



SEAC

GENERAL NOTES

Structural Engineers Association of Colorado Newsletter

SEPTEMBER GENERAL MEETING

Schedule

Mark Your
Calendar
(2009)

General Membership Meetings

(Breakfast 7:30 a.m.)

January 15
March 19
May 21
July 16
September 17

Business Practice Committee Meetings

(Breakfast 7:30 a.m.)

February 12
April 9
June 11
August 13
October 8

SEAC Board of Directors Meetings

(7:30 a.m.)

January 8
February 5
April 1
June 4
August 6
October 1

Fall Seminar October 15

Annual Dinner
Banquet
November 12
6 - 9 p.m.

Complex Sloping Steel Roof Issues

Steel roof framing construction becomes exponentially complex as slopes increase beyond $\frac{1}{4}$ " per foot. Mountain projects almost always fall into this type of construction. Non-repetitive framing, vaulted framing, connections and deck support must be clearly defined in the documents for the construction team since these issues are almost always atypical. Often the General Contractor, Detailer, Fabricator and Erector are faced with incomplete Design Documents and left guessing about the design intent. This paper and presentation will address important considerations for inclusion in the Design Documents for complex sloped steel roof construction. Some areas we will consider are:

1. Top of Steel (underside of deck?), roof slope conflicts, work points & dimensioning of Design Drawings
2. What details are necessary? Conflicts between drawings and sections
3. Required deck supports and placement of the supporting structure beneath
4. Open web joist issues
5. Connections
6. Snow fence & safety tie-off considerations
7. Specification & Design Drawing conflicts
8. Pre-detailing and Pre-construction Meetings

This paper was prepared by the SEAC Steel Liaison Committee (names listed to the right), a coalition of Front Range Fabricators, Detailers, Erectors and Structural Engineers dedicated to improving the steel construction industry.



Dave Henley, P.E., Vulcraft
Tim Hickisch, P.E., Jirsa Hedrick & Associates
Robert Leberer, P.E., Anderson & Hastings
Patrick McManus, S.E., Puma Steel
Justin Mitchell, P.E., LPR Construction Co.
Derek Pedersen, P.E., JVA Consulting Engineers
John Quinn, Zimkor LLC
Brent Ross, Zimkor LLC
Tom Skinner, P.E., JVA Consulting Engineers
Bryan Starr, P.E., S.E., S. A. Miro, Inc.
Tad Toler, Cobalt of Colorado
Maynard Trostel, P.E., Puma Steel
Jules Van de Pas, P.E., S.E., Computerized Structural Design
Scott Ven Deren, Mountain Steel & Supply Co.
David Weaver, Zimmerman Metals, Inc
Bruce Wolfe, P.E. Structural Consultants, (Chairman)
Bill Zimmerman, P.E., Zimkor LLC

Don't Miss Out - September General Meeting

Date: Thurs. September 17, 2009

Speaker(s): Steel Liaison Committee

Location: Renaissance Denver Hotel

3801 Quebec Street

(South of the I-70 Quebec Intersection)

Please e-mail your reservation to
Caryn at: seac@martinmartin.com.
Reservations MUST be made By
Monday, September 14, 2009

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Information for inclusion in the newsletter must be received one month prior to the next general meeting.

Caryn L. Bauer

SEAC Executive Assistant

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President's Message

As we wrap up the summer and head into the fall, there is a lot going on within our organization and related groups. On September 17th, we will have our final General Breakfast Meeting for the year, followed by our half-day Fall Seminar on October 15th, and our Annual Dinner Banquet on November 12th. A very busy time of year for our organization! In addition, there are many opportunities for continuing education through related organizations. We receive notices from these other groups and try to pass along the ones that we feel are worthwhile for our members. There is a flyer for the SEAC Fall Seminar in this newsletter; please RSVP prior to September 15th in order to receive the discount.

In the last newsletter, I wrote about our national organization, NCSEA, and the benefits available such as webinars, conferences, and publications. In this month's newsletter, we have a report from the NCSEA President, so you can get even more detail. I would like to point out that **Ben Nelson**, who is SEAC's representative to NCSEA and has been on their Board of Directors the past two years, has now been nominated for Treasurer of the national group. Good luck Ben!

You may be getting tired of seeing me write about the SEAC website; however, more progress has been made. It may be slow, but we are moving forward! Our website committee consists of **John Malcolm, Caryn Bauer, Greg Arbour, Jeannette Torrents,**

and myself. We are currently working with our website consultant, and plan to launch before the end of the year. We will have the ability to purchase publications and pay membership dues on-line.

At our July General Membership Meeting, we voted on the adoption of a Code of Ethics for our organization. The proposed code was based on the model code distributed by the NCSEA. The Code of Ethics was passed through a voice vote and adopted as a Policy Statement of SEAC. This Code will be posted on the new website. At the May meeting, we also officially approved the Colorado Ground Snow Load Report and Map publication. So we are caught up on administrative business!

As we move towards the end of the year, that also means that our Nominating Committee is gearing up. **Jerry Maly, Dave Houdeshell, and Brent Norris** have agreed to be on this committee this fall. If you have an interest in serving on the board of SEAC or just want to ask questions or make suggestions, please contact one of these individuals or myself. Please consider getting involved in your organization by serving as an officer or director.

Hope to see you all at our upcoming events!

GENERAL NOTES - *ANNOUNCEMENTS*

SEPTEMBER GENERAL MEETING SPONSOR



The Rocky Mountain Steel Construction Association is a region trade organization affiliated with the American Institute of Steel Construction (AISC).

RMSCA is made up of over 80 diverse member firms including fabricators, erectors, detailers, material producers and suppliers, and construction related vendors. Membership is open to any individual or firm in the Rocky Mountain region having an interest in the use of structural steel as a construction material.

RMSCA Objectives and Purpose is to promote and expand the use of structural steel

construction; to bring into closer touch those persons with an interest in the use of structural steel; to disseminate accurate and reliable information concerning technical developments and construction techniques and to encourage continuing development of and adherence to appropriate standards of safety and quality relating to steel structures.

Thank You !

JULY-GENERAL MEETING SPONSOR

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JULY MEETING PHOTOGRAPHS



Mick Muller
July Speaker



SEAC Membership - July Meeting
Another Full House

GENERAL NOTES - ANNOUNCEMENTS

PUBLICATIONS

FOR SALE

2007 COLORADO GROUND SNOW LOAD REPORT & MAP
Price: \$75 (members)

A GUIDE FOR CONSULTING STRUCTURAL ENGINEERING SERVICES: A RECOMMENDED STANDARD OF PRACTICE
Price: \$25 (members) and \$50 (non-members)

2006 SURVEY OF COLORADO BUILDING DEPARTMENTS
UNIT PRICE: \$50.00
CD: \$100.00

Contact Caryn Bauer at:
seac@martinmartin.com for an order form.

In The Spotlight

Please WELCOME our newest members to SEAC!!

Cody Geisendorfer (Professional Member)
Shear Engineering Corporation

Terrence McGovern (Affiliate Member)
Wiss, Janney, Elstner Associates, Inc.

Important

Have you sent in your Registration form for the SEAC Fall Seminar scheduled for October 15, 2009? The Registration Form is included on the next page.

We want your

Suggestions

FUTURE MEETING TOPICS

The Board of Directors would like to invite the membership to make suggestions for possible future meeting speakers and topics. Please send any ideas to:

rhedrick@jirshedrick.com



The latest Membership Roster will be released in late September.



Construction Documents: Where Do We Stand?

SEAC - 2009 FALL SEMINAR
THURSDAY, OCTOBER 15, 2009

LOCATION

Renaissance Denver Hotel
3801 Quebec Street
Denver, CO 80207

AGENDA

7:30-8:15 - Breakfast

8:15 - 12:00 - Seminar (Breaks
with Coffee/Tea included)

Everyone is encouraged to
stay and eat lunch in the
restaurant for networking
(lunch cost is "on your own")

COST:

\$60 - Payment Received By
Sept. 15, 2009

\$75 - After Sept. 15, 2009

\$40 - Students & Those
Unemployed

4.0 Professional Hours
(equivalent to 0.4 CEU's) are
awarded when attending this
seminar. Certificate available
day of Seminar.

This is a half day event for the education of young engineers and refreshing the perspective of engineers at all levels. The conference will feature three panels, each discussing different perspectives on the use of structural construction documents and SEAC's Recommended Standard of Practice.

PLAN REVIEWERS PANEL:

Representatives from local Building Departments and independent plan review firms will discuss the process that plan examiners use in permit reviews and a "Top Ten List" of items that are the most common cause of plan check corrections.

CONTRACTORS PANEL:

Representatives from local general contractors and major subcontractors will discuss topics concerning the builder's use and interpretation of structural documents, and a "Top Ten List" of items that frequently generate RFI's, as well as potential techniques to avoid them. The discussion will also address the differing roles of Contractor's Engineer versus Engineer-of-Record, as they relate to subcontractor - engineered elements.

SEAC PANEL:

SEAC Panel on the adopted "Guide for Consulting Structural Engineering Services in Colorado, A Recommended Standard of Practice". This panel will discuss the issues raised in the first two panels with the goal to provide insight into SEAC's Recommended Standard of Practice, to provide guidance for the Structural Engineer to strike an appropriate balance in fulfilling the needs of project owners, clients, contractors, and code officials.

**MAKE CHECKS PAYABLE
TO SEAC. MAIL CHECK &
THIS FORM TO:**

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Company Name:

Phone No:

Names of Attendees:

Fee Amount

TOTAL

A Report from the President



President
Robert Paullus

In a year that will long be remembered for a severe recession, bankruptcies, foreclosures, unethical business practices, and unprecedented deficit spending, I am pleased to report that NCSEA is on firm financial footing and continues to operate within budget. Your NCSEA staff has worked exceedingly hard to control spending while continuing to maintain services and activities to promote and enhance structural engineering. In addition, your board of directors has adopted a new conflict of interest policy to ensure that NCSEA does not suffer from the conflicts of interest that have plagued other organizations. NCSEA efforts continue to be directed toward strengthening individual member organizations, enhancing the influence and effectiveness of committees, and finding new ways to enhance the profession of structural engineering.

It appears that this year will see the first statewide association in Pennsylvania, where the Delaware Valley Association of Structural Engineers (DVASE) has historically been the only chapter in the area. At the same time, Wisconsin seems poised to become the newest member organization, having worked throughout the year to establish leadership and member interest. Other states are continuing to add chapters, particularly in the northeast, to provide more access to their members.

Committee work continues to be the life blood of NCSEA. NCSEA has nine active committees, each one listed on the NCSEA website, along with a brief description of the committee's purpose and a volunteer application form, should you be so inclined. In order to maximize participation and minimize costs, several of our committees have taken advantage of NCSEA's web-based meeting capability, which was made available for the first time this year. Cost savings include not only direct meeting costs, but also personal costs to participants and their companies, due to lost time away from the office. We expect the use of this tool to grow in the coming years as technology continues to advance in this area.

I would like to highlight a few things that our committees have been working on this year: We are excited to see Sarah McClendon and Bob Durfee provide new leadership as co-chairs of the *Advocacy Committee*. Likewise, Scott Nacheman is the new chair of the *SEER Committee* and is leading efforts in organizing emergency response, as well as working with member organizations to get all states to enact some type of Good Samaritan legislation to protect volunteer responders in times of disaster. Our *Code Advisory Committee* stepped up efforts and met ICC's new June 1 deadline for submitting proposals for the 2012 IBC and IEBC. In addition, Don Scott of the SEAW has agreed to head a new *Wind Subcommittee*. As wind design becomes more of a focus for insurance companies and code enforcement agencies, more practical review of wind design standards should help provide more reasonable design requirements in codes and reference standards. The *Licensing Committee* continues to make steady progress in promoting separate licensure. Within the past year, laws changing structural title acts to partial practice acts went into effect in both Washington and Utah. Florida appears to be moving toward consideration of separate licensure within the next two years, and member organizations in other states report that legislatures in their states are showing signs of being more receptive to discussing separate licensure laws for structural engineers. NCEES is helping to pave the way by continuing to update its Model Law Structural Engineer designation, as well as reformatting the Structures I and II exams to form a single 16-hour exam, given in two modules. Successfully passing both modules will be required for obtaining either an SE or PE designation. (Currently, states that do not have separate SE licensure only require passing the Structures I exam for licensure as a PE.) Just as more attention is now being given to licensing exams, more and more states are requiring continuing education for license renewal. Providing quality continuing education materials and learning opportunities is a primary focus for NCSEA. During this 2008/2009 year, the number of NCSEA web-cast seminars has grown to twenty, including a six part series on masonry design. Both our *Continuing Education Committee* and our *Publications Committee* continue to seek better ways to provide the quality continuing education structural engineers need, in order to keep abreast of ever-changing technology and design methods. This year NCSEA published its first design guide, the "Guide to the Design of Diaphragms, Chords and Collectors", which became available in May and is already in its second printing; and its companion seminar has already been given in more than 25 cities across the country. Currently, two more books are planned, covering topics that have not been adequately addressed for the practicing structural engineer. NCSEA's goal in publishing books and design guides is to provide practical, real-world examples and methods that can be used by engineers on a daily basis. In order to continue to meet this goal, we invite your input and ideas for topics and publication types.

NCSEA's Winter Institute is another major event that our organization hosts each year, to provide learning focused on a particular design theme. This year's Institute in Miami drew a near record number of registrants, quite an accomplishment in a less-than-stellar economy. Focusing on wind design, the seminars were combined with a tour of RWDI's wind tunnel facility and gave many participants their first opportunity to observe facilities and processes associated with project-specific, wind tunnel load determination. The 2-day seminar also provided an opportunity for all to interact directly with some of the nation's foremost authorities in wind design. NCSEA's 2010 Winter Institute in San Diego promises to provide similar interaction with seismic experts, as well as a tour of the University of California San Diego (UCSD) shake table facility. The opportunity for attendees to tour some of our nation's top research and testing facilities is what sets the NCSEA Winter Institute apart from other seminars and conferences.

Finally, NCSEA's culminating activity each year is the annual conference. This year's seventeenth annual conference will be located in Scottsdale, Arizona, hosted by the Structural Engineers Association of Arizona (SEAOA). In addition to a quality set of speakers and seminar topics, there will be the opportunity for attendees to interact with members and leaders of all of our member organizations. Attend the conference and you will be able to offer direct feedback on what NCSEA should be doing to help you as an individual practicing structural engineer, to learn what other member organizations are doing in their states and chapters, to trade ideas, and to help set the course of structural engineering for the future.