



CONNECTIONS

September 2012 Volume 13 Issue 1

Newsletter of the
Structural Engineers
Association of Oregon

SEAO

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Upcoming SEAO Meetings and Events:

Wednesday, September 26, 2012: SEAO Dinner Meeting

Speaker: Lane P. Jobe, PE, SE, Principal at Miller Consulting Engineers, Inc.

Topic: Masonry Design Using TMS 402-11 Design Manual.

Location/Time: Governor Hotel, Second Floor Library, Portland / 5:30 pm check-in & social, 6:00 pm dinner; 7:00 pm program.

See page 3 for more information

There will be a Life Member Presentation and New Board Member Installation as well.

Tuesday, October 30, 2012: SEAO Lunch Meeting

Speakers: Steve Pryor, PE, SE, International Director of Building Systems at Simpson Strong-Tie

Topic: Seismic and Moment Frame Testing at the Simpson Strong-Tie Tye Gilb Lab

Location/Time: Governor Hotel, Portland / 11:30 am check-in, 12:00 pm lunch; 12:15 pm program.

Sponsors: Available for sponsorship.

Thursday, November 1, 2012: OSU Student Chapter Speaker Meeting-Open to All

Speaker: Sam Rahani, President of the Structural Engineering Institute (SEI)

Location/Time: Kearney Hall, Room 312, Oregon State University, Corvallis, OR/6 pm to 7 pm

Topic: A discussion of the state of affairs in the SEI (background, current activities, and future initiatives) and Structural Engineering Licensure.

Meeting is open to all and refreshments will be provided.

See attached brochure on page 15 for additional information.

Thursday, November 8, 2012: SEAO Fall Seminar

Topic: ACI 318-11 Anchor Design

Speakers: SK Ghosh and Susan Dowty of S.K. Ghosh Associates, Inc.

Location: Sheraton Portland Airport Hotel & Conference Center, 8235 NE Airport Way, Portland, OR

Time: Registration opens at 7 am, Seminar from 8 am to 5 pm

See pages 11 and 12 for additional information.

2012 – 2013 SEAO Board

We are pleased to announce the following new board members for the 2012-2013 term:

President:	Aaron Burkhardt	Secretary:	Jennifer Eggers
Vice President:	Amit Kumar	Director:	Don Ellsworth (2nd year)
Treasurer:	Shelly Duquette		Jason Thompson (1st year)
		Past President:	Ed Quesenberry

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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.

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BOARD OF DIRECTORS

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PRESIDENT'S MESSAGE: MANY HANDS, MANY THANKS

By: Ed Quesenberry, P.E., S.E.



"Many hands make light work" was a saying that I used to hate hearing my dad say. It generally meant that instead of going off and playing with my friends, I was going to be stuck in the yard pulling weeds, raking leaves or some other type of torturous drudgery. As it typically goes with fathers and sons, I have grown to fully comprehend what a powerful piece of wisdom this really is. I love it so much, I share it with my kids regularly, much to their chagrin.

When I look back at my year as SEAO President, my dad's wisdom once again rings true; the countless hours of volunteer work performed by many of our members made "light work" of the tasks and challenges that SEAO was faced with in the last 12 months. It was a little daunting in the beginning, mostly due to the bar being set so high by Trent Nagele the previous year. Even as Past President, Trent's diligence and commitment to our organization are a large part of the successes we have seen this year, and I personally would not have made it through my term as smoothly without his guidance and counsel. As I have said many times this year, "Trent, you're the man!"

Another person that stands out to me as playing a pivotal role in SEAO's year to year operation is Jane Ellsworth. Jane is the common thread that stitches all of the different Boards, SEAO annual events and yearly duties together and helps to ensure that we have continuity and consistency in the way SEAO is operated. Honestly, I would have been pretty lost without Jane's patience, reminders, and support. Her behind-the-scenes efforts are not often heralded, but Jane, SEAO benefits greatly from your work, and I thank you for everything you do.

The Board this year was great to work with; always at the ready to offer their opinions, debate the issues constructively, make well-informed decisions, and most importantly, to eat the smoked salmon I prepared and pretend they liked it. Aaron, Michelle, Kevin, Don and Norm, thanks for all of your dedication and

support over the last year, and I look forward to working with those of you that will be continuing on the Board next year.

A big part of the "many hands" are all of the committee chairs and their committees, who have spent countless hours assembling the newsletter, reviewing code changes, getting speakers and sponsors for our meetings, planning our golf tournament, seminars and conferences, motivating and involving our younger members, running our scholarship foundation, and being great examples of the spirit of volunteerism. Without you, SEAO would have failed miserably at accomplishing its mission and fulfilling its obligation to its members this last year.

What started out as a daunting undertaking has turned out to be a fun, exciting journey with a bunch of great people. I have served SEAO in various capacities over the last 15 years, so I know first hand that being involved in the organization does not have to mean a huge commitment of time. While SEAO manages to get the job done with those that step forward each year, the organization's strength of purpose and mission can be furthered at a greater pace and with greater ease if more people step up and get involved. I encourage each one of you reading this to find some way to contribute to or be involved with SEAO this coming year. This may include as little as attending one or two more monthly meetings than you did last year, or as much as finding a committee that interests you and joining it. Thanks to all those who have helped me and the Presidents before me, SEAO has quite a bit of momentum, and with your hands in the mix, it can continue to build toward the future.



SEAO Committees

Technical

Doug Meltzer
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Seismic

Jason Thompson
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Wind

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Conferences

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Young Member Forum

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Seminars

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MASER, OBOA

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ron@millers-se.com

SEPTEMBER DINNER MEETING ANNOUNCEMENT WEDNESDAY, SEPTEMBER 26, 2012

Topic: The presentation this month will summarize the important changes to the *Building Code Requirements for Masonry Structures* (TMS 402-11/ACI 530-11/ASCE 5-11) and *Specification for Masonry Structures* (TMS 602-11/ACI 530.1-11/ASCE 6-11) related to masonry design as referenced in the 2012 *International Building Code*, (IBC).

Topics presented will include the removal of the historical one-third increase in allowable stresses for wind and seismic loading when using allowable stress design (ASD), new Deep Beam Provisions, the *Direct Design Handbook for Masonry Structures*, newly defined terms within the masonry building code, masonry infill, new modifications to lap splices with confining reinforcement, Special Reinforced Masonry Shear wall hook bar requirements including the *Masonry Society Interpretation* for design, as well as modifications to shear design for both beams and shear walls. Example problems comparing the shear provisions of the 2008 TMS to the updated shear provisions of the 2011 TMS will be discussed.

Speaker: Lane P. Jobe, PE, SE

As a principal of Miller Consulting Engineers, Inc., Lane Jobe is a licensed structural engineer and has been involved in structural engineering since 1996. Lane's breadth of experience includes seismic pipe bracing, foundation designs for traffic poles, steel moment frame designs, historic building retrofits, seismic roof upgrades, and investigations that require analysis and retrofits employing recognized standards such as FEMA 178 and ASCE-31.

Lane participates as an active member in various professional organizations focused on improving existing building codes and standards. His efforts include working as an active member with SEAO, helping to establish guidelines for special inspection requirements used throughout the state of Oregon and conducting structural engineering trial designs with The Masonry Society for the *Direct Design Handbook for Masonry Structures*, a current masonry design standard.



Education: Bachelor of Science-Civil Engineering, Portland State University, Portland, Oregon (1996)

Registrations:

- Oregon Civil & Structural Licenses
- California Civil & Structural Licenses
- Hawaii Civil License
- Montana Civil License
- Washington State Civil & Structural License

Professional Affiliations:

- American Institute of Steel Construction (AISC)
- American Society of Civil Engineers (ASCE)
- Steel Framing Alliance (SFA)
- Structural Engineers Association of Oregon (SEAO)
- The Masonry Society (TMS)

Location and Times:

Governor Hotel, 2nd Floor, Library
614 SW 11th Ave, Portland OR

The MAX Light Rail System stops just a block away from the hotel (The Galleria stop) and Portland's Streetcar stops right outside the hotel. Smart Park is located at SW 10th and Yamhill about two blocks from the hotel.

Check-in: 5:30 pm

Dinner: 6:00 pm

Life Member Presentation to Brad Moyes & Installation of New Board Members: 6:30 pm

Program: 7:00 pm

Cost: Dinner & Program

- \$32 – Pre-paid Members
- \$40 – Pre-paid Non-members
- \$18 – Students

Cost: Videocast Locations

- \$20 – Members
- \$33 – Non-members
- \$13 – Students

Videocast Venues:

Corvallis: CH2M Hill, 1100 NE Circle Blvd., Suite 300, (541)752-4271

Eugene: Artisan Engineering, 325 West 13th Avenue, (541)338-9488

Reservations:

Pre-registration required. **You can register and pay online at www.seao.org before noon, Friday, September 21.** You can also register with Michelle Chavez at Miller Consulting via phone at (503) 246-1250 or via Email: michelle@millers-se.com. Note: No-shows will be billed.

PDH Credit: One PDH has been recommended for this program.

2012 SEO/OACI GOLF TOURNAMENT SUMMARY

By: Melissa McFeron, Chair of Golf Committee

On July 18, many of your fellow engineers gathered at Stone Creek Golf Course to take part in the 2012 SEO/OACI Golf Tournament. This year we partnered with the Oregon Chapter of the America Concrete Institute to share in the festivities. Each participant has the opportunity of winning \$10,000 cash with a hole-in-one. Although no one was able to walk away with the prize this year, the Golf Committee has great hopes that it could happen next year. Although the field of 84 golfers was down from previous years, the tournament was still a success.

Please see the list below for the winners of the tournament and the raffle. We hope to see you all next year!

Golf Tournament Results

1st place - 55

Jane Ellsworth

Tyler Phiher

Steve Speckman

2nd place – 56 (two eagles)

Jacob Struck

Rob Losch

Brian Yoakum

Randy Brown

3rd place – 56 (one eagle)

Jeff Schroeder

Jeff Schmidt

Mike Parkin

Roger Peterson

Winners of the SEO Trophy (must have 3 registered SEO members in your group)

Jerry Estoup

Steve Pierson

Peder Golberg

Mike Hagerty

Raffle Winners

42" Flat Screen TV – Kevin McCormick

Ipad – Bill Galaway

Kindle Fire – Scott Cotton

Salmon Fishing Trip for Two – Jody McGowan

Golf 3-wheeled Push Cart – Greg Wong

Putter – Brad Esler

Putter – Fred Parish

Binoculars – Dale Peterson

Binoculars – Bill Galaway

There were several more gift cards and other items in the raffle. The day was a big success and we hope to have more participates next year. Please plan to come out and enjoy the day with your fellow engineers in July!



“Thank You”

to the following sponsors for making the Golf Tournament possible:

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Dayton Superior
Five Star Products
ITW Red Head
W.R. Meadows
Insulfoam
Raeco Specialty Cements
Construction Services/ADEKA Waterstops
CalPortland

Mayes Testing
Quikrete

provided the keg of beer at dinner
provided the on-course beverage tickets

(Continued on page 10)

SEAO SCHOLARSHIP FOUNDATION WINNERS

By: SEAO SF Chair Greg Munsell

The Structural Engineers Association of Oregon is pleased to announce our scholarship recipients for the 2012-2013 academic year. The SEAO Scholarship Foundation Board dispersed a total of \$8500 this year. \$2,000 scholarships were awarded to Sean Hinchcliffe, Matthew Nicholson and Avi Singh. The \$2,500 Don Kramer Memorial Scholarship was awarded to Peter Kahn. Once again, the generosity of our membership, combined with the success of the annual Trade Show continues to keep our scholarship program strong and allow this level of giving. Thank you to all our donors, the Trade Show vendors and the SEAO membership for your support of the Foundation.

Our Don Kramer Memorial Scholarship winner, **Peter Kahn**, is pursuing a Masters Degree at Portland State University, where he has an overall GPA of 3.55 and engineering GPA of 3.62. Last summer he was an engineering intern for Bridges to Prosperity (B2P), a non-profit specializing in the design and construction of footbridges in developing regions of the world. His work included time in Ethiopia co-designing slope stability at a proposed bridge site and assessing nine previous bridge projects. Upon his return, Peter founded the PSU Chapter of B2P and became its first president. B2P-PSU has already grown to over a dozen participants.

Sean Hinchcliffe is a Senior at the Oregon Institute of Technology pursuing a Bachelors Degree in Civil Engineering. Sean has an overall GPA of 3.94 and an engineering GPA of 3.98. Sean is currently participating in the Civil Engineering Cooperative Program (CECOP) at OIT which allows students to go on two six-month internships before graduating. Last year he interned with the City of Portland and is currently interning with ATI Wah Chang. Sean also participates in the OIT Chapter of ASCE. Sean plans to pursue an advanced degree in structural engineering after graduating from OIT.



Avi Singh is pursuing a Masters Degree at Portland State University, where he has an overall GPA of 3.54 and engineering GPA of 3.54. He has been participating with SEAO and the Oregon Section of ASCE in addition to being active with the PSU student chapter of ASCE and helping to start the newly formed B2P-PSU. Avi is also a regular volunteer with the Oregon Food Bank. Avi is very interested in the seismic performance of bridges and his goal is a research project modeling an existing bridge in 3D and making recommendations for improvements.

Matthew Nicholson is a Senior at the Oregon Institute of Technology pursuing a Bachelors Degree in Civil Engineering. Matthew has an overall GPA of 3.38 and an engineering GPA of 3.38. He also plans to pursue a Masters Degree after completing his undergraduate degree. Matthew has been active in the OIT Chapter of ASCE and Engineers Without Borders. He has also worked in the construction trades as a volunteer in Mexico building concrete masonry buildings, as a carpenter in Portland building custom homes and as a foreman in Medford working on a multi-story steel structure.



SEAO will invite the scholarship recipients to the September Dinner Meeting. Please attend so you can meet those recipients that are able to attend. In addition to the scholarship, they will each receive a one-year student membership to SEAO.

Thank you again to all of our members and friends who have donated to the Scholarship Foundation. Also, we would like to thank the Scholarship Committee for their help in reviewing and scoring the applications: Chad Kilian (Black & Veatch), Brad Larsen (OBEC Consulting Engineers), and Dominic Webber (BergerABAM).

WELCOME NEW MEMBERS!

August:

Ken Rasmussen, Modern Building Systems

Michael Roberts, BSCE

Matthew Tobolski, Tobolski Watkins Engineering

Ryan Baker, Group MacKenzie

COMMITTEE UPDATE

Wind Committee:

The State of Oregon's Building Codes Division (BCD) has been in contact with SEAO's Seismic Committee and Wind Committee regarding said portions of the code found within ASCE 7-10. BCD is essentially looking for a guide to help compare ASCE 7-05 to 7-10 (and effectively the 2010 OSSC's development toward the 2014 OSSC) and both committees have begun this process.

The Wind Committee just sent out a first draft of its comparative review in mid-August. The review by the Wind Committee includes recommendations and these recommendations usually lean toward an "adopt as is" stance. Though our beloved Chapter 6 has swollen into six separate chapters AND wind speeds and their respective maps have been completely overhauled, most formulas, design approaches, and tables remain familiar. There are known issues that ASCE 7-10 carries over from ASCE 7-05 but, aside from rewriting the ASCE 7 standard, such issues might best be continued to be overlooked for the current code update--as they were for ASCE 7-10 and by its authors. Our committee is not a large one (myself and Cameron Swearengin with BMGP in Salem) and I've contacted a few others like Ed Quesenberry and Trent Nagele to please add their reviews into the mix. We would greatly appreciate any other comments from the membership. The comparison that has been sent to BCD has been conveyed as a DRAFT and it was communicated that another round of comments would come. Additionally, feedback on the DRAFT review from BCD was encouraged.



Additionally, there were some issues with a link to a full scale wind test performed by the Insurance Institute for Business and Home Safety (IBHS). We hope to find a new and related link to an amazing video to soon replace the previous link.

Please contact Jim Riemenschneider at jimr@vlmk.com if you are interested in helping out with the Wind Committee or if you have any feedback on ASCE 7-10 for wind design.

MEMBER OF THE MONTH



The SEAO Member of the Month for September, 2012, is Kevin McCormick. Kevin chaired the SEA Northwest Conference Committee and led the effort of planning and executing the Conference at Kah-Nee-Ta Resort in July. This year's conference was the fourth that he has taken charge of for SEAO, and it was a very successful event. All those that attended would agree that the conference was educational, fun and relaxing, and we have Kevin's steadfast leadership and experience to thank for it. Kevin was able to restore the family atmosphere to the conference with his foresight to hold the event during the summer at a resort. As a result, there were spouses and kids in attendance, giving the conference a very refreshing feel. Kevin also brought back the water event, which thanks to his clever manipulation, SEAO won easily (and we got a really big trophy!).

When he is not spending countless hours planning SEAO events, Kevin is Managing Principal at Miller Consulting Engineers in Portland. He has been with Miller since 1989 and an SEAO member since 1990, so he is obviously an individual that takes commitment seriously. In his spare time, he enjoys playing golf, cheering his kids on in sports, and has developed quite a knack for painting his house.

So, if you see Kevin around town or at an SEAO event, make sure you thank him for his continued contribution to the organization and for doing such a great job on the Northwest Conference.

NEW LIFE MEMBER

Brad Moyes, PE, SE, LEED AP

Principal | Structural Engineering Manager at KPFF Consulting Engineers



Professionally, Brad has a wealth of experience in numerous project types which has made him an excellent design engineer and skilled manager. Brad perceives buildings as living objects that interact with people and serve many generations. He finds medical and education projects particularly gratifying as they benefit students and offer a critical service to society. Brad has been with KPFF Portland since its inception in 1974. Brad's judgment and insight supports his current role on the Board of the National Council of Structural Engineers Associations.

Brad has always been a strong supporter of SEAO. He has served SEAO in various capacities throughout the years, including President in 2002-2003. He has volunteered many hours to our organization.

On a personal note, Brad is the guy to ask if you have a question on Oregon wines. He and his wife Jeanette are wine club members at five wineries and can frequently be seen driving the back roads of wine country on weekends.

Brad is also an avid cyclist. He has ridden Cycle Oregon nine times and the Cycle Oregon Weekend ride the last five years. The weekend rides include Jeanette on the back of their tandem bike giving encouragement or directions.

He is a proud father and soon to be grandfather. His daughter, Mimi, a nurse at Emanuel, is expecting in October. His son, Mark, is an engineer with Freightliner in Portland.

Education:

BS, Civil Engineering, Oregon State University

Registrations:

Professional Structural Engineer – OR, CA, WA, ID, RI, NE

Professional Civil Engineer – CA

Professional Engineer – CO, DE, FL, IA, IN, KS, LA, MN, NC, ND,

NH, SC, SD, TN, VT, WI, WV

Affiliations:

- American Concrete Institute, Past President OR Chapter
- American Institute of Steel Construction
- American Society of Civil Engineers
- American Society of Testing and Materials
- Construction Specification Institute
- National Council of Structural Engineering Associations, Board Member
- Structural Engineers Association of OR, Past President



Brad Moyes (center) with Grant Davis and Art Johnson at KPFF— The Good Old Days

SEAO wishes to show their appreciation of all Brad's efforts past, present and future by bestowing the title of Life Member upon Brad at this month's meeting. Thank you, Brad, for all you do for the benefit of the membership and congratulations.

LIVE LOAD REDUCTION Q & A

2009 IBC Sections 1607.9 and 1607.11 – Live Load Reductions Q&A

In 2012-13, the SEAO Newsletter will reproduce parts of the 2009 IBC Q&A – Structural Provisions, which is a compilation of questions on the structural provisions of the code and answers provided by International Code Council staff. Upcoming issues will include additional Q&A's on the 2009 IBC.

1607.9 Reduction in live loads. Except for uniform live loads at roofs, all other minimum uniformly distributed live loads, L_o , in Table 1607.1 are permitted to be reduced in accordance with Section 1607.9.1 or 1607.9.2. Roof uniform live loads, other than special purpose roofs of Section 1607.11.2.2, are permitted to be reduced in accordance with Section 1607.11.2. Roof uniform live loads of special purpose roofs are permitted to be reduced in accordance with Section 1607.9.1 or 1607.9.2.

1607.9.1.4 Group A occupancies. Live loads of 100 psf and at areas where fixed seats are located shall not be reduced in Group A occupancies.

1607.9.1.5 Roof members. Live loads of 100 psf or less shall not be reduced for roof members except as specified in Section 1607.11.2.

1607.9.2 Alternate floor live load reduction. As an alternative to Section 1607.9.1, floor live loads are permitted to be reduced in accordance with the following provisions. Such reductions shall apply to slab systems, beams, girders, columns, piers, walls and foundations.

1. A reduction shall not be permitted in Group A occupancies.

1607.11.2 Reduction in roof live loads. The minimum uniformly distributed live loads of roofs and marquees, L_o , in Table 1607.1 are permitted to be reduced in accordance with Section 1607.11.2.1 or 1607.11.2.2.

1607.11.2.2 Special-purpose roofs. Roofs used for promenade purposes, roof gardens, assembly purposes or other special purposes, and marquees, shall be designed for a minimum live load, L_o , as specified in Table 1607.1. Such live loads are permitted to be reduced in accordance with Section 1607.9. Live loads of 100 psf or more at areas of roofs classified as Group A occupancies shall not be reduced.

Q: I have a little trouble understanding the relationship of 2009 IBC Sections 1607.9, 1607.11.2.2, 1607.9.1.4, 1607.9.1.5, and the first item of Section 1607.9.2. If I have a roof assembly area with more than 50 fixed seats, I would call it an A-3 Occupancy and assign 60 psf as the live load. Sections 1607.9 and 1607.11.2.2 will send me to sections 1607.9.1 or 1607.9.2 for live load reduction. However, Sections 1607.9.1.4 and 1607.9.1.5 and the first item of Section 1607.9.2 prohibit me from any live load reduction. When I try an A-Occupancy with 100 psf or more roof live load, Section 1607.11.2.2 says no reduction is allowed. It appears that no matter if the load is more or less than 100 psf or exactly 100 psf, A-Occupancy roof live load cannot be reduced. Instead of simply stating so, Section 1607.11.2.2 says A-Occupancy roof live load 100 psf or more cannot be reduced. When it's less than 100 psf, I

should go to Sections 1607.9.1 or 1607.9.2 (sounds like reduction is allowed), yet both places say no reduction is allowed. Is this correct?

A: Yes. The requirements in the 2009 IBC are summarized as follows:

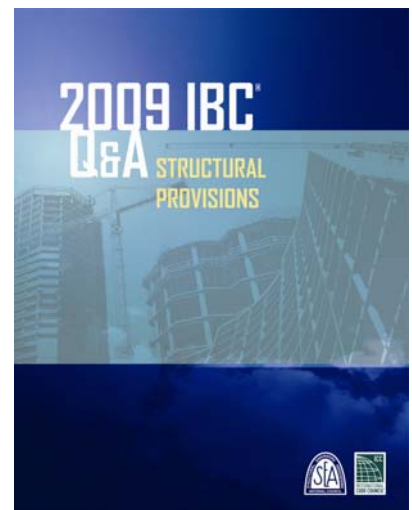
- Live loads of 100 psf in Group A assembly occupancies cannot be reduced (Section 1607.9.1.4)
- Live loads in fixed seating areas of Group A assembly occupancies cannot be reduced (Section 1607.9.1.4)
- Live load reduction by the alternative reduction method is not permitted in Group A assembly occupancies (Section 1607.9.2)
- Roof live loads of 100 psf or more in Group A assembly occupancies cannot be reduced (Section 1607.11.2.2)
- Roof live loads of 100 psf or less can be reduced in accordance with Section 1607.11.2 except as noted in Section 1607.11.2.2 for in Group A assembly occupancies (Section 1607.9.1.5)

This situation with live load reduction on occupiable roof loads has been simplified in the 2012 IBC. It requires that areas of roofs that are occupiable, such as roof gardens, marquees, or assembly areas are permitted to have the uniformly distributed live loads reduced in accordance with Section 1607.10.

[Q&A 16-117]

This question and answer are from the *2009 IBC Q&A Structural Provisions*. The question is a commonly asked question which arises in the application of code provisions during design and plan review. The IBC section is reprinted for easy reference, followed by the question and answer pertaining to that section. The *2009 IBC Q&A Structural Provisions* is available at iccsafe.org/store. Use ID # 4003S09.

The applications published herein are those of the ICC staff and are not binding on the authority having jurisdiction. The authority having jurisdiction has the ultimate responsibility for rendering interpretations of the code.



BUILDING AT RISK SUMMIT 2012

BUILDINGS AT RISK

EARTHQUAKE LOSS REDUCTION SUMMIT

A PRECURSOR TO THE GREAT CALIFORNIA SHAKEOUT

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FOR: BUILDING OFFICIALS, BUILDING OWNERS, STRUCTURAL ENGINEERS, ARCHITECTS, POLICY MAKERS, FIRST RESPONDERS, CONTRACTORS, DEVELOPERS, AND BUILDING DESIGN PROFESSIONALS

LOS ANGELES, CA
OCTOBER 11, 2012

KEYNOTE SPEAKER:
DR. LUCILE M. JONES, USGS

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CONTACT SEAOSC@SEAOSC.ORG

STRENGTHEN SoCal

- UPDATE YOUR UNDERSTANDING OF SEISMIC RISK, VULNERABLE BUILDINGS, AND BUILDING STRENGTHENING
- CREATE MORE RESILIENT AND SUSTAINABLE COMMUNITIES BY EMPOWERING THEM TO TAKE ACTION

FOR MORE INFORMATION VISIT:
www.SEAOSC.org

The Structural Engineers Association of Southern California (SEAOSC) will again be hosting a major earthquake loss reduction summit on October 11, 2012, in Los Angeles, California. This is an annual event and is a precursor to the "Great ShakeOut" www.shakeout.org/ event that will be held on October 18, 2012. As you know, there are several types of structures that are at risk and many stakeholders do not know what action can be taken to mitigate this risk.

SEAOSC will be partnering again with other earthquake preparedness organizations in the planning of this event.

The goals for this event are to increase the awareness of seismic risk and the importance of earthquake risk mitigation while highlighting the role of the structural engineer as well as other key stakeholders and their coordinated collaboration. Those that should attend include building officials, architects, building owners, the public, government officials, insurance company representatives, engineers, and police and fire department representatives.

For more information visit SEAOSC's link: http://www.seaosc.org/events_bar.cfm.

STRUCTURAL MASONRY DESIGN WEBINAR

The Northwest Concrete Masonry Association will be conducting a three-session webinar focusing on the design of reinforced concrete masonry construction. Both working stress and strength design methods of the 2009 IBC and 2008 MSJC codes will be covered.

The updated webinar will cover design examples of masonry building elements by manual and automated methods. It is aimed at practicing engineers who want to learn how to design masonry in a practical and efficient manner. Continuing education credit (up to 7.5 PDH) can be earned. Certificates of attendance will be issued.



Webinar dates: **October 11, October 16 and October 18, 2012**
Time: Each session will run from 4:00 pm to 6:00 pm Pacific Time

See attached brochure for additional information, visit the web site at www.nwcma.org, or contact the Northwest Concrete Masonry Association directly at (425)697-5298.

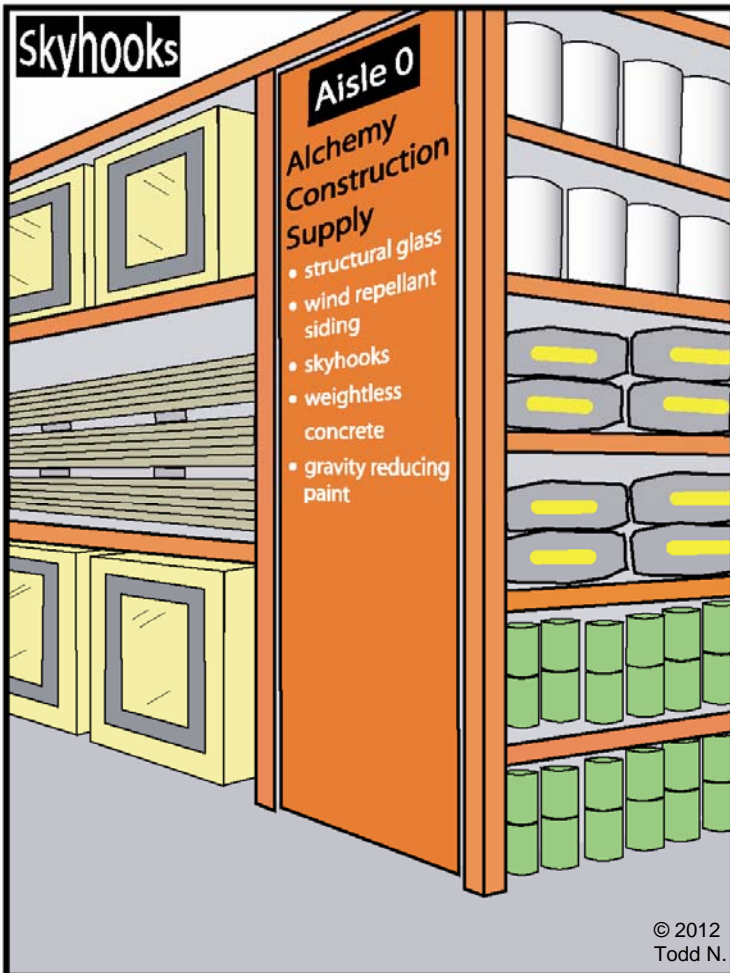
EMPLOYMENT OPPORTUNITY

STRUCTURAL ENGINEER (VANCOUVER, WASHINGTON)

Kramer Gehlen & Associates, Inc. (KGA), Vancouver, Washington, is seeking a Structural Engineer who has two to five years of related experience. A Master's degree in Civil Engineering with a structural emphasis is preferred, but candidates with a Bachelor's degree will be considered.

Responsibilities include performing engineering calculations and performing construction administration duties. The ideal candidate will have a working knowledge of codes and engineering software. Experience in the use of Revit Structures is highly desirable.

KGA is involved in a wide range of projects. We offer a flexible and family-friendly working environment, and a competitive compensation and benefits package. To apply, please email your cover letter and resume to: debbiew@kramer-gehlen.com KGA is an Equal Opportunity Employer.



If only...

GOLF TOURNAMENT SUMMARY

(Continued from page 4)

A few additional foursomes are pictured below.



Please consider attending next summer's event and joining in on the fun!

SEAO ACI 318-11 Anchor Design – Seminar Other ACI 318 Significant Changes & (3) ASCE 7 Misunderstood Provisions

Hosted by the Structural Engineers Association of Oregon (SEAO)

Date: Thursday, November 8, 2012 – 8:00 AM to 5:00 PM

Registration Opens at 7:00 AM (Lunch Included)

Cost: \$200 SEAO Member (Includes Class Notes) \$250 Non-member
\$25 Late Fee (if registration received after Nov. 1, 2012)
Students \$65 (Includes Notes) – Must show current student ID
No refunds after 12:00 noon Thursday, Nov. 1, 2012
Register early; Maximum 100 people **Program to be Taped by Limelight Video**

Location: Sheraton Portland Airport 8235 NE Airport Way
Hotel and Conference Center Portland, Oregon
(503) 249-7606

Continuing Education: SEAO has recommended this seminar for 7 PDHs
(5 PDHs for Viewing Video)

Speakers: S. K. Ghosh, Ph.D., President, S. K. Ghosh Associates Inc., 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.

Susan Dowty, SE, Project Manager, S. K. Ghosh Associates Inc., is the past Structural Secretariat for the IBC and consultant responsible for reorganizing the ASCE 7-05 seismic provisions. Ms. Dowty was extensively involved in code development during her 14-year employment with ICBO.

IMPROVED ANCHOR DESIGN PROVISIONS IN ACI 318-11

Ever since Appendix D, Anchoring to Concrete, was introduced in the 2002 edition of ACI 318, the design of anchors subject to seismic forces in structures assigned to Seismic Design Category (SDC) C and above has been problematic. Real relief has finally been provided in ACI 318-11. This portion of the seminar will discuss the significant revisions to the seismic design provisions for anchorage to concrete, including

- 20% rule for invoking seismic design requirements
- ductile anchor check – single anchors and groups
- $8d_b$ stretch length requirement
- options for shear

The other big change in Appendix D of ACI 318-11 is the introduction of design provisions for adhesive anchors. These provisions will be briefly discussed.

SIGNIFICANT CHANGES IN ACI 318-11 OUTSIDE OF APPENDIX D

Significant changes in ACI 318-11 outside of Appendix D, including important changes in Chapter 21, Earthquake-Resistant Structures, will be outlined and discussed. The most significant of these changes is the introduction of a definition and design provisions for wall piers. Wall pier provisions so far were available only in the form of an IBC modification to ACI 318 requirements.

THREE FREQUENTLY MISUNDERSTOOD ASCE 7 PROVISIONS

ASCE 7 provisions related to the following topics have generated many questions from users of the document. Important clarifications will be provided, which should lead to a better understanding of the provisions.

1. Drift Determination and Building Separation
2. Special Seismic Load Combinations
3. R, C_d and Overstrength Factor Values for Horizontal and Vertical Combinations

Questions: Andy Stember at (503) 657-9800

ACI 318-11 Anchor Design Seminar & Signif. Changes

Registration Form

Register Online at www.seao.org or

Send to: SEAO
PO Box 2958
Vancouver, WA 98668
(503) 753-3075

Make Checks Payable to:
SEAO

(503) 214-8142 (fax)

Firm Name: _____

Firm Address: _____

Phone _____

Name of Attendee(s) _____

of Attendee(s) _____ @ \$200.00 / each = \$ _____
(Nonmember \$250.00)

of Late Fees _____ @ \$25.00 / each = \$ _____

of Students _____ @ \$65.00 / each = \$ _____

of Videos _____ @ \$175.00 / each = \$ _____

Total Enclosed = \$ _____

To Register with Visa Or Mastercard go to www.seao.org to register online.



NORTHWEST CONCRETE MASONRY ASSOCIATION PRESENTS

STRUCTURAL MASONRY DESIGN WEBINAR

This updated three-session webinar will focus on the requirements of 2009 IBC Chapter 21 and the referenced material standard TMS 402/ACI 530/ASCE 5. Both working stress and strength design of reinforced concrete masonry will be covered. Learn how to use and interpret the building code through masonry building element design examples. New material has been added since the last version of this 2009 IBC based webinar. Seminar participants can earn continuing education credit (7.5 PDHs). Certificates of attendance will be issued.

Webinar Details:

Dates:	October 11, 16, 18, 2012
Time:	4 - 6:30 pm <i>Pacific Time</i>
Cost:	\$125 per session per internet connection or \$325 for all three sessions.
Connection:	The webinar will be conducted using Go To Meeting. Each connection site will receive one workbook which includes a bound set of course notes. Additional workbooks are available for \$25 each plus shipping and handling.

Webinar Content:

Oct. 11:	Masonry Materials, Code Overview, Beam Design, Anchor Bolts
Oct. 16:	Columns, Out-of-Plane Walls, Quality Assurance, Constructability
Oct. 18:	In-Plane Walls, Seismic Testing, 2012 Code Changes, Direct Design

Instructors:

David McLean, Ph.D, P.E.,	Washington State University, Pullman, WA - Oct. 11th
Sue Frey, P.E.,	CH2M Hill, Corvallis, OR - Oct. 16th
Ed Huston, P.E.,	Smith and Huston Consulting Engineers, Seattle, WA - Oct. 18th
Tom Young, P.E.,	Northwest Concrete Masonry Association, Mill Creek, WA



NORTHWEST CONCRETE MASONRY ASSOCIATION

STRUCTURAL MASONRY DESIGN WEBINAR

Please plan to participate. Register today! Seminar participants can earn continuing education credit (7.5 PDH credit available). You can register on-line at www.nwcma.org, by calling NWCMA at 425.697.5298, or by faxing this completed form to 425.697.2679.

Name: _____

Company: _____

Address: _____

City/State: _____ Phone: _____ Fax: _____

Email: _____

Register me for the sessions marked below:

<input type="checkbox"/> Oct. 11, 2012	\$ 125.00
<input type="checkbox"/> Oct. 16, 2012	\$ 125.00
<input type="checkbox"/> Oct. 18, 2012	\$ 125.00
<input type="checkbox"/> All three sessions	\$ 325.00
<input type="checkbox"/> _____ Extra workbooks @ \$25/ea plus \$10.00 s/h	\$ _____
Add 9.5 % tax on workbook charge only	\$ _____
Total Due	\$ _____

Payments:

☐ Check or Money Order (payable to Northwest Concrete Masonry Association)

☐ Credit Card (Check one) ☐ Visa ☐ Mastercard ☐ Discover ☐ American Express

Card Number _____ Name on Card _____

Billing Address: _____

Exp. Date _____ CCV # (last 3 digits on back of card) _____

Confirmation:

You will receive confirmation of your registration, including detailed information regarding Go To Meeting requirements.

Refund Policy: *If you notify us that you are unable to participate 5 or more working days before the webinar we will refund your registration fee. Notice less than 5 working days before the webinar will be subject to a \$75.00 administrative fee. Confirmed registrants who do not participate are liable for the entire registration fee unless we are notified in advance of the webinar date.*

Please send completed registrations and payment to:

NWCMA • 16300 Mill Creek Blvd, Ste 208-C • Mill Creek, WA • 98012 or fax to 425.697.2679

Questions? 425.697.5298



American Society of Civil Engineers, OSU Student Chapter

Speaker Meeting

**Sam Rahani, President of ASCE
Structural Engineering Institute (SEI)**

**“ASCE’s Structural Engineering Institute
and SE Licensure”**

**Kearney Hall, 6-7 PM
Thursday, Nov 1st
Refreshments Provided**

Sam Rihani, P.E., F.SEI, F.ASCE of Reston, Virginia, is current President of the Structural Engineering Institute and Principal of REI Structural Consultants. During his 35-year professional career, he has specialized in the structural analysis and design of steel framing systems and buildings, and acted as the lead structural engineer on more than 700 projects including numerous industrial, commercial, educational, and institutional buildings. He has held the positions of Senior Structural Engineer, Design Manager, Engineering Manager, Division Manager, Vice President of Engineering and Project Management, Principal, and CEO. He is a licensed professional engineer in 11 states, and is a Fellow member of SEI and ASCE. Sam has been an active member of ASCE since 1975 when he was an undergraduate student at Oregon State University. He is a 1977 graduate of Oregon State University with a BS in civil engineering. He earned his MSCE with an emphasis in structural engineering from the University of Maryland.

