CONNECTIONS

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Newsletter of the Structural Engineers Association of Oregon

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SEAO has a LinkedIn account and can be followed at SEAO LinkedIn Page.

Upcoming SEAO Meetings and Events:

Tuesday, October 14 - Friday, October 17, 2025
NCSEA 2025 Structural Engineering Summit
Location: New York Hilton Midtown, 1335 6th Avenue, New York, NY
Registration is now open. See Page 3 for more information.

Tuesday, October14, 2025: SEAO Chapter Meeting
Topic: Advancing Precast Concrete: Innovations, Sustainability, and Emerging Trends
Speaker: Zak Perkerewicz & Dan Serra, Knife River Prestress
Location: The Old Spaghetti Factory, 715 S Bancroft Street, Portland, OR
Time: 11:30 am Check-In & Lunch, Program at Noon
See page 2 for registration information.

Wednesday, October 15, 2025: SEAO Fall Seminar
Topic: An Overview of ACI 318-25
Speakers: S.K. Ghosh Ph.D., and Kirsten Zeydel, SE, with S.K. Ghosh Associates
Location: Embassy Suites Washington Square, 9000 SW Washington Square Rd, Tigard, OR
Time: 8 am Registration; 8:30 am to 4 pm Seminar
See page 4 for more information.

ANNUAL DUES REMINDER

Annual dues for SEAO membership are due by October 20, 2025. The SEAO website is open for paying dues. Visit: https://www.seao.org/ to login and pay your dues. Please contact Jane at jane@seao.org if you'd like to pay an alternate way. Renewal rates are as follows:

- Member (licensed PE in Oregon): $125
- Affiliate Member (unlicensed): $110
- Student Member (full-time student in Civil or Structural Engineering): $20
- Retired Members/Affiliates, or Professors: $25
- Life Members: Free

CONNECTIONS is a monthly publication of the Structural Engineers Association of Oregon, published to disseminate current news to our membership and others involved in the profession of structural engineering. The opinions expressed reflect those of the author and, except where noted, do not represent a position of SEAO.

Send membership inquiries to:

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SEE PAGE 6 FOR NEW BOARD MEMBERS. CONTACT INFORMATION WILL BE POSTED IN NEXT NEWSLETTER.

SEAO OCTOBER CHAPTER MEETING
Tuesday, October 14, 2025

Topic: Advancing Precast Concrete: Innovations, Sustainability, and Emerging Trends

This presentation will examine the evolving role of prefabricated concrete products within the AEC industry, with a focus on engineering applications and performance. We'll review recent innovations in manufacturing processes, productization, and standardization that are driving efficiency and consistency in precast systems. Sustainable design strategies and the environmental advantages of precast concrete will be discussed in the context of lifecycle performance and embodied carbon reduction. The session will also highlight our newly opened precast facility in Washington, designed to deliver efficient, safe, and sustainable production capabilities that support regional infrastructure needs. We'll conclude with case studies from recent projects in the Pacific Northwest.

Speakers: Zak Perkerewicz & Dan Serra, Knife River Prestress

Zak Perkerewicz is a Preconstruction Manager for Knife River Prestress, Inc., which is the largest producer of precast concrete products in the Pacific Northwest. Zak began his career in the precast/prestressed concrete industry in 1997 and has been with Knife River since 2001. Over the years, he has held a variety of roles spanning project management, operations, and preconstruction. In his current role, Zak works closely with the AEC community to develop large-scale commercial and architectural projects throughout the region. Knife River Prestress is proud to be an "ABC Plant," meaning it is certified to produce Architectural, Bridge, and Commercial precast concrete products. With the expanded capacity of two plants, our company is uniquely positioned to serve a wide range of project types and industry needs across the Pacific Northwest.

Dan earned his BS (2012) and MEng (2013) in Civil Engineering at Oregon State University and has been with Knife River Prestress since 2013. With over 12 years of experience, he has contributed to a wide range of precast and prestressed concrete projects, including bridges, data centers, stadiums, parking garages, and other commercial and infrastructure developments. His portfolio includes notable work on the Newberg-Dundee Bypass Bridges, the Providence Park Stadium Expansion, and the BMW of Tigard parking garage. Dan and his wife Kim welcomed twin daughters to the world in January 2025, bringing both joy and a new dynamic to their lives.

Location: The Old Spaghetti Factory, 715 S Bancroft Street, Portland, OR 97239

Time: 11:30 am—Noon — Check-in & Lunch
Noon—1 pm — Program

Cost: $35 Prepaid Members
$45 Prepaid Non-Members
$20 Student Members

Reservations: Pre-registration is required for all. You can register and pay online at: https://www.seao.org/events/oct2025/advancing-precast-concrete-innovations-sustainability-and-emerging-trends before end of day, Friday, October 10 You can also register with Jane Ellsworth via phone at (503)753-3075 or via email: jane@seao.org. It is expected that this event will sell out so register early.

PDH Credit: One (1) PDH will be available for this program.
Questions: Contact Jane Ellsworth at jane@seao.org.

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PRESIDENT'S OCTOBER MESSAGE
By: Christopher Carroll, PE

Dear SEAO Members, Colleagues, and Friends

As my term as President of the Structural Engineers Association of Oregon comes to an end, I want to sincerely thank you for your trust and support. It has been a true honor to serve this remarkable community.

I am especially grateful to our Board of Directors and committee volunteers. Your hard work and dedication to advancing technical education and professional growth form the foundation of SEAO's success.

To all our volunteers and sponsors—thank you. Your contributions are the backbone of our organization and ensure SEAO continues to flourish.

I have complete confidence in SEAO's future and the capable leadership taking the helm. Our momentum is strong, and I encourage each of you to remain engaged as we continue shaping the future of our profession.

Thank you again for the privilege of serving as President. The strength of SEAO comes from your integrity, technical excellence, and dedication to our field. I look forward to staying connected and supporting our shared mission in the years ahead.

Best Regards,

Christopher M. Carroll, PE
2024/2025 SEAO President (Outgoing)
2025/2026 Past President

NCSEA 2025 STRUCTURAL ENGINEERING SUMMIT
October 14–17, 2025

Bright ideas in the Big Apple: The NCSEA Structural Engineering Summit is coming to New York City from October 14–17, 2025.
Be part of the action at the Midtown Hilton, where you'll connect with practicing structural engineers, industry leaders, and innovative thinkers from across the country. Join us to explore the latest advancements in structural engineering, building, and design codes through engaging education sessions. Collaborate on technical, business, and industry challenges, enhance your leadership skills, and expand your professional network in an inspiring setting.

Registration Is now open. Visit https://www.ncseasummit.com/ to register.

SEAO FALL SEMINAR: AN OVERVIEW OF ACI 318-25

Wednesday, October 15, 2025

8 AM–4 PM

Topic: AN OVERVIEW OF ACI 318-25

The latest edition of ACI 318 Building Code Requirements for Structural Concrete was released at the end of January, 2025, although a printed version did not become available until late July. It is expected to be adopted by the 2027IBC.

ACI 318-25 introduces significant updates, including a new sustainability appendix and a new appendix on performance-based wind design, revised requirements for post-installed reinforcing bars, and enhanced provisions for shear friction. Additional updates include improvements to deep foundation requirements across all seismic design categories and clarified guidelines for cantilever and basement wall shear design.

The document also features numerous advancements in seismic design provisions (including significant relief from the severe shear design requirements for special shear walls in ACI 318-19), and modifications to development length equations. Enhanced language on the development, embedment, and anchorage of reinforcement, as well as new strength reduction factors for breakout failure, are also included, along with updated guidance for developing closely spaced bars in tension.

Speakers: S.K. Ghosh Ph.D. & Kirsten Zeydel, SE, S.K. Ghosh Associates

S. K. Ghosh Ph.D., is a highly acclaimed speaker and author on seismic-related issues and concrete design, and has been involved with the development of national codes and standards.

Kirsten Zeydel, SE, is the Director of Design at Nevell Group, Inc. and a Structural Consultant with S.K. Ghosh Associates. She is a licensed Structural Engineer based in Southern California, with over twenty years of experience in structural design. Kirsten has experience with all structural materials.

Location: Embassy Suites Washington Square, 9000 SW Washington Square Road, Tigard, OR

Date: Wednesday, October 15, 2025

Time: 8 am to 8:30 am — Registration
8:30 am to 4 pm— Seminar

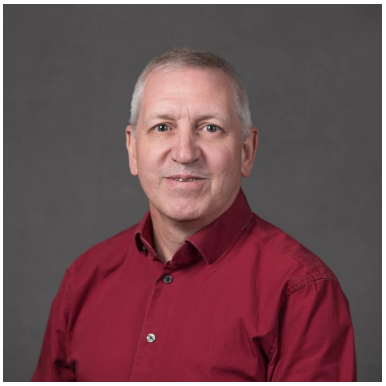
Cost: $225 Member
$275 Non-Member
$65 Student
$25 Late Fee After October 8

Reservations: Pre-registration is required for all. **You can register and pay online at:** https://www.seao.org/events/oct2025/aci-318-25 You can also register with Jane Ellsworth via phone at (503)753-3075 or via email: jane@seao.org. It is expected that this event will sell out so **register early**.

Lunch: A buffet lunch is included with your registration.
PDH Credits: Six (6) PDHs will be available for this program.
Questions: Contact Jane Ellsworth at jane@seao.org.

NEW LIFETIME MEMBER: GREG MUNSELL

By: Doug Paola & Bruce Holiday



We are happy to award lifetime membership in SEAO to Greg Munsell. Greg has been a member of SEAO for over thirty years, and his tireless participation has been invaluable to the organization. Greg has served as Treasurer and President and was a key member of the Snow Load Committee and has also been chair of the Scholarship Foundation.

Greg's introduction into SEAO came in his first week as a new member of Miller Consulting Engineering. Mr. Ray Miller had Greg tag along with him to an SEAO monthly meeting. At which point, Ray introduced Greg to Bruce Holliday, who was our fairly new Program & Meeting chairman. Ray instructed Bruce to put Greg to work in helping grow the attendance for SEAO's monthly meeting.

Greg was very apprehensive, but as Bruce explained to Greg, at some point in his career, he may need a new job and working here with Bruce, he would meet every principal of all the firms and all of their senior engineers from around the state of Oregon.

From all that excitement, Greg went on to help establish and work with Bruce on setting up the SEAO Scholarship Foundation which grew into a viable and valuable instrument for college engineering students.

At a work party, at Portland State University, where SEAO was requested to remove their history, Greg and Bruce discovered the original Charter and Incorporation Papers for SEAO. These papers were saved and are now residing in Greg's personal safety deposit box.

As treasurer Greg oversaw the conversion of the scholarship committee into a full-fledged non-profit foundation which was key to its ongoing financial success. Later, with Greg's leadership, the foundation began to grow and provide an increasing number of scholarships to local engineering students.

Following that, Greg served on the Snow Load committee. He helped do snow record analysis to develop the 2007 SEAO Snow Load Manual and Maps. In 2013 he jumped back in to help with further updates to the manual, and the online lookup table still in use today.

Greg is active in local charities, while he still works full-time as a structural engineer, and we hope he doesn't retire too soon. When Greg is not behind a desk, he is a part-time winemaker, Oregon State fan, and an avid outdoorsman.

We all know how hard Greg has worked on committees and then worked his way through the chairs of our organization. But for Greg's most outstanding contribution to SEAO, you'll have to attend this month's membership meeting, as Bruce Holliday, will walk you through why there is even an SEAO today.

ENGAGEMENT & EQUITY COMMITTEE SEEKING VOLUNTEERS

Make an Impact and Get Involved

The SE3-OR survey committee is seeking help from two (2) more dedicated individuals for reviewing and editing the 2023 survey publication report from survey responses collected in late-2023. A lot of work has gone into creating the report so far, and we need your help to cross the finish line and get it out to engineers!

Benefits:

- This is a great opportunity to get involved with a professional committee!
- If you are a licensed engineer in OR, you can count up to 8 hours of active participation as PDHs.
- And most exciting … A FREE YEAR OF SEAO MEMBERSHIP!

Visit: https://www.seao.org/committees/advocacy/se3 for more information.

SEAO Board of Directors
2025-2026

President: Kylean Gunhus joined Miller Consulting Engineers in 2016 after completing his bachelors degree in Civil Engineering at Oregon State University. While at Miller Consulting Engineers he has worked on a variety of different projects. Recently, his focus has been on multi-family residential, seismic evaluations and upgrades, and concrete repairs. Kylean is passionate about providing the client with comprehensive and clear designs to ensure the project is completed smoothly. When he's not working (or working on his house), he is likely at the gym, skiing in the winter, or playing in a softball league with friends from college. Kylean joined the SEAO board of directors in 2022 and began serving as our treasurer, last year he served as vice president, and this year is our new president.

Vice President: Sarah Johnson has been working in structural engineering for ten years. She has her Bachelors from the Oregon Institute of Technology and her Masters from the University of Washington. After graduating, Sarah worked in a diverse number of structural engineering firms across the world. She designed small renewable buildings made from strawbale, rammed-earth, and shipping containers while working in Southern Oregon. She helped design ship loaders and industrial structures while in Calgary, Canada. She worked on a large mall with an indoor amusement park and water slide while working in Cairo, Egypt. She even helped design tensile fabric structures to withstand major wind events while working in Perry, Florida. Since returning to Oregon, Sarah worked with DCI engineers for a couple years; working on projects ranging from small residential homes to multi-story commercial buildings. Now, Sarah works for Akana, a Native-owned plan and design firm, designing municipal buildings throughout the Pacific Northwest, as well as residential and commercial structures for Tribal lands. Sarah joined the Board in 2024 as Secretary.

Secretary: Elyssa Dekker obtained her Bachelor's Degree in Architectural Engineering from Cal Poly San Luis Obispo, and her Master's Degree in Structural Engineering and Mechanics of Materials from UC Berkeley. After finishing school, Elyssa moved to Portland and joined the Holmes team where she has been for the last three years. She's currently working on various mass timber projects, including a bit of testing down at Oregon State, and is part of the women-led team designing the new Seattle Storm Center for Basketball Performance. Elyssa has been a member of SEAO's SE3 Committee for the past year and volunteers with AFO's Architects in Schools program. She is excited about the opportunity to get more involved in SEAO and give back to the local engineering community.

Treasurer: Ryan Guay currently works at PACE Engineers in Portland. He obtained both his bachelors and masters degree in structural engineering from Portland State University, completing his masters degree while working full time at KPFF. Ryan enjoys mentoring newer engineers, and helping them start their career in the right direction, giving them the knowledge that he wishes he had earlier in his career. He hopes to instill confidence and passion in the next generation of structural engineers. Outside of work, he enjoys playing baseball, golf, and hiking in the beautiful Pacific NW.

New Director (Year 1 of 2): Zak Perkerewicz began his career in the precast/prestressed concrete industry in 1997 and has been with Knife River since 2001. Over the years, he has held a variety of roles spanning project management, operations, and preconstruction. He currently serves as an Outside Sales Representative for Knife River's Prestress operations, focusing on large-scale commercial and architectural projects throughout the Pacific Northwest. Zak enjoys collaborating with design teams and owners to develop innovative and efficient precast/prestressed concrete solutions from the early conceptual phase, and he takes pride in seeing those projects succeed for all involved. Outside of work, Zak enjoys skiing, running, fishing, tackling home improvement projects, and spending time with his family.

Returning Director (Year 2 of 2): Geoff Smoke currently works at Mackenzie in the structural engineering department where he has spent the first 5 years of his career. He is an alumnus of Portland State University where, after first obtaining a degree in Geography, decided to pursue a career in engineering and obtained a second B.S. degree in Civil Engineering with a focus on Structural. He would like to use his time with SEAO to become more involved with his local structural engineering community.

Past President: Christopher Carroll obtained his bachelor's degree in Civil Engineering from Portland State where he was the vice president of the university's chapter of ASCE. He currently sits as the outgoing (past) president of SEAO. Christopher has worked at Mackenzie in the structural engineering department and now works at SSOE Group. He has seven years of experience in the structural engineering field and hopes to use his time with SEAO to give back to the engineering community.

NCSEA UPCOMING LIVE WEBINARS

Register At: https://www.ncsea.com/education-events/calendar/

October 9, 2025, 10 am to 11 am Pacific Time (FREE)
2025 SEE Awards Webinar Series
New Buildings $80 Million to $200 Million: FORTH Hotel
Speaker: Rob Weilacher, P.E., S.E., Uzun+Case, LLC
The Forth Hotel is located on the Atlanta Beltline and is a development by New City Properties. The structure has a diagrid load bearing concrete structure. This project has won five state awards in addition to the NCSEA award. (1 PDH)

October 23, 2025, 10 am—11:15 am Pacific Time (Fee for Webinar/ Included in Webinar Subscription Package)
Snow Loads in ASCE 7-22, What's New and Different
Speaker: Michael O'Rourke
Stay up-to-date with critical changes in snow load design with this informative webinar, tailored for structural engineers, architects, and building code professionals. We'll begin by unpacking three major updates in ASCE 7-22: the new ground snow loads, the addition of a winter wind parameter for drift loads, and significant revisions to the shape of windward drifts. We'll then dive into two frequently asked topics: the influence of roof R-value on the new Ct thermal factor, and the criteria for determining the height of parapet walls that fully capture drifting snow. Finally, we'll explore new provisions for superimposing drifts from two different wind directions.. (1.25 PDH)

November 4, 2025, 8 am to 1:30 pm Pacific Time (Fee for Webinar/ Not Included in Webinar Subscription Package)
CalOES Safety Assessment Program
Speakers: Klaus Perkins, P.E., S.E., Bennett & Pless; Patrick Murren, P.E., S.E., CEMS Engineering
This California Office of Emergency Services (CalOES) Safety Assessment Program (SAP), presented by NCSEA, is based on ATC-20/45 methodologies and forms. This SAP training course provides engineers, architects, and code-enforcement professionals with the basic skills required to perform safety assessments of structures following disasters. Licensed design professionals and certified building officials will be eligible for SAP Evaluator certification and credentials following completion of this program and submission of required documentation. (5 PDH)

November 6, 2025, 10 am—11:15 am Pacific Time (Fee for Webinar/ Included in Webinar Subscription Package)
Design, Construction, and Performance of Two-Way Conventionally Reinforced Concrete Slabs
Speakers: Gwenyth Searer, P.E., S.E., Wiss, Janney, Elstner Associates; Terrence Paret, Senior Principal at WJE
Two-way, conventionally reinforced concrete slabs have a predictable propensity to crack and deflect. Design provisions, particularly those related to minimum thickness and strip design methods, have not changed substantively for many code cycles and allow engineers to exercise broad discretion during the design process within certain prescribed limitations. The exercise of discretion leads to some designs falling toward the margins of permissible design limitations and others landing more squarely within the margins. This webinar will show the range of in-field behaviors exhibited by code-compliant designs and will provide straightforward explanations for common radial and spiderweb cracking and out-of-levelness that are likely to exceed expectations. The presentation will also include discussion of common errors in design and construction and the need for more detailed precautionary code commentary to inform engineers about declining serviceability as designs approach permissible design limitations. It will also include recommendations for designers to achieve more robust designs that perform closer to the expectations of owners, occupants, and engineers. (1.25 PDH)

December 4, 2025, 10 am to 11 am Pacific Time (Fee for Webinar/ Included in Webinar Subscription Package)
Strengthening of Existing Concrete Structures: Options, Design, and Installation Case Studies
Speakers: Jennifer Dimig, P.E., S.E. and Brian Greve, P.E., S.E., Wiss, Janney, Elstner, Inc.
Restoration and renovation projects often include the need to increase the capacity of existing structural members to accommodate increased design loads or address deficiencies in the original design or construction. This presentation will provide an overview of various options to increase the shear and flexural capacity of existing reinforced concrete members. The presentation will discuss current design procedures, review installation factors that impact the feasibility and selection of the various strengthening options, and discuss project case studies utilizing the various options. By the end of this webinar, participants will be able to:

- Understand the available options for strengthening existing concrete structures.
- Describe the current design procedures for FRP and supplemental steel reinforcement.
- Understand the limitations of specific reinforcement options with regards to strengthening limits, including fire considerations.
- Describe the installation factors that may impact the feasibility or performance of the various strengthening options. (1 PDH)

January 15, 2026, 10 am—11:30 am Pacific Time (Fee for Webinar/ Included in Webinar Subscription Package)
Code Compass: Navigating IBC, IRC, IFC & IEBC for Structural Engineers
Speakers: John Showalter, P.E., ICC; Shandra Hyde, P.E., ICC; Rob Neale, CFPS, Integra Code Consultants
Which code applies—and when? Structural engineers often face the challenge of determining which building code governs a particular project. This webinar demystifies the scoping and application of the International Building Code (IBC), International Residential Code (IRC), International Fire Code (IFC), and International Existing Building Code (IEBC). Whether you're designing a new commercial structure, modifying a residential home, or assessing an existing building, understanding the intent and scope of each code is critical. Join us for a practical, engineer-focused session that clarifies code boundaries and highlights common pitfalls to guide your decision-making. (1.5 PDH)

There are also recorded webinars that can be purchased for professional development hours (PDHs) online at https://www.ncsea.com/education-events/calendar/

EMPLOYMENT OPPORTUNITY

HARPER HOUF PETERSON RIGHELLIS

Structural Engineer
Portland, OR

The ideal candidate will be a capable team player, respond effectively to multiple deadlines, and take pride in their work. They must also be highly attentive to detail and have excellent communication and organizational skills. Some responsibilities will include:

- Perform engineer-of-record design computations and code checks and develop contract plans and documents for structural projects
- Assist project managers
- Perform and prepare structural calculations for submittal to permitting agencies
- Actively participate in structural QA/QC
- Perform feasibility studies/layout work and analysis of structures
- Maintain client relationships to ensure satisfaction and effectively communicate with all disciplines, agencies, and authorities involved in projects
- Provide oversight and resolution of issues during construction phase work
- Interact with clients and/or coordinate detailed phases of engineering work on projects

Experience/Qualifications:

- Bachelor's degree in civil engineering with a structural emphasis
- **Minimum of 2 + years in structural engineering**
- Preferred licensed professional engineer or soon to be licensed in Oregon
- Familiarity with applicable building codes and standards
- Knowledge of structural design software is desirable

Apply via HHRP's Career Center

ASK A QUESTION, GET AN ANSWER

Do you have a code question you would like to ask the Wind Committee or Snow Committee?

SEAO is pleased to provide a simple way for Q&A's with technical committees. Email questions to jane@seao.org, and SEAO will direct your question to the appropriate committee chair for a response. Questions and their answers will be made anonymous and available to the membership on the website www.seao.org. Committees include: Seismic, Wind, Snow, Code, Vintage Building, and Special Inspections.

ADVERTISING SPACE AVAILABLE

SEAO is pleased to provide full page advertising to members for $500 and to non-members for $600. That is the price to run the ad the entire year from September to August. If you'd like to advertise, please contact Jane at jane@seao.org.