



CFSEI

2022 ANNUAL EXPO



CURTIS, A DOUBLETREE BY HILTON HOTEL
DENVER, COLORADO
May 16-18, 2022

THANK YOU TO OUR SPONSORS





CFSEI
COLD-FORMED STEEL
ENGINEERS INSTITUTE

We're back! The CFSEI Executive Committee is overjoyed and excited for the return to our in-person Expo experience. In the most immediate way, we have been reminded of our resilience and ability to focus on progress through daunting and unending challenges. We know the challenges will continue and their faces will change, but our enduring spirit will carry us onward.



We gather in Denver this year to celebrate our successes, foster new relationships and continue the collective pursuit of excellence in our industry. We provide safe, efficient, and competitive results for our stakeholders and projects, and collaboration within these common goals is critical for our future success and livelihoods.

How fitting that this year's Expo is being held in Denver, Colorado, my hometown. I hope you will enjoy the beautiful blue skies and sunsets over the Rocky Mountains to the west that lift my spirits throughout the year. Our Tuesday night event is sure to be one for the memory books. We have reserved an area at The ViewHouse Eatery with an option to attend the Rockies game across the street at Coors Field after dinner. The Ballpark District is a great place to have some fun. Take every opportunity to join your professional colleagues in a unique Denver experience.

Our lineup this year includes a wide range of topics relevant to the daily execution and future development of services and standards needed in our industry. The movement toward panelization, modularization, and general prefabrication persists with the shifts in skilled labor availability, time constraints, and supply chain variabilities. You will find several presentations relevant to these topics this year. Changing code standards, increasing architectural complexity and contractual shifts in project procurement require our unique expertise to guide our projects and clients into a successful experience. We have a panel on delegated design, a presentation on envelope framing with energy requirements and a review of code changes affecting calculated member strength capacities.

Having this position allows me to voice my gratitude and pure admiration for everyone involved in continuing this organization's success and pursuit of education. We have

several committee members, past and present, who volunteer an immense amount of time to create Tech Notes, webinars, award competitions, and of course the annual Expo. Our 2021 results include multiple Tech Note updates and releases, six webinars, rejuvenation of the Student Competition and further development of long-term educational goals for the engineering and student communities. We are proud to have implemented a student and educational stipend for this year's Expo, further promoting participation in our organization.

Most importantly, we formally set aside special thanks each year to recipients of the John P. Matsen Award for Distinguished Service. These recipients hold the organization on their shoulders, and we could not continue without their sacrifices.

We give special thanks to our returning and new sponsors who contribute so much to making the Expo successful:

- Steel Framing Industry Association
- USG
- ClarkDietrich Building Systems
- Douglass Colony
- CEMCO
- TrusSteel
- Simpson Strong-Tie
- Marino\Ware
- Argos Systems
- Pinnacle LGS Inc.
- Advant Steel LLC
- Nucor Vulcraft

Remember to relax and enjoy this experience. Take a moment to thank the Committee members, AISI representatives, sponsors, and everyone else who has worked so hard to make this event equally educational and enjoyable for all attendees.

Energetically yours,

Daniel Stadig, P.E., Salas O'Brien
2021-2022 CFSEI Chairman

DOUGLASS COLONY TOUR

MONDAY, MAY 16, 2022

The tour bus will leave the Curtis Denver – a DoubleTree by Hilton Hotel,
1405 Curtis Street, Denver, Colorado 80202

Transportation will leave the hotel no later than 12:10 p.m.

12:30 p.m. - 3:00 p.m.

Douglass Colony Tour
5901 East 58th Avenue
Commerce City, Colorado 80022

3:15 p.m.

The tour bus will leave Douglass Colony and return to the Curtis Denver – a
DoubleTree by Hilton Hotel, 1405 Curtis Street, Denver, Colorado 80202

** Lunch will not be provided.*

** You must be registered as a full conference attendee to participate in this tour.*

TUESDAY, MAY 17, 2022

7:00 a.m. – 4:00 p.m. Registration in Four Square Corridor

7:00 a.m. – 8:30 a.m. Breakfast in Four Square Ballroom

9:00 a.m. – 10:00 a.m. **Envelopes, Energy and Steel: How Structural Choices Affect Energy Use**
Marco Polo Ballroom Don Allen, LEED AP, SECB, Super Stud Building Products

10:00 a.m. – 10:15 a.m. Break with Sponsors in Four Square Ballroom

QA & QC for Modular and Panelization
Nader Elhadj, P.E., FRAMECAD America
Patrick W. Ford, P.E., R.A. Smith, Inc.
Marco Polo Ballroom Jeffrey Klaiman, P.E., ADTEK Engineers, Inc.
Fernando Sesma, CEMCO
10:15 a.m. – 11:15 a.m.

Red Rover **Testing Criteria and Standards for Cold-Formed Steel Connections**
Clifton Melcher, P.E., S.E., Simpson Strong-Tie Company, Inc.
Hien Nguyen, M.S., P.E., Simpson Strong-Tie Company, Inc.

11:30 a.m. – 12:45 p.m. Lunch and Annual Meeting in Four Square Ballroom

Panel on Delegated Design
Cody L. Dailey, P.E., S.E., McClure Engineering Company
Marco Polo Ballroom Patrick M. Hainault, P.E., R.A. Smith, Inc.
Andrew Newland, P.E., ADTEK Engineers, Inc.
Daniel Stadig, P.E., Salas O'Brien
1:00 p.m. – 2:00 p.m.

Red Rover **What's New in 2022: Steel Decking the World**
Thomas Sputo, Ph.D., P.E., S.E., Steel Deck Institute
Sputo and Lammert Engineering, LLC

2:00 p.m. – 2:15 p.m. Break with Sponsors in Four Square Ballroom

2:15 p.m. – 3:15 p.m. **Keynote Speaker**
Marco Polo Ballroom Larry W. Williams, APR
Steel Framing Industry Association

5:00 p.m. – 8:00 p.m. Dinner & Social Event

WEDNESDAY, MAY 18, 2022

7:00 a.m. – 3:15 p.m. Registration in Four Square Corridor

7:00 a.m. – 8:30 a.m. Breakfast in Four Square Ballroom

9:00 a.m. – 10:00 a.m. **Member Capacity Changes Per the New Code**
Marco Polo Ballroom Patrick W. Ford, P.E., R.A. Smith, Inc.

10:00 a.m. – 10:15 a.m. Break with Sponsors in Four Square Ballroom

Marco Polo Ballroom **Innovation and Seismic Design for Cold-Formed Steel**
Benjamin W. Schafer, Ph.D., P.E., Johns Hopkins University

10:15 a.m. – 11:15 a.m.

Red Rover **Cold-Formed Steel Load Bearing Panelization**
John Parish, P.E., Excel Engineering, Inc.

11:30 a.m. – 12:45 p.m. Lunch and Awards Presentation in Four Square Ballroom

Marco Polo Ballroom **Filling in the Missing Pieces - How to Load Roof Profiles Using ASCE 7**
Bill Babich, P.E., TrusSteel

1:00 p.m. – 2:00 p.m.

Red Rover **Premeditation of Panelized Projects**
Megan Washnieski, P.E., South Valley Prefab.

2:00 p.m. – 2:15 p.m. Break with Sponsors in Four Square Ballroom

2:15 p.m. – 3:15 p.m. **Cold-Formed Steel Q&A Session**
Marco Polo Ballroom Roger LaBoube, Ph.D., P.E., Cold-Formed Steel Engineers Institute, Jennifer Zabik, P.E., S.E., Bennett-Pless Engineering

3:15 p.m. Expo Closes

MONDAY, MAY 16, 2022: 12:30 PM – 3:00 PM

DOUGLASS COLONY TOUR

CONTINUING EDUCATION - 2 PROFESSIONAL DEVELOPMENT HOUR



This event provides an opportunity to tour the panelization facility of Douglass Colony Group in Denver, one of the only construction and roofing specialists in the U.S. with a business line in every aspect of a build. DCG will demonstrate the design detailing, production and assembly of steel wall panels and steel trusses. They will also review the process of fabrication, from receiving the quotation to ordering the material to delivering the job. A sample panel will be fabricated and assembled during the tour. DCG will explain the pros and cons of panelization as well as the importance of using engineering and detailing software programs to ensure the quality and consistency of the product. A question-and-answer session will be held at the conclusion of the tour. Learn more about Douglass Colony Group at <https://douglasscolony.com/>.

Transportation will leave the hotel no later than 12:10 p.m. Lunch will not be provided.

Douglass Colony Group
5901 East 58th Avenue
Commerce City, Colorado 80022

TUESDAY, MAY 17, 2022: 9:00 AM – 10:00 AM: ROOM – MARCO POLO BALLROOM

ENVELOPES, ENERGY AND STEEL:

How Structural Choices Affect Energy Use

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

The term “building envelope” was not very common a few decades ago, but today it is an important consideration in any structure that has conditioned space. Since most cold-formed steel engineers work on these types of buildings, designers need to understand how their choices affect flows of air, moisture and heat through the building envelope. Industry veteran Don Allen will start with the basics: air/vapor/moisture barriers, why they are important, and how the selection of framing makes a big difference in how these barriers perform. Then he will dig deeper into some of the common detailing mistakes that lead to poor energy performance – and show you how these mistakes can be avoided. This presentation will touch on the broader goal of net-zero building carbon emissions and how cold-formed steel can play a major role in long-term building performance and energy use, while at the same time providing excellent structural performance and durability. Principles from the recently released AISI S250, *North American Standard for Thermal Transmittance of Building Envelopes with Cold-Formed Steel Framing*, will be included.

Don Allen, P.E., LEED AP, SECB Super Stud Building Products

Don Allen, P.E., S.E., LEED AP, is an internationally known expert in cold-formed steel design, and currently serves as director of engineering for Super Stud Building Products. He chairs the AISI Education Committee, is actively involved in the development of ASTM and AISI standards, and has designed projects in Europe, Africa and North America. In addition to working for steel product manufacturers, Don has spent more than a decade in private practice and served over nine years as technical director for the Steel Stud Manufacturers Association (SSMA), the Steel Framing Alliance (SFA) and the Cold-Formed Steel Engineers Institute (CFSEI). At Super Stud, Don is actively involved in product development for multiple product lines including steel framing, structural floor sheathing, steel structural wall panels, exterior insulation and finish systems (EIFS), and steel doors.



TUESDAY, MAY 17, 2022: 10:15 AM - 11:15 AM: ROOM - MARCO POLO BALLROOM

QA & QC FOR MODULAR AND PANELIZATION

Introduction of QA/QC in Modular, Prefabrication and Panelization

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Methods of construction have come and gone, but among those that continue to grow are modular/prefabricated and panelization. Our panel of speakers will discuss the QA/QC of handling commercial, industrial and residential modular/ panelized projects, from design to Quality Control programs in the field or prefabrication facilities and Quality Assurance requirements for contractors and designers. They will include the development and introduction of third-party certification programs.

PANELISTS

Nader Elhajj, P.E., FRAMECAD America

Nader Elhajj is director of engineering for FRAMECAD America. He has more than 35 years of experience in the design, construction and analysis of building methods and materials. Prior to joining FRAMECAD, Nader was director of the National Association of Home Builders (NAHB) Research Center, now known as Home Innovation Research Labs, where he managed research and development projects for alternative building materials and emerging technologies. He also managed tasks related to the design, construction, analysis, testing and field evaluation of construction materials in housing.



Nader is active in writing engineering standards, codes and specifications for the building industry, and serves on several cold-formed steel industry committees. He has developed standardized designs and other prescriptive specifications for cold-formed steel framing and has authored or co-authored several publications on housing design and cold-formed steel framing. He is a licensed structural engineer with a Master of Science degree in Structural Engineering and a Master of Business Administration degree.

Patrick W. Ford, P.E.
R.A. Smith, Inc.

Pat Ford's professional experience includes serving as technical director of the Steel Framing Industry Association (SFIA), management and engineering design with R.A. Smith (and previously Matsen Ford Design), as well as managing, engineering and business positions for several other firms. His work has involved several structural design, contract and project management functions on a wide variety of commercial, industrial and institutional building projects.



Relative to cold-formed steel structural framing, Pat has more than 40 years of experience that includes application of the latest technologies and design concepts to load bearing structures and a wide variety of curtainwall and prefabricated systems. His engineering systems design experience includes structural steel, concrete, engineered masonry, wood and other systems in addition to cold-formed steel. He has building credits throughout the country as well as several projects outside the U.S.

He is an active voting member, committee member and subcommittee chairman with the American Iron and Steel Institute (AISI), American National Standards Institute (ANSI), American Society of Civil Engineers (ASCE), ASTM International, the Association of the Wall and Ceiling Industry (AWCI), Cold-Formed Steel Engineers Institute (CFSEI) and Steel Framing Industry Association (SFIA). He is a registered professional engineer in 19 states and the District of Columbia.

Jeffrey Klaiman, P.E.
ADTEK Engineers, Inc.

Jeff has almost 30 years of experience in the construction industry. He is principal in charge of structural engineering at ADTEK Engineers, Inc., where he oversees the design and coordination of all cold-formed steel design documents. He manages in-house staff in four offices for general structural and cold-formed steel framing design, develops project schedules, and coordinates quality control reviews with project managers on his team.



His expertise includes building maintenance and engineering, on-site engineering for a concrete contractor, and manager of technical services and Versa-Truss product manager for Dale/Incor (national manufacturer of cold-formed steel framing products and systems). He participates on the American Iron and Steel Institute's Committee on Specifications for the Design of Cold-Formed Steel Structural Members and the Committee on Framing Standards. Jeff is chairman of the Standard Practices Subcommittee of the AISI Committee on Framing Standards, chairman of the SFIA Technical Committee, and president of MASFA. He has been

a member of CFSEI for more than 15 years and served as a past president, and is also a member of ASTM International and the Steel Framing Alliance.

Fernando Sesma
California Expanded Metal Products Company (CEMCO)

Fernando Sesma is director of technical services for California Expanded Metal Products Company (CEMCO). He has 40 years of experience in the areas of codes, design, construction and manufacturing of cold-formed steel framing members.



Before joining CEMCO, Fernando gained a wide range of experience with other companies. He was staff engineer for ICBO Evaluation Services in Whittier, California, working as a product evaluator and in product criteria development. He was director of technical services for the Drywall Information Trust Fund Southern California, where he provided technical support and training to contractors and inspectors. He was senior technical representative for the Construction Steel Division of United States Gypsum Company, where he worked with steel, gypsum and plastering steel products.

He has served as a member and in leadership roles with several professional organizations, including the American Iron and Steel Institute's Committee on Framing Standards, American Standard of Testing Materials C11 and A05 Committees, Steel Framing Industry Association, Steel Stud Manufacturers Association, International Code Council, Cold-Formed Steel Engineers Institute, American Society of Civil Engineers, Construction Specifications Institute and National Fire Protection Association.

Fernando has a degree in Civil Engineering from California State Polytechnic University, Pomona.

TUESDAY, MAY 17, 2022: 10:15 AM – 11:15 AM: **ROOM - RED ROVER**

TESTING CRITERIA AND STANDARDS FOR COLD-FORMED STEEL CONNECTIONS

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Sometimes the hardest part of the design is the connection. Manufacturers can make this process easier for design professionals by providing allowable loads based on testing.

The commonly approved criteria and standards are:

- ES-AC261, Acceptance Criteria Connectors Used with Cold-Formed Steel Structural Members
- AISI S905, *Test Standard for Determining the Strength and Deformation Characteristics of Cold-Formed Steel Connections*
- AISI S913, *Test Standard for Determining the Strength and Deformation Behavior of Hold-Downs Attached to Cold-Formed Steel Structural Framing*
- AISI S914, *Test Standard for Determining the Strength and Deformation Behavior of Joist Connectors Attached to Cold-Formed Steel Structural Framing*
- AISI S915, *Test Standard for Determining the Strength and Deformation Behavior of Through-the-Web Punchout Cold-Formed Steel Wall Stud Bridging Connectors, 2015 Edition*

This presentation will focus on ES-AC261 test procedures and qualification requirements for steel connectors, including bypass clip connectors used with cold-formed steel structural members. It will also examine code requirements, testing evaluation and failure modes observed in full-scale testing, as well as component testing. Many of the challenging questions received regarding complex testing, anchorage testing and evaluation of loading on connections will be discussed.

Clifton Melcher, P.E., S.E.
Simpson Strong-Tie Company, Inc.

Clifton Melcher, P.E., S.E. is senior product manager for Simpson Strong-Tie Company, Inc., where he is responsible for managing the development and promotion of cold-formed steel products and related software. Prior to joining Simpson Strong-Tie, Clifton was the engineering branch manager for a large cold-formed steel manufacturer. He is a registered civil and structural engineer with more than 20 years of experience in the cold-formed steel industry. He earned his bachelor's and master's degrees in Civil Engineering from Iowa State University.



Hien Nguyen, M.S., P.E.
Simpson Strong-Tie Company, Inc.

Hien Nguyen, M.S., P.E. is a senior research and development engineer for Simpson Strong-Tie Company Inc., based in Pleasanton, California. A new product development specialist, Hien has more than 20 years of experience in structural connector design for wood and cold-formed steel. She recently led the effort to add curtain wall clip provisions to ICC-ES AC261 - *Acceptance Criteria for Connectors Used with Cold-Formed Steel Structural Members*, approved in February 2019. She was a contributor toward the development of several AISI test standards and for CFSEI's publication "Cold-Formed Steel Framed Wood Panel or Steel Sheet Sheathed Shear Wall Assemblies." She has a Bachelor of Science degree in Civil Engineering from the University of California, Davis and a master's degree from San Jose State University. She is a registered civil engineer in California.



TUESDAY, MAY 17, 2022: 11:30 AM – 12:45 PM: ROOM - FOUR SQUARE BALLROOM

LUNCHEON

CFSEI ANNUAL MEETING



INSTALLATION OF CFSEI EXECUTIVE COMMITTEE



TUESDAY, MAY 17, 2022: 1:00 PM – 2:00 PM: ROOM – MARCO POLO BALLROOM

PANEL ON DELEGATED DESIGN

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

As cold-formed steel (CFS) specialty engineers, we are the experts on the project for the design, detailing and feasibility of the limitations of cold-formed steel. All parties involved in a project, from the architect and engineer of record to the general contractor and drywall subcontractor, rely on our expertise.

Each design and construction team approaches CFS-delegated design differently for each project, creating new challenges for managers to ensure proper service to their clients. The panel participants will discuss common challenges they have encountered on various projects during both the design and construction phases. They will discuss solutions to common mistakes and take questions from the audience.

PANELISTS

Cody L. Dailey, P.E., S.E.
McClure Engineering Company

Cody Dailey, P.E., S.E. is vice president of structural services for McClure Engineering Company based in Missouri, Iowa, and Kansas, and practicing in 48 states. He has over 18 years of experience designing cold-formed systems throughout the country. He has a background specifically in non-bearing exterior framing, curved structural cold-formed, multiple types of floor systems, panelized construction, tall multi-story (10+) drift controlled cold-formed hybrid lateral systems, blast-resistant cold-formed, and DOD progressive collapse. He has overseen multiple projects around the country of 10 stories and taller, including 13 stories in high seismic. Cody is a member of the CFSEI Executive Committee.



Patrick M. Hainault, P.E.
R.A. Smith, Inc.

Patrick Hainault is the cold-formed group leader at R.A. Smith, Inc. in Brookfield, Wisconsin. His experience includes engineering design and staff management with R.A. Smith, Inc. and Matsen Ford Design Associates, Inc., where he was a principal and senior engineer for 21 years. His expertise includes application of the latest technologies and design concepts to a wide variety of primary and secondary structures, including prefabricated systems. In addition to specialty



expertise in cold-formed steel, his engineering systems design experience includes structural steel, reinforced concrete, engineered masonry and wood. He was a structural designer for a concrete reinforcement supplier and a technician for a national material-testing firm. Patrick is a vice-chairman of the CFSEI Executive Committee, a member of the SFIA Technical Committee and the AWCI Construction Technology Committee. He is a registered professional engineer in Wisconsin and several other states. He earned his Bachelor of Science degree in Civil Engineering from Marquette University.

Andrew Newland, P.E.
ADTEK Engineers, Inc.

Andrew has more than 10 years of experience in both cold-formed steel manufacturing and design. He is the specialty structural team leader for ADTEK's offices in Charlottesville, Virginia and Bay City, Michigan, which specialize in the design of load bearing and non-load bearing cold-formed steel projects.



Andrew is a member of the ASCE-SEI Committee on Cold-Formed Steel and participated in the development of the design guide "Best Current Practices for Cold-Formed Steel Connections to Other Materials." He is a member of the American Iron and Steel Institute Committee on Specifications. He is the immediate past chairman of the CFSEI Executive Committee and serves as chairman of the Technology Committee overseeing the development of CFSEI Technical Notes. He is a graduate of Virginia Tech, where he earned a B.S. degree in Civil and Environmental Engineering and an M.S. degree in Civil Engineering.

Daniel Stadig, P.E.
Salas O'Brien

Daniel Stadig, P.E. is an associate vice president and cold-formed steel division manager at Salas O'Brien. He is a registered professional engineer with structural engineering experience dating back to 2009.



He provides project management and structural design for all project types with a focus on blast-resistant structures, modular structures, panelized structures and Virtual Design and Construction/BIM.

Daniel currently serves as chairman of the CFSEI Executive Committee and chairman of the CFSEI BIM Committee. He also serves on the American Iron and Steel Institute Committee on Specifications for the Design of Cold-Formed Steel Structural Members.

He holds a B.S. degree from Marquette University and an M.S. degree from Mississippi State University, where he studied blast-resistant structural design under researchers at the U.S. Army Engineer Research and Development Center (ERDC).

TUESDAY, MAY 17, 2022: 1:00 PM – 2:00 PM: ROOM - RED ROVER

WHAT'S NEW IN 2022: STEEL DECKING THE WORLD

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

2022 is a year of change in the world of steel deck. The Steel Deck Institute (SDI) has a brand-new design standard, ANSI/SDI SD-2022 - *Design of Steel Deck*, which combines the SDI's three separate roof, composite and non-composite floor deck standards. But that is not all! There is an updated Quality Control Standard and the beginnings of a new and improved Code of Standard Practice. AISI S310 has new provisions for diaphragm design, and ASCE 7 has new wind and seismic provisions that affect steel deck. Plus, there are new design manuals and technical notes that are available. So don't be left in the dark. Attend this enlightening session and learn about all the new resources.

Thomas Sputo, Ph.D., P.E., S.E.
Steel Deck Institute
Sputo and Lammert Engineering, LLC

Thomas Sputo, Ph.D., P.E., S.E. is president of Sputo and Lammert Engineering, LLC in Gainesville, FL, where he is responsible for designing and investigating buildings and other structures. He is also technical director of the Steel Deck Institute. Additionally, Tom is a senior lecturer emeritus at the University of Florida, where he taught structural design for over 20 years. He has over 33 years of experience in various areas of structural design, including specialty engineering of manufactured components. He is a licensed professional engineer or structural engineer in 13 states and is a special (threshold) inspector in Florida.



TUESDAY, MAY 17, 2022: 2:15 PM – 3:15 PM: [ROOM – MARCO POLO BALLROOM](#)

KEYNOTE SPEAKER

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Larry W. Williams, APR
Steel Framing Industry Association

Larry is executive director of the Steel Framing Industry Association, the industry organization dedicated to expanding the market for cold-formed steel (CFS) through promotion, advocacy, education and by providing a positive environment for innovation. The SFIA's 1,200 members come from virtually every link of the CFS industry supply chain including steel mills, coil coaters, stud and connector manufacturers, panelizers, engineers, researchers, suppliers/distributors, and builders and framing contractors. SFIA members manufacture 80 percent of the steel framing materials and supply/distribute 90 percent of the steel framing and related materials in the U.S.



Prior to joining the Steel Framing Industry Association, Larry served as general manager of market development and sustainability for the World Steel Association (Brussels), president of the Steel Framing Alliance, and as a founder and executive director of the Light Gauge Steel Engineers Association (now Cold-Formed Steel Engineers Institute). As partner in one of Northern California's largest marketing and strategic communications firms, Larry worked with Fortune 500 clients in the food and beverage, financial services and travel/entertainment industries.

TUESDAY, MAY 17, 2022: 5:00 PM – 8:00 PM

DINNER & SOCIAL EVENT

THE VIEWHOUSE BALLPARK EATERY/BALL GAME

Enjoy a relaxing evening and great food at the ViewHouse Ballpark Eatery, located in Denver's Ballpark neighborhood across from Coors Field. We'll enjoy dinner and drinks in the courtyard while seated at cabanas and picnic tables, and the more energetic among us can compete in games located at the playground behind the big screen. [Check out the 360 view](#) and learn more about ViewHouse Ballpark at <https://viewhouse.com/>.

The Colorado Rockies will play the San Francisco Giants beginning at 6:40 p.m. on the same evening. CFSEI will secure tickets for full conference registrants interested in attending the ball game. There will be no additional cost for the tickets, which are being provided by the Steel Framing Industry Association. A big thank you to SFIA! Go Rockies!



WEDNESDAY, MAY 18, 2022: 9:00 AM – 10:00 AM: [ROOM – MARCO POLO BALLROOM](#)

MEMBER CAPACITY CHANGES PER THE NEW CODE

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

This session will provide an overview of the changes (with applicable timing) to the codes, reference standards and specifications relative to cold-formed steel (CFS) framing that have occurred in recent years. Several typical CFS member capacities have been affected. The presentation will provide insight for engineers, architects, builders and code officials who may have to deal with steel framing, helping them to better understand the complexities and interactions of the changing codes and standards landscape.

Patrick W. Ford, P.E.
R.A. Smith, Inc.

Pat Ford's professional experience includes serving as technical director of the Steel Framing Industry Association (SFIA), management and engineering design with R.A. Smith (and previously Matsen Ford Design), as well as managing, engineering and business positions for several other firms. His work has involved several structural design, contract and project management functions on a wide variety of commercial, industrial and institutional building projects.



Relative to cold-formed steel structural framing, Pat has more than 40 years of experience that includes application of the latest technologies and design concepts to load bearing structures and a wide variety of curtain wall and prefabricated systems. His engineering systems design experience includes structural steel, concrete, engineered masonry, wood and other systems in addition to cold-formed steel. He has building credits throughout the country as well as several projects outside the U.S.

He is an active voting member, committee member and subcommittee chairman with the American Iron and Steel Institute (AISI), American National Standards Institute (ANSI), American Society of Civil Engineers (ASCE), ASTM International, the Association of the Wall and Ceiling Industry (AWCI), Cold-Formed Steel Engineers Institute (CFSEI) and Steel Framing Industry Association (SFIA). He is a registered professional engineer in 19 states and the District of Columbia.

WEDNESDAY, MAY 18, 2022: 10:15 AM - 11:15 AM: [ROOM - MARCO POLO BALLROOM](#)

INNOVATION AND SEISMIC DESIGN FOR COLD-FORMED STEEL

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Understanding the seismic performance of cold-formed steel (CFS) framing requires more than just an exploration of isolated shear walls. Over the last 10-plus years, first with the efforts around CFS-NEES and today with CFS-NHERI, our teams have been learning and translating CFS systems knowledge into improved standards and design tools for cold-formed steel engineers. This talk will summarize some of the critical findings from past work, highlight advancements and changes in seismic design for CFS, and provide a preview of the capstone CFS-NHERI testing of a 10-story CFS-framed building on the shake tables at the University of California San Diego currently scheduled to initiate in Spring 2023.

Benjamin W. Schafer, Ph.D., P.E.
Johns Hopkins University

Benjamin W. Schafer is the Willard and Lillian Hackerman Professor in the Department of Civil and Systems Engineering at Johns Hopkins University. He is director of both the Cold-Formed Steel Research Consortium and Ralph O'Connor Sustainable Energy Institute at Johns Hopkins University. He is also a consulting principal at SGH. He serves on a variety of American Institute of Steel Construction (AISC), American Iron and Steel Institute (AISI) and American Society of Civil Engineers (ASCE) standards committees related to steel structures and is known for his expertise in the design of thin-walled cold-formed steel structures. He is a dedicated and oft-injured runner, facilitator for a middle school maker program, and currently resides in Washington, D.C. with his wife and child.



WEDNESDAY, MAY 18, 2022: 10:15 AM - 11:15 AM: **ROOM - RED ROVER**

COLD-FORMED STEEL LOAD BEARING PANELIZATION

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Cold-formed steel wall framing is being used extensively in multi-story load bearing applications. Today, more than ever, this wall framing is being prefabricated into panels, offering the benefits of time, material and cost savings. In order for these projects to be successful, the cold-formed steel engineer must consider additional factors that are inherent to panelization. This presentation will provide an overview on how to plan with the panel fabricator, engineer with the panel designer and field installation in mind, and coordinate with the other trades. Additional engineering consideration will be given to different floor systems, load distribution members and panel discontinuity. The presentation will include several examples of projects with these panel challenges.

John Parish, P.E.
Excel Engineering, Inc.

John is a professional engineer and project manager at Excel Engineering, Inc., based in Wisconsin. He has 16 years of structural engineering experience and currently works with staff to create cold-formed steel load bearing and curtainwall delegated design submittals for projects across the country. He specializes in projects that utilize prefabricated cold-formed steel wall panels and teams with an in-house staff dedicated to creating panelized shop drawings, layouts and details. He previously served on the CFSEI Technology Development Committee. John has a bachelor's degree in Civil Engineering from the University of Wisconsin-Madison.



WEDNESDAY, MAY 18, 2022: 11:30 AM – 12:45 PM: ROOM - FOUR SQUARE BALLROOM

LUNCHEON



AWARDS PRESENTATION



WEDNESDAY, MAY 18, 2022: 1:00 PM - 2:00 PM: **ROOM - MARCO POLO BALLROOM**

FILLING IN THE MISSING PIECES - HOW TO LOAD ROOF PROFILES USING ASCE 7

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Cold-formed steel (CFS) trusses are designed to resist a variety of environmental loads such as live loads, dead loads, snow loads, wind loads and seismic loads. As engineers, we turn to the ASCE 7 standard to find loading solutions. While it may seem like ASCE 7 has all the answers, there are some missing puzzle pieces. It is the engineer's responsibility to fill in those missing pieces by interpreting ASCE 7 in situations that are not explicitly covered, and then apply and specify the load accordingly.

In this presentation, we will go through a quick review of the snow and wind provisions of ASCE 7. We will then explore how to apply these provisions to our modern-day roof profiles. We will provide a careful review of several conditions that will highlight the drawbacks of ASCE 7. The result of this analysis will be a rational interpretation of the standard on how we can load the roof. Finally, we will review some available literature that may help with wind and snow loading.

Bill Babich, P.E.
TrusSteel

Bill Babich, P.E. is the director of engineering for TrusSteel, a provider of cold-formed steel truss engineering and technology utilizing the proprietary TrusSteel system. He has been involved in the prefabricated truss industry for 36 years and specifically with the CFS industry since 1997. Bill is a member of the American Society of Civil Engineers (ASCE), the AISI Committee on Framing Standards (COFS) and the Cold-Formed Steel Engineers Institute (CFSEI). He is the former chairman of the AISI COFS Truss Subcommittee and the CFSEI Executive Committee.



WEDNESDAY, MAY 18, 2022: 1:00 PM – 2:00 PM: **ROOM - RED ROVER**

PREMEDITATION OF PANELIZED PROJECTS

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Panelized projects can create opportunities for contractors and clients to decrease costs and schedule durations while taking advantage of factory-like quality control conditions. How much builders and clients benefit, however, can be largely dependent on decisions made during the architectural and structural design process to prepare for panelization. This presentation will review some considerations to be made during the design process to ensure the success of panelized projects by decreasing project material and labor costs, increasing coordination of design team members that will reduce rework and design hours, and understanding field operations.

Megan Washnieski, P.E.
South Valley Prefab

Megan Washnieski, P.E., is director of design and engineering for South Valley Prefab. She has worked on contractor construction teams for nearly 24 years; 16 of them with South Valley. Her construction experience includes project management and operations management for South Valley Drywall in addition to her current role at South Valley Prefab. Previously, Megan worked as a project manager for a general contractor. She received a B.S. degree in Engineering from Iowa State University and currently serves on the board of directors for the Steel Framing Industry Association (SFIA).



WEDNESDAY, MAY 18, 2022: 2:15 PM – 3:15 PM: **ROOM – MARCO POLO BALLROOM**

COLD-FORMED STEEL Q & A SESSION

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Cold-formed steel design is not typically a course topic offered at universities. Therefore, an engineer is on her/his own to self-educate. How does one self-educate? One answer is to attend a seminar or webinar on a specific topic.

But for those who have a specific project question and need a quick answer, another option is to take advantage of the highly successful CFSEI “Ask an Expert” feature on the CFSEI website or call the CFSEI Hotline at 800-79STEEL. These inquiries cover the gamut of cold-formed steel applications.

In this interactive session, the presenters will review some of the most frequently asked questions they receive and will also answer your specific cold-formed steel questions. The most frequently asked questions include:

- Should loose straps be a concern?
- Does gypsum between the steel plies impact the screw connection strength?
- For the single-side strap, do I need to be concerned when designing the boundary post design?
- How does one design a shear wall for force transfer around openings?
- What wind loading drift limits are appropriate for mid-rise structures?

Take advantage of this one-hour opportunity to self-educate with two of the industry’s most respected experts.

Roger LaBoube, Ph.D., P.E.
Cold-Formed Steel Engineers Institute

Dr. Roger A. LaBoube is Curator’s Distinguished Teaching Professor Emeritus of Civil, Architectural and Environmental Engineering and former director of the Wei-Wen Yu Center for Cold-Formed Steel Structures at the Missouri University of Science & Technology. Dr. LaBoube holds B.S., M.S., and Ph.D. degrees in Civil Engineering from the University of Missouri-Rolla. He has an extensive background in the design and behavior of cold-formed steel structures. His research and design activities have touched on many facets of cold-formed steel construction, including cold-formed steel beams, panels, trusses, headers, and wall studs as well as bolt, weld, and screw connections. Dr. LaBoube is active in several professional organizations and societies. He serves as chairman of the American Iron and Steel Institute (AISI) Committee on Framing Standards and is an emeritus



member of the AISI Committee on Specifications for the Design of Cold-Formed Steel Structural Members. He is a registered professional engineer in Missouri.

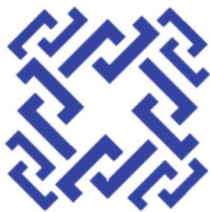
Jennifer Zabik, P.E., S.E.
Bennett-Pless Engineering

Jennifer Zabik, P.E., S.E. is associate and vice-president of Bennett-Pless Engineering. She has been practicing structural engineering for 18 years in the state of Florida and is registered in over 25 states, as well as Puerto Rico. She received her undergraduate and master's degrees at the University of Florida. She served as chair of the CFSEI Executive Committee in 2016. Jennifer has also served as chair of the ASCE-SEI LAD Committee and has been an active member of the ASCE-SEI CFS Committee. She is a co-author and contributor to two design guides with ASCE: "Bracing Cold-Formed Steel: A Design Guide" and "CFS Connections to Other Materials: A Design Guide."



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Cold-Formed Steel Engineers Institute

25 Massachusetts Avenue, N.W., Suite 800
Washington, DC 20001

Tel: 1-800-79-STEEL (800-797-8335)

Website: www.cfsei.org