

SEAI NEWSLETTER



Structural Engineers Association of Idaho

P.O. Box 8733, Boise, ID 83707

www.seaidaho.org

BOARD OF DIRECTORS & COMMITTEE CHAIRS

Please feel free to contact any one of our board members with your ideas or suggestions for program/speaker topics or how you would like SEAI to better represent the Structural Engineers of Idaho.

SEAI would like to welcome **Tyler Haney**, of Treasure Valley Engineers, who will be joining us as our newsletter and web editor in March.

President

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SEAI SEMINAR EVENT – FEBRUARY 21ST 9 AM – 5 PM



Date: Tuesday, February 21, 2006

Location: Boise State University,
Student Union Building,
Boise, Idaho

Presenters: Robert J. Taylor, PhD, P. Eng,
M.ASCE,
Assoc. AIA AWC Director,
Technology Transfer
James D. Bowman, B.S., C.B.O.
AWC Northeast Regional Manager

The American Wood Council is the industry leader in development of standards for wood design and is an accredited continuing education credit provider with AIA, IACET, AIBD, and ICC.

In this educational event, seminar participants will be able to see updates to codes and standards that affect wood structures, comprehend provisions of the 2005 NDS[®], and be introduced to the Wood Frame Construction Manual 2001 National Edition for wind, snow, and seismic applications for One- and Two-Family Dwellings. Information on wood connection design philosophies and lateral load bracing will also be presented.

A 2005 NDS[®] and Supplement, and a seminar information package will be provided to each attendee (as noted) which includes a CD of all courses presented (fully scripted) and other useful wood design information and resources. Of interest to participants is the Wood Frame

Construction Manual (WFCM) for One- and Two-Family Dwellings, 2001 Edition; an ANSI approved document that provides engineered and prescriptive requirements for wood frame construction based on dead, live, snow, seismic and wind loads derived from the 2000 International Building Code (IBC).

Developed over a six-year period by AF&PA's WFCM/ANSI Canvass Committee, the WFCM represents a major milestone for the wood products industry. Designers and code enforcement officials now have one comprehensive design reference to provide solutions for residential wood construction, which is increasingly being regulated, especially in higher load regions.

**Boise State University
Student Union Building
Tuesday, February 21st**

Catered lunch is provided

Boise State Campus Map
<http://oit.boisestate.edu/printing/newsite/pdfs/mapb&w.pdf>

SEMINAR PROGRAM SCHEDULE

Feb. 21 AM	Building Codes and Wood Design
9:00 – 9:30 am	Registration & Check in
9:30 – 10:30 am 1.0 hrs	<i>Building Code Update</i> Recognize the latest changes impacting wood design and construction in major model building codes including: ICC's International Building Code (2000 and 2003 editions), ICC's International Residential Code (2000 and 2003 editions), and NFPA's NFPA 5000 Building Code. Limited discussion of 2006 changes to the I-Codes will be offered.
10:30 – 12:00pm 1.5 hrs	<i>Wood Structural Design in the International Building Code 2003</i> A layout of how structural wood provisions are presented in the IBC 2000 and 2003; Chapter 23 in particular. Course also covers how AF&PA documents are referenced.
12:00 – 1:00 pm	Lunch
Feb. 21 PM	Wood Design Standards and Wood Product Applications
1:00 – 2:30 pm 1.5 hrs	<i>ASD and LRFD with the 2005 National Design Specification for Wood Construction</i> The NDS® for Wood Construction 2005 is a dual format ASD and LRFD document with some enhancements from the 2001 version. Learn about the format of the new document and how to apply its ASD and LRFD design provisions to wood construction through worked examples.
2:30 – 2:45 pm	Afternoon Break
2:45 – 3:45 pm 1.0 hr	<i>The Wood Connection Session</i> This session presents current wood connection design philosophy, behavior, serviceability issues, and connection design techniques for small and large wood members, panel products, and wood assemblies, using dowel-type and specialized components. Glued connections will also be discussed along with a brief introduction to connection design software.
3:45 – 5:00 pm 1.75 hrs	<i>Lateral Load Bracing</i> Learn in depth about the general concept of bracing wood structures and in detail about the IRC requirements for wall bracing. Construction types and the behavior of small structures and structural elements under gravity, seismic and wind forces. Principles and typology of lateral load resistance systems will be discussed including prescriptive braced wall lines as addressed by the IBC/IRC. An introduction to engineered shear wall design, location, and inspection points will be offered, along with the 2001 Wood Frame Construction Manual (WFCM).



STRUCTURAL ENGINEERS ASSOCIATION OF IDAHO

P.O. Box 8733
Boise, Idaho 83707

1-DAY WOOD DESIGN SEMINAR FEBRUARY 21, 2006 – BOISE, IDAHO

This 1-day wood design seminar is being sponsored by SEAI, the Structural Engineers Association of Idaho. SEAI is a non-profit organization for structural engineers, whose goals are as follows: to provide an active association for better acquaintance and understanding among engineers; to encourage practice with ethical standards; to promote the highest standards of structural engineering to the end that the best interest of the client, the community, the public, and the profession will be served, and to cooperate with other professional organizations. For more information on SEAI, including information on how to join, please visit our website located at: <http://www.seaidaho.org>. To receive our FREE monthly newsletter, please email Ash Hobbs at ahobbs@ahjengineers.com.

Seating is limited at 65 persons for this event, and registrations will be accepted on a first come, first serve basis. If you have any questions regarding registration, please contact Ash Hobbs at ahobbs@ahjengineers.com or at (208) 323-0199x216. Questions regarding program information should be directed towards Wilson Antoniuk at antoniw@trusjoist.com or at (208) 395-2458.

Cancellation Policy: In the unlikely event that SEAI is forced to cancel a seminar, registrants will be entitled to receive a full refund or attend another seminar. Cancellations made by the registrant more than 15 days prior to seminars are subject to a \$10 administrative fee. No refunds will be issued for cancellations made within 15 days of a seminar.

Cut and return along with your check to the address above

WOOD DESIGN SEMINAR REGISTRATION FORM

Company Information

Name: _____
Address: _____

Contact Person's Information

Name: _____
 Phone #: _____
 Fax #: _____
 Email: _____

Please check one box above to indicate the preferred method of confirming registration.

Attendee's Name	Base Price ¹ (Select one per person)				Adjustments		SUBTOTAL
	Student ² (w/o NDS) FREE	Student ² (with NDS) \$38	SEAI Member \$125	Non-SEAI Member \$140	Late Registration ³ +\$10	Mult. Person Discount ⁴ -\$15	
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Check if more than 5 people (Attach a separate sheet with names and pricing)					Subtotal of attached sheet:		
					TOTAL PAYMENT:		

Please make all checks payable to S.E.A.I.

¹ Pricing includes **2005 NDS & Supplement** (except free student price), Lunch, Snack, Seminar Kit with Free AWC CD (including over 5000 pgs of documentation), two speakers from the AWC, and 7.0 CEU's.

² Submit a photocopy of a valid student ID with registration.

³ Late registration adjustment applies for each person if registration is postmarked after Feb. 13, 2006.

⁴ Multiple person discount adjustment applies for each person (students excluded) if 3 or more people are attending from the same company.

BY THE WAY...ENGINEERING NEWS AND GENERAL INTEREST

MEMBERSHIP UPDATE

SEAI is still growing. We would like to welcome the following new members:

<u>Name</u>	<u>Employer</u>
Tyler Haney	Treasure Valley Engineers
Brian Rausch	Stapley Engineering
Rogue Richardson	Stapley Engineering
Nick Welch	TRU Engineering

UPCOMING SEMINAR

The 2006 SEA Northwest Conference is being hosted by SEAO. The conference is being held at the Skamania Lodge in the Columbia River Gorge July 20–22. The theme is “Engineering in the Land of Earth, Wind, and Ice” presentation topics and speakers will be announced in future newsletters.

TRAINING WORKSHOP

Simpson Strong-Tie Co. is sponsoring a products training workshop on its structural components connectors and systems in Boise on **Tuesday March 14, 2006**. The training, literature and lunch are provided at no cost to attendees.

Simpson requests that attendees register in advance. Attendees can register online at the following web address:

<http://www.strongtie.com/workshops/21/21schedule.asp?Site=>

“Liquid Stone” Exhibition closed

WASHINGTON, D.C.—The National Building Museum’s popular exhibition, Liquid Stone: New Architecture in Concrete closed on January 2006 after being on view for over a year and a half.

BIGGEST AND BADDEST

The world’s tallest buildings were recently cited in *Forbes Magazine*.

WORLD'S TALLEST BUILDINGS			
Rank	Building	Height	City/Country
1	Taipei 101	509 meters 1,670 ft	Taipei, Taiwan
2	Petronas Tower 1	452 meters 1,483 feet	Kuala Lumpur, Malaysia
3	Petronas Tower 2	452 meters 1,482 feet	Kuala Lumpur, Malaysia
4	Sears Tower	442 meters 1,450 ft	Chicago, USA
5	Empire State Building	381 meters 1,250 ft	New York, USA

SNOW LOADS

Excerpted from “Snow Loads Studied For Clues to Polish Roof Collapse” 1/30/2006. By Peter Reina, *Engineering News Record*.

Deep, frozen snow is seen as a likely cause of the roof collapse in Katowice, Poland, causing over 60 deaths and around 150 injuries on January 28. With roughly 100-m-long sides, the 11-m-tall steelwork shed-like structure consists of conventional long-span trusses covered with lightweight roofing.

Whether accumulated snow had been cleared from the roof remains uncertain. Had it remained, the snow could well have overloaded the structure, believes Zbyszek Czajewski, a senior structural engineer in the Warsaw office of design firm Arup Group Ltd. “There is no requirement in the code to move the snow,” says Czajewski. The company’s Jan Dybala is quoted giving design snow loads of 70–80 kg per sq m.

The article in full can be purchased for \$4.95 at http://enr.ecnext.com/free-scripts/comsite2.pl?page=enr_document&article=neenar060130 ENR subscribers can view it free of charge.

MEETING RECAP – JAN 17, 2006

Ash Hobbs

Richard Weingardt, a regular contributor to *Structural Engineer* magazine and author of the book “Engineering Legends; Great American Civil Engineers” presented at last month’s SEAI meeting. Mr. Weingardt’s presentation focused on the state of the structural engineering community, the biggest problems it currently faces, some possible solutions, and how to reach your highest level of potential in leadership, involvement, and visibility in the community.

Mr. Weingardt reminds us that structural engineering is a noble, uplifting, and enriching profession that adds value to society. An engineer may choose to go into the private sector, the public sector, or research, making engineering both a scaleable and versatile profession. Unfortunately, structural engineers are generally a humble bunch, willing to let architects get all the recognition, and we fail to speak with a unified voice. We are typically the victims of the Confucius Syndrome, which states “find a job you love and you’ll never have to work a day in your life.” Sometimes that means that the job is rewarding in of itself, and we have no need for praise.

Some of the major problems that currently face the structural engineering community are that engineering is being treated as a commodity where services are selected by the lowest price, we have some of the highest insurance costs due in part, to frivolous lawsuits, and that the internet and the new global economy have opened up a world of low cost labor around the world. As a community, we have three methods in addressing the problems that we face. We can ignore the problems and hope they go away or that someone else will take care of them, we can join

others as subordinates, or we can step-up and become leaders. *Only by stepping up and becoming leaders will we yield the best results.*

In his research of past engineering superstars, Mr. Weingardt cited several common traits that they all shared. They were all well rounded individuals, they were all well educated beyond a 4 year college degree, they all had interests outside of engineering, and they all participated in their communities. Based largely on his research, Mr. Weingardt outlined what he calls his “basic six-pack plan” to help engineers achieve success:

1. Continue your education after graduation, not only in engineering topics, but by possibly exploring literature, geography, and political science.
2. Practice your communication skills and presentation styles.
3. Become an expert in something outside of engineering, even if it’s fly fishing, cheesecake making, or history.
4. Get involved in community affairs, including school boards and committees. Better yet, become the leader of a committee.
5. Get involved and understand the political process.
6. Find mentors and study role-models among those with high standing.

Overall, the structural engineering profession has a good future to look forward to. There will be more demand for our services due to expected high population growth, and advancements in technology and materials.

SEAI would like to thank Mr. Weingardt for his enriching presentation. If you are interested in Mr. Weingardt’s published works, you can find more information at <http://www.richardweingardt.com>.

EVENT CALENDAR

(Events are subject to change)

February – Wood Design Seminar at the Boise State University Student Union Building (see attached flyer). RSVP as soon as possible – only 9 seats remaining.

March – Simpson Strongtie products training (not a SEAI sponsored event).

July – The 2006 SEA Northwest Conference at the Skamania Lodge in the Columbia River Gorge July 20–22.

The SEAI Newsletter is published monthly. All newsletter submissions are welcome from the SEAI community. Have a suggestion, feature, link or product review? Would you like to recommend a SEAI member for an interview in our next newsletter?

Please contact our newsletter editors, Allie Smith–Hobbs at alliesmithhobbs@yahoo.com or Tyler Haney at thaney@tveinc.com

THE STRUCTURAL ENGINEERING COMMUNITY

Applied Technology Council – <http://www.atcouncil.org>

Board of Professional Engineers and Land Surveyors – <http://www2.state.id.us/ipels/>

Design Build Magazine (McGraw–Hill) – <http://www.designbuildmag.com/>

Engineering & (Bi–Weekly Newsletter) – <http://www.engineeringand.com>

Engineering Forum – <http://www.eng-tips.com/>

Engineering News Record – <http://www.enr.com>

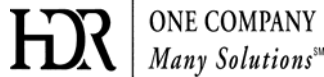
Structural Engineers Association International – <http://www.seaint.org/>

Structural Engineers Association of Utah – <http://www.seau.org/>

Structural Engineers Association of Washington – <http://www.seaw.org/>

Structural Engineers of Oregon – <http://www.seao.org/main.htm>

EMPLOYMENT OPPORTUNITIES



HDR is an architectural, engineering, planning and consulting firm that excels at complex projects and solving challenges for clients. More than 4,400 employee-owners, including scientists, planners, architects, engineers, consultants, and construction managers, in over 120 locations worldwide, pool their strengths to provide solutions beyond the scope of traditional A/E/C firms. HDR is currently No. 19 on the Engineering News-Record “Top 500 Design Firms” rankings. It is ranked No. 31 in environmental and No. 10 in transportation.

HDR’s Boise Department is looking for qualified **Bridge Engineers** to fill vacancies in our Transportation group. The primary duties of the Bridge Engineer will be to provide structural planning, analysis and design for all structural aspects of transportation projects. The Bridge Engineer will complete designs per American Association of State Highway and Transportation Officials specifications. Typical projects include bridge (steel plate girder, pre-stressed concrete, segmental and cable), box culvert and interchange design for highway and railway projects. The ideal candidate will have 2-6 years experience with bridge design and analysis, a Bachelors degree in Civil/Structural Engineering, and have a working knowledge of design software such as Larsa, LPILE, PCA Column, or Conspan. AutoCAD and/or Microstation required.

Visit www.careers-hdrinc.com and view positions in Boise, ID to apply or contact Diana Paoletti at 425-450-6200. No outside agencies. An Affirmative Action Participant EOE/M/F/D/V.



AHJ Engineers, P.C.
Structural Engineers

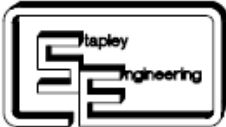
Last year AHJ Engineers celebrated 20 years of providing quality structural engineering services in the Treasure Valley and beyond. As we grow to meet current demand, we are seeking EIT’s and PE’s with 2-10 years experience in consulting structural engineering.

We offer a flexible, encouraging work environment in which talented professionals can achieve their career objectives as well as pursue their personal goals. The successful candidate must be able to express their knowledge to our clients both verbally and through their work. If you are proactive, committed to excellence, can manage multiple projects and have a passion for creating quality structures, please send your resume to: ahj@ahjengineers.com or mail to AHJ Engineers, 12501 W. Explorer Dr., Suite 100, Boise, ID 83713.

As a benefit for our members, SEAL is now accepting employment advertisements in our monthly publication.

Please contact Sarah McClendon at sarah.mcclendon@mcm-eng.com or 342-4214 x306 for submission guidelines and rates.

EMPLOYMENT OPPORTUNITIES



We are looking for **Structural Engineers** who like a great deal of responsibility including a combination of teamwork and independent projects, time management and diverse design opportunities.

Stapley Engineering is a dynamic engineering firm that provides structural analysis and design of buildings and other structures located throughout the United States. We are committed to exceeding client expectations, empowering employees to achieve personal and professional goals, and enhancing the environment with state-of-the-art structural designs.

Positions are available for all levels of experience. Successful applicants must have a B.S. degree in Civil Engineering, E.I.T. registration, and a strong background in design principles for concrete, steel, wood, and masonry. Knowledge of AutoCad ADT 3.3 (2002) and/or MicroStation J or v8, Word, Excel, and other structural software design applications are desirable.

Job responsibilities are commensurate with experience and may include:

- Executing and checking engineering calculations and drawings.
- Providing project management functions including project communications, management of project schedules and budgets, and coordination between structural drawings and those of other disciplines.

Stapley Engineering offers competitive salaries and excellent benefits including medical, dental, vision, 401(K) and a flexible paid time off schedule. To apply, submit your resume to janeb@stapley.net.



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Are you a results oriented person?
Do you want to develop relationships with clients?

Coffman Engineers is the place for you!

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Seattle, Washington Office

Structural Design Engineer (E.I.T. or P.E.)
CAD Operator/Designer

Spokane, Washington Office

Structural Design Engineer (E.I.T. or P.E.)

Los Angeles, California Office

Structural Design Engineer (E.I.T., P.E., S.E.)
CAD Operator/Designer

For details about these openings visit www.coffman.com.
Qualified applicants should fax or e-mail their resume to:
(206) 624-3775 seattlehrd@coffman.com

LASTING creativity | results | relationships

As a benefit for our members, SEAI is now accepting employment advertisements in our monthly publication.

Please contact Sarah McClendon at sarah.mcclendon@mcm-eng.com or 342-4214 x306 for submission guidelines and rates.