



CFSEI

2023 ANNUAL EXPO



**HILTON NEW ORLEANS RIVERSIDE
NEW ORLEANS, LOUISIANA**

May 8-10, 2023

THANK YOU TO OUR SPONSORS



STRUCTO-CRETE® BRAND





CFSEI
COLD-FORMED STEEL
ENGINEERS INSTITUTE

Welcome back! The CFSEI Executive Committee is overjoyed for this year's CFSEI Expo. We are excited to have the opportunity to build upon the momentum from the 2022 Denver Expo and current record membership.

The construction industry is experiencing new challenges in the post-pandemic environment; from supply chain and workforce concerns to more compressed schedules than ever before.

Fortunately, from panelization and modular construction, to creative lightweight framing designs and products, cold-formed steel (CFS) engineers, producers, contractors, and researchers are uniquely positioned to be leaders in the solutions to many of these challenges. We know these challenges, and more, will continue to present themselves and the CFS industry will meet them head on by providing creative solutions to keep moving forward.



We gather in New Orleans this year to celebrate the CFS community, 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.

Our lineup this year includes a wide range of topics and speakers relevant to CFS engineers and designers of all levels. The CFS industry continues to strive towards making our design as efficient as possible. We have presentations on cutting edge industry research, BIM coordination and coordination issues with other building components, all of which push us forward in design efficiency. There are presentations on difficult topics such as seismic and blast designs, as well as practical everyday topics engineers struggle to understand. We also have the ever popular Cold-Formed Q&A session where you will have the opportunity to hear what other engineers are asking about and also ask your own questions. We are excited for the Keynote presentation to be provided by Tom Sputto on the Collapse Champlain Tower South and the impact it has had on the engineering and construction industry.

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 2022 results include new Tech Notes and webinars, record entries for the Design Excellence Awards, and further development of long-term educational goals for the engineering and student communities. We are proud to continue the young engineer 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:

ClarkDietrich Building Systems	SFIA	USG
Nucor Vulcraft/Vercor	Simpson Strong-Tie	
Advant Steel LLC	Argos Systems,	ASC Steel Deck
BYLD	CEMCO	DeWalt
FRAMECAD	Marino\Ware	MiTek
TrusSteel	Scottsdale Construction Systems	Dominion

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

Remember to relax, enjoy this experience, and try to embrace the New Orleans motto of "laissez les bon temps rouler" or "let the good times roll."

Sincerely,



Patrick M. Hainault, P.E., R.A. Smith, Inc.
2022-2023 CFSEI Chairman

DOMINION USA, INC.

MONDAY, MAY 08, 2023

The tour bus will leave the Hilton New Orleans Riverside,
2 Poydras Street, New Orleans, Louisiana 70130.

Transportation will leave the hotel no later than 1:00 p.m.

1:00 p.m. - 4:00 p.m.
Dominion USA, Inc.
2417 Sharon Street
Kenner, LA 70062

4:00 p.m.
The tour bus will leave Dominion Facility and return to the Hilton New Orleans
Riverside, 2 Poydras Street, New Orleans, Louisiana 70130.

** Lunch will be provided by Dominion USA, Inc.
* You must be registered as a full conference attendee to participate in this tour.*

TUESDAY, MAY 9, 2023

7:00 a.m. – 4:00 p.m. Registration in Churchill Foyer

7:00 a.m. – 8:30 a.m. Breakfast in Churchill Room D

9:00 a.m. – 10:00 a.m. [Grin and Bear It: The Complex Behavior of Studs Bearing on Concrete Slabs](#)
Churchill Room D
Kara D. Peterman, Ph.D., University of Massachusetts Amherst

10:00 a.m. – 10:15 a.m. Break with Sponsors in Churchill Room D

Churchill Room B [Working Together: Cold-Formed Steel Framing and Metal Building Systems](#)
Stephen J Reiners, P.E., S.E., Behlen Building Systems

10:15 a.m. – 11:15 a.m.

Churchill Room C [Ask the Experts - A Panel on Cold-Formed Steel Connections](#)
Andrew Newland, P.E., ADTEK Engineers, Inc
Chris Gill, Hilti
Howard Good, Aerosmith Fastening Systems
Madeleine Grimmer, P.E., Simpson Strong-Tie
Jason Wager, P.E, DeWalt

11:30 a.m. – 12:45 p.m. [Lunch: Annual Meeting and Awards in Churchill Room D](#)

Churchill Room B [An Introduction to Blast Resistant Design with a Focus on Cold-Formed Steel](#)
Clay Naito, Ph.D., P.E., FPCI, Lehigh University

1:00 p.m. – 2:00 p.m.

Churchill Room C [Top 10 Headaches for a Cold-Formed Steel Specialty Structural Engineer](#)
Jeffrey Klaiman, P.E., ADTEK Engineers, Inc.

2:00 p.m. – 2:15 p.m. Break with Sponsors in Churchill Room D

Churchill Room B [Closing the Gaps: Ensuring alignment between the Engineer of Record Design Intent and Delegated CFS Truss Design](#)
Peter A. Humphrey, P.E., MiTek

2:15 p.m. – 3:15 p.m.

Churchill Room C [Mid-Rise Construction/Shaftwall System Applications and Limitations](#)
Cody L. Dailey, P.E., S.E., McClure Engineering Company
Chuck Webb, P.E., S.E., CSI, CDT, ClarkDietrich Engineering Services LLC

3:15 p.m. – 3:30 p.m. Break with Sponsors in Churchill Room D

3:30 p.m. – 4:30 p.m. [Keynote](#)
Churchill Room D [The Collapse of Champlain Tower South and the Implications for Existing Building Evaluation](#)
Thomas Sputo, Ph.D., P.E., S.E., Steel Deck Institute
Sputo and Lammert Engineering, LLC

5:00 p.m. – 9:00 p.m. [Dinner & Social Event](#)

WEDNESDAY, MAY 10, 2023

7:00 a.m. – 3:15 p.m. Registration in Churchill Foyer

7:00 a.m. – 8:30 a.m. Breakfast in Churchill Room D

9:00 a.m. – 10:00 a.m. [Cold-Formed Steel: Hacks, Holes and Cuts](#)
Churchill Room D Patrick W. Ford, P.E., R.A. Smith, Inc., Steel Framing Industry Association

10:00 a.m. – 10:15 a.m. Break with Sponsors in Churchill Room D

Churchill Room B [Frequently Misunderstood Wind Load Topics for Cold-Formed Steel Structures](#)
10:15 a.m. – 11:15 a.m. Emily Guglielmo, P.E., S.E., F.SEI, Martin/Martin

Churchill Room C [Optimizing Construction Efficiency with BIM: The Benefits of Early Coordination for Prefabricated Loadbearing CFS Structures](#)
Jesse Hasenfus, Excel Engineering, Inc.
Bill Wilde, Excel Engineering, Inc.

11:30 a.m. – 12:45 p.m. [Lunch: Award Winners 1st Place Presentation in Churchill Room D](#)

Churchill Room B [Bracing Cold-Formed Steel Studs](#)
1:00 p.m. – 2:00 p.m. Benjamin W. Schafer, Ph.D., P.E., Johns Hopkins University

Churchill Room C [Cold-Formed Steel Framing in Seismic Areas](#)
Kirsten Zeydel, S.E., Nevell Group, Inc.

2:00 p.m. – 2:15 p.m. Break with Sponsors in Churchill Room D

2:15 p.m. – 3:15 p.m. [Cold-Formed Steel Q&A](#)
Churchill Room D Roger LaBoube, Ph.D., P.E., Missouri University of Science & Technology, Jennifer Zabik, P.E., S.E., Bennett-Pless Engineering

3:15 p.m. Expo Closes

MONDAY, MAY 8, 2023: 1:00 PM – 4:00 PM

DOMINION TOUR

CONTINUING EDUCATION - 2 PROFESSIONAL DEVELOPMENT HOUR

DOMINION

Dominion USA, Inc. is an independent Scottsdale Facility with a panelized framing facility in New Orleans that produces cold-formed steel walls and trusses. Since 2016, Dominion has been producing houses, commercial strip centers, condominiums, medical office buildings, and college dorms from 500 square feet, 60,000 square feet, and up to four stories using panelized steel framing technology with recycled Nucor steel as raw material. The Dominion system is made up of three machines that produce two-by-four, two-by-six, and steel floor and roof trusses for the structures. Dominion design process and machines are driven by proprietary software that ensures precision, efficiency, strength, and speed. Dominion software and machines are patent protected.

Dominion USA, Inc.
2417 Sharon Street
Kenner, Louisiana 70062

Transportation will leave the hotel no later than 1:00 p.m. Lunch will be provided by Dominion USA, Inc. provided.

TUESDAY, MAY 9, 2023: 9:00 AM – 10:00 AM: **CHURCHILL ROOM D**

GRIN AND BEAR IT: THE COMPLEX BEHAVIOR OF STUDS BEARING ON CONCRETE SLABS

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Cold-formed steel studs installed on concrete slab floors are a ubiquitous scenario in light-framed construction. Current specifications treat this condition as an ideal uniform bearing condition. But should they? This presentation will examine a recent research campaign on stud bearing on concrete slabs at the University of Massachusetts Amherst and discuss possible implications for designers.

Kara D. Peterman, Ph.D.
University of Massachusetts Amherst

Dr. Kara Peterman is an associate professor in the University of Massachusetts Amherst Department of Civil and Environmental Engineering, where she runs the Basic Infrastructure Research Group. At UMass, Dr. Peterman investigates cold-formed and hot-rolled steel system behavior, seismic response of those systems, sustainability in basic infrastructure, and the stability of thin-walled steel members. Dedicated to professional service, she is a member of the AISI Committee on Specifications and chairs its Test-Based Design subcommittee, the AISI Committee on Framing Standards, and the AISC Committee on Sustainability. Recently, Dr. Peterman was elected as vice president of the Cold-Formed Steel Engineers Institute, where she chairs the Education Committee. She is also a member of the Executive Committee of the Structural Stability Research Council (SSRC). She received the 2022 Milek Fellowship and 2021 Terry Peshia Early Career Faculty Award from AISC, the 2021 McGuire Award for Junior Researchers from SSRC, and the 2018 Norman Medal from the American Society of Civil Engineers, the highest honor for a technical paper. Dr. Peterman was also awarded the 2021 UMass College of Engineering Outstanding Teaching Award in recognition of her accomplishments as an educator. Prior to joining UMass, Dr. Peterman was a postdoctoral researcher at Northeastern University and received her Ph.D. from Johns Hopkins University.



TUESDAY, MAY 9, 2023: 10:15 AM - 11:15 AM: **CHURCHILL ROOM B**

WORKING TOGETHER: COLD-FORMED STEEL FRAMING AND METAL BUILDING SYSTEMS

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Metal building system (MBS) projects require cold-formed steel (CFS) framing as part of the exterior wall system and for interior wall and ceiling systems. This presentation will provide an overview of the design and behavior of metal buildings and discuss the unique project management structure for MBS projects. It will cover serviceability requirements such as deflection and drift and will provide a summary of metal building resources. Metal building systems are not always covered in structural engineering curriculum. This presentation will provide CFS engineers with the information they need to achieve successful MBS designs.

Stephen J Reiners, P.E., S.E.
Behlen Mfg. Co. - Behlen Building Systems

Stephen J. (Steve) Reiners, P.E., S.E. is a technical director and provides technical sales services for Behlen Building Systems. He has been actively engaged in the metal building systems industry for 45 years and has been a Behlen Partner in Progress since 2005. During his career, he has helped plan and design thousands of metal building systems and has trained dozens of engineers and technicians.



Steve is an active representative on numerous committees and task groups in the Metal Building Manufacturers Association (MBMA). He participated in the publication of MBMA's Metal Building Systems Manual and Fire Resistance Design Guide for Metal Building Systems. He is the author of several articles for the national trade magazine Metal Construction News and has made countless presentations to industry groups on metal building systems and related subjects. He is a member of the National Society of Professional Engineers (NSPE), the Structural Engineering Certification Board (SECB), the American Society of Civil Engineers (ASCE), the American Welding Society (AWS) and the American Society for Testing and Materials (ASTM).

Steve is a licensed professional or structural engineer in 45 states and Guam. He earned a bachelor's degree in civil engineering and an MBA degree from the University of Southwestern Louisiana.

TUESDAY, MAY 9, 2023: 10:15 AM - 11:15 AM: **CHURCHILL ROOM C**

ASK THE EXPERTS: A PANEL ON COLD-FORMED STEEL CONNECTIONS

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

We know how important connections are in all aspects of structural design. Cold-formed steel is no different and can present unique challenges. Whether you struggle finding the appropriate fastener into post-tensioned concrete or for certain seismic conditions, our panel will be there to answer all your fastener-related questions. We will have experts in mechanical and adhesive anchors, powder actuated and pneumatic direct fastening, and screws. Come ready to hear from our panel and ask questions.

MODERATOR

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 a Principal at ADTEK Engineers, Inc. and the specialty structural team leader for the Charlottesville, Virginia, Fairfax, 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. He is a member of the American Iron and Steel Institute (AISI) Committee on Specifications. He is a past chairman and current member 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.

PANELISTS

Chris Gill **Hilti**

Chris Gill is the Technical Services Manager for Direct Fastening at Hilti in Plano, Texas. He is responsible for the department which performs product testing, generates technical data, publishes technical documents, and obtains approvals and listings for power-actuated and screw-fastening products. He is a member of the American Iron and Steel Institute (AISI) Committee on Specifications, and a voting member of its subcommittees responsible for connections and joints, and diaphragm design. Chris participated in the 2020 NEHRP Provisions Update Committee, Issue Team 9, which addressed alternate provisions for seismic diaphragm design, and recommended new provisions for incorporation into ASCE/SEI 7. He has also contributed to the soon-to-be published ASCE/ SEI Design Guide “Cold-Formed Steel Connections to Other Materials.”



Chris has more than 30 years working in the fastening and anchoring industry. He previously worked as a field engineer, field engineering manager, trade manager and product manager with Hilti. He holds a B.S. degree in Engineering from Brown University and an M.S. degree in Engineering and Technology Management from Oklahoma State University.

Howard Good, **Aerosmith Fastening Systems**

Howard Good is the director of business development for Aerosmith Fastening Systems in Indianapolis, Indiana. He started his career in fastening with Grabber Construction products over 25 years ago, focusing on the collated SuperDrive line and integrating the technology into many markets, mostly with light gauge steel framing assemblies. Over the last 16 years, he has been a significant member of the Aerosmith Fastening Systems team, helping to build the company to a level that is well recognized and regarded as a direct fastening solution for connections to light gauge steel, concrete and CMU. With an emphasis on pneumatic and gas tool delivery platforms, he delivers an alternative fastening method focused on productivity. Howard is a board member of the Mid-Atlantic Steel Framing Alliance.



Madeleine Grimmer, P.E.
Simpson Strong-Tie Company, Inc.

Madeleine is the cold-formed steel business specialist for Simpson Strong-Tie. She joined the company as a field engineer in North Carolina in 2017. Madeleine is currently based in Chicago, Illinois and covers the Midwest, Mid-Atlantic and Northeast regions of the U.S. Prior to joining Simpson Strong-Tie, she worked as a structural engineer in the nuclear power industry specializing in seismic studies, blast analysis, nuclear containment design and structural forensics. Madeleine is a registered professional engineer in North Carolina. She earned her bachelor's degree in civil and environmental Engineering and master's degree in Structural Engineering from the University of North Carolina - Charlotte.



Jason H. Wagner, P.E.
DEWALT

Jason H. Wagner, P.E. is the director of field technical services for DEWALT and is responsible for overseeing field engineering in the United States. He has spent the last 15 years developing, training and supporting the anchoring and fastening industry in the areas of research and development, product management and field technical support. Prior to joining DEWALT, Jason worked as a staff engineer for ICC Evaluation Services, where he evaluated building products for code officials, designers and contractors. In addition to his professional responsibilities, Jason is a voting member of ACI Committee 355 – Anchorage to Concrete. Jason is a registered professional engineer in Colorado. He earned a bachelor's degree in civil engineering from Columbia University.



TUESDAY, MAY 9, 2023: 11:30 AM - 12:45 PM: CHURCHILL ROOM D

LUNCHEON

CFSEI ANNUAL MEETING AND AWARDS



INSTALLATION OF CFSEI EXECUTIVE COMMITTEE



TUESDAY, MAY 9, 2023: 1:00 PM – 2:00 PM: **CHURCHILL ROOM B**

AN INTRODUCTION TO BLAST RESISTANT DESIGN WITH A FOCUS ON COLD-FORMED STEEL

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

This session will provide an overview of blast loads and blast evaluation of cold-formed steel structures. It will cover the determination of blast pressures based on explosive threats, determination of dynamic resistance, dynamic analysis techniques, and assessment of level of performance under the event. Examples of cold-formed steel blast design detailing enhancements will be discussed.

Clay Naito, Ph.D., P.E., FPCI
Lehigh University

Clay Naito, Ph.D., P.E., FPCI, is a professor of structural engineering at Lehigh University, where he has served since 2002. He received his Ph.D. and M.Sc. degrees from the University of California Berkeley and his B.Sc. degree from the University of Hawaii. His research is focused on experimental and analytical evaluation of reinforced and prestressed concrete structures subjected to extreme dynamic events including earthquakes, impacts, and intentional blast demands. Clay has published over 90 peer-reviewed articles and over 80 technical reports and conference papers. He is a past associate editor for the “ASCE Bridge Journal,” past member of the Precast/Prestressed Concrete Institute (PCI) Technical Activities Committee, and past chair of the PCI Blast Resistance and Structural Integrity Committee. He also served as a member of the American Concrete Institute (ACI) 318 Subcommittee G and ACI 550, and is a past associate member of the ASCE 7-16 Subcommittee on Tsunami Loads and Effects.



TUESDAY, MAY 9, 2023: 1:00 PM – 2:00 PM: **CHURCHILL ROOM C**

TOP 10 HEADACHES FOR A COLD-FORMED STEEL SPECIALTY STRUCTURAL ENGINEER

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

On most jobs, the contractor has to hire a Specialty Structural Engineer (SSE) to undertake the formal delegated design of the cold-formed steel (CFS) framing for submittal to an architect/engineer (A/E) of Record. The SSE is tasked with interpreting the contract documents and designing the CFS framing to work within the architectural intent and in accordance with the parameters provided by the Structural Engineer of Record. But when the A/E contract documents require CFS to do something it just cannot do, or the contractor in the field performs an installation that is not in accordance with the design of the SSE, it causes project delays, cost overruns and giant headaches for the SSE. This session will share case studies that showcase 10 of the most commonly repeated issues seen by an SSE and will provide potential solutions and suggestions on how to avoid them on future projects. Five examples will cover situations called for in contract documents that are not appropriate or feasible for CFS framing, and the other five will focus on common errors witnessed in the field of improper installation and how to fix them. Architects, engineers and contractors will find this session valuable to ensure their future projects are less stressful and more successful.

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 . 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.

TUESDAY, MAY 9, 2023: 2:15 PM - 3:15 PM: **CHURCHILL ROOM B**

CLOSING THE GAPS: ENSURING ALIGNMENT BETWEEN THE ENGINEER OF RECORD DESIGN INTENT AND DELEGATED COLD-FORMED STEEL TRUSS DESIGN

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

This session will highlight the critical importance of alignment between the design intent of the Engineer of Record (EOR) and the delegated design of the cold-formed steel (CFS) trusses by the Truss Design Engineer with emphasis on frequently encountered issues where additional communication and coordination are required. Typical issues can include clarification of applied loads and performance criteria, coordination of support conditions including embeds and/or ledgers, lateral load transfer through the truss system to the building lateral load resisting system, special framing conditions, wall bracing, mechanical equipment loads and support method, and beyond. By highlighting these issues, a greater awareness and level of attention can be brought to these critical coordination items among the design community in order to achieve alignment between the EOR's design intent and the truss design by the Truss Design Engineer in the delegated design process.

Peter A. Humphrey, P.E.
MiTek

Peter A. Humphrey, P.E is the director of engineering for MiTek's Structural Framing Systems group with over 30 years of engineering and management experience in the building and construction industry. Having practiced consulting structural engineering for 20 years prior to specializing in cold-formed steel on the manufacturing side of the business, Peter provides unique insight and understanding of the industry in support of the MiTek vision to transform the building industry by championing better building methods through the Design-Make-Build approach.



Since specializing in engineering of CFS, Peter has gained extensive experience in cold-formed steel framing design with an emphasis on truss systems and has developed a passion and expertise in new product development, testing and code compliance. His consulting engineering experience includes significant work in educational facilities (K-12 and college/university), commercial and industrial projects, institutional and public facilities, multi-family housing and senior living projects, as well as restoration and renovation projects. Peter earned his bachelor's degree in architectural engineering from Penn State University. He is a licensed professional engineer in multiple states.

TUESDAY, MAY 9, 2023: 2:15 PM - 3:15 PM: **CHURCHILL ROOM C**

MID-RISE CONSTRUCTION/SHAFTWALL SYSTEM APPLICATIONS AND LIMITATIONS

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

The height, size, and versatility of load-bearing cold-formed structures can be limited by more than structural capacity. Fire detailing requirements can also be “project killers” and force budgets beyond what the proforma will support. Although fire requirements are the responsibility of the architect, this presentation will discuss tools that engineers should possess for constructive conversation with building officials, owners, and architects with respect to primary and secondary members, rating of individual elements, and use cost-saving exemptions withing the IBC.

Specialty engineering services are frequently required for interior nonstructural applications as delegated by the design team, this presentation will also discuss shaftwall limitations and what should be considered by the specialty engineering services when incorporating shaftwall design into the shop drawing package since shaftwall framing applications have their limitations which are often unknown or ignored in application.

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.



Chuck Webb, P.E., S.E., CDT
ClarkDietrich Building Systems

Chuck Webb, P.E., S.E., CDT is the technical sales manager for ClarkDietrich Building Systems where he is responsible for developing a “trusted advisor” relationship with the design community and identifying product opportunities and solutions for the company’s design and contractor teams. He joined ClarkDietrich Building Systems in 2004 as a project engineer/manager and general manager for the cold-formed engineering team. Chuck’s engineering experience has enabled him to translate his understanding of labor-saving cold-formed products and applications into improvements in the construction process. He earned his bachelor’s degree in civil engineering from the Georgia Institute of Technology.



TUESDAY, MAY 9, 2023: 3:30 PM – 4:30 PM: **CHURCHILL ROOM D**

KEYNOTE SPEAKER

THE COLLAPSE OF CHAMPLAIN TOWER SOUTH AND THE IMPLICATIONS FOR EXISTING BUILDING EVALUATION

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

On June 24, 2021, Champlain Towers South, a 12-floor condominium in Surfside, Florida, partially collapsed at approximately 1:30 a.m. EDT. The collapse happened suddenly and resulted in mass casualties. The “how” of the collapse is the subject of an investigation by the National Institute of Standards and Technology (NIST) and several other government and private entities. The “why” of the event has been a matter of tremendous discussion and government action, especially in light of the fact that Miami-Dade County has mandated structural and electrical inspections of buildings that are 40 years old and additional inspections at 10-year increments. The Florida Building Commission has contracted with the University of Florida to undertake a review of the existing building inspection process within the state and to report back to the Commission, which is making further recommendations to the legislature and governor. But is this enough? The presenter is one of the investigators for this project and he will discuss what this means for the evaluation of existing buildings not only in Florida, but throughout the country, and what the steel community must do to respond.

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 vice president of Sputo and Lammert Engineering, LLC in Gainesville, Florida, designing and investigating buildings and other structures. He is also the technical director of the Steel Deck Institute. Tom is a Senior Lecturer Emeritus at the University of Florida, where he taught structural design for over 20 years. He has over 35 years of experience in varied areas of structural design, including specialty engineering of manufactured components. He is a licensed professional engineer or structural engineer in 13 states, and a Special (Threshold) Inspector in Florida.



TUESDAY, MAY 9, 2023: 5:00 PM - 9:00 PM

DINNER & SOCIAL EVENT

CREOLE QUEEN RIVER CRUISE



Enjoy a relaxing evening and great food onboard the Paddlewheeler Creole Queen paddle boat, located near the Hilton New Orleans Riverside Hotel (see map). Enjoy the Creole buffet, Dixieland entertainment and views of the city as you cruise on the Mississippi River. The evening begins with a reception at 5:00 p.m. The boat will leave the dock at 7:00 p.m. and dinner will be served. The boat will return to the dock at 9:00 p.m.

- 6:00 p.m. - Embark the boat, buffet and drinks.
- 7:00 p.m. - Boat leaves the dock.
- 9:00 pm. - Boat returns to the dock.

WEDNESDAY, MAY 10, 2023: 9:00 AM – 10:00 AM: **CHURCHILL ROOM D**

COLD-FORMED STEEL: HACKS, HOLES AND CUTS

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

This session will be a brief overview of current commercial, institutional and multi-residential project uses of cold-formed steel framing. Common problems associated with members being cut, drilled through or damaged in the field will be reviewed, along with some of the possible solutions. The overall aim will be to provide additional insight for engineers, designers and inspectors who may or may not deal with steel framing on a daily basis. The end result should be to help better judge correct uses of cold-formed steel framing details in commercial construction and to identify potential problems earlier in the course of a project.

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.

WEDNESDAY, MAY 10, 2023: 10:15 AM - 11:15 AM: **CHURCHILL ROOM B**

FREQUENTLY MISUNDERSTOOD WIND LOAD TOPICS FOR COLD-FORMED STEEL STRUCTURES

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

The session will focus on wind provisions of ASCE 7/ IBC (International Building Code) that are frequently misunderstood or incorrectly applied with a particular emphasis on cold-formed steel structures, including building enclosure classification, torsional wind design, wind load analysis methods, canopies, rooftop screen walls, and effective wind area. It will also focus on ASCE 7-16 changes and explore the future of wind design.

Emily Guglielmo, P.E., S.E., F.SEI Martin/Martin

Emily Guglielmo, P.E., S.E., F.SEI, a principal with Martin/Martin. With near two decades of structural engineering experience, Emily began her career in the Denver, Colorado office of Martin/Martin and now manages the firm's San Francisco Bay area office. Emily has lectured on wind load provisions both nationally and internationally. She is also the chair of the NCSEA Wind Engineering Committee and a voting member of the ASCE 7 Wind Loads Subcommittee. She has received several awards, including SEI Fellow and the Susan M. Frey NCSEA Educator Award for effective instruction for practicing structural engineers. Emily earned her bachelor's degree in Civil Engineering from UCLA and her master's degree in Structural Engineering from UC Berkeley.



WEDNESDAY, MAY 10, 2023: 10:15 AM - 11:15 AM: **CHURCHILL ROOM C**

OPTIMIZING CONSTRUCTION EFFICIENCY WITH BIM: THE BENEFITS OF EARLY COORDINATION FOR PREFABRICATED LOADBEARING COLD-FORMED STEEL STRUCTURES

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

NUCOR®
VULCRAFT/VERCO
Session Sponsor

This presentation will address typical design challenges associated with prefabricated loadbearing cold-formed steel (CFS) structures. The presenters will explain how a sequence-based approach using Building Information Modeling (BIM) can be implemented to effectively communicate the numerous constraints involving engineering, design and other building systems. The presentation will also showcase early coordination techniques that improve efficiency and help reveal problems before fabrication and installation. It will benefit architects, engineers and contractors that specialize in prefabrication.

Jesse Hasenfus
Excel Engineering, Inc.

Jesse Hasenfus is a project manager at Excel Engineering and runs the firm's Building Information Modeling (BIM) Services department, specializing in BIM for MEP systems and cold-formed steel framing. He has nearly two decades of experience in the AEC industry and is passionate about BIM and Virtual Design and Construction (VDC) coordination. Previously, Jesse served as Excel Engineering's BIM manager, supporting the firm's multiple in-house design and engineering disciplines including architecture, structural, civil, mechanical, electrical, plumbing and process. His experience with developing content and implementing standards for those groups provided him with a high level of understanding for how people, spaces and systems come together on a project. Jesse is a member of the Cold-Formed Steel Engineers Institute (CFSEI) and is the recipient of several design excellence awards for projects featuring innovative BIM solutions.



Bill Wilde
Excel Engineering, Inc.

Bill Wilde is a senior project manager at Excel Engineering with over 26 years of experience in the cold-formed metal framing industry. His work on 525 Water Street, a 107-unit condominium building in a development known as The Wharf in Washington, DC, was recognized with a 2016 CFSEI Design Excellence Award and was featured in the January 2017 issue of STRUCTURE Magazine. Bill is committed to his work and strives to identify and resolve issues as early as possible in the project timeline. As a manager, he emphasizes the importance of paying attention to detail with the designers under his supervision. He earned a Bachelor of Science degree in Architecture and Urban Planning from the University of Wisconsin - Milwaukee.



WEDNESDAY, MAY 10, 2023: 11:30 AM - 12:45 PM: **CHURCHILL ROOM D**

LUNCHEON



FIRST PLACE AWARD WINNERS PRESENTATIONS



WEDNESDAY, MAY 10, 2023: 1:00 PM – 2:00 PM: **CHURCHILL ROOM B**

BRACING COLD-FORMED STEEL STUDS

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

The need to brace cold-formed steel studs to achieve reasonable levels of design efficiency and performance is clear; however, guidance and design requirements have evolved greatly beyond providing two percent of the axial demand. This talk will summarize current guidance and requirements in AISI S100 and AISI S240 for bracing studs. In addition, a summary of research to understand and predict the behavior of studs with sheathing bracing, discrete bracing, and combined (sheathing and discrete) bracing will be summarized. Finally, a proposed approach for rational engineering design of studs with combined bracing will be summarized. This approach is also under consideration for formal adoption in future AISI standards.

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

Benjamin W. Schafer is the Hackerman Professor in the Department of Civil and Systems Engineering and the director of the Ralph O'Connor Sustainable Energy Institute at Johns Hopkins University. Professor Schafer also serves as the director of the Cold-Formed Steel Research Consortium and is active in engineering consulting as a consulting principal at SGH. He received his Ph.D. from Cornell University and his B.S.E. from the University of Iowa. Professor Schafer serves on AISI, AISC, and ASCE specification committees related to steel structures. He has previously served as chair of the Department of Civil Engineering at Johns Hopkins, chair of the Structural Stability Research Council, president of the Cold-Formed Steel Engineers Institute, and North American editor of the "Journal of Thin-Walled Structures."



WEDNESDAY, MAY 10, 2023: 1:00 PM – 2:00 PM: **CHURCHILL ROOM C**

COLD-FORMED STEEL FRAMING IN SEISMIC AREAS – WHAT I NEVER KNEW I NEEDED TO KNOW

CONTINUING EDUCATION - 1 PROFESSIONAL DEVELOPMENT HOUR

Cold-Formed Steel Framing (CFS) is an excellent solution for structural and non-structural systems in seismic areas. But are there unique challenges to consider? Is it as simple as designing for those pesky seismic loads? How much do seismic loads vary? Are there special detailing requirements? Do any of these seismic requirements conflict with fire requirements?

Join Kirsten for a discussion on CFS framing in seismic areas. From main structures to exterior/interior elements, this session will cover them all and discuss the seismic-specific items to watch out for when using CFS framing as the main structure. This session will also discuss how exterior/interior non-structural CFS framing supports seismic loads as well as how they do and do not accommodate base building movements.

While there will be technical topics covered, this presentation is intended for everyone from engineers to owners.

Kirsten Zeydel, S.E.
Novell Group, Inc.

Kirsten Zeydel, S.E. is the director of design at Novell Group Inc. She is a registered structural engineer in California with over 22 years of structural engineering design and management experience. She specializes in cold-formed steel (CFS) design, detailing, and panelization. Kirsten led the structural engineering group at a startup company where she developed a QA/QC process acceptable to OSHPD, and obtained IAPMO product certification for the framing members, sheathed panels, and pre-finished exterior panels. Her extensive experience in CFS design includes a dorm project with nine multi-story CFS load bearing buildings totaling 800,000-sq-ft, and the CFS non-load bearing interior and exterior framing for a 550,000-sq-ft hospital in California. In addition to the engineering side of CFS design, Kirsten has experience with quality programs, product certification, welding procedures, architectural building code requirements and prefinished exterior panels. She is also a proud wife and mother of two children who firmly believes that being a mom has made her a better engineer.



Session Sponsor



WEDNESDAY, MAY 10, 2023: 2:15 PM – 3:15 PM: **CHURCHILL ROOM D**

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? Possibly by attending a seminar or webinar on a specific topic, but sometimes all that's needed is a quick answer to a specific project question.

How do you find that quick answer? Many engineers take advantage of the highly successful CFSEI "Ask an Expert" page on the CFSEI website or the CFSEI Hotline at 1-800-79STEEL. The inquiries we receive cover the gamut of cold-formed steel applications and we respond to them promptly.

In this session, we'll review a few of these most-asked questions, such as:

- Should loose straps be a concern?
- Does gypsum between the steel plies impact the screw connection strength?
- How does one design a shear wall for force transfer around openings?
- What is the yield strength used to design a member in 1989?
-

You may have a few cold-formed steel questions of your own, and we'll answer them in this interactive Q&A session. We guarantee you'll learn something new.

Roger LaBoube, Ph.D., P.E.
Missouri University of Science & Technology

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."



THANK YOU TO OUR SPONSORS



STRUCTO-CRETE® BRAND





Cold-Formed Steel Engineers Institute

513 W. Broad Street, Suite 210

Falls Church, VA 20001

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

Website: www.cfsei.org