



Structural Engineers Association of Colorado Newsletter

MARCH GENERAL MEETING Geofoam – A Lightweight Fill Alternative

Schedule Mark Your Calendar (2012)

General

Membership Meetings January 18 (Wed.) **Lakewood Country Club**

Renaissance Hotel (Breakfast 7:30 a.m.) March 15 May 17 July 19 September 20

Business Management Committee Meetings (Breakfast 7:30 a.m.) February 9 April 12 June 14 August 9 October 11

SEAC Board of Directors Meetings

(7:30 a.m.) January 5 February 2 April 5 June 7 August 2 October 4

Fall Seminar October 18

Annual Banquet November 15 11:30 a.m. - 1:00 p.m. In this educational experience, the participants will learn about the utilization of geofoam as a light weight fill alternative. EPS Geofoam is a large block, rigid foam plastic material that has typical densities between 12-46 kg/m³ (0.7-2.85 lbs/ft³) making it up to 100 times lighter than soil. It is one of the only truly engineered fill materials that has predictable, consistent physical properties. Geofoam exhibits the highest strength to weight ratio of any fill material. Geofoam is a simple, cost effective solution for five major geotechnical conditions that engineers encounter on a regular basis:

- 1. The elimination or reduction of lateral loads upon structures with geofoam.
- 2. The utilization of geofoam in the driving block of a landslide.
- 3. The utilization of geofoam to reduce dead and live loads over buried utilities.
- 4. Creating a zero loading factor for soft oil remediation.
- 5. Utilizing geofoam as a structural void fill for various concrete applications.

The incorporation of geofoam for infrastructure projects has now been successfully utilized for a number of decades in a number of countries all over the world. Some of these countries are Norway, The Netherlands, the United States, Japan, Germany and Malaysia. The utilization of geofoam for commercial, residential and infrastructure projects around the United States has seen a dramatic growth trend in recent years.

In this educational experience the participants will also learn the manufacturing process of EPS, the history of geofoam, recent trends, some design considerations, specifications and installation considerations.

Speaker Bio on Page 3

Don't Miss Out - March General Meeting

Date: Thursday, March 15, 2012 - 7:30 a.m.

Speaker(s): Nico Sutmoller Location: Renaissance Denver Hotel 3801 Quebec Street, Denver, CO 80207 (South of the I-70 & Quebec Intersection)

Please RSVP on the SEAC website at www.seacolorado.org: or email Caryn Farrell at: seac@martinmartin.com Reservations MUST be made by: Monday, March 12, 2012.

Page 1

Officers & Board Members



David Poe President Anchor Engineering, Inc. 303-783-4797 david@anchoreng.com



Jim Ness VP/Treasurer Monroe & Newell Engineers, Inc. 303-623-4927 jness@monroe-newell.com



Paul Hause Secretary Structural Consultants, Inc. 303-399-5154 paul@sci-denver.com



Andrew Kelsey Past-President Ascent Group Inc. 303-499-3022 a.kelsey@ascentgrp.com



Stan Welton Director Thornton Tomasetti 303-260-6425 <u>SWelton@ThorntonTomasetti.com</u>



Tom Skinner Director JVA, Incorporated 303-444-1951 tskinner@jyajya.com



Robert Leberer Director Anderson & Hastings Consulting, Inc. 303-483-8486 <u>rleberer@ahceinc.com</u>

Submit comments/articles to: Caryn Farrell Structural Engineers Association of Colorado c/o Martin/Martin, Inc. 12499 West Colfax Avenue Lakewood, CO 80215 (303) 431-6100 x403 (303) 431-6866 fax seac@martinmartin.com WWW.SEAColorado.org

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

Caryn L. Farrell SEAC Executive Assistant seac@martinmartin.com

President's Message

ot to state the obvious, but our profession has had a very difficult time the last few years and hopefully as you read this work already has, or is starting to pick up again. Meanwhile, the profession of Structural Engineering continues to be a topic in the local media. There are a lot of important issues being discussed and SEAC has an opportunity to be a positive influence for the good of our profession. One such important topic is that of the Sunset Review of Colorado's statutes for Professional Engineering Licensure. Our Past-President Andrew Kelsey has graciously volunteered to be a Liaison for SEAC to the state board. He has already attended two meetings. The Sunset Review process concludes next year, so we have this year in which we can influence decisions that are made. (If you have specific questions or comments, I am sure Andrew would value your input.)

The Business Practice Committee opened up their last meeting to the general membership and it was well attended. The topic was centered on the series of newspaper articles regarding schools and the involvement of many of our firms either directly or indirectly. The discussion was lively and touched on how these matters tie into many others including the following: How to promote our profession in a positive way to the Public, the Sunset Review process, making changes to the Colorado Revised Statues and/or regulations & rules governing peer reviews, and the question of do we as a profession in Colorado pursue getting separate licensure for structural engineers introduced into the statute.

Thanks to all those who participated in our survey regarding what to do with last year's budget surplus. Based on the feedback we received, the Board of Directors has decided to allocate the budget surplus thusly:

- 1/3 will be saved
- 1/3 will be used to defray costs for the current year
- 1/3 will be used to benefit the SEAC Scholarship fund.

The joint CAGE/SEAC meeting that was held in January was a success with a good presentation from Zonge. (Thanks to CAGE for hosting this year!)

Thanks to all who have tried the method of paying dues online. There have been some bugs as this is the first year of trying it, but we think that in the long run it will be helpful to the membership to make it more convenient to pay dues online.

With so much going on this year, I would encourage you, if you want to be more involved with the advancement of our profession, to seek out and engage with one of our committees. The committee chair list is published on the website.

David A. Poe, P.E., S.E. President

GENERAL NOTES - ANNOUNCEMENTS

Continued From Page 1: Speaker Bio's - March Meeting

Nico Sutmoller, Insulfoam Geofoam Specialist, works in conjunction with the technical Center and all of the Insulfoam facilities throughout North America as the geofoam specialist. Prior to joining Insulfoam in 2007 as the geofoam specialist, Mr. Sutmoller had vast experience with geofoam ensuring that manufactured geofoam materials such as those required at the Louis Armstrong Int'l Airport, New Orleans, Louisiana and the Woodrow Wilson Bridge in Alexandria, Virginia projects met the material requirements under the strictest manufacturing guidelines.

Throughout the country, Nico is a frequent guest speaker at various ASCE Chapters, Geotechnical conferences, USACE districts, Architectural and Engineering firms, numerous



Nico Sutmoller Insulfoam Geofoam Specialist

DOTs, and their consulting engineers working on specific design/build projects and a multitude of General Contractors.

Most recently, Nico has assisted a number of state departments of transportation in setting their geofoam specifications guidelines such as those presently in place for the Nebraska Department of Transportation.

Nico also works closely with and guides the Insulfoam National Geofoam CAD designers in preparing and approval of the geofoam shop drawings for the individual project engineers, visits jobsites and educates contractors that have little prior knowledge to the installation of geofoam in ensuring that the installation goes smoothly.



Most geofoam projects do not necessarily involve transportation applications and Nico works on a multitude of other commercial/residential geofoam projects involved the reduction of lateral and dead loads upon structures, and/or underlying soils have low bearing capacity which would cause unacceptable soil settlement.

Nico can be contacted on his cell phone at 616-446-5776 or via email at <u>nico@insulfoam.com</u>.

Structural Engineers Association of Colorado Newsletter Classified Section

Brown AND Caldwell

Our Denver office is looking for structural engineers. You will work with structural, mechanical, process and electrical engineers and designers on designs for facilities primarily serving the water and wastewater industries. Project work includes: structural design for small to large projects in Colorado, Arizona, and other states around the country; directing structural CAD staff in the preparation of construction drawings; preparation of project specifications; coordination with other engineering disciplines; and construction support services. Must have a minimum of 5 vears experience and a M.S. degree in civil engineering. Please email resume to: cmarks@brwncald.com

Thornton Tomasetti

Thornton Tomasetti, Inc. Employment Opportunity

Thornton Tomasetti, an award winning international engineering firm, seeks structural engineers with up to 10 years of experience for our new Denver office.

We offer an excellent benefits package including company-paid medical and dental insurance, a matching 401(k) plan, and a friendly, collaborative work environment.

To learn more about our company and employment opportunities, please visit the link listed below: <u>http://www.thorntontomasetti.com/</u> <u>careers/denver/structural_engineers</u>

Classified Ad Policy

To place an ad please contact Caryn Farrell at: <u>seac@martinmartin.com</u>

Ads will be placed on the SEAC Website and newsletter. Employment Ads must be kept to 100 (maximum).

The cost is \$100.00.



Full time position for: Licensed Structural Engineer in SW Littleton A&E office. Applicant may view our web site at: www.csainet.com Small 10 person office. Health insurance, PTO, 401K benefits offered. Please email resume to: csteckly@csainet.com



Larsen Structural Design is a smaller structural engineering firm in Fort Collins, Colorado. Our size allows an engineer the opportunity to utilize all skills necessary to complete a building project including project management and significant client interaction. Project types include commercial, industrial, municipal, educational, residential and multifamily. Revit software utilized heavily.

We are looking for a dynamic individual with 3 to 10 years experience who wants to grow along with our firm. We offer competitive wages and benefits with a fun and relaxed working environment.

Please email resume and cover letter to: <u>blake@larsensd.com</u>

Larsen Structural Design 19 Old Town Square, Suite 238 Fort Collins, CO 80524 970-568-3355 www.larsensd.com

GENERAL NOTES - SPONSORS/ANNOUNCEMENTS

MARCH SPONSOR: ROSBORO - XBEAM THANK YOU



2012 Membership Dues

Did you renew your membership with SEAC? Membership payments were due on **January 31, 2012**. Please submit payment online or by check to keep your membership current. Please visit our website to pay online or contact Caryn Farrell at:

seac@martinmartin.com www.seacolorado.com

Thank you for continuing to support SEAC!

If you have a change of address, phone, email, or Professional Membership type, please email Caryn Farrell at: <u>seac@martinmartin.com</u>



Please welcome our newest members to SEAC:

John Kendall (Professional Member) TAKRAF USA, Inc.

Sean Molloy (Professional Member) Martin/Martin, Inc.

Gregory Black (Professional Member)

Paul Encinias (Professional Member) Jacobs Engineering

Raleigh Fisher (Affiliate Member) Martin/Martin, Inc.



SEAC wants to hear from you! Do you have ideas/suggestions for SEAC? Please contact a Board member with any suggestions. Thanks!

GENERAL NOTES - ANNOUNCEMENTS

Joint RMSCA/SEAC Meeting in January

Topic:

The Geology of Seismic Site Class and the Effect of Site Class on Structural Design



David Butler, Zonge International



Kevin Haas, Martin/Martin, Inc.



2012 SEAOC CONVENTION Santa Fe, New Mexico September 12 – 15

ANNOUNCING THE 2012 SEAOC CONVENTION

The 2012 SEAOC Convention Committee invites you to stay current on the latest developments in structural engineering and construction technology while enjoying the scenic, historic, artistic and cultural splendors of Santa Fe, New Mexico. Consider bringing your family to visit local national parks and monuments such as Bandelier National Monument, Chaco Canyon and Canyon de Chelly, all within a short drive from Santa Fe.

Location:	Santa Fe, New Mexico	
Dates:	Wednesday, September 12 – Saturday, September 15	
Convention Hotels:	ELDORADO HOTEL & SPA HILTON Santa Fe / Historic Plaza	www.EldoradoHotel.com www.HiltonofSantaFe.com
	For more information in the coming weeks, visit our website:	

http://convention.seaoc.org



Traditional Glulam is narrower than standard framing material and has been manufactured the same way for generations.

It's time for an upgrade.

Architectural Appearance Full Framing-Width Stock Glulam

Rosboro is now manufacturing all 4x and 6x glulam products in full framing widths in Architectural Appearance. That means one set of SKUs, for exposed or concealed applications and no more shimming or extra labor on the jobsite.

Available Net Widths:

- Beams 3¹/2", 5¹/2", 6³/4", and 8³/4".
- Columns 3¹/2" x 6", 5¹/2" x 5¹/2", 5¹/2" x 6".



Traditional Glulam and I-Joist Depths

A full range of common depths means our glulam will do the job:

- Glulam Depths 6" through 30" in $1^{1}/2$ " increments.
- I-joist Depths 9¹/₂", 11⁷/₈", 14", 16" and 18".

The Greenest Beam on the Market

Made from renewable 2nd and 3rd generation forests, glulam was green before green was exciting. As an even better choice for today's progressive market, X-Beam is manufactured with wet-use adhesives that meet or exceed the most stringent global emission standards, and is now available with FSC-certification.



Increased Strength

The greater widths translate to more load-carrying capacity due simply to having a greater volume of wood (up to +12% for $3^{1}/2^{"}$ and +7% for $5^{1}/2^{"}$).

- 24F-V4
- Tension Zone: 2,400 psi
- Compression Zone: 1,850 psi
- Fc1: 650 psi
- Fv: 265 psi
- MOE: 1.8 x 10⁶ psi Apparent, 1.9 x 10⁶ psi True E



The Engineered Wood of Choice

Single piece installation eliminates side loading issues common with multi-ply LVL. Full width X-Beam provides greater surface area for continuous and interior bearing applications and holes can be drilled within liberal guidelines. Don't forget, X-Beam is the most competitively priced EWP on the market!

Spread the word: The next generation of glulam is here.



Growing Today ${\scriptstyle \bullet}$ Building Tomorrow $^{\scriptscriptstyle \bigcirc}$

Rosboro P.O. Box 20, Springfield, OR 97477 Technical Support: (877) 457-4139 Email: info@rosboro.com Web: www.rosboro.com