

CFSEI STUDENT COMPETITION

WALL SECTION DESIGN

CALL FOR ENTRIES

2022 - STUDENT COMPETITION

AWARD	ENTRY SUBMITTED BY TEAM LEADER		
NAME: _			
COLLEGE: _			
ARE YOU A CFSEI MEMBER?		YES	NO
PROJECT TEAM			
	TEAM MEMBER		
NAME:			
6011565			

	TEAM MEMBER		
NAME:			
COLLEGE:			
MAJOR:			
E-MAIL:			
AREA CODE PHONE NUMBER:			
ARE YOU A CFSEI MEMBER?		YES	NO
	TEAM MEMBER		
NAME:			
COLLEGE:			
MAJOR:			
E-MAIL:			
AREA CODE PHONE NUMBER:			
ARE YOU A CFSEI MEMBER?		YES	NO
	TEAM MEMBER		
NAME:			
COLLEGE:			
MAJOR:			
E-MAIL:			
AREA CODE PHONE NUMBER:			
ARE YOU A CFSEI MEMBER?		YES	NO

PLEASE PROVIDE A LIST OF ADDITIONAL TEAM MEMBERS ON A SEPARATE PAGE IF NEEDED

COMPETITION PROCEDURE

Submit a shop drawing design package for the cold formed steel framing shown in the provided contract document abstract of an exterior platform with soffit. The abstract includes a typical architectural detail, structural detail, general structural notes (GSN), and the division 05 40 00 project design specifications for the cold formed steel framing. The shop drawing design package needs to provide all the necessary information required in division 05 40 00 specification abstract. The specification lists the required components of the shop drawings. The package needs supportive calculations showing the framing components meet the design load requirements per specification.

Shop Drawings should consist of the following:

Show details of fabrication and installation, include sections, details of components, and attachments to the support structure. Include spacing, sizes, thicknesses, and types of coldformed steel framing; and fastening and anchorage details, including mechanical fasteners. Indicate reinforcing channels, opening framing, supplemental framing, strapping, bracing, bridging, splices, accessories, and connection details. The CFS framing must allow the intended architectural finishes and shape to be installed while connecting to the primary structure for support. Reference the 05 40 00 specifications for additional information.

Calculations:

The calculation package should include everything used in your design process to create the shop drawings.

Rules:

Support members and attachment clips must all use the material cold-formed steel. Any form of connection to the support structure like welding, mechanical fasteners, bolted, power-driven fasteners, etc., is acceptable. Students can use proprietary products provided by manufacturers such as clips and members, but they can design custom shapes or clips of their own.

Calculations should focus on hand calculations, but students can use software like RISA/SAP/RSG, etc., to backcheck the designs. Hand calculations should focus on using the information provided in SFIA/SSMA manuals, AISI excerpts, and CFSEI tech notes. Students can reference the following links for additional information.

- https://www.cfsei.org/
- https://www.cfsei.org/technical-notes
- https://www.cfsei.org/free-aisi-standards
- https://ssma.com/
- https://sfia.memberclicks.net/

Student Membership:

Students are encouraged to obtain a free complimentary CFSEI membership to gain access to a wide range of benefits uniquely tailored for cold-formed steel engineers. To learn more about these benefits, please visit the link below.

• https://www.cfsei.org/membership

Provide a summary outlining how the shop drawing package was put together and some of the design challenges. (Use the space below)				

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