occupancy.

For current members, WAsafe enrollment expires 5 years after the last training. All ID badges list an expiration date. Individuals should take the online Refresher training within 12 months after the WAsafe enrollment expires, or they will be required to take the full-day BSE training to stay active in WAsafe. In comparison, completing the Refresher is expected to take 3 to 4 hours. For more details about the Refresher and to register, go to: [Refresher Training](#). Taking the full-day WAsafe BSE class is also an alternative to the Refresher.

For more about the WAsafe program, visit the website: wasafecoalition.org.

SEAW is a key member of the WAsafe Coalition. If you have any questions about the Disaster Prep/Response Committee or the WAsafe program, please send an email to joyce.seaw@wasafecoalition.org.



*Shoring of an unsafe building in Puebla, Mexico, damaged by the 2017 Central Mexico Earthquake.
Photo courtesy Erik Bishop.*

Performance-Based Concrete Specification Guidance



Chris Jeseritz

Last year, the National NCSEA Sustainability Design Committee's Specification Working Group published a white paper that provides guidance and resources for practicing structural engineers to incorporate performance-based concrete specifications into their projects. The white paper contains a concrete class table example and a list of references and commentary related to the typical properties that engineers may consider in their structural general notes and specifications.

Incorporating concrete performance specifications into projects communicates the required design performance objectives, such as compressive strength and durability requirements, but allows the concrete producer the ability to optimize the concrete mix ingredients to reach the required criteria for each mix. Additionally, this optimization can lead to potential reductions in concrete mixes embodied carbon, which is increasingly becoming a design consideration or requirement by clients, state legislation, building codes, and green building rating systems.

You can read and review the Performance-Based Concrete Specification Guidance document [here](#). To learn more about other strategies structural engineers can incorporate into their design practice, consider joining the SEAW Sustainability Committee. To join the committee, please email Chris Jeseritz at cjeseritz@pcs-structural.com to receive the monthly invite.

Narrative and Disclaimer: The intent of this table and supporting commentary is to provide guidance to engineers to performance specify concrete and is intended for information and discussion purposes only. All potential concrete classes and intended uses have not been addressed. Refer to ACI and IBC for additional requirements that should be included in construction documents not specifically addressed here. The engineer of record is responsible for all content and values issued on an actual project.

Concrete Class Table

Intended Use	Compressive Strength f'c (psi), at 28 days, uno	Exposure Class				Maximum w/cm ratio	Maximum Aggregate Size	Target Air Content	Global Warming Potential Target (kgCO2e/ycd3)	Other Design Requirements
		F	S	W	C					
Drilled Piers	4000psi NWC at 56 days	F0	S0	W0	C0	—	1 1/2"	--	240	The design requirements provided in this example are the minimum recommended criteria for all projects. See the description of additional concrete properties on the next page for additional information. Add additional columns as needed for project specific conditions.
Spread Footings	4000psi NWC at 56 days	F0	S0	W0	C0	—	1 1/2"	--	240	
Foundation Walls	4000psi NWC at 56 days	F0	S0	W0	C0	—	3/4"	--	240	
Grade Beams and Stem Walls	4500psi NWC at 56 days	F2	S0	W1	C1	0.45	3/4"	6%	290	
Core, Shear and Bearing Walls	5000psi NWC at 56 days	F0	S0	W0	C0	—	3/4"	—	290	
Interior SOG	3000psi NWC at 56 days	F0	S0	W0	C0	—	1"	—	205	
Exterior/ Garage SOG	5000psi NWC at 56 days	F3	S0	W1	C2	0.40	1"	6%	330	
Interior PT Elevated Slab	5000psi NWC at 28 days (3000psi at stressing)	F0	S0	W0	C0	—	3/4"	—	429	
Exterior/ Garage PT Elevated Slab	5000psi NWC at 28 days (3000psi at stressing)	F3	S0	W1	C2	0.40	3/4"	6%	429	
Columns	7000psi NWC at 28 days	F0	S0	W0	C0	—	3/4"	—	490	
Interior Non - PT Elevated Slab	5000psi NWC at 28 days	F0	S0	W0	C0	—	3/4"	—	330	
Exterior/ Garage Non - PT Elevated Slab	5000psi NWC at 28 days	F3	S0	W1	C2	0.40	3/4"	6%	330	

Notes:

- Concrete proportioning and requirements must comply with ACI 318-19 Tables 19.3.1.1, 19.3.2.1, 19.3.3.1 and 26.4.2.2(b) in addition to the requirements of this table.
- Global warming potential (GWP) targets as shown have been established as part of the sustainable design requirements for the project and are intended to be maximum values.

Celebrating 75 Years: The Years Before SEAW



Scott Douglas
SEAW Seattle Chapter Past President

This is a continuing series of Equilibrium articles to recognize and celebrate the 75th anniversary of SEAW. The following article includes excerpts from a presentation given by Harvey Pittelko (the "P" in KPFF) and information from the timeline tab at Magnusson Klemencic Associates' website. Our profession's history is relevant before the creation of SEAW in 1950. After the 1949 Olympia Earthquake, the strong foundation of our structural engineering community was able to organize, create SEAW, and grow to be one of the more prominent SEAs in the country.

William Henry Witt was an entrepreneur from the Midwest. Witt came to Seattle in 1919 and founded the W.H. Witt Company. At that time the majority of significant buildings were structural steel. Being very resourceful and innovative, Witt would market his firm to clients by saying he would save them money by designing a project in concrete instead of steel. The W.H. Witt Company, in addition to marketing and designing concrete buildings, detailed and placed the rebar for those projects.

In 1922, Witt hired an engineer who just graduated from the University of Washington, Harold Worthington. In 1928, the Lloyd Building, a 10-story building at the corner of 6th Avenue and Stewart Street in Seattle, was completed and occupied. W.H. Witt moved into the sixth floor of the Lloyd Building. In October of that year Witt was killed by a train, leaving Harold Worthington and another engineer named George Runciman to run the company.

In 1929, the stock market crashed. Work tapered off, and in 1932 and 1933 there was absolutely no work. W.H. Witt still had an excellent reputation, which helped the company barely stay alive by taking any work available, such as detailing rebar for contractors for as little as \$3 per job. In 1933, prohibition was

repealed and the W.H. Witt Company was awarded a job designing a distillery which, along with a few other projects which included bridges, kept them afloat. In 1934, they designed a 28-story office building for Seattle City Light. The design fee was \$6,000, but at that time Witt's office rent was \$25 a month. The W.H. Witt Company survived.

In 1945, George Runciman decided to leave W.H. Witt Company, leaving Harold Worthington to run the office. In 1946, Worthington hired an engineer by the name of Al Kelly (the "K" in KPFF). He then hired another by the name of John Skilling. Many other prominent engineers were hired, including Jack Christianson. H.W. Witt & Company grew and prospered, and started hiring many individuals from California. In 1955 the W.H. Witt Company changed its name to Worthington & Skilling, which after eight name changes is now Magnusson Klemencic Associates.

In 1958, Worthington & Skilling was awarded the design of a 21-story building at the corner of 4th Avenue and Union Street in downtown Seattle, the Washington Building. When completed in 1960, the developer offered space in the building to Worthington and Skilling. Al Kelly decided to stay behind at the Lloyd Building and started his own firm, which became KPFF.

None of the above individuals are mentioned in the Equilibrium's February 75th Anniversary article on the founding of SEAW, but all of them were prominent SEAW members, most serving as Seattle Chapter presidents.

Once again, as these articles commemorate the 75-year history of SEAW we hope to emphasize that SEAW has always been at the forefront in the advancement of our profession. Throughout our 75 years, SEAW has consistently made a difference. We are more than justified to celebrate our 75th Anniversary!



The Lloyd Building, a 10-story building in Seattle, was completed in 1928 and held offices of one of the city's first structural engineering firms. Image courtesy the MKA website.

Then

1950's



**LOCATION:
MUSEUM OF FLIGHT**

75 YEAR ANNIVERSARY



Now

EVENING EVENT

OCTOBER 23, 2025

CALENDAR



June 26, 2025

Seattle June Chapter Social (@Eventide Lake Union at Tyee) | 5:00 - 8:00 PM PST

September 15-19, 2025

September 25-26, 2025

SEA Northwest Conference / SEAW 75th Anniversary Celebration (@DoubleTree by Hilton, Spokane)

October 23, 2025

75th Anniversary Evening Social (@Museum of Flight, Seattle)

Please see the SEAW website for other event dates and information: <https://www.seaw.org/calendar>

MEMBERSHIP POSTINGS



Welcome New Members!

Clarissa Rogers
Clover Park Technical College
Student – Seattle Chapter

Kyle Johnson
Student – SW Chapter

EMPLOYMENT OPPORTUNITIES



Are you currently seeking employment as a structural engineer, senior manager, or a senior engineer technician? Check out our job board for [current employment opportunities](#).

Structural Engineer

GLR Engineers
Spokane, WA

GLR Engineers is seeking applicants for a structural engineer position in our Spokane, WA office. The applicant shall have a minimum of 6 years of relevant experience in the field of structural consulting design. Desired experience shall consist of working with multiple types of building materials, project types and the ability to contribute on multiple projects and deadlines. The selected applicant will be expected to produce structural calculations required for permit submittals, work with GLR's in-house drafting department to produce construction drawings, coordinate with architectural clients and other design team members, and succeed in operating in a team environment. Knowledge of Revit modeling is a plus. Applicant must be self-motivated with a strong drive to learn and expand their knowledge base.

GLR Engineers is a structural engineering firm with offices in downtown Boise, ID and Spokane, WA. We work on a variety of project types across the country and offer a diverse range of design experience on a

week to week basis. Work will be shared between both office locations, web-based communication skills are a must. We offer a competitive salary, excellent benefits, and flexible work hours. Please send your cover letter and resume for review and consideration to jacob@glengineers.com.

Apply Now!

Applying or Renewing your Membership in SEAW

SEAW is organized into the membership categories and their corresponding dues structures listed below. Select the membership category that best fits your status.

Your contact information is shared with our foundation, SEFW.

In order to “opt-out” please [contact](#) the association office. [Click here](#) for our privacy policy.

Join or Renew Today

Please consider making a line-item donation to [SEFW](#) as part of your dues renewal. Special designation can be placed on the donation, so it can be applied to scholarships, disaster preparedness or research opportunities. SEFW fulfills its mission with the assistance of donations from individuals and corporations.

More information on SEFW and its mission to promote structural engineering can be found at www.sefw.org. Thank you for your support!

Structural Engineers Association of Washington

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