



STRUCTURAL ENGINEERS OF COLORADO

NEWSLETTER

JULY SEAC GENERAL MEETING

2016 SCHEDULE

Meetings

Loc: Renaissance Hotel
Time: Breakfast 7:30 a.m.
May 19
July 21
September 15

Fall Seminar

Loc: Renaissance Hotel
Date: October 27
Time: 7:30 a.m.—12 p.m.

Annual Meeting

Time and Location TBD

Board of Directors

Martin/Martin, Inc.
Time: 7:30 a.m.
January 7
February 4
April 7
June 2
August 4
October 6

Business Management

Committee

Loc: Renaissance Hotel
Time: Breakfast 7:30 a.m.
February 11
April 14
June 9
August 11



Recommended Practices for Specifying and Delegating Responsibilities for Precast Building Structures in Colorado

This presentation will demonstrate how to improve communication between engineer-of-record and specialty engineers. The results will be improved work flow, reduced errors/omissions, and improved cooperation within the Colorado engineering community. We will be giving some guidelines for what scope is recommended to be included in contract documents and what should be delegated to a specialty engineer.

Bio: Trevor Kirkley, PE—EnCon Design, LLC

Trevor Kirkley is the Engineering Manager at EnCon Design, the engineering and drafting group of a multi plant precast concrete manufacturer and has an excellent understanding of precast, pre-stressed concrete building systems. With his 9 years of experience working for precast manufacturers, he has developed the judgment and skills that make him a valuable resource for preconstruction, design, plant and field services within the design group. His specialty in precast and prestressed structures has given him experience working on a wide variety of commercial, residential, industrial, government, and institutional projects throughout the country. He has experience with all phases of the precast construction process and as a result has been instrumental in developing solutions to difficult challenges that arise within the precast construction process.



Also participating: Engineer of Record

RSVP July 2016 MEETING

July 21, 2016

Breakfast at 7:30 a.m.

Renaissance Hotel

3801 Quebec Street, Denver, CO 80207

RSVP by *Monday, July 18*, on the [SEAC website](#)

BOARD OF DIRECTORS

Structural Engineers Association of Colorado



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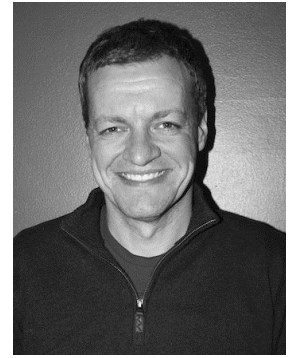
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Susan Jorgensen

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We Want to Hear from YOU! The SEAC Board of Directors is interested in hearing your suggestions, comments, and ideas. Please feel free to contact a member of the BOD at any time. Thank you to all of our members who continue to support SEAC!

PRESIDENT'S MESSAGE

Structural Engineers Association of Colorado

Welcome to July. I hope everyone had a safe and fun holiday weekend.

I am happy to announce that the launch of the new SEAC website is imminent. One key function of the new website will be an area for SEAC members to submit forum posts, as well as to submit responses. The idea is to create an opportunity for members to openly share their thoughts and experiences. Your board members are currently drafting the first posts so that they will be ready to submit as soon as the website is available. Please take time to read them, and to submit your responses.

Many of you may have noticed that David Poe has graciously volunteered to manage the audio-visual and WebEx setups for SEAC meetings for quite some time now. David has done an excellent job, but SEAC would like to give him a well-deserved break. So, please take note of the solicitation in this month's newsletter. We are seeking technical support with the setup and take down of the audio-visual and WebEx systems during our general meetings and Fall seminars. The position does not need to be filled by a SEAC member, and it is a for-pay position. Please spread the word if you know someone who might be a good fit and want to earn a little pocket money.

In other news, many of our committees are hard at work. The precast concrete committee has prepared a white paper and this month's presentation, the steel committee is developing a white paper and presentation for a future SEAC general meeting, the young members group is becoming more active every month (make sure to participate in the gingerbread bridge competition if you think your team can win, or if you just want to have some fun), the education committee is very active planning this year's Fall seminar as well as other frequent activities, Peter Marxhausen has breathed new life into the ethics committee, The northern Colorado committee continues to grow thanks to our many colleagues from that part of our awesome state, and the business management committee is conducting the annual SEAC Business Practice Survey. Please consider volunteering for a committee if you do not already do so. I believe our members and our committees are SEAC's lifeblood.

Finally, if you're a cycling fan, don't forget to catch a stage or two of the 2016 Tour de France this month.

Cheers,



Benton Cook, SEAC President

EMPLOYMENT OPPORTUNITIES

Structural Engineers Association of Colorado



Jirsa Hedrick values passion and excitement for structural design as we provide our team with some of the most challenging building projects while working with industry-leading designers and builders.

We are a consulting structural engineering firm specializing in the design of commercial building structures, and are seeking a **Structural Project Engineer** and a **Structural Project Manager**. You will have the opportunity to work on a variety of project types including office buildings, lofts, apartments, hotels, mixed use buildings, retail, schools, churches, casinos, and senior housing. We are a small firm that values and respects our team members' skillsets, ideas, and life outside of work. Our teams work on projects from conception through construction to ensure that every engineer is well-rounded and acquires broad knowledge and experience for the next project. You will be challenged, you will grow, and you will love and respect the people you work with.

Qualifications:

- Master's Degree in Structural Engineering (or Architectural Engineering)
- 2-20 years of experience in commercial building design
- A passion for structural design of buildings
- A positive attitude
- Good communication skills

Preferred skills:

- Revit knowledge
- Software experience with RAM Structural System, RAM Concept, RISA, TEDDS

Why you will love us:

- Great company culture
- Flexible schedule
- Amazing co-workers
- Competitive compensation
- Fully paid medical insurance for your entire family
- Dental insurance available
- SAR SEP (retirement savings program) available
- Paid vacation, holidays and sick time

Does this sound like you? If so, please forward your resume to structure@jirsahedrick.com
Questions? Call Brenda at 303.318.6524 or email byockstick@jirsahedrick.com

Please visit our website and follow us on social media with the following links



EMPLOYMENT OPPORTUNITIES

Structural Engineers Association of Colorado



Project Engineer PE Role Profile

Title: Project Engineer PE

- Assist with management of specified areas of project work.
- Ensure that design and details area prepared and transferred to the Project Drafter in a clear and timely manner with minimum supervision.
- Assist in management of projects by tracking work with consideration of budget and schedule.
- Review plans, details, and specifications and provide interpretation of the same. Identify all deficiencies and assist Project Manager with resolution.
- Ensure accuracy of work and adherence to Company Standards and Procedures.
- Supervise and provide guidance to other design engineers for training and project work.
- Provide technical assistance to other departments as required.
- Be informed of current developments within the Company and the industry and be vigilant in finding ways to improve efficiency and economy.
- Pursue continuous education for professional, technical and managerial proficiency.
- Represent the Company in a professional manner
- Background in bridge construction and design is preferable.
- Experience with design of precast/prestressed concrete is preferable.
- College degree – Engineering
- 5 Years of experience
- Registered Professional Engineer in the State of Colorado

Applicants interested can email perezn@rmpprestress.com

EMPLOYMENT OPPORTUNITIES

Structural Engineers Association of Colorado



Fortis Structural is a Denver based firm providing structural engineering services to some of the top owners, developers, architects and contractors in the industry. We work on a large variety of projects, including office buildings, multi-family residential projects, medical facilities, schools, and mountain resort projects. Our projects are primarily in Colorado although we are also doing work in multiple states throughout the country. We're constantly looking for the best and brightest talent in the structural engineering field, with particular needs as follows. Candidates shall have experience in commercial, medical, retail, multi-family residential, hospitality, resort or institutional projects.

Design Engineer

0 to 5 years of experience in structural engineering. A Bachelor's degree in Civil (Structural) or Architectural Engineering is required, with a Master's degree preferred. Familiarity with the International Building Code and Revit Structures is a plus.

Project Engineer

5 to 10 years of experience in structural engineering and licensed as a Professional Engineer. A Bachelor's degree in Civil (Structural) or Architectural Engineering is required, with a Master's degree a plus. Familiarity with the International Building Code is required, and Revit Structures is a plus. Experience working directly with architectural clients is required.

Project Manager

8 to 15 years of experience in structural engineering and licensed as a Professional Engineer. A Bachelor's degree in Civil (Structural) Engineering is required. Familiarity with Revit Structures is a plus. The ideal candidate will have experience working with multiple architectural clients with the ability to recruit work to the firm. Strong interpersonal and leadership skills are a must.

We offer competitive salaries and benefits and the opportunity to work in a fun, collaborative environment. Hard work and success will be rewarded. Please email your cover letter and resume to jrapp@fortisstructural.com. Something better awaits you.

ANNOUNCEMENTS

Structural Engineers Association of Colorado

Welcome to our Newest Members

Todd Clapp (Student Member)

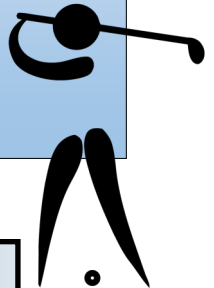
Sheila Butcher (Professional Member)
Wallace Engineering

Brandon Warren (Professional Member)
EVstudio

Jay Arehart (Student Member)

GOLF!

*Please see the flyer
attached to the back
of this newsletter for
information.*



NOW AVAILABLE

The 2016 Colorado Design Snow Load Report is available for free download from the Publications tab of the SEAC website!

IS YOUR COMPANY HIRING?

Consider placing an ad in the bi-monthly SEAC newsletter to reach over 300 members, including professional engineers, architects, contractors, suppliers, and vendors.

To learn more, contact Michelle Mishkar (SEACNEWS@MartinMartin.com)

ANNOUNCEMENTS

Structural Engineers Association of Colorado

SEAC YMG

The YMG has been busy this year with networking events, a visit to active construction sites, a tour of Rocky Mountain Prestress and participated in the NCSEA Nation-Wide Trivia Night. We have a full schedule to finish off the year including a Powers Fasteners Masonry Fastening Seminar which includes a hands-on section and a social event afterwards, our Summer Family Picnic, a Hilti Deck Fastening Seminar including a hands-on section, and our annual Gingerbread Bridge Competition. If you are interested in participating in these or future SEAC YMG events or know of anyone that may be interested, please contact us at yeg.seac@gmail.com. Our events are not limited to SEAC members, so please forward our information along to all young engineers looking to get involved.

YMG Summer Picnic

Families are welcome to join us at our Second Annual Summer Picnic on July 30, 2016 at Observatory Park in Denver. There will be games, food and beverage provided. The Picnic will be from 10:30 to 3:00. Please RSVP to yeg.seac@gmail.com and be sure to list the number of people in your party and any dietary restrictions by the end of day on 07/27/2016 so we can go shopping. We look forward to getting together and meeting everyone's family.

Thanks

Young Members Group

SEAC is looking for a qualified person to support the organization as a WebEx broadcasting technician at each of its events. Six times a year, SEAC broadcasts their general meetings and fall seminar to invited guests across Colorado. The job activities include:

- Coordinating with the hotels A/V personnel on equipment and services that SEAC has contracted for.
- Setting up SEAC equipment, running and monitoring the WebEx broadcast throughout the event, trouble shooting and breaking down the equipment at the conclusion.
- Time commitment is from 6:30 to 9:30 am for five general meetings per year, and from 6:00 am to 1:00 pm for the annual fall seminar.

Compensation for the position will be \$250 per general meeting, and \$500 per fall seminar.

If you are interested, or if you know someone who might be interested, please contact [Caryn](#), [Michelle](#), or any Board member for further details.

ANNOUNCEMENTS

Structural Engineers Association of Colorado

GIRLS IN STEM

The SEAC Education Committee is looking for companies and volunteers who would be interested to participate in the student outreach opportunities for the “Girls in STEM” program.

WE are currently looking for Engineering companies willing to host a tour with Q&A, rotations with high school students.



If interested, contact us at EducationSEAC@gmail.com

SPONSORS!

Your Logo Could Go Here!

Do you know someone that would be interested in
sponsoring a SEAC Meeting?

Please contact Don Carroll, Past-President, 561-226-1220 - DCarroll@wje.com



2016 SEAC Fall Seminar Topic Outlines

Save the Date: October 27th

Precast Topic & Wood Shear Wall Design Topic

Presented by: Jason P. Lien, PE, FPCI

Executive Vice President at EnCon United, Denver, Colorado

This presentation will highlight various precast topics, such as:

Precast EOR Design and Coordination Details

♦ ***Camber/ Topping/ Drainage/ Bottom Tensile Stress Interaction***

Investigate the impact of placing restrictions on the bottom tensile stress of prestress member and the interrelationship that has on camber, topping thickness, and drainage in a prestress parking deck. A review of bottom tensile stress limits per ACI 318 and code prescribed stress limitations.

♦ ***Holes in Prestressed Beams***

One technique to leverage smaller structural depths or plenum space is through the use of holes in inverted tee beams between double tee stems. A brief review of the statics under construction loading, service loading, and ultimate loading. Rational design methods are presented for distribution of prestress, shear, torsion, and moment.

ASCE 7-16 Adoption of PCI Diaphragm Research

ASCE 7-10 has been modified and updated to ASCE-7-16 and includes a new Section, 12.10.3, Alternative Design Provisions for Diaphragms including Chords and Collectors, within the Diaphragm Chords and Collectors section, 12.10. This new section provides for an alternative determination of diaphragm design force level, which is mandatory for precast concrete diaphragms in buildings assigned to SDC C, D, E, or F.

State of BIM in the PCI Precast Industry

General overview presented as a historical perspective to current implementation benefits, focus on data exchange through IFC and validation testing of import / export utilities, and a case study application.

Presented by: Michelle Kam-Biron, PE, SE, M. ASCE, SECB – Senior Director, Education, American Wood Council

Seismic-Resistive Design of Wood Buildings

Identify IBC code requirements for seismic design of wood structures. Identify ASCE 7-10 and SDPWS for seismic design of wood structures. Understand the limitations of wood shear walls and diaphragms. Identify special seismic detailing requirements for wood structures.

Shear Wall Design Examples per 2015 WFCM and 2015 SDPWS

Identify and understand the basic shear wall system to resist wind and seismic loads. Understand the difference between segmented and perforated shear wall design. Understand hold down design. Be able to identify and analyze shear walls per 2015 WFCM, 2015 WFCM High Wind Guides, and 2015 SDPWS and understand the differences between them.

SEAC Education Committee Corner

Structural Engineers Association of Colorado



The SEAC Education Committee hosted the Precast Tour, on June 17th at the Stresscon precast facility in Colorado Springs.

Approximately 20 SEAC members participated.

We appreciate all of Stefan Kalbl's hard work, a SEAC EC member, who put a lot of volunteering hours into organizing the tour, internal coordination with his Stresscon team, guiding the tour through the design department, and showing the SEAC members the various stages of the precast commercial and architectural plant.

We would also like to thank to all the Stresscon tour guides for leading the groups, providing lunch, and hosting a raffle for the 7th Edition PCI Design Handbook.

SEAC members, if you have a recommendation for another tour per your interest, or if you would like to guide a tour at your company manufacturing facility, inform us at EducationSEAC@gmail.com.

Please mention "SEAC Tour" in the E-mail subject.

The SEAC Education Committee will review the suggestions and select a tour for 2017 events.



SEAC COMMITTEES... We Need You!

Structural Engineers Association of Colorado

Have you considered joining a committee?

*Your participation is what makes our organization so successful.
If you are interested in joining, please click on the hyperlinked name to contact
the Committee Chair or Board Liaison.*

| Committee | Chairperson | Contact Phone | Board Liaison |
|-----------------------|------------------------------------|---------------|------------------------------------|
| BIM | Dezi Mackey | 303.431.6100 | Jeannette Torrents |
| Building Dept. Survey | DORMANT | | Rob Jackson |
| Business Management | Wayne Muir | 303.399.5154 | Paul Hause |
| Construction Industry | Mark Cormier | 303.444.1951 | Paul Doak |
| Denver Building Dept. | Jerry Maly | 303.914.4300 | Rob Jackson |
| Education | Irena Kahanek | 720.296.7595 | Susan Jorgenson |
| | Chad Mitchell | 720.407.1031 | |
| Ethics | Peter Marxhausen | 303.947.5375 | |
| Membership | Jerry Maly | 303.914.4300 | Ben Cook |
| Nominating | Jerry Maly | 303.914.4300 | Ben Cook |
| Northern Colorado | Greg Black | 970.619.8986 | Greg Black |
| Precast Concrete | Alex Mihaylov | 303.298.1900 | Paul Doak |
| SEER | Brent Norris | 303.860.9021 | Rob Jackson |
| | Mike Piper | 303.431.6100 | |
| Scholarship | Jeannette Torrents | 303.444.1951 | Susan Jorgenson |
| Seismic Standards | Rob Jackson | 303.843.2850 | Ben Cook |
| Snow Loads | Jeanette Torrents | 303.444.1951 | Jeannette Torrents |
| Standard of Practice | Jim Ness | 303.623.4927 | Paul Doak |
| Steel Materials | Ben Cook | 303.914.4300 | Ben Cook |
| Wind Loads | Jeannette Torrents | 303.444.1951 | Jeannette Torrents |
| Young Engineers | Mathew Peterson | 303.726.2909 | Susan Jorgenson |



COLORADO ASSOCIATION OF
GEOTECHNICAL ENGINEERS



2016 GOLF TOURNAMENT





**Colorado Association of Geotechnical Engineers,
Structural Engineers Association of Colorado,
American Society of Civil Engineers &
ADSC Rocky Mountain Chapter
~ 2016 Golf Tournament ~
August 4th, 2016**



Where:

**Fossil Trace Golf Club
3050 Illinois Street
Golden, Colorado 80401
303-277-8750
www.fossiltrace.com**



Schedule of events:

- Practice Range from Noon to 1:15 p.m.
- Shotgun Start at 1:30 p.m.
- Dinner/Awards/Raffle immediately following Play



Fossil Trace Golf Club is one of Colorado's most popular and premier golf courses. Located in Golden, Colorado - Fossil Trace Golf Club is nestled adjacent to the foothills of the Front Range and only 20-minutes from downtown Denver and in close proximity to other suburban areas including Littleton, Lakewood, Arvada and Boulder.

Golf Tournament Prizes include 1st Place Team, 2nd Place Team, 3rd Place Team, Mens/Womens Longest Drive, Mens/Womens Closest to the Pin, Mens/Womens Longest Put, as well as giveaways.

****SPONSORSHIPS NEEDED** See following page for registration.
Fossil Trace Golf Club Map - <https://goo.gl/maps/yyBDY5zz2J42>**

**CAGE/SEAC/ASCE/ADSC
2016 Golf Tournament
Fossil Trace Golf Course
August 4, 2016
1:30 p.m. Shotgun Start**

Name: _____
Company: _____
Address: _____
City/State/Zip: _____
Phone: _____ Email: _____

\$150 per Golfer ** \$140 ea. Foursomes ** Non-Members Welcome

of Players: _____
Player Names: _____

Note: Mulligans will be available for purchase the day of the tournament. Bring a credit card, check, or cash to participate.

Available Sponsorships:

- ☐ \$200 Hole Sponsorships
- ☐ \$250 Mens/Womens Longest Drive Sponsorships
- ☐ \$250 Mens/Womens Closest to the Pin Sponsorships
- ☐ \$500 Beverage Cart Sponsorships
- ☐ \$500 Dinner Sponsorships
- ☐ \$500 Awards Sponsorships
- ☐ \$750 Cocktail/Social Sponsorships

Payment Option: **Note Please remit payment by July 21st, 2016**

- ☐ Total \$ Amount to be charged to Card _____
Card Holders Name: _____
Card Type _____ Card # _____
Expiration Date _____ 3 Digit Security Code _____
Signature _____
- ☐ Will be paying via Check. Please make checks payable to CAGE and send payment to Becky Roland, CAGE PO Box 460311 Denver, CO 80246.

Please send my receipt via email to _____

Please Send Registration Form to Becky Roland w/ CAGE via Fax (720) 230-4846 or Email - admin@cagecolorado.org

Note: You may also register online at www.cagecolorado.org