



Structural Engineers Association of Montana

is proud to sponsor the upcoming seminar

SPRING CONFERENCE – AISC 15TH EDITION, MASS TIMBER LATERAL DESIGN, AND SNOW LOADS WITH JERRY STEPHENS (0.7 CEU / 7 PDH Earned)

Where: Homewood Suites
1023 Baxter Lane
Bozeman, MT 59715
Room Rate: \$129/night
Call 1-406-587-8180 to reserve
under “SEAMT”
(rate block expires 5/1!)

Time: Monday 5/6, 1:00pm -5:00pm
Tuesday 5/7 8:30am - 12:00pm

SEAMT Social 6 – 9 pm @ Ale Works

611 E Main St, Bozeman, MT 59715

(You can sign up for the social separately for \$20 at the SEAMT website below. Young Members welcome!)

SEAMT Member Price: \$200

Non-Member Price: \$275

Student Price: Free

To join or renew your SEAMT membership, go to <https://www.seamt.org/membership>

To sign up for the conference and social, go to <https://www.seamt.org/events>

Monday 5/6, 1 pm – 5:30 pm:

The 2016 AISC *Specification and Steel Construction Manual*, 15th Ed. Seminar, Presenter: Susan Burmeister
4.0 PDHs

The 2016 AISC *Specification for Structural Steel Buildings* and the 15th Edition *Steel Construction Manual* are both available now. You won't want to miss this half-day seminar where important changes and clarifications that have been incorporated into these documents will be explained. The seminar will examine the *Specification* chapter by chapter and highlight changes since the 2010 version. Design examples will be presented to demonstrate the changes in the *Specification* and how to apply useful design aides in the Manual. *Option for each attendee to purchase one copy of the Manual for the discounted price of \$125 (discounted from \$200 for members/\$400 for non-members).*

The seminar will highlight changes to:

- Treatment of compression members with slender elements
- Treatment of tees and double angles in bending
- Shear provisions for built-up I-shapes
- Bolted connection provisions
- And more...

Speaker Bio:

Susan Burmeister, PE - Owner and Structural Design Consultant, S2B Structural Consultants, PLLC.

Susan Burmeister is the owner and a structural design consultant at S2B Structural Consultants, PLLC with over 20-years of design experience on a variety of structure types around the country. She regularly works with design of steel buildings and design of concrete buildings. She received both her BS and MS from Georgia Institute of Technology. Susan is a member of the AISC Committee on Specifications, the AISC Task Committee #5 on composite member design, secretary of the ASCE Committee on the Design of Steel Building Structures, and sits on the Board of Directors for the Structural Engineers Association of the Metropolitan Washington DC chapter.



Structural Engineers Association of Montana **is proud to sponsor the upcoming seminar**

Tuesday 5/7, 8:30 am – 10 am

Structural Design of Mass Timber Framing Systems, Ricky McLain

Course Description:

This presentation will provide a detailed look at the structural design processes associated with a variety of mass timber products, including glued-laminated timber (glulam), cross-laminated timber (CLT), and nail-laminated timber (NLT). Applications for the use of these products in gravity and lateral force-resisting systems under modern building codes will be discussed. Other technical topics will include mass timber floor panel vibration criteria, connection options and design considerations, and fire-resistance structural design. Lateral design of mass timber structures will also be included, with a review of current code provisions, detailing best practices and alternative design options for mass timber diaphragms and shearwalls.

Speaker Bio:

Ricky McLain, PE, SE, Senior Technical Director – Tall Wood, WoodWorks

Ricky is WoodWorks' in-house expert on tall wood buildings, providing analysis and guidance on architectural, fire and life safety, and structural design topics related to tall mass timber projects. He supports the AEC community both directly and collaboratively with WoodWorks Regional Directors, and guides the development of education and resources related to tall wood buildings in the U.S. Prior to this emphasis, Ricky's role encompassed all building types and wood systems. He also has extensive experience in lead engineer roles related to structural design, project management and construction administration. Ricky is very active as a member of numerous committees and councils related to building design and is the Executive Director of the Structural Engineers Association of Vermont.

Tuesday 5/7, 10:30 am – 12 pm

Update: Snow Loads for Structural Design in Montana - Past, Present and Future Work

Course / Open Forum Description:

Snow loads are a driving element in structural design across the state of Montana. Over the years, efforts have been made to continually improve the fundamental basis for these loads, i.e., the expected ground snow load with a 50 year mean recurrence interval. Estimating these design ground snow load can be challenging at many places in Montana, due to the sparseness of stations at which historical data are available, the nature of the data itself, and the rapid changes that can occur in snow conditions across relatively short distances. In Montana, accepted statistical procedures have been used with extreme value probability distributions to estimate such ground snow loads at various stations around the state from historical data. These values have subsequently been used with various interpolation routines to allow design ground snow loads to be estimated at any location in the state.

These estimated design ground snow loads can be improved by periodically updating them to take advantage of a) simply the additional years of data available on ground snow depths and snow loads since the last update and b) ongoing improvements in data analysis and processing routines, notably with respect to interpolation/extrapolation algorithms and data visualization.

This past year record breaking snow depths were recorded at some locations around the state, with the associated structural consequences serving as a vivid reminder of the importance of snow loads in structural design. Building industry stakeholders all agree it's time to chart out a definitive path forward to complete a review and revision of the snow loads for structural design in Montana – where are things at, what needs to be done, and how do we get there.

Speaker Bio:

Jerry Stephens, PhD, PE - Professor and Dept. Head, Retired, Civil Engineering Dept., Montana State University

For the past 30 years, Jerry Stephens has been a member of the Civil Engineering Department at Montana State University.

Professor Stephens taught structural engineering and researched various structural engineering problems focused on the effects of damaging loads on structural systems and innovative building materials. With colleagues and students, he completed the 2004 update of Snow Loads for Structural Design in Montana and has worked on a further update for the past several years. He also has and continues to respond to questions from the engineering and construction industry on snow loads around the state. From 2012 to 2018, Professor Stephens served as Civil Engineering Department Head, retiring from MSU at the end of 2018. Early in his career before coming to Montana, Professor Stephens worked at the University of New Mexico and West Virginia University.