

NEWSLETTER

AUGUST 2011



CFSEI
COLD-FORMED STEEL
ENGINEERS INSTITUTE



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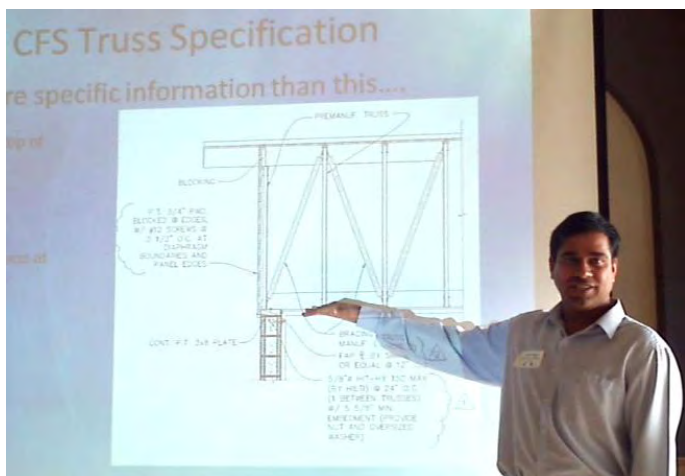
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UPCOMING EVENTS:

CFSEI Webinar: CFS Submittals	Aug 25, 2011
METALCON International, Atlanta, GA	Oct 11-13, 2011
22 nd Short Course on CFS Structures, St. Louis, MO	Oct 25-27, 2011

RE-CAP OF JULY 14TH MEETING*

The CFSEI Florida Chapter would like to extend a big “THANK YOU” to Sowri Rajan, PE (Chief Engineer of Alpine Structural Consultants) for presenting “Lessons Learned – Truss Design and Installation to Avoid Disaster” on July 14th. The meeting was well attended, and the presentation material was extremely well received by the audience.



Congratulations to Florida Chapter member **Robert Haug, PE**, who was the lucky winner of the raffle prize: AISI S214-07 "AISI North American Standard for Cold-Formed Steel Framing – Truss Design 2007 Edition"! Florida Chapter members who missed out on attending this event can access the meeting presentation by logging in online at <http://www.cfsei.org/florida.htm>. For feedback

* Julie Lowrey, E.I., TrusSteel, ITWBCG, Inc.
Vice-President (2011), CFSEI FL Chapter

regarding this event, contact Julie Lowrey (jlowrey@itwbcbg.com).



Our Chapter meetings would not be possible without the support of our valued sponsors. We sincerely thank Aegis Metal Framing and TrusSteel for their support of this event and for their continued support of the CFSEI Florida Chapter.

NEW BENEFIT FOR FL CHAPTER MEMBERS – ACCESS PAST PRESENTATIONS ONLINE*



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Effective immediately, CFSEI Florida Chapter members can access past meeting presentations online at <http://www.cfsei.org/florida.htm>. This benefit is only available to current Florida Chapter members, so you will have to log in to access the past presentations. The Florida Chapter Board of Directors is committed to giving you the most for your membership, so please take advantage of this new benefit. If you would like to join the CFSEI Florida Chapter, and gain access to this and all of our other benefits, please visit www.cfsei.org.

PREVIEW OF NEXT DINNER PRESENTATION ON “CFS SOFTWARE” – SAVE THE DATE FOR NOVEMBER 10TH*



Please save the date for our next dinner meeting presentation happening on Thursday November 10th, 2011. We are pleased and excited to announce that Bob

Glauz, author of the “CFS” family of software products from RSG Software will be coming to present for the Florida Chapter. For many of us who design CFS members, “CFS” software is a “must have”, and its capabilities have been instrumental in our daily work. Please stay tuned – More details regarding this meeting will be coming soon!

The following information is courtesy of <http://www.rsgsoftware.com>:

“Mr. Glauz earned his Bachelor's degree in Civil Engineering from the University of Missouri – Rolla in 1982 and Master's degree in Civil Engineering from the University of Kansas in 1988. He is a licensed, practicing Professional Engineer and participates as a member of the American Iron and Steel Institute Committee on Specifications.”

* Julie Lowrey, E.I., TrusSteel, ITWBCG, Inc.
Vice President (2011), CFSEI FL Chapter

Background

The American Iron and Steel Institute (AISI) has issued numerous editions of the "Specification for the Design of Cold-Formed Steel Structural Members" over the years. The 1986 Edition introduced a significant change to member local buckling strength determination called the "Unified Approach". This approach requires the computation of effective widths of each element of the cross section, based on the slenderness of the element, the stress in the element, and the degree of edge stiffening. The effective section properties are then used to determine the strength. This is often an iterative process due to shifting of the neutral axis and thus changes in stress level.

The first version of CFS was written in 1987 to assist the engineer in performing these calculations. From the beginning, the primary goal was to handle any general shape of uniform material thickness. The internal calculations were developed from mathematically rigorous derivations for arbitrary shapes, including integration through the bend radius segments and across the material thickness. Furthermore, the calculations of torsional properties, which are often crucial in the determination of member strength, use exact integrations for thin-walled sections that

incorporate the bend radius segments as well. Just as important was the goal to make the application easy to use.

A flexible method of defining cross section shapes was devised that simply requires the length and angle of consecutive connected elements, and the bend radius between each of them. Additionally, the interface was graphical to provide the user with immediate visual confirmation of the inputs as they are given.

Today's Software



® The CFS application has evolved through changes in appearance, numerous enhancements, and

changes to the AISI Specification. The 1996 Edition of the Specification for the Design of Cold-Formed Steel Structural Members combined Load Factor and Resistance Design (LRFD) and allowable stress design (ASD) into one specification. The 1999 Edition was published as Supplement No. 1 to the 1996 Edition, which further refined the Specification and added some new provisions. Subsequently, AISI worked with Canada (CSA) and Mexico (CANACERO) to develop the 2001 Edition of the NASPEC for the Design of Cold-Formed Steel Structural Members. That was followed by the 2004 Supplement which introduced the Direct Strength Method. And now the

2007 Edition of the North American Specification is the latest edition.

CFS Version 6.0 provides calculations from the 2007 Edition, including ASD and LRFD methods (U.S. and Mexico) and the LSD method (Canada). Calculations from the 1999, 2001, and 2004 editions continue to be available in CFS. Also, the 2002 Edition of the ASCE Specification for the Design of Cold-Formed Stainless Steel Structural Members (ASCE-8-02) is used for ASD and LRFD methods with stainless steel materials (Information Courtesy of <http://www.rsgsoftware.com/>).



For Registrations, please click the link below

22nd Short Course on Cold-Formed Steel Structures

October 25, 26, and 27, 2011
St. Louis, Missouri

Continuing Education Credits: 2.4 CEUs

<http://www.shop.ccfsonline.org/>

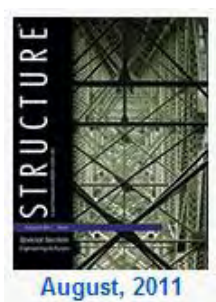


CFS ARTICLES IN THE AUGUST ISSUE OF STRUCTURE® MAGAZINE*

August 2011 Steel

The August 2011 issue of STRUCTURE® Magazine features several articles and advertisements related to the cold-formed steel framing industry. The articles included are:

- **Codes and Standards:** *Structural Implications of Energy Codes for Steel Framing* by Mark Nowak and Jay Crandell, P.E. (Page 08)
- **Outside the Box:** *Cold-Formed Steel Bridge Trusses Provide Material Handling Solution* by Sowri Rajan, P.E. and Troy Lutgens (Page 13)
- **Structural Specifications:** *The Lost Specifications Section* by Renee Doktorczyk, AIA (Page 16)



The August issue is available online now. To view or download the above articles, visit <http://www.structuremag.org/issue.aspx>.

* Tamilselvan Samiappan, P.E., TrusSteel, ITWBCG, Inc.
Board Member (2011), CFSEI FL Chapter

UPDATE ON CFSEI TECHNICAL NOTE*



The CFSEI has recently published two new Technical Notes:

Tabulated Local and Distortional Elastic Buckling Solutions for Standard Shapes (G103-11a) –

This Tech Note includes tabulated elastic buckling moments and forces for local and distortional buckling of standard shapes such as those in AISI S201 and SSMA. The tabulated values in the Tech Note will serve as an efficient and time saving reference material for those who use Direct Strength Method (DSM) for design.

Design of By-Pass Slip Connectors in CFS Construction (W103-11) – This Tech Note is the updated and revised edition of the LGSEA Tech Note on By-Pass Slip Connectors (TN-544).

If you are a member of CFSEI, you should have received an e-mail announcement with a link to download; you can also login to www.cfsei.org using your username and password to **download the Technical Note for FREE**. To become a member to receive free Technical Notes and all the other member benefits, visit www.cfsei.org.



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Thursday, August 25, 2011 CFSEI presents

Cold-Formed Steel Submittals: *Expectations and Performance of Structural and Specialty Engineers*

The structural design of cold-formed steel (CFS) framing on many projects is outside the scope of the structural engineer of record. On these projects, design is typically performed by a specialty structural engineer, who may work for the general or specialty contractor. Webinar attendees will learn what the contractual and legal requirements are for both the provider of this design and the professionals who review and approve these submittals. This seminar is specially tailored for construction professionals who regularly provide or review these documents. It will give both the designer, reviewer, and others a thorough understanding of the design responsibilities and issues with deferred design, and how to avoid many of the common mistakes.

Date: Thursday, August 25, 2011
Time: 3 p.m. Eastern; 2 p.m. Central; 1 p.m. Mountain; Noon Pacific; 10 a.m. Hawaii
Format: Web-based seminar using "Go To Meeting" technology.
Duration: 1+ hour of lecture and design examples, followed by 30 minutes of discussion and questions. (1.5 hour total—however this is registered for 1 hour of continuing education)
Cost: \$75 per computer screen for CFSEI & SFA Members;
 \$100 for non-members

Unlimited participants from the same firm at each screen. Gatherings at professional associations are encouraged, but need to be communicated and approved by CFSEI.

Late Registration: Registrations must be received 48 hours prior to the webinar time or a \$20 late registration fee will be assessed.

Continuing Education: 1.0 hour available. Additional participants registered by a non-member can purchase continuing education credits for \$25 each.

Who Should Attend?

- **Anyone who reviews CFS Submittals, including**
 - Structural engineers
 - Architects
 - General Contractors
- **Anyone responsible for providing CFS submittals, including**
 - Wall and Ceiling Contractors
 - Specialty Structural Engineers
- Forensic Engineers
- Project Managers
- Drafters and Detailers
- CFS Framing and Fastener / Connector / Accessory Manufacturers

Sign up today at www.cfsei.org. See next page for additional details.

Thursday, August 25, 2011 CFSEI Webinar:**Cold-Formed Steel Submittals:
Expectations and Performance of
Structural and Specialty Engineers**

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This webinar includes:

- Responsibilities of the structural engineer of record (SER)
- Responsibilities of other members of the construction team with respect to CFS framing design and submittals
- Helpful information on when it is appropriate to require CFS submittals, and when you may not want to delegate design.
- Case studies of successful and unsuccessful projects with CFS delegated design

Webinar Materials

The day before the webinar, registered participants will have access to electronic versions of the following:

- Presenter's notes
- *AISI Code of Standard Practice*
- CFSEI Technical Note G800-07a (ASTM Standards for CFS)
- CFSEI Technical Note G801-08 (ASTM A1003 - No Cause for Rejection)
- Evaluation form

About the Presenter:

Steve Walker, P.E., has been involved with the design of CFS framing for over 25 years. He is the principal and founder of the Light Gauge Steel Engineering Group, Inc. (LGSEG), a firm that practices in more than 40 states. Mr. Walker has more than thirty years experience in the design of structural framing systems with all types of structural materials. His experience with CFS framing includes consulting for product manufacturers, design of specialty accessories and clips, forensic investigations, structural repair and remediation, and loadbearing CFS multi-story structural design. Steve has served on the American Iron and Steel Institute (AISI) Committee on Specifications (COS) and Committee on Framing Standards (COFS), and was a board member of the CFSEI during its transition phase from the Light Gauge Steel Engineers Association (LGSEA.) Steve is currently on the CFSEI Task Group for CFS engineer certification, and the AISI Task Group for the *Code of Standard Practice for the Cold-Formed Steel Structural Framing Industry*.



Steel Framing Alliance™

SFA FBPE Provider #0005013

Why should you attend?

- Many designers and contractors do not fully understand the legal and ethical issues surrounding delegated design
- Attendees will learn how to quickly spot potential problems with CFS submittals
- Receive and understand the AISI Code of Standard Practice, and how it can help with your project
- If you are a member or join CFSEI when you sign up, other participants at your location can obtain **continuing education at no additional cost.**



Sign up today at www.cfsei.org

A LIST OF AVAILABLE CFSEI TECH NOTES (as of August 2011)		*** FREE TO MEMBERS ***
Number	Description	Date
G000 General		
360	Acoustic Insulation and Sound Transmission in CFS Construction	Oct-99
420	Fire-Rated Assemblies for CFS Construction	Oct-98
559	Design Considerations for Flexural and Lateral-Torsional Bracing	Jun-01
1010b	Inspection Checklist for Structural CFS Framing: Field Guide (pocket size)	Oct-98
1010c	Inspection Checklist for Structural CFS Framing (full size)	Oct-98
G000-08	CFS Design Software	Feb-08
G100-07	Using Chapter F of the North American Specification for the Design of CFS Structural Members	Sep-07
G101-08	Design Aids & Examples for Distortional Buckling (Formerly G100-08; corrected 3/17/2010)	Sep-08
G102-09	Designing Cold-Formed Steel using the Direct Strength Method (formerly G100-09)	Aug-09
G103-11a	Tabulated Local and Distortional Elastic Buckling Solutions for Standard Shapes (Revised 8/2011)	Jun-11
G800-07a	ASTM Standards for CFS	Jun-07
G801-08	ASTM A1003 - No Cause for Rejection	Jul-08
G900-08	Design Methodology for Hole Reinforcement of Cold-Formed Steel Bending Members	Jul-08
J000 Floor and Joist Systems		
J100-11	CFS Floor Joists (formerly 552)	Apr-11
W000 Wall Systems		
542	Introduction to Curtain Wall Design Using CFS	Jan-01
W100-08a	Single Slip Track Design	Aug-08
W101-09	Common Design Issues for Deflection Track	Sep-09
W103-11	Design of By-Pass Slip Connectors in CFS Construction	Aug-11
W200-09	Header Design	Feb-09
W104-10	Top Track Load Distribution Members	Dec-10
R000 Roof and Ceiling Systems		
C000 Component Assemblies (Trusses and Wall Panels)		
551d	Design Guide: Construction Bracing of CFS Trusses	Jan-96
551e	Design Guide: Permanent Bracing of CFS Trusses	Feb-98
551f	Specifying Pre-Engineered CFS Floor and Roof Trusses	Oct-98
F000 Fasteners and Connection Hardware		
F100-09	Design of Clip Angle Bearing Stiffeners	Mar-09
F140-10	Welding CFS (replaced 560-b1)	May-10
F300-09	Pneumatically Driven Pins for Wood-Based Panel Attachment	Jul-10
560c	Clinch (Integral) Fastening of CFS	Jan-99
562	Powder Actuated Fasteners in CFS Construction	Oct-01
565c	Screw Fastener Selection for Light Gauge Steel Framing	Feb-97
565d	Screws for Attachment of Steel-To-Wood and Wood-Steel	Oct-05

A LIST OF AVAILABLE CFSEI TECH NOTES (as of August 2011)		*** FREE TO MEMBERS ***
Number	Description	Date
T000 Thermal, Fire, and Acoustic		
T001-09	Cost-Effective CFS Fire & Acoustic-Rated Wall & Floor/Ceiling Assemblies for Multi-Unit Struct.	Nov-09
M000 CFS in Mixed Structural Systems		
D000 Durability & Corrosion Protection		
D001-07	Durability of CFS Framing Members	Sep-07
D100-08	Corrosion Protection of Screw Fasteners	Apr-08
D200-07	Corrosion Protection for CFS Framing in Coastal Areas (replaces TN140 10/03)	Jan-07
560b-5	Fastener Corrosion	Apr-99

Old Notes, Withdrawn or Replaced		
544	Design of By-Pass Slip Connectors in Cold-Formed Steel Construction	Sep-04
560b-1	Welding CFS (replaced 5/2010 by F140-10)	Oct-99
561b	Pneumatically Driven Pins for Wood Based Panel Attachment (replaced by F300-09)	Mar-98
140	Corrosion Protection for CFS Framing in Coastal Areas (replaced by D200-07)	Oct-03
550	Design Values for Vertical and Horizontal Lateral Load Systems (Superseded by AISI S214)	Sep-01
552	CFS Floor Joist Design (replaced by J100-11)	Feb-00
5000	Field Installation Guide for CFS Roof Trusses (refer to Cold-Formed Steel Building Component Safety Information (CFSBCSI) from the Structural Building Components Association (SBCA))	May-00



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