



STRUCTURAL ENGINEERS OF COLORADO NEWSLETTER

2019 SPRING SCHEDULE

SEAC Member Meeting

May 16, 2019
Lakewood Country Club
6800 W 10th Ave
Lakewood, CO 80214
7:30am-9am

NoCo Meeting

May 16, 2019
CTL Thompson
400 North Link Lane
Fort Collins, CO 80524
7:30am-9am

Call for NCSEA Delegate

May 31, 2019 (response due)
See page 6 of Newsletter

SEAC Board Meeting (web)

June 6, 2019
7:30am-9am

Business Management Committee Meeting

June 13, 2019
Martin/Martin
12499 West Colfax Ave.
Lakewood, CO 80215
7:30am-9am

NCSEA Structural Engineering Summit

November 12-15, 2019
Disneyland® Hotel
Anaheim, CA

SEAC March General Meeting

Engineering Ethics and Laws in Colorado

We all tend to view ourselves as the “good guy”. You ask yourself, “Why would I need to attend a SEAC meeting in May to hear about ethics when I’m the good guy and I already do stuff right? It’s the other ‘bad’ engineers who should learn about this stuff!”

Choosing between “good” and “bad” appears easy until unseen variables are introduced such as time constraints, family, promotion opportunities, job security, peer pressure, supervisor pressure, and professional reputation. Engineers are not only faced with choices between good and bad, but often a more difficult ethical dilemma occurs when making choices between competing goods or competing bads.

As engineers, moreover as structural engineers, we are tasked to protect the safety, health, and welfare of the public. Although doing what is right seems obvious, how do we know what is right? Our industry ethics are intended to give us a moral guide and direction, but periodically reacquainting ourselves with these standards is necessary to apply those ideals appropriately. In fact, several states require one or more hours of annual or bi-annual training on ethics training topics to maintain licensure.

Neither the entire breadth nor depth of engineering ethics can be confined to a 1-hour breakfast meeting topic; however, the May 2019 SEAC meeting will offer an appropriate refresher on ethical guidance and will also include a self-graded exam to evaluate your knowledge of current laws, rules, and bylaws governing the practice of engineering in Colorado. Example topics include marijuana use, working on a design-build team, good Samaritan laws, child support, title protection, electronic signatures, conflicts of interest, and more. How well will you do?

Speaker:

Peter Marxhausen, M.S., P.E., first obtained registration in Colorado in 2004 and is a licensed Professional Engineer in nine states. In addition to being a senior staff forensic structural engineer with Higgins & Associates, Inc. he is an adjunct faculty member with the University of Colorado Denver where he teaches in the Civil Engineering Department. Mr. Marxhausen’s course curriculum includes the subjects of engineering ethics and laws. Mr. Marxhausen has been a member of SEAC since 2004 and chairs the SEAC Ethics and Legislative committee. He has also served on several other SEAC committees over the past 15 years.

Sponsored by:



PRESIDENT'S MESSAGE

Structural Engineers Association of Colorado

We are in the heart of spring and it is one of my favorite times of year here in Colorado. With the spring moisture (rain and snow that does not want to seem to give up), cool nights, and warm days all the browns and tans are turning into the vibrant colors that show mother nature is waking back up for another year. This is great for those of us that enjoy getting outside and enjoying our state and all it has to offer.

The March General Meeting was on Structural Resiliency and was presented by Dr. Bruce Ellingwood. It was well attended locally in person and in our Out-of-Area locations via Web-ex.

Membership renewal is now behind us and the database has been transferred to the new website. The database has gone through the annual housekeeping process. If your contact info has changed, or you know it is going to, please remember to update it on the SEAC website so that we can remain in touch and there is not a delay in getting the monthly communications out to you.

SEAC and CAGE are working together again this year on the Annual golf tournament coming up later this summer. Stay tuned for more details. Partnering with other organizations assists all the organizations in getting good, relevant content out to our members.

Another large task that has been completed by the Building Management Committee is the results of the first-ever Individual Compensation Survey. The results are in, they have been compiled and put into a format that can be presented and has been sent out to those who participated. This year took longer than anticipated, however it was the first year and now that the format has been decided on, the process will go much faster this year and in the years to come. If you want the survey results, please participate. There will be another opportunity coming up in the near future to participate in the survey so that you can get the results. Watch your in-box. Another good reason to keep your contact info up to date!

SEAC will strive to keep a consistent communication schedule with you. On the even numbered months there will be an e-news sent out to capture the events and information in one e-mail and on the odd numbered months there will be the newsletter that will be e-mailed. While we will do our best to keep this schedule, there will most likely be instances where time sensitive event info must be distributed and that will be in a separate e-mail. The e-news and the newsletters are a good way to keep the e-mail traffic manageable, however all the info of up coming events will be on the website.

I look forward to seeing you at the General Breakfast Meeting on May 16, 2019 at the Lakewood Country Club. We are excited to have the Business Practice Committee present the results from the surveys that our membership participated in last year. We also will have Peter Marxhausen who is going to have an interactive presentation on Colorado Engineering Ethics and Laws. Thank you to our sponsor, MyTiCon, who help make these events possible.

Choose to make today a great one!



Jeremy Crandall, SEAC President

SEAC Committee News

Structural Engineers Association of Colorado

Bellevue Station Office Building & Parking Garage Site Tour

The SEAC Education Committee would like to invite you to tour the construction of the next phase of the Bellevue Station Master Plan, Bellevue Station Lot E. A brief introduction of the project scope will be followed by a tour of this under-construction 15-story cast-in-place concrete, steel, and precast concrete structure. The tour will highlight the unique design features and challenges of this office, retail, and parking structure. Please join the group after at Los Chingones Mexican DTC for a complementary beverage and appetizers courtesy of Stresscon Corporation.



Photo Courtesy of Weitz, Rendered by Gensler

WHO: SEAC members, non-members, and students

WHAT: Bellevue Station Lot E Site Tour

WHEN: Thursday, June 27th @ 3:30pm to 5:00pm

LOCATION: 6900 Layton Ave, Denver, CO 80237

RSVP: Event registration will open on Friday, May 24th on the SEAC website

PDH: 1.5 hours

SEAC Fall Seminar

Doubletree Hilton - Westminster
8773 Yates Drive, Westminster, CO 80031
October 10, 2019

SEAC is now accepting sponsorships for the Fall Seminar. If you would like to promote your company, click [here](#) to participate. If your company would like to become the Fall Seminar raffle prize sponsor, please contact the Education Committee directly at Education@seacolorado.org

Thank you to our current sponsors:

GOLD



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Interested in Joining the Education Committee?

We are looking for motivated SEAC members to join the SEAC Education Committee. We plan and organize events throughout the year to support continuing education and outreach for SEAC members and students including project presentations, job-site tours, PE/SE exam study review, and the annual Fall Seminar. If you are interested in joining, please contact us at education@seacolorado.org. We look forward to hearing from you and working towards another great year ahead!

SEAC Committee News

Structural Engineers Association of Colorado

Denver Art Museum Site Tour and Project Presentation Recap from May 2nd

Jonathan Oltman with Martin/Martin and Dave Mecham with Fentress Architects shared the design and construction process of the Denver Art Museum renovation. The tour attendees enjoyed walking through the various terraces, the new main entrance, and the Welcome Center. During the presentation, attendees learned about various aspects of the design, including the complicated structural steel roof and the 25 ft glass facade. Four Winds provided an impressive space for the presentation.



Update from the SEAC Denver Building Department Liaison Committee regarding the 2019 Denver Building Code Adoption Process

As reported in the March newsletter, the City and County of Denver plans to adopt an updated building code later this year that will utilize the 2018 I-Codes. In concert with this effort, the SEAC Denver Building Department Liaison Committee (DBDLC) began meeting in January to review the existing amendments to the structural provisions in the 2016 Denver Building Code, which is based on the 2015 I-Codes, and consider new amendment proposals.

To that end, in late April the DBDLC submitted a number of proposals addressing structural provisions in the 2018 editions of the IBC, IRC and IEBC for adoption by the City and County of Denver. As in years past, these proposals address certain seismic, snow, and wind requirements, as well as requirements relative to special inspections and structural observations. The committee also submitted a proposal to amend Denver's definition of *dangerous* so that it matches the definition in both the IBC and IEBC. Finally, the committee submitted a proposal to allow the use of three new mass timber construction types in Denver: Type IV-A, IV-B, and IV-C. These construction classification types, already approved by the ICC for inclusion in the 2021 IBC, would expand the allowable use of mass timber construction to larger areas and greater heights than previously allowed. If approved, use of these mass timber provisions would be allowed upon adoption of the updated Denver Building Code utilizing the 2018 IBC.

The Denver Community Planning and Development Department formed six technical advisory committees consisting of city staff and industry experts to evaluate the new codes and proposed amendments. Committee hearings will begin during the week of May 13 and are expected to continue into August. All hearings are open to the public, and any interested person may attend and participate in the floor discussions by offering testimony for or against any proposal. All proposals are published and available for review on the Denver Building Code website, as are the locations, times, and agendas for the committee meetings. Members of the DBDLC include: Don Carroll, Bob Halliday, Rob Jackson, Erin Kinder, Greg Kingsley, Jerry Maly (chair), Chad Mitchell (board of directors liaison), Austin Reese (secretary), David Renn, Andrew Stam, Gene Stevens, Jedidiah Williamson, Rodger Young.

SEAC Committee News

Structural Engineers Association of Colorado

YMG Personal Vision Workshop

- When: Tuesday, May 7 from 6-7:30PM
- Where: CU Denver College of Architecture - Room 3301
1250 14th St
Denver, CO 80202
- Cost: \$5 (dinner provided)
- Register: [Click here](#)

Join us for a highly interactive Professional Development Workshop focusing on evaluating what personal balance and values look like to YOU and turning that into a purpose statement that can guide you to setting short and long term goals. We will look at what motivates you, what your strengths and weakness are, and what you can do with these to help you lead a more fulfilling and satisfied career and life.

This event is being organized by ASCE and is open to a number of other professional organizations (SEAC, CAGE, SWE, WTS, etc.) so it will also be a great opportunity to connect with other young engineers who are committed to identifying and achieving their full potential.



2019 Gingerbread Bridge Competition

Friday, November 22nd
at Dry Dock Brewing
in Aurora

Now Seeking NCSEA Representative

Past Board members and active Committee Chairs with thorough knowledge of SEAC are eligible. The delegate is the official liaison between SEAC and NCSEA. The delegate shall serve at least 2 years but no more than 5 years. Previous delegates are not eligible unless no other candidate is available. If you are interested in serving, please email administrator@seacolorado.org by May 31, 2019. Duties start immediately.

[Call for 2019 Excellence in Structural Engineering Award Entries](#)

The [NCSEA Excellence in Structural Engineering Awards](#) annually highlights some of the best examples of structural engineering ingenuity throughout the world. Structural engineers and structural engineering firms are encouraged to enter.

Projects are judged on innovative design, engineering achievement and creativity in the following categories:

- New Buildings under \$20 Million
- New Buildings \$20 Million to \$100 Million
- New Buildings over \$100 Million
- New Bridge and Transportation Structures
- Forensic/Renovation/Retrofit/Rehabilitation Structures up to \$20 Million
- Forensic/Renovation/Retrofit/Rehabilitation Structures over \$20 Million
- Other Structures

Chosen projects will be honored at the [NCSEA Structural Engineering Summit Awards Banquet](#) at the *Disneyland Hotel* in **Anaheim, CA**.

Selected projects must have a representative present at the banquet in order to win the award. An outstanding project will be chosen from each category and then featured in STRUCTURE Magazine.

Previous Colorado Projects have included JVA, Inc. and Martin|Martin.

Entries due July 16, 2019.

NCSEA News

Structural Engineers Association of Colorado

NCSEA Webinars

May 7th

[The Future of Wood Construction-Upcoming Code Changes for 2021 IBC Related to Tall Wood Construction](#)

Lori Koch, P.E.

May 9th

[Session II: Bridge Design – Approximate Methods in the Design of Bridges](#)

Tony Shkurti, Ph.D., S.E., P.E.

May 16th

[Session III: Bridge Design – Seismic Design of Bridges](#)

Tony Shkurti, Ph.D., S.E., P.E.

May 21, 2019

[Insidious Thermal Forces in Steel Structures: What You Need to Know](#)

Barry Arnold, P.E., S.E.

June 4, 2019

[Wind Tunnel Testing for Structural Engineers](#)

Dr. Roy Denoon, Ph.D.

Recorded Webinars can be purchased [here](#).

Advancing the Practice of Structural Engineering **2019 Summit Registration Is Open**

Join us November 12th to 15th for the 2019 Structural Engineering Summit taking place at the Disneyland® Hotel in Anaheim, California. **Registration opened Wednesday, May 1!** The Summit draws the best of the structural engineering field together for high-quality education by expert speakers, a dynamic trade show with over 60 exhibitors, and compelling peer-to-peer networking at a variety of events and receptions.

What's new to the 2019 Summit?

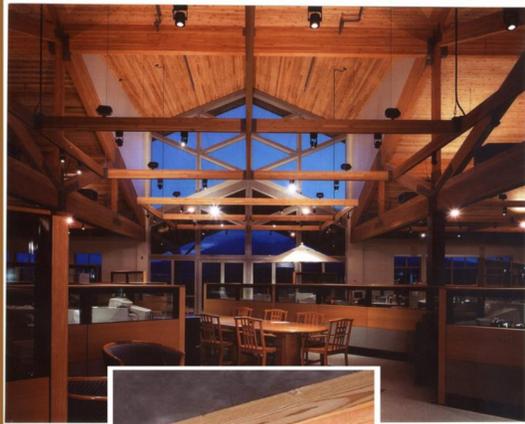
- New Format! Beginning on Tuesday & ending Friday afternoon, the program will offer more education (over 16 hours) and less overlap.
 - [View the Schedule at a Glance here!](#)
- NCSEA has partnered with the American Wood Council, APA–The Engineered Wood Association, and Simpson Strong-Tie to bring the [Timber-Strong Design Build™](#) Competition to the Summit for student teams from across the country to compete.
- [View other networking opportunities.](#)
- New Awards presentation & event!
- Keynote Presentations from Stacy Bartoletti, P.E., S.E.; Melissa Marshall; Avery Bang; Dr. Lucy Jones; and Ashraf Habibullah, S.E.
 - [Learn about our Keynote Speakers!](#)

Visit www.ncsea.com on May 1st to receive this year's best registration price!

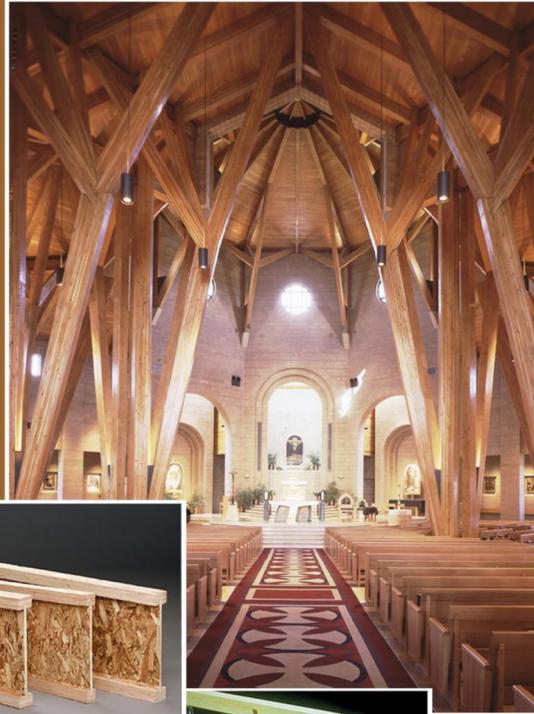
SEAC Fall Seminar Gold Sponsor

Structural Engineers Association of Colorado

STURMAN INDUSTRIES, WOODLAND PARK, CO



OUR LADY OF LORETO CATHOLIC PARISH, FOXFIELD, CO

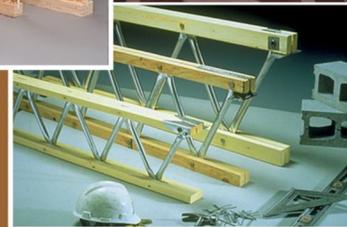


GLULAM BEAM

RED-I. JOIST



RED-I™ JOISTS - LIGHT WEIGHT AND EFFICIENT!



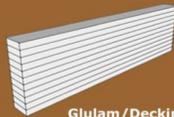
REDBUILT. OPEN-WEB TRUSS

Lam-Wood Systems, Inc.

Structural Wood Products



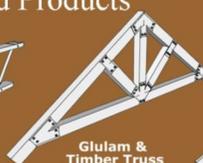
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Glulam/Decking



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Open-Web Truss



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SEAC Fall Seminar Silver Sponsors

Structural Engineers Association of Colorado



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- ✦ Waterproofing
- ✦ Post Tension Tendons
- ✦ Epoxy Injection
- ✦ Urethane Injection
- ✦ Corrosion Mitigation
- ✦ Shoring and Jacking
- ✦ Underpinning
- ✦ Soil Stabilization
- ✦ Structural Welding



www.restruction.com

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COLORADO

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Other Events of Interest

Structural Engineers Association of Colorado

[Colorado Wood Design Symposium - May 16 in Greenwood Village](#)



With a full day of seminars and an industry showcase, the Colorado Wood Design Symposium will pack an informational punch for architects, engineers, contractors, developers, code officials and anyone interested in wood's exciting design possibilities. During the day, access wood design experts, informative seminars, technical information from manufacturers, engineering consultants and industry associations, and exhibits featuring a wide range of structural and finishing products.



COLORADO ASSOCIATION OF
GEOTECHNICAL ENGINEERS

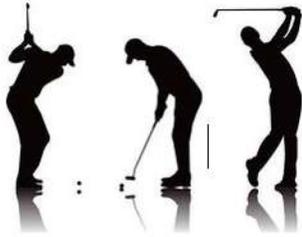


2019 GOLF TOURNAMENT



Come Play the West





**Colorado Association of Geotechnical Engineers,
Structural Engineers Association of Colorado,
American Society of Civil Engineers &
ADSC Rocky Mountain Chapter
~ 2019 Golf Tournament ~
August 22nd, 2019**

Where:

**West Woods Golf Club
6655 Quaker Street
Arvada, Colorado 80007
303-277-8750
<https://www.westwoodsgolf.com>**



Schedule of Events:

- 12:00 to 12:45 p.m. Practice Range
- 1 p.m. Shotgun
- Dinner/Awards/Raffle
Immediately Following Play



West Woods Golf Course is one of Colorado's most newly remodeled golf courses. Located in Arvada, Colorado – West Woods Golf Course is nestled near the foothills of the Front Range and only 15-minutes from downtown Denver and in close proximity to other suburban areas including Littleton, Lakewood, Golden 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.
West Woods Golf Course Map - <https://goo.gl/maps/KYVU9tmgrjR2>**

**CAGE/SEAC/ASCE/ADSC
2019 Golf Tournament
West Woods Golf Course
August 22, 2019
1 p.m. Shotgun Start**

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

\$155 per Golfer ** \$580 per Foursome ** 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:

- \$250 Hole Sponsorships
- \$350 Hole Sponsorship and Staff the Tee Box
- \$250 Mens/Womens Longest Drive Sponsorship
- \$250 Mens/Womens Closest to the Pin Sponsorship
- \$500 Beverage Cart Sponsorship
- \$500 Lunch Sponsorship
- \$500 Awards Sponsorship
- \$750 Cocktail/Social Sponsorship

Payment Option: ****Note** Please remit payment by August 1, 2019**

- 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 441069 Aurora, CO 80044.

Please send my receipt via email to _____

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

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

Newsletter Ads

Structural Engineers Association of Colorado



YOUR ADVERTISEMENT HERE

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

Contact Kim Wyatt at administrator@seacolorado.org or go online to <https://seacolorado.org/seac-shop/>.

Full Page Employment Ad: \$250
Half Page Employment Ad: \$150
Quarter Page Employment Ad: \$100

Full Page Ad: \$350
Half Page Ad: \$250
Quarter Page Ad: \$200

SEAC 2019 Calendar

Structural Engineers Association of Colorado

SEAC Calendar

2019

Important Dates

BOD Meetings - 7:30am at LamWood Systems

Thursday January 2, 2019
Thursday February 7, 2019*
Thursday March 7, 2019
Thursday April 4, 2019*
Thursday May 2, 2019
Thursday June 6, 2019*
Thursday July 11, 2019
Thursday August 1, 2019*
Thursday September 5, 2019
Thursday October 3, 2019*
Thursday November 7, 2019
Thursday December 5, 2019*

* notes conference call only

Business Management - 7:30am at Martin|Martin

Thursday February 14, 2019
Thursday April 11, 2019
Thursday June 13, 2019
Thursday August 8, 2019
Thursday October 10, 2019

General/Annual Meetings - 7:30am

Thursday January 17, 2019 at Lakewood Country Club
Thursday March 21, 2019 at Lakewood Country Club
Thursday May 16, 2019 at Lakewood Country Club
Thursday July 18, 2019 at Lakewood Country Club
Thursday September 19, 2019 at Lakewood Country Club

Fall Conference October 10 at Doubletree Westminster

Annual Meeting November 8 at Colo. History Museum

SEAC Newsletter Deadlines

January issue - December 27th
March issue - February 21st
May issue - April 23rd
July issue - June 23rd
September issue - August 24th
November issue - October 24th

SEAC ENews Deadlines

February issue - January 31st
April issue - March 31st
June issue - May 31st
August issue - July 31st
October issue - September 30th
December issue - November 30th

January

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September

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Structural Engineers Association of Colorado



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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!