

# SUPREME FRAMING SYSTEM

Steel-Con<sup>TM</sup>

**Steel Construction  
Systems**



2012 INTERNATIONAL  
BUILDING  
CODE

2015 INTERNATIONAL  
BUILDING  
CODE





<b>What is the Supreme Framing System?</b> .....	<b>4</b>
<b>Certification of Materials</b> .....	<b>5</b>
LEED Credits.....	5
Independent Product Certification.....	5
Code Approvals, Performance Standards, and Product Certifications.....	5
<b>Technical Information</b> .....	<b>6-9</b>
Nomenclature Example.....	6
General Notes for All Tables.....	7
Supreme Stud Profiles.....	7
Steel Thickness and Stiffening Lip Length.....	7
Screw and Weld Capacities.....	8
Web Depth-to-Thickness Ratios.....	9
Definitions of Symbols.....	9
<b>Section Properties</b> .....	<b>10-12</b>
Nonstructural Studs.....	10
Track.....	11-12
<b>Wall Conditions</b> .....	<b>13</b>
<b>Composite Interior Wall Heights</b> .....	<b>14</b>
<b>Non-Composite Interior Wall Heights</b> .....	<b>15-17</b>
<b>Curtain Wall Limiting Heights</b> .....	<b>18-20</b>
<b>Combined Axial and Lateral Loads</b> .....	<b>21-23</b>
<b>Ceiling Spans</b> .....	<b>24</b>
<b>Hat Channel Section Properties</b> .....	<b>25</b>
<b>Hat Channel Spans</b> .....	<b>26</b>
<b>Web Crippling Loads</b> .....	<b>27</b>
<b>Supreme Acoustical Performance Testing</b> .....	<b>28</b>
<b>Supreme Fire-Rated Assemblies</b> .....	<b>29</b>
<b>Supreme Framing Accessories</b> .....	<b>30-32</b>
Supreme Slotted Track.....	30-31
Supreme Z-Furring.....	32
<b>Supreme Deep Leg Deflection Track</b> .....	<b>33</b>
<b>Location</b> .....	<b>Back Cover</b>



## The **Benefits** of the **Supreme Framing System™** Speak for Themselves

### ***What is the Supreme Framing System™?***

Supreme Framing System™ is a stud and track design that uses thinner steel and superior high yield strength steel when compared to traditional material. Supreme Framing System™ is available nationally through multiple independent steel stud manufacturers.

- Complies with 2012 & 2015 IBC
- Multiple UL approved fire-rated assemblies
- Excellent acoustical performance
- High strength steel reducing screw stripping
- Fasten with sharp point screws (D25, D20, and D24)
- Wider flanges for screw placement
- Full line of Supreme Framing accessories
  - Hat Channel and Z-Furring
  - Slotted Leg Track

### ***BIM Software - Download Supreme!***

Steel-Con is dedicated to staying on the cutting edge of the construction industry. Steel-Con's most recent step to honor this commitment has been to make all of the Supreme Steel Framing products available to use with your Building Information Modeling (BIM) Software.

Steel-Con has teamed up with StrucSoft Solutions to create models for all Supreme products. These products are available to you for download and can be incorporated into your BIM model via a Metal Wood Framer (MWF) Pro Wall add-in. The MWF Pro Wall feature allows designers to specify Supreme Products based upon allowable wall heights or ceiling/floor spans. MWF Pro Wall also allows the designer to frame wall openings (doors and windows) automatically based upon user templates.

StrucSoft Solutions MWF software is compatible with Autodesk's Revit software and is available for purchase at [www.strucsoftsolutions.com](http://www.strucsoftsolutions.com). If you have already purchased the add-in software, then all of the Supreme products are included in the most recent update. In addition to the products being incorporated into StrucSoft software, all of the section profiles are available for free download at [www.steelconsystems.com](http://www.steelconsystems.com).

### **» Contact Steel-Con Engineering Services**

*For assistance with ordering or questions on your project, utilize Steel-Con Engineering Services:*

**Call:** 1-407-438-1664

**Email:** [Technical@SteelConSys.com](mailto:Technical@SteelConSys.com)

**LEED Credits**

LEED Credit Description and Category	Possible Points Using Steel-Con Products for LEED v4 BD+C*
Building Product Disclosure and Optimization - Environmental Product Declaration - MR <sup>1</sup>	2 Points
Construction and Demolition Waste Management - MR <sup>2</sup>	2 Points
Building Product Disclosure and Optimization - Sourcing of Raw Materials - MR <sup>3</sup>	1 Points
Building Product Disclosure and Optimization - Material Ingredients - MR <sup>4</sup>	1 Points
Innovation - IN5	2 Points
<b>Total Possible Points</b>	<b>8 Points</b>

\*BD+C = Building Design and Construction

**Independent Product Certification**

- Code Compliance - IAPMO Uniform Evaluation Service, LLC
  - IAPMO Report UER-0313 (Steel Framing System)
  - IAPMO Report ER-0283 (Slotted Track System)
- Fire Testing - Underwriters Laboratories, Inc.
- Sound Ratings - Riverbank Acoustical Laboratories
- Structural Testing - STAR Laboratories
- Structural Engineer - DEVCO Engineering

**Code Approvals, Performance Standards, and Product Certifications**

AISI’s “North American Specification for the Design of Cold-Formed Steel Structural Members”

ASTM International:

- A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process
- A1003 - Standard Specification for Steel Sheet, Carbon, and Metallic-Coated for Cold-Formed Framing Members
- C645 - Standard Specification for Non-Structural Steel Framing Members
- C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products
- C955 - Standard Specification for Load-Bearing (Transverse and Axial) Steel Studs, Runners (Tracks), and Bracing or Bridging for Screw Application of Gypsum Panel Products and Metal Plaster Bases
- C1007 - Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories
- E72 - Standard Test Methods of Conducting Strength Tests of Panels for Building Construction
- E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
- E119 - Standard Test Methods for Fire Tests of Building Construction and Materials



## Nomenclature Example

Our products have a four-part identification code that identifies the web depth, flange width, style, and mil thickness.

### Member Web Depth

(Example: 6" = **600** × 1/100 inch)

All member depths are given in 1/100 inch.

For all "SFT" sections, member depth is the inside to inside dimension.

### Flange Width

(Example: 1 5/8" = 1.625" ≈ **162** × 1/100 inch)

All flange widths are given in 1/100 inch.

**600** **SFS** **162** - **33EQS**

### Style

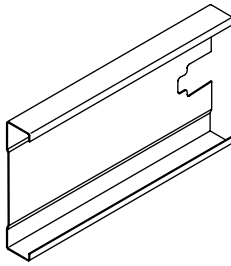
(Example: Supreme Framing Stud section = **SFS**)

Nomenclature uses the following characters to designate the profile:

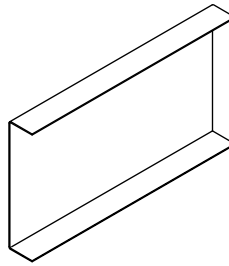
- SFS** = Supreme Framing Stud
- SFT** = Supreme Framing Track
- F** = Furring Channel
- SLT** = Slotted Leg Track
- ZF** = Z-Furring

### Thickness Designation

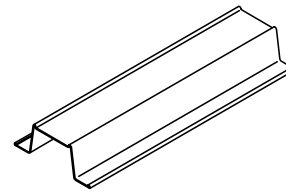
See Thickness Tables on page 7.



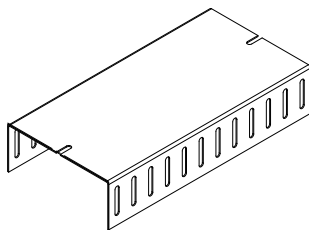
"SFS" - C-STUD SECTIONS



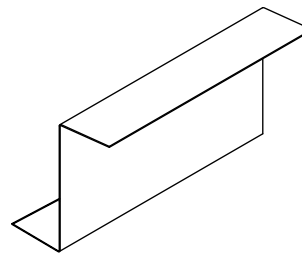
"SFT" - TRACK SECTIONS



"F" - FURRING CHANNEL SECTIONS



"SLT" - SLOTTED LEG TRACK SECTIONS



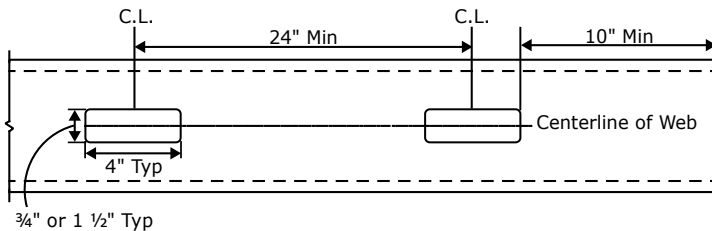
"ZF" - Z-FURRING

## Certified Third Party Testing

The Supreme Framing System is an engineered drywall stud that is designed to meet or exceed the traditional 25 gauge (18 mil) and 20 gauge (30 mil) studs. ASTM C 645 Section 9.2 allows for thickness variations and exemptions from minimum section property values if specified performance requirements are met with certified third party testing. The Supreme Framing System products meet and exceed these requirements.

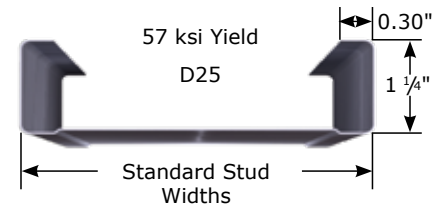
## General Notes for All Tables

- The values in this catalog are based on the North American Specification for the Design of Cold-Formed Steel Structural Members, AISI S100-07 with Supplement S2-10 as referenced by 2012 IBC and AISI S100-12 as referenced by 2015 IBC.
- The structural properties included in this catalog have been computed based on allowable strength design (ASD) method.
- Distortional buckling calculations are based on  $K\phi = 0$ .
- The effective moment of inertia for deflection is calculated at a stress that results in a section modulus such that the stress times the section modulus at that stress is equal to the allowable moment. AISI S100 Procedure I for serviceability determination has been used.
- Conditions with loads that exceed the 10 psf limit for nonstructural members require an approved G60 coating.
- When provided, factory punchouts will be located along the center line of the webs of the stud members and will have a minimum center-to-center spacing of 24". Punchouts for members greater than 2 1/2" deep are a maximum of 1 1/2" wide x 4 1/2" long. Members with depths 2 1/2" and smaller are maximum 3/4" wide x 4 1/2" long. Any configuration or combination of holes that fit within the punchout width and length limitations mentioned above shall be permitted; other punchout configurations and locations not in compliance with limitations listed above must be approved by a design professional. Values herein are based on punchout configuration and location as illustrated below.
- The 10" end distance shown may be altered if calculations are in conformance with code.



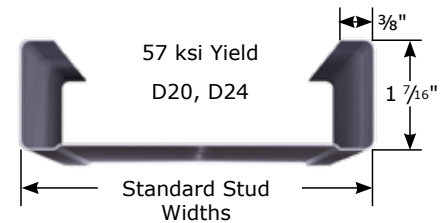
## Supreme Stud Profiles

### Non-Structural



#### Available Sizes

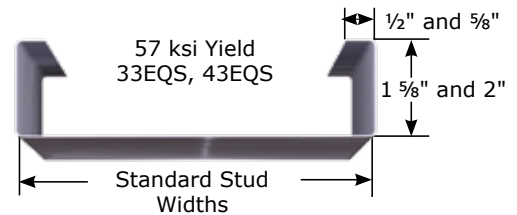
1 5/8", 2 1/2", 3 1/2", 3 5/8", 4", 5 1/2" and 6"



#### Available Sizes

1 5/8", 2 1/2", 3 1/2", 3 5/8", 4", 5 1/2" and 6"

### Structural



#### Available Sizes

2 1/2", 3 1/2", 3 5/8", 4", 5 1/2", 6", and \*8"

\*available in 43EQS only

## Steel Thickness and Stiffening Lip Length

### Steel Thickness Table

Designation Thickness	Minimum Thickness <sup>1</sup> (in)	Design Thickness <sup>1</sup> (in)	Design Inside Corner Radii (in)	Galvanized Thickness
D25	0.0147	0.0155	0.0860	G40
D20	0.0179	0.0188	0.0844	G40
D24	0.0223	0.0235	0.0820	G60
33EQS	0.0280	0.0295	0.0790	G60
43EQS	0.0380	0.0400	0.0712	G60

<sup>1</sup>Minimum thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the jobsite based on AISI S100-07 Section A2.4

### Stiffening Lip Length

Member	Flange Width	Stiffening Lip Length (in)
SFS125	1 1/4"	0.300
SFS	1 7/16"	0.375
SFS162	1 3/8"	0.500
SFS200	2"	0.625

## Screw and Weld Capacities

### Screw Table Notes

1. Capacities based on AISI S100 Section E4 specification.
2. When connecting materials of different steel thicknesses or tensile strengths, use the lowest values. Tabulated values assume two sheets of equal thickness are connected.
3. Capacities are based on Allowable Strength Design (ASD) and include safety factor of 3.0.
4. Where multiple fasteners are used, screws are assumed to have a center-to-center spacing of at least 3 times the nominal diameter (d).
5. Screws are assumed to have a center-of-screw to edge-of-steel dimension of at least 1.5 times the nominal diameter (d) of the screw.
6. Values are for pure shear or tension loads. See AISI S100 Section E4.5 for combined shear and pull-over.
7. Tension capacity is based on the lesser of pull-out capacity in sheet closest to screw tip, or pull-over capacity for sheet closest to screw head (based on head diameter shown).
8. Higher values, especially for screw strength, may be obtained by specifying screws from a specific manufacturer.

### Allowable Screw Connection Capacity (Pounds Per Screw)

Designation Thickness	Design Thickness	Fy Yield (ksi)	Fu Tensile (ksi)	#6 Screw 0.138" Dia; 0.25" Head		#8 Screw 0.164" Dia; 0.313" Head		#10 Screw 0.190" Dia; 0.340" Head		#12 Screw 0.216" Dia; 0.340" Head		½" Screw 0.250" Dia; 0.409" Head	
				Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension
D25	0.0155	57	65	111 <sup>1</sup>	39	111 <sup>1</sup>	47	111 <sup>1</sup>	54	-	-	-	-
D20	0.0188	57	65	142 <sup>1</sup>	48	150 <sup>1</sup>	57	164 <sup>1</sup>	66	109	75	-	-
D24	0.0235	57	65	174 <sup>1</sup>	60	184 <sup>1</sup>	71	236 <sup>1</sup>	82	152	93	-	-
33EQS	0.0295	57	65	171	75	187	89	201	103	214	117	231	136
43EQS	0.0400	57	65	270	102	295	121	317	140	338	159	364	184

<sup>1</sup>Values are based on testing using AISI S100 procedures.

### Weld Table Notes

1. Weld capacities are based on the AISI S100 Specification Sections E2.4 for fillet welds and E2.5 for groove welds.
2. When connecting materials of different steel thicknesses or tensile strengths (Fu), the lowest values should be used.
3. Capacities are based on Allowable Strength Design (ASD) and include appropriate safety factors.
4. Longitudinal capacity is loading in parallel direction of the length of the weld.
5. Weld capacities are based on either 0.0938" or 0.125" diameter E60 or E70 electrodes. The use of 0.030" to 0.035" diameter wire electrodes may provide best results.
6. Transverse capacity is loading in perpendicular direction of the length of the weld.
7. For flare groove welds, the effective throat of weld is conservatively assumed to be less than 2t.

### Weld Capacity (Pounds Per 1" Weld)

Designation Thickness	Design Thickness	Fy Yield (ksi)	Fu Tensile (ksi)	Nominal Weld Size	Weld Type			
					Fillet		Flare Groove	
					Longitudinal <sup>1</sup>	Transverse	Longitudinal <sup>2</sup>	Transverse
43EQS	0.0400	57	65	1/16	639	1106	696	849

<sup>1</sup> For welds less than 1" in length, AISI S100 equations E2.5-1 and E2.5-2 must be checked.

<sup>2</sup> Values based on AISI S100 equation E2.6-2.





## Web Depth-to-Thickness Ratios

### Web Depth-to-Thickness Ratio

Mill Thickness	D25		D20		D24		33EQS		43EQS	
Design Thickness (in)	0.0155		0.0188		0.0235		0.0295		0.0400	
Inside Bend Radius (in)	0.086		0.0844		0.082		0.079		0.0712	
Depth (in)	h (in) <sup>2</sup>	h/t	h (in) <sup>2</sup>	h/t	h (in) <sup>2</sup>	h/t	h (in) <sup>2</sup>	h/t	h (in) <sup>2</sup>	h/t
1.625	1.422	91	1.419	75	1.414	60	1.408	47	1.403	35
2.5	2.297	148	2.294	122	2.289	97	2.283	77	2.278	56
3.5	3.297	213 <sup>1</sup>	3.294	175	3.289	139	3.283	111	3.278	81
3.625	3.422	221 <sup>1</sup>	3.419	181	3.414	145	3.408	115	3.403	85
4	3.797	245 <sup>1</sup>	3.794	200	3.789	161	3.783	128	3.778	94
5.5	5.297	-	5.294	-	5.289	225 <sup>1</sup>	5.283	179	5.278	131
6	5.797	-	5.794	-	5.789	246 <sup>1</sup>	5.783	196	5.778	144
8	7.797	-	7.794	-	7.789	-	7.783	-	7.778	194

<sup>1</sup> h/t exceeds 200, web stiffeners required

<sup>2</sup> h value used for h/t calculation is the flat width of the web. For SFS members, this is the out-to-out member size, minus twice the thickness, minus twice the inside bend radius.

<sup>3</sup> h/t values exceeding 260 are marked with a dash (-).

<sup>4</sup> h/t values in this table apply to SFS (studs and joists) members only and do not apply to tracks and channels.

## Definitions of Section Property Symbols

### Gross Properties

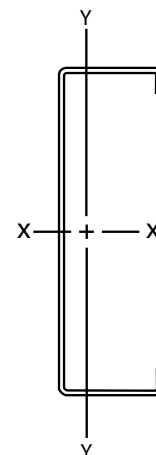
- Ix: Moment of inertia of the cross section about the x-axis.
- Sx: Section modulus about the x-axis.
- Rx: Radius of gyration of cross section about the x-axis.
- Iy: Moment of inertia of cross section about the y-axis.
- Ry: Radius of gyration of cross section about the y-axis.

### Effective Properties

- Ixe: Effective moment of inertia about the x-axis.
- Sxe: Effective section modulus about the x-axis.
- Mal: Allowable moment based on local buckling.
- Mad: Allowable moment based on distortional buckling assuming  $K\phi = 0$ .
- Ma: Allowable moment for track and channel members, based on local buckling only.
- Vag: Allowable strong axis shear away from punchout, calculated in accordance with AISI S100 Section C3.2.1.
- Vanet: Allowable strong axis shear at the punchout, calculated in accordance with AISI S100 Section C3.2.2.

### Torsional and Other Properties

- J: St. Venant torsional constant. The numbers shown in the tables for J have been multiplied by 1000. The actual values can be obtained by dividing the listed numbers by 1000.
- Cw: Torsional warping constant.
- Xo: Distance from the shear center to the centroid along the principal x-axis.
- m: Distance from shear center to mid-plane of web.
- Ro: Polar radius of gyration of cross section about the shear center.
- $\beta$ :  $1 - (Xo/Ro)^2$
- Lu: Critical unbraced length for lateral-torsional buckling. Members are considered fully braced when unbraced length is less than Lu.
- $K\phi$ : Distortional buckling moment (Mad) is calculated without the beneficial effect of sheathing to rotational stiffness.  $K\phi = 0$ .







# Section Properties - Track

Part No.	Design Thickness (in)	Fy (ksi)	Gross Properties							Effective Properties				Torsional Properties					
			Area (in <sup>2</sup> )	Weight (lb/ft)	Ix (in <sup>4</sup> )	Sx (in <sup>3</sup> )	Rx (in)	Iy (in <sup>4</sup> )	Ry (in)	Ixe (in <sup>4</sup> )	Sxe (in <sup>3</sup> )	Ma (in-k)	Vag (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	m (in)	Ro (in)	β
400SFT150-D24	0.0235	57	0.153	0.520	0.373	0.181	1.562	0.021	0.373	0.305	0.084	2.87	295	0.028	0.065	-0.635	0.399	1.727	0.865
400SFT150-33EQS	0.0295	57	0.207	0.700	0.530	0.256	1.602	0.044	0.461	0.423	0.129	4.39	583	0.060	0.132	-0.824	0.508	1.860	0.804
400SFT150-43EQS	0.0400	57	0.280	0.950	0.719	0.346	1.603	0.059	0.459	0.598	0.232	7.92	1450	0.149	0.178	-0.819	0.506	1.858	0.806
400SFT200-D20 <sup>2</sup>	0.0188	57	0.151	0.510	0.417	0.202	1.664	0.062	0.642	-	-	-	-	0.018	0.184	-1.236	0.741	2.170	0.676
400SFT200-D24 <sup>2</sup>	0.0235	57	0.188	0.640	0.521	0.253	1.665	0.077	0.641	-	-	-	-	0.035	0.229	-1.234	0.740	2.169	0.676
400SFT200-33EQS <sup>2</sup>	0.0295	57	0.236	0.800	0.655	0.316	1.666	0.097	0.640	-	-	-	-	0.068	0.287	-1.231	0.738	2.168	0.678
400SFT200-33EQS <sup>2</sup>	0.0295	57	0.236	0.800	0.655	0.316	1.666	0.097	0.640	-	-	-	-	0.068	0.287	-1.231	0.738	2.168	0.678
400SFT200-43EQS	0.0400	57	0.320	1.090	0.888	0.428	1.666	0.130	0.638	0.674	0.229	7.82	1450	0.171	0.387	-1.226	0.735	2.165	0.679
550SFT125-D25 <sup>2</sup>	0.0155	57	0.124	0.422	0.519	0.185	2.046	0.015	0.350	-	-	-	-	0.010	0.089	-0.548	0.355	2.146	0.935
550SFT125-D20 <sup>2</sup>	0.0188	57	0.150	0.510	0.630	0.224	2.046	0.018	0.349	-	-	-	-	0.018	0.108	-0.546	0.354	2.146	0.935
550SFT125-D24 <sup>1</sup>	0.0235	57	0.188	0.640	0.787	0.28	2.046	0.023	0.348	0.568	0.113	3.99	213	0.035	0.134	-0.545	0.353	2.146	0.936
550SFT125-33EQS	0.0295	57	0.236	0.800	0.988	0.351	2.046	0.029	0.347	0.776	0.169	5.75	422	0.068	0.167	-0.542	0.352	2.145	0.936
550SFT125-43EQS	0.0400	57	0.320	1.090	1.339	0.474	2.046	0.038	0.345	1.160	0.284	9.70	1049	0.171	0.224	-0.539	0.349	2.144	0.937
550SFT150-D25 <sup>2</sup>	0.0155	57	0.132	0.449	0.580	0.207	2.098	0.025	0.438	-	-	-	-	0.011	0.145	-0.721	0.459	2.261	0.898
550SFT150-D20 <sup>2</sup>	0.0188	57	0.160	0.540	0.703	0.25	2.098	0.031	0.437	-	-	-	-	0.019	0.176	-0.720	0.458	2.260	0.899
550SFT150-D24 <sup>1</sup>	0.0235	57	0.200	0.680	0.879	0.312	2.098	0.038	0.437	0.653	0.116	3.97	213	0.037	0.219	-0.718	0.457	2.260	0.899
550SFT150-33EQS	0.0295	57	0.251	0.850	1.104	0.392	2.098	0.048	0.435	0.920	0.176	6.01	422	0.073	0.274	-0.715	0.456	2.259	0.900
550SFT150-43EQS	0.0400	57	0.340	1.160	1.496	0.529	2.099	0.064	0.433	1.291	0.313	10.70	1049	0.181	0.368	-0.712	0.453	2.258	0.901
550SFT200-D20 <sup>2</sup>	0.0188	57	0.179	0.610	0.851	0.303	2.182	0.068	0.616	-	-	-	-	0.021	0.380	-1.095	0.677	2.518	0.811
550SFT200-D24 <sup>2</sup>	0.0235	57	0.223	0.760	1.064	0.378	2.183	0.085	0.615	-	-	-	-	0.041	0.474	-1.093	0.676	2.517	0.812
550SFT200-33EQS <sup>2</sup>	0.0295	57	0.280	0.950	1.336	0.474	2.184	0.106	0.614	-	-	-	-	0.081	0.593	-1.090	0.675	2.516	0.812
550SFT200-43EQS	0.0400	57	0.380	1.290	1.811	0.641	2.184	0.142	0.612	1.441	0.313	10.67	1049	0.203	0.799	-1.086	0.672	2.514	0.814
600SFT125-D25 <sup>2</sup>	0.0155	57	0.132	0.449	0.640	0.209	2.203	0.016	0.342	-	-	-	-	0.011	0.108	-0.523	0.342	2.290	0.948
600SFT125-D20 <sup>2</sup>	0.0235	57	0.160	0.540	0.776	0.254	2.204	0.019	0.342	-	-	-	-	0.019	0.131	-0.522	0.341	2.290	0.948
600SFT125-D24 <sup>1</sup>	0.0235	57	0.200	0.680	0.970	0.317	2.204	0.023	0.341	0.690	0.124	4.24	195	0.037	0.163	-0.520	0.340	2.290	0.948
600SFT125-33EQS <sup>1</sup>	0.0295	57	0.251	0.850	1.218	0.397	2.204	0.029	0.34	0.946	0.185	6.31	386	0.073	0.204	-0.518	0.339	2.289	0.949
600SFT125-43EQS	0.0400	57	0.340	1.160	1.650	0.537	2.204	0.039	0.338	1.420	0.313	10.67	961	0.181	0.273	-0.515	0.336	2.288	0.949
600SFT150-D25 <sup>2</sup>	0.0155	57	0.140	0.475	0.712	0.233	2.259	0.026	0.430	-	-	-	-	0.011	0.177	-0.691	0.444	2.401	0.917
600SFT150-D20 <sup>2</sup>	0.0188	57	0.169	0.580	0.864	0.282	2.259	0.031	0.429	-	-	-	-	0.02	0.214	-0.690	0.443	2.401	0.917
600SFT150-D24 <sup>1</sup>	0.0235	57	0.212	0.720	1.080	0.352	2.259	0.039	0.428	0.721	0.126	4.28	195	0.039	0.267	-0.688	0.442	2.400	0.918
600SFT150-33EQS <sup>1</sup>	0.0295	57	0.266	0.900	1.355	0.442	2.260	0.049	0.427	0.993	0.187	6.39	386	0.077	0.334	-0.686	0.441	2.400	0.918
600SFT150-43EQS	0.0400	57	0.360	1.220	1.837	0.597	2.260	0.065	0.425	1.500	0.318	10.86	961	0.192	0.449	-0.682	0.438	2.398	0.919
600SFT200-D20 <sup>2</sup>	0.0188	57	0.188	0.640	1.039	0.339	2.350	0.069	0.607	-	-	-	-	0.022	0.464	-1.055	0.659	2.647	0.841
600SFT200-D24 <sup>2</sup>	0.0235	57	0.235	0.800	1.299	0.424	2.351	0.086	0.606	-	-	-	-	0.043	0.578	-1.053	0.658	2.646	0.842
600SFT200-33EQS <sup>2</sup>	0.0295	57	0.295	1.000	1.631	0.531	2.351	0.108	0.605	-	-	-	-	0.086	0.724	-1.050	0.656	2.645	0.842
600SFT200-43EQS	0.0400	57	0.400	1.360	2.210	0.719	2.352	0.145	0.603	1.780	0.341	11.62	961	0.213	0.976	-1.046	0.654	2.643	0.843
800SFT125-43EQS <sup>1</sup>	0.0400	57	0.420	1.430	3.345	0.821	2.823	0.041	0.312	2.794	0.426	14.54	718	0.224	0.525	-0.437	0.293	2.874	0.977
800SFT150-43EQS <sup>1</sup>	0.0400	57	0.440	1.500	3.674	0.902	2.891	0.069	0.396	2.906	0.433	14.77	718	0.235	0.865	-0.586	0.387	2.976	0.961
800SFT200-43EQS <sup>1</sup>	0.0400	57	0.480	1.630	4.332	1.063	3.005	0.156	0.570	3.127	0.442	15.07	718	0.256	1.887	-0.915	0.588	3.193	0.918

<sup>1</sup>Web height-to-thickness ratio exceeds 200. Web stiffeners are required at all support points and concentrated loads.

<sup>2</sup>Web height-to-thickness ratio exceeds 260 or flange width-to-thickness ratio exceeds 60. Section is not in compliance with AISI S100 Section B1, so effective properties are not provided.



## Composite & Non-Composite Wall Conditions

Use Supreme Studs in a variety of applications including walls, ceilings and soffits. While some conditions require the knowledge of a design professional, Supreme Studs allow you to select assemblies using tabulated data. Locate the required assembly in the diagrams below and follow the instructions for selecting the proper design table.

### Composite Assemblies

Use composite limiting height data when walls are sheeted with gypsum board on both flanges of the stud for the full height of the wall. Supreme Stud composite data meets 2012 and 2015 IBC's, and was tested and analyzed using the most recent version of AC86. Composite limiting height tables for Supreme members are available shown on page 14.

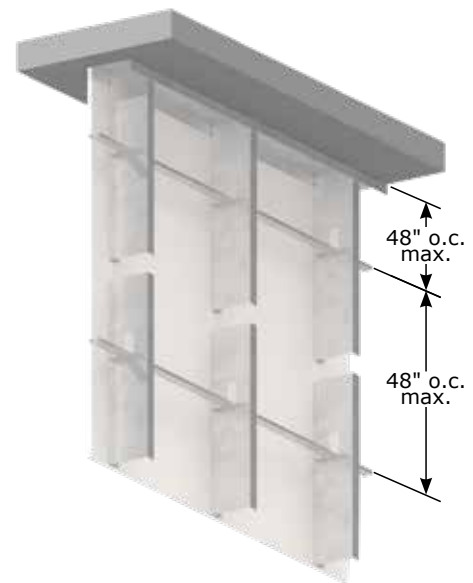


**Composite:**  
Gypsum board full height on both sides

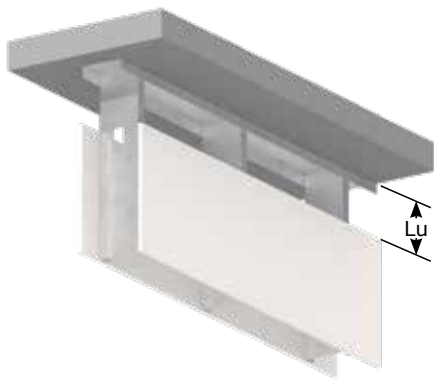
### Non-Composite Assemblies

Non-composite conditions are common in most structures. A non-composite condition may be when the gypsum board stops at the finished ceiling height and the stud continues span to the deck. Contacting technical services or a design professional can be advantageous, but you can satisfy many conditions by using the non-composite limiting heights tables shown on page 15.

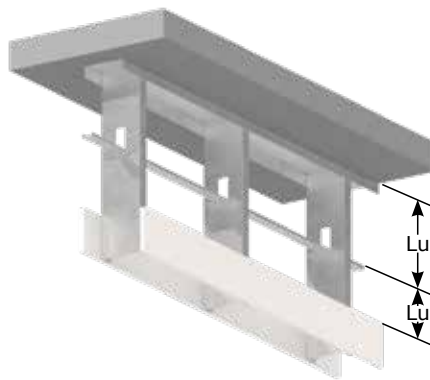
*Distance of unbraced length (Lu) can be found in the physical and structural properties starting on page 10.*



**Non-Composite: Braced at 48" o.c.**  
Gypsum board placed on only one side



**Non-Composite: Fully Braced**  
Unbraced length is less than Lu



**Non-Composite: Fully Braced**  
Bracing spacing above gypsum is less than Lu

### Chase Walls or Furred Walls

Chase and furred walls are common, but the conditions vary depending on the building requirements.

# Composite Interior Wall Heights

## Table Notes

1. Allowable composite limiting heights are calculated using ICC-ES AC86-2010. The  $\frac{1}{3}$  stress increase for strength was not used.
2. No fasteners are required for attaching the stud to the track. Except studs located adjacent to door and window frames, partition intersections, and corners. Per ASTM C754 5.3.2.1.
3. Stud bearing must be a minimum of 1".
4. The gypsum board must be applied full height in the vertical orientation to each stud flange and installed using minimum #6 Type S drywall screws, per IAPMO-UES 0313.
5. Galvanizing to be G40 minimum for 10 PSF or less, and G60 minimum for greater than 10 PSF lateral loads.

## Composite Interior Wall Heights

Part No.	Fy (ksi)	Spacing (in) oc	5 psf			7.5 psf			10 psf		
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162SFS125-D25	57	12	13' 4"	10' 10"	9' 8"	11' 8"	9' 7"	8' 6"	10' 7"	8' 9"	-
	57	16	12' 1"	10' 0"	8' 10"	10' 7"	8' 9"	-	9' 7"	7' 11"	-
	57	24	10' 7"	8' 9"	-	9' 3"	-	-	8' 2" f	-	-
250SFS125-D25	57	12	15' 8"	13' 7"	12' 2"	13' 8"	11' 11"	10' 7"	12' 5"	10' 10"	9' 7"
	57	16	14' 3"	12' 4"	11' 0"	12' 5"	10' 10"	9' 7"	11' 1" f	9' 10"	8' 6"
	57	24	12' 5"	10' 10"	9' 7"	10' 5" f	9' 4"	8' 1"	9' 0" f	8' 4"	-
362SFS125-D25	57	12	21' 9"	17' 3"	15' 1"	18' 6" f	15' 1"	13' 2"	16' 1" f	13' 9"	12' 0"
	57	16	19' 8" f	15' 8"	13' 9"	16' 1" f	13' 9"	12' 0"	13' 11" f	12' 6"	10' 9"
	57	24	16' 1" f	13' 9"	12' 0"	13' 1" f	12' 0"	10' 4"	11' 4" f	10' 9"	9' 3"
400SFS125-D25	57	12	21' 8"	17' 7"	15' 8"	18' 6" f	15' 4"	13' 9"	16' 0" f	14' 0"	12' 6"
	57	16	19' 7" f	16' 0"	14' 3"	16' 0" f	14' 0"	12' 6"	13' 10" f	12' 8"	11' 4"
	57	24	16' 0" f	14' 0"	12' 6"	13' 1" f	12' 2"	10' 11"	11' 4" f	11' 1"	9' 11"
600SFS125-D25	57	12	28' 8" f	24' 4"	21' 7"	23' 5" f	21' 3"	18' 10"	20' 3" f	19' 3"	17' 2"
	57	16	24' 10" f	22' 1"	19' 8"	20' 3" f	19' 3"	17' 2"	17' 7"	17' 7"	15' 7"
	57	24	20' 3" f	19' 3"	17' 2"	16' 7" f	16' 7" f	14' 11"	14' 4" f	14' 4" f	13' 5"
162SFS-D20	57	12	13' 7"	11' 1"	9' 9"	11' 11"	9' 9"	8' 6"	10' 10"	8' 10"	7' 9"
	57	16	12' 4"	10' 1"	8' 10"	10' 10"	8' 10"	7' 9"	9' 10"	8' 1"	-
	57	24	10' 10"	8' 10"	7' 9"	9' 5"	7' 9"	-	8' 5"	-	-
250SFS-D20	57	12	17' 1"	14' 0"	12' 5"	14' 11"	12' 3"	10' 10"	13' 7"	11' 1"	9' 10"
	57	16	15' 6"	12' 9"	11' 3"	13' 7"	11' 1"	9' 10"	12' 4"	10' 1"	8' 8"
	57	24	13' 7"	11' 1"	9' 10"	11' 8" f	9' 8"	8' 2"	10' 2" f	8' 7"	-
362SFS-D20	57	12	22' 4"	17' 9"	15' 6"	19' 6"	15' 6"	13' 7"	17' 3" f	14' 1"	12' 4"
	57	16	20' 4"	16' 1"	14' 1"	17' 3" f	14' 1"	12' 4"	15' 0" f	12' 10"	11' 1"
	57	24	17' 3" f	14' 1"	12' 4"	14' 1" f	12' 4"	10' 8"	12' 3" f	11' 1"	9' 7"
400SFS-D20	57	12	23' 1"	18' 4"	16' 0"	20' 2"	16' 0"	14' 0"	17' 8" f	14' 6"	12' 8"
	57	16	21' 0"	16' 8"	14' 6"	17' 8" f	14' 6"	12' 8"	15' 3" f	13' 2"	11' 6"
	57	24	17' 8" f	14' 6"	12' 8"	14' 5" f	12' 8"	11' 1"	12' 6" f	11' 6"	10' 0"
600SFS-D20	57	12	31' 2"	24' 9"	21' 7"	25' 11" f	21' 7"	18' 10"	22' 6" f	19' 7"	17' 2"
	57	16	27' 6" f	22' 6"	19' 7"	22' 6" f	19' 7"	17" 2"	19' 6" f	17' 10"	15' 7"
	57	24	22' 6" f	19' 7"	17' 2"	18' 4" f	17' 2"	14' 10"	15' 11" f	15' 7"	13' 4"
162SFS-D24	57	12	13' 11"	11' 4"	10' 0"	12' 2"	9' 11"	8' 8"	11' 0"	9' 0"	7' 10"
	57	16	12' 8"	10' 4"	9' 1"	11' 0"	9' 0"	7' 10"	10' 0"	8' 1"	-
	57	24	11' 0"	9' 0"	7' 10"	9' 7"	7' 9"	-	8' 6"	-	-
250SFS-D24	57	12	18' 2"	14' 5"	12' 7"	15' 10"	12' 7"	11' 0"	14' 5"	11' 5"	10' 0"
	57	16	16' 6"	13' 1"	11' 5"	14' 5"	11' 5"	10' 0"	13' 1"	10' 5"	8' 11"
	57	24	14' 5"	11' 5"	10' 0"	12' 7"	10' 0"	8' 6"	11' 0" f	8' 11"	-
362SFS-D24	57	12	23' 6"	18' 8"	16' 4"	20' 6"	16' 4"	14' 3"	18' 8"	14' 10"	12' 11"
	57	16	21' 4"	16' 11"	14' 10"	18' 8"	14' 10"	12' 11"	16' 5" f	13' 5"	11' 9"
	57	24	18' 8"	14' 10"	12' 11"	15' 6" f	12' 11"	11' 3"	13' 5" f	11' 9"	10' 2"
400SFS-D24	57	12	25' 0"	19' 10"	17' 4"	21' 10"	17' 4"	15' 2"	19' 8" f	15' 9"	13' 9"
	57	16	22' 9"	18' 1"	15' 9"	19' 8" f	15' 9"	13' 9"	17' 0" f	14' 4"	12' 6"
	57	24	19' 8" f	15' 9"	13' 9"	16' 0" f	13' 9"	12' 0"	13' 11" f	12' 6"	10' 11"
600SFS-D24	57	12	33' 8"	26' 9"	23' 4"	28' 4" f	23' 4"	20' 5"	24' 6" f	21' 2"	18' 6"
	57	16	30' 0" f	24' 3"	21' 2"	24' 6" f	21' 2"	18' 6"	21' 3" f	19' 3"	16' 10"
	57	24	24' 6" f	21' 2"	18' 6"	20' 0" f	18' 6"	16' 2"	17' 4" f	16' 10"	14' 8"

"f" Flexural stress controls allowable height.

## Table Notes

1. Loads have **not** been reduced for strength or deflection checks; full lateral load is applied.
2. Limiting heights are based on steel properties only (non-composite) without the contribution of sheathing to strengthen and stiffen the assembly. Properly fastened sheathing is still required for members to be considered fully braced.
3. Web crippling check is based on 1" end bearing.
4. Allowable moment is the lesser of  $M_{br}$  and  $M_{sd}$ . Stud distortional buckling based on an assumed  $K\phi = 0$ .
5. See page 7 for additional table notes.

## Non-Composite - Fully Braced

Part No.	Fy (ksi)	Spacing (in) oc	5 psf			7.5 psf			10 psf		
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162SFS-125-D25	57	12	9' 4"	-	-	-	-	-	-	-	-
	57	16	8' 1"	-	-	-	-	-	-	-	-
	57	24	-	-	-	-	-	-	-	-	-
250SFS-125-D25	57	12	12' 10"	10' 2"	8' 11"	10' 6"	8' 11"	-	9' 1"	8' 1"	-
	57	16	11' 2"	9' 3"	8' 1"	9' 1"	8' 1"	-	-	-	-
	57	24	9' 1"	8' 1"	-	-	-	-	-	-	-
350SFS-125-D25 <sup>1</sup>	57	12	14' 4"	12' 11"	11' 3"	11' 8"	11' 3"	9' 10"	10' 1"	10' 1"	8' 11"
	57	16	12' 5"	11' 9"	10' 3"	10' 1"	10' 1"	8' 11"	8' 9"	8' 9"	8' 1"
	57	24	10' 1"	10' 1"	8' 11"	8' 3"	8' 3"	-	-	-	-
362SFS-125-D25 <sup>1</sup>	57	12	14' 6"	13' 5"	11' 9"	11' 10"	11' 8"	10' 3"	10' 3"	10' 3"	9' 4"
	57	16	12' 7"	12' 2"	10' 8"	10' 3"	10' 3"	9' 4"	8' 11"	8' 11"	8' 5"
	57	24	10' 3"	10' 3"	9' 4"	8' 5"	8' 5"	8' 1"	-	-	-
400SFS-125-D25 <sup>1</sup>	57	12	15' 0"	14' 1"	12' 4"	12' 3"	12' 3"	10' 9"	10' 7"	10' 7"	9' 9"
	57	16	13' 0"	12' 10"	11' 2"	10' 7"	10' 7"	9' 9"	9' 2"	9' 2"	8' 10"
	57	24	10' 7"	10' 7"	9' 9"	8' 8"	8' 8"	8' 6"	-	-	-
162SFS-D20	57	12	10' 5"	8' 3"	-	9' 1"	-	-	-	-	-
	57	16	9' 5"	-	-	-	-	-	-	-	-
	57	24	-	-	-	-	-	-	-	-	-
250SFS-D20	57	12	14' 4"	11' 4"	9' 11"	12' 4"	9' 11"	8' 8"	10' 8"	9' 0"	-
	57	16	13' 0"	10' 4"	9' 0"	10' 8"	9' 0"	-	9' 3"	8' 2"	-
	57	24	10' 8"	9' 0"	-	8' 9"	-	-	-	-	-
350SFS-D20	57	12	17' 11"	14' 7"	12' 8"	14' 7"	12' 8"	11' 1"	12' 8"	11' 7"	10' 1"
	57	16	15' 6"	13' 3"	11' 7"	12' 8"	11' 7"	10' 1"	10' 11"	10' 6"	9' 2"
	57	24	12' 8"	11' 7"	10' 1"	10' 4"	10' 1"	8' 10"	8' 11"e	8' 11"e	8' 0"
362SFS-D20	57	12	18' 4"	15' 2"	13' 3"	14' 11"	13' 2"	11' 7"	12' 11"	11' 11"	10' 6"
	57	16	15' 10"	13' 9"	12' 0"	12' 11"	11' 11"	10' 6"	11' 3"	10' 9"	9' 7"
	57	24	12' 11"	11' 11"	10' 6"	10' 7"	10' 4"	9' 2"	9' 2" e	9' 2" e	8' 3"
400SFS-D20 <sup>1</sup>	57	12	19' 5"	16' 0"	14' 0"	15' 11"	14' 0"	12' 3"	13' 9"	12' 9"	11' 1"
	57	16	16' 10"	14' 7"	12' 9"	13' 9"	12' 9"	11' 1"	11' 11"	11' 7"	10' 1"
	57	24	13' 9"	12' 9"	11' 1"	11' 3"	11' 1"	9' 8"	9' 8"	9' 9"	8' 10"
162SFS-D24	57	12	11' 0"	8' 9"	-	9' 8"	-	-	8' 9"	-	-
	57	16	10' 0"	-	-	8' 9"	-	-	-	-	-
	57	24	8' 9"	-	-	-	-	-	-	-	-
250SFS-D24	57	12	15' 4"	12' 2"	10' 7"	13' 5"	10' 7"	9' 3"	12' 2"	9' 8"	8' 5"
	57	16	13' 11"	11' 1"	9' 8"	12' 2"	9' 8"	8' 5"	11' 1"	8' 9"	-
	57	24	12' 2"	9' 8"	8' 5"	10' 7"	8' 5"	-	9' 5"	-	-
350SFS-D24	57	12	19' 11"	15' 10"	13' 10"	17' 5"	13' 10"	12' 1"	15' 10"	12' 7"	10' 11"
	57	16	18' 1"	14' 4"	12' 7"	15' 10"	12' 7"	10' 11"	13' 9"	11' 5"	9' 11"
	57	24	15' 10"	12' 7"	10' 11"	13' 0"	10' 11"	9' 7"	11' 3"	9' 11"	8' 8"
362SFS-D24	57	12	20' 6"	16' 3"	14' 2"	17' 11"	14' 2"	12' 5"	16' 3"	12' 11"	11' 3"
	57	16	18' 7"	14' 9"	12' 11"	16' 3"	12' 11"	11' 3"	14' 1"	11' 9"	10' 3"
	57	24	16' 3"	12' 11"	11' 3"	13' 3"	11' 3"	9' 10"	11' 6"	10' 3"	8' 11"
400SFS-D24	57	12	22' 2"	17' 7"	15' 4"	19' 4"	15' 4"	13' 5"	17' 1"	13' 11"	12' 2"
	57	16	20' 2"	16' 0"	13' 11"	17' 1"	13' 11"	12' 2"	14' 10"	12' 8"	11' 1"
	57	24	17' 1"	13' 11"	12' 2"	13' 11"	12' 2"	10' 8"	12' 1"	11' 1"	9' 8"
550SFS-D24 <sup>1</sup>	57	12	28' 5"	22' 8"	19' 10"	23' 3"	19' 10"	17' 4"	20' 1"	18' 0"	15' 9"
	57	16	24' 8"	20' 7"	18' 0"	20' 1"	18' 0"	15' 9"	17' 5"	16' 4"	14' 3"
	57	24	20' 1"	18' 0"	15' 9"	16' 5"	15' 9"	13' 9"	14' 2"	14' 2"	12' 6"
600SFS-D24 <sup>1</sup>	57	12	29' 8"	23' 7"	20' 8"	24' 2"	20' 8"	18' 0"	20' 11"	18' 9"	16' 4"
	57	16	25' 8"	21' 5"	18' 9"	20' 11"	18' 9"	16' 4"	18' 2"	17' 0"	14' 10"
	57	24	20' 11"	18' 9"	16' 4"	17' 1"	16' 4"	14' 3"	14' 10"	14' 10"	13' 0"

<sup>1</sup>Web height-to-thickness ratio exceeds 200. Web stiffeners are required at all support points and concentrated loads.  
 "e" Web stiffeners required at ends.

# Non-Composite Interior Wall Heights

## Table Notes

- Heights based on steel properties only.
- Limiting heights based on lateral and torsional bracing spaced 48" on center, full height of member.
- Deflection and Strength Calculations based on a 1.0 factor.
- Allowable moment is the lesser of  $M_{ai}$  and  $M_{ad}$ . Stud distortional buckling based on an assumed  $K\phi = 0$ .

## Non-Composite - Braced at 48" On Center

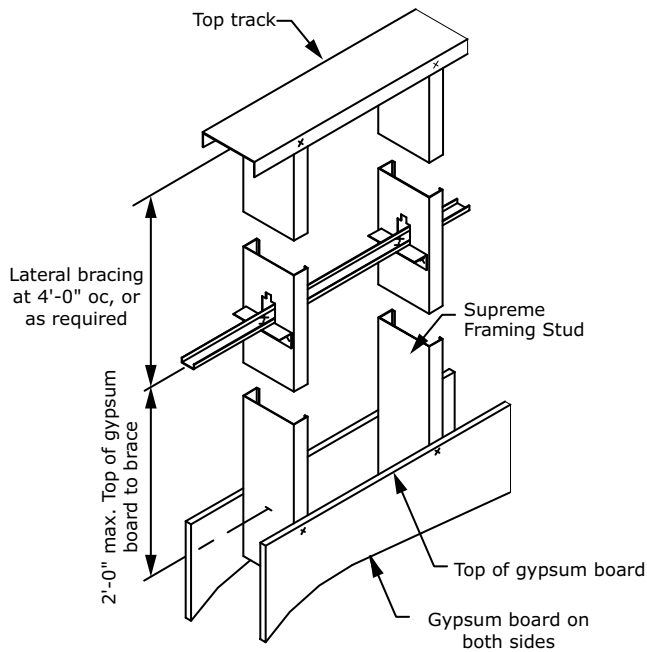
Part No.	Fy (ksi)	Spacing (in) oc	5 psf			7.5 psf			10 psf		
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162SFS125-D25	57	12	-	-	-	-	-	-	-	-	-
	57	16	-	-	-	-	-	-	-	-	-
	57	24	-	-	-	-	-	-	-	-	-
250SFS125-D25	57	12	10' 11"	10' 5"	9' 1"	8' 11"	8' 11"	-	-	-	-
	57	16	9' 6"	9' 5"	8' 3"	-	-	-	-	-	-
	57	24	-	-	-	-	-	-	-	-	-
350SFS125-D25 <sup>1</sup>	57	12	12' 10"	12' 10"	11' 8"	10' 5"	10' 5"	10' 2"	9' 1"	9' 1"	9' 1"
	57	16	11' 1"	11' 1"	10' 7"	9' 1"	9' 1"	9' 1"	-	-	-
	57	24	9' 1"	9' 1"	9' 1"	-	-	-	-	-	-
362SFS125-D25 <sup>1</sup>	57	12	13' 1"	13' 1"	12' - 0"	10' 8"	10' 8"	10' 5"	9' 3"	9' 3"	9' 3"
	57	16	11' 4"	11' 4"	10' 10"	9' 3"	9' 3"	9' 3"	8' 0"	8' 0"	8' 0"
	57	24	9' 3"	9' 3"	9' 3"	-	-	-	-	-	-
400SFS125-D25 <sup>1</sup>	57	12	14' - 0"	14' - 0"	12' 10"	11' 5"	11' 5"	11' 3"	9' 11"	9' 11"	9' 11"
	57	16	12' 1"	12' 1"	11' 8"	9' 11"	9' 11"	9' 11"	8' 3"	8' 3"	8' 3"
	57	24	9' 11"	9' 11"	9' 11"	-	-	-	-	-	-
162SFS-D20	57	12	9' 11"	8' 2"	-	8' 1"	-	-	-	-	-
	57	16	8' 7"	-	-	-	-	-	-	-	-
	57	24	-	-	-	-	-	-	-	-	-
250SFS-D20	57	12	13' 8"	11' 3"	9' 10"	11' 2"	9' 10"	8' 7"	9' 8"	8' 11"	-
	57	16	11' 10"	10' 3"	8' 11"	9' 8"	8' 11"	-	8' 4"	8' 2"	-
	57	24	9' 8"	8' 11"	-	-	-	-	-	-	-
350SFS-D20	57	12	16' 0"	14' 6"	12' 8"	13' 1"	12' 8"	11' 1"	11' 4"	11' 4"	10' 1"
	57	16	13' 10"	13' 2"	11' 6"	11' 4"	11' 4"	10' 1"	9' 10"	9' 10"	9' 2"
	57	24	11' 4"	11' 4"	10' 1"	9' 3"	9' 3"	8' 9"	8' 0"	8' 0"	8' 0"
362SFS-D20	57	12	16' 5"	14' 11"	13' 0"	13' 5"	13' 0"	11' 5"	11' 7"	11' 7"	10' 4"
	57	16	14' 3"	13' 7"	11' 10"	11' 7"	11' 7"	10' 4"	10' 1"	10' 1"	9' 5"
	57	24	11' 7"	11' 7"	10' 4"	9' 6"	9' 6"	9' 0"	8' 3"	8' 3"	8' 2"
400SFS-D20 <sup>1</sup>	57	12	17' 7"	15' 9"	13' 9"	14' 4"	13' 9"	12' 1"	12' 5"	12' 5"	10' 11"
	57	16	15' 2"	14' 4"	12' 6"	12' 5"	12' 5"	10' 11"	10' 9"	10' 9"	9' 11"
	57	24	12' 5"	12' 5"	10' 11"	10' 2"	10' 2"	9' 7"	8' 9"	8' 9"	8' 8"
162SFS-D24	57	12	11' 0"	8' 9"	-	9' 8"	-	-	8' 9"	-	-
	57	16	10' 0"	-	-	8' 9"	-	-	-	-	-
	57	24	8' 9"	-	-	-	-	-	-	-	-
250SFS-D24	57	12	15' 4"	12' 2"	10' 7"	13' 5"	10' 7"	9' 3"	12' 2"	9' 8"	8' 5"
	57	16	13' 11"	11' 1"	9' 8"	12' 2"	9' 8"	8' 5"	11' 1"	8' 9"	-
	57	24	12' 2"	9' 8"	8' 5"	10' 7"	8' 5"	-	9' 2"	-	-
350SFS-D24	57	12	19' 11"	15' 10"	13' 10"	17' 0"	13' 10"	12' 1"	14' 9"	12' 7"	10' 11"
	57	16	18' 0"	14' 4"	12' 7"	14' 8"	12' 7"	10' 11"	12' 8"	11' 5"	9' 11"
	57	24	14' 8"	12' 7"	10' 11"	12' 0"	10' 11"	9' 7"	10' 4"	9' 11"	8' 8"
362SFS-D24	57	12	20' 6"	16' 3"	14' 2"	17' 4"	14' 2"	12' 5"	15' 0"	12' 11"	11' 3"
	57	16	18' 4"	14' 9"	12' 11"	14' 11"	12' 11"	11' 3"	12' 11"	11' 9"	10' 3"
	57	24	14' 11"	12' 11"	11' 3"	12' 2"	11' 3"	9' 10"	10' 7"	10' 3"	8' 11"
400SFS-D24	57	12	22' 2"	17' 7"	15' 4"	18' 3"	15' 4"	13' 5"	15' 9"	13' 11"	12' 2"
	57	16	19' 3"	16' 0"	13' 11"	15' 9"	13' 11"	12' 2"	13' 7"	12' 8"	11' 1"
	57	24	15' 9"	13' 11"	12' 2"	12' 10"	12' 2"	10' 8"	11' 1"	11' 1"	9' 8"
550SFS-D24 <sup>1</sup>	57	12	28' 2"	22' 8"	19' 10"	23' 7"	23' 0"	19' 10"	17' 4"	19' 11"	15' 9"
	57	16	24' 3"	20' 7"	18' 0"	20' 4"	19' 10"	18' 0"	15' 9"	17' 2"	14' 3"
	57	24	19' 10"	18' 0"	16' 4"	15' 9"	16' 2"	15' 9"	13' 9"	14' 0"	12' 6"
600SFS-D24 <sup>1</sup>	57	12	28' 11"	23' 7"	20' 8"	23' 7"	20' 8"	18' 0"	20' 5"	18' 9"	16' 4"
	57	16	24' 11"	21' 5"	18' 9"	20' 4"	18' 9"	16' 4"	17' 8"	17' 0"	14' 10"
	57	24	20' 4"	18' 9"	16' 4"	16' 8"	16' 4"	14' 3"	14' 5"	14' 5"	13' 0"

<sup>1</sup>Web height-to-thickness ratio exceeds 200. Web stiffeners are required at all support points and concentrated loads.  
e=Requires web stiffeners.



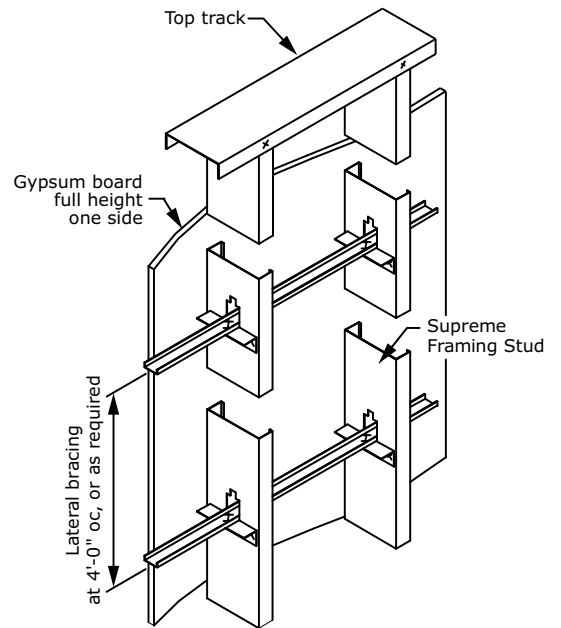
**Lateral Bracing**

Example of lateral bracing for walls not sheathed full height.

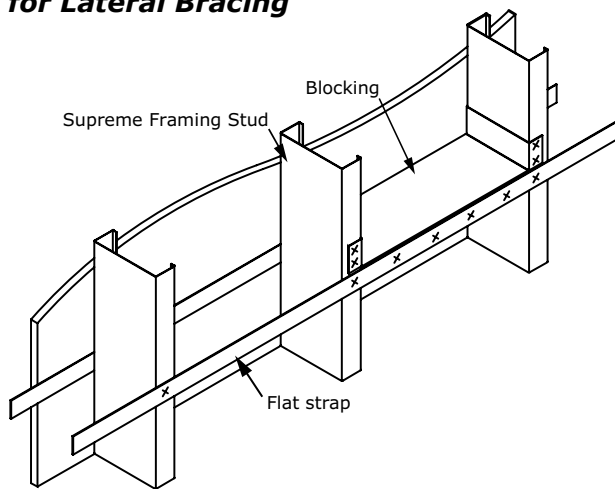


**Lateral Bracing**

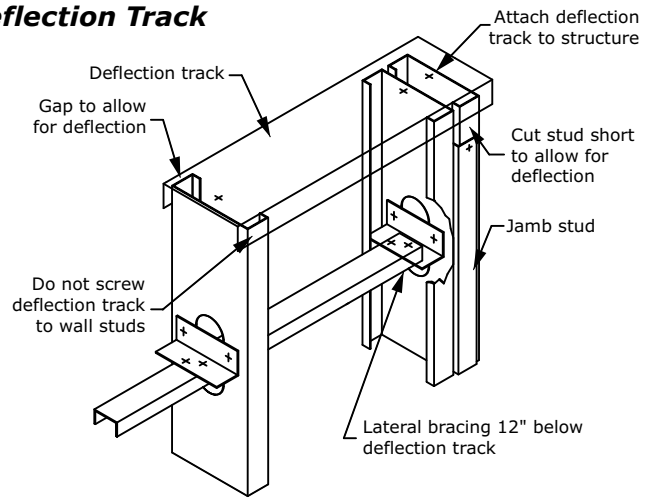
Example of lateral bracing for walls sheathed full height on one side.



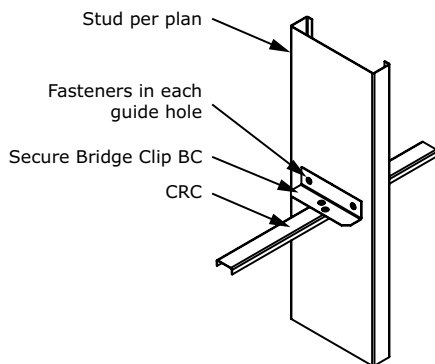
**Flat Strap and Blocking for Lateral Bracing**



**Deflection Track**



**U-Channel and Secure Bridge Clip for Lateral Bracing**



**General Note:**

All connections should be designed by a licensed design professional.

# Curtain Wall Limiting Heights

## Table Notes

1. Listed wind pressures represent calculated designed wind pressure (0.6 W based on 2015 IBC). For deflection calculations, listed wind pressures have been reduced by 0.70 as allowed by IBC. The 5 psf pressure has not been reduced for deflection checks.
2. Studs are assumed to be adequately braced at a maximum spacing of  $L_v$  to develop full allowable moment.  $L_v$  spacing shown in section property tables on page 10.
3. Web crippling check is based on 1" of bearing at end supports and 3" of bearing at interior support.
4. Shear and web crippling capacity at end supports have **not** been reduced for punchouts. Shear and web crippling capacity at interior support have been reduced for the presence of punchout adjacent to the support.
5. Combined bending and shear check at interior support is based on unreinforced web per AISI S100 (Eq. C3.3.1-1). Shear capacity and combined bending and shear check at interior support have been reduced for the presence of punchouts adjacent to support.
6. Framing members for interior non-bearing wall conditions with 5 psf loading may be selected using the information in this table.
7. See page 7 for additional table notes.

## 350 SFS

Part No.	F <sub>y</sub> (ksi)	Spacing (in) oc	5 psf			15 psf			20 psf			25 psf		
			L/120	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
350SFS162-33EQS	57	12	22' 4"	17' 8"	15' 5"	13' 10"	12' 1"	10' 2"	12' 6"	10' 11"	9' 3"	11' 8"	10' 2"	8' 7"
	57	16	20' 3"	16' 1"	14' 0"	12' 6"	10' 11"	9' 3"	11' 5"	9' 11"	8' 5"	10' 7"	9' 3"	-
	57	24	17' 8"	14' 0"	12' 3"	10' 11"	9' 7"	8' 1"	9' 11"	8' 8"	-	8' 11" e	8' 1"	-
350SFS162-43EQS	57	12	24' 10"	19' 8"	17' 2"	15' 4"	13' 5"	11' 4"	13' 11"	12' 2"	10' 3"	12' 11"	11' 4"	9' 6"
	57	16	22' 6"	17' 10"	15' 7"	13' 11"	12' 2"	10' 3"	12' 8"	11' 1"	9' 4"	11' 9"	10' 3"	8' 8"
	57	24	19' 8"	15' 7"	13' 8"	12' 2"	10' 8"	9' 0"	11' 1"	9' 8"	8' 2"	10' 3"	9' 0"	-
350SFS200-43EQS	57	12	25' 9"	20' 5"	17' 10"	16' 2"	14' 1"	11' 11"	14' 8"	12' 10"	10' 10"	13' 7"	11' 11"	10' 0"
	57	16	23' 4"	18' 6"	16' 2"	14' 8"	12' 10"	10' 10"	13' 4"	11' 8"	9' 10"	12' 4"	10' 10"	9' 1"
	57	24	20' 4"	16' 2"	14' 2"	12' 10"	11' 2"	9' 5"	11' 8"	10' 2"	8' 7"	10' 10"	9' 5"	8' 0"

Part No.	F <sub>y</sub> (ksi)	Spacing (in) oc	30 psf			35 psf			40 psf			50 psf		
			L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
350SFS162-33EQS	57	12	10' 11"	9' 7"	8' 1"	10' 5"	9' 1"	-	9' 11"	8' 8"	-	8' 11" e	8' 1"	-
	57	16	9' 11"	8' 8"	-	9' 3" e	8' 3"	-	8' 8" e	-	-	-	-	-
	57	24	8' 2" e	-	-	-	-	-	-	-	-	-	-	-
350SFS162-43EQS	57	12	12' 2"	10' 8"	9' 0"	11' 7"	10' 1"	8' 6"	11' 1"	9' 8"	8' 2"	10' 3"	9' 0"	-
	57	16	11' 1"	9' 8"	8' 2"	10' 6"	9' 2"	-	10' 1"	8' 9"	-	9' 4"	8' 2"	-
	57	24	9' 8"	8' 5"	-	9' 1"	8' 0"	-	8' 6"	-	-	-	-	-
350SFS200-43EQS	57	12	12' 10"	11' 2"	9' 5"	12' 2"	10' 8"	9' 0"	11' 8"	10' 2"	8' 7"	10' 10"	9' 5"	8' 0"
	57	16	11' 8"	10' 2"	8' 7"	11' 1"	9' 8"	8' 2"	10' 7"	9' 3"	-	9' 6"	8' 7"	-
	57	24	10' 1"	8' 11"	-	9' 4"	8' 5"	-	8' 9"	8' 1"	-	-	-	-

"e" Web stiffeners required at ends.

## 362 SFS

Part No.	F <sub>y</sub> (ksi)	Spacing (in) oc	5 psf			15 psf			20 psf			25 psf		
			L/120	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
362SFS162-33EQS	57	12	22' 11"	18' 2"	15' 11"	14' 2"	12' 5"	10' 5"	12' 11"	11' 3"	9' 6"	12' 0"	10' 5"	8' 10"
	57	16	20' 10"	16' 6"	14' 5"	12' 11"	11' 3"	9' 6"	11' 8"	10' 3"	8' 7"	10' 10"	9' 6"	8' 0"
	57	24	18' 2"	14' 5"	12' 7"	11' 3"	9' 10"	8' 3"	10' 2"	8' 11"	-	9' 1" e	8' 3"	-
362SFS162-43EQS	57	12	25' 6"	20' 3"	17' 8"	15' 9"	13' 9"	11' 7"	14' 4"	12' 6"	10' 7"	13' 4"	11' 7"	9' 9"
	57	16	23' 2"	18' 4"	16' 0"	14' 4"	12' 6"	10' 7"	13' 0"	11' 4"	9' 7"	12' 1"	10' 7"	8' 11"
	57	24	20' 3"	16' 0"	14' 0"	12' 6"	10' 11"	9' 2"	11' 4"	9' 11"	8' 4"	10' 7"	9' 2"	7' 9"
362SFS200-43EQS	57	12	26' 5"	21' 0"	18' 4"	16' 7"	14' 6"	12' 3"	15' 1"	13' 2"	11' 1"	14' 0"	12' 3"	10' 4"
	57	16	24' 0"	19' 1"	16' 8"	15' 1"	13' 2"	11' 1"	13' 8"	11' 11"	10' 1"	12' 8"	11' 1"	9' 4"
	57	24	21' 0"	16' 8"	14' 6"	13' 2"	11' 6"	9' 8"	11' 11"	10' 5"	8' 10"	11' 1"	9' 8"	8' 2"

Part No.	F <sub>y</sub> (ksi)	Spacing (in) oc	30 psf			35 psf			40 psf			50 psf		
			L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
362SFS162-33EQS	57	12	11' 3"	9' 10"	8' 3"	10' 8"	9' 4"	-	10' 2"	8' 11"	-	9' 1" e	8' 3"	-
	57	16	10' 2"	8' 11"	-	9' 5" e	8' 6"	-	8' 10" e	8' 1" e	-	-	-	-
	57	24	8' 3" e	-	-	-	-	-	-	-	-	-	-	-
362SFS162-43EQS	57	12	12' 6"	10' 11"	9' 2"	11' 11"	10' 5"	8' 9"	11' 4"	9' 11"	8' 4"	10' 7"	9' 2"	7' 9"
	57	16	11' 4"	9' 11"	8' 4"	10' 10"	9' 5"	7' 11"	10' 4"	9' 0"	7' 7"	9' 6"	8' 4"	7' 1"
	57	24	9' 11"	8' 8"	7' 4"	9' 3"	8' 3"	6' 11"	8' 8"	7' 10"	6' 8"	7' 9"	7' 4"	6' 2"
362SFS200-43EQS	57	12	13' 2"	11' 6"	9' 8"	12' 6"	10' 11"	9' 3"	11' 11"	10' 5"	8' 10"	11' 1"	9' 8"	8' 2"
	57	16	11' 11"	10' 5"	8' 10"	11' 4"	9' 11"	8' 4"	10' 10"	9' 6"	8' 0"	9' 9"	8' 10"	-
	57	24	10' 3"	9' 2"	-	9' 6"	8' 8"	-	8' 11"	8' 3"	-	-	-	-

"e" Web stiffeners required at ends.

400 SFS

Part No.	Fy (ksi)	Spacing (in) oc	5 psf			15 psf			20 psf			25 psf		
			L/120	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
400SFS162-33EQS	57	12	24' 9"	19' 8"	17' 2"	15' 4"	13' 5"	11' 3"	13' 11"	12' 2"	10' 3"	12' 11"	11' 3"	9' 6"
	57	16	22' 6"	17' 10"	15' 7"	13' 11"	12' 2"	10' 3"	12' 8"	11' 0"	9' 4"	11' 9"	10' 3"	8' 8"
	57	24	19' 8"	15' 7"	13' 7"	12' 2"	10' 7"	8' 11"	10' 9" e	9' 8"	8' 1"	9' 7" e	8' 11" e	-
400SFS162-43EQS	57	12	27' 6"	21' 10"	19' 1"	17' 0"	14' 10"	12' 6"	15' 6"	13' 6"	11' 5"	14' 4"	12' 6"	10' 7"
	57	16	25' 0"	19' 10"	17' 4"	15' 6"	13' 6"	11' 5"	14' 1"	12' 3"	10' 4"	13' 0"	11' 5"	9' 7"
	57	24	21' 10"	17' 4"	15' 1"	13' 6"	11' 9"	9' 11"	12' 3"	10' 9"	9' 0"	11' 5"	9' 11"	8' 5"
400SFS200-43EQS	57	12	28' 6"	22' 7"	19' 9"	17' 10"	15' 7"	13' 2"	16' 3"	14' 2"	12' 0"	15' 1"	13' 2"	11' 1"
	57	16	25' 11"	20' 7"	17' 11"	16' 3"	14' 2"	12' 0"	14' 9"	12' 11"	10' 10"	13' 8"	12' 0"	10' 1"
	57	24	22' 7"	17' 11"	15' 8"	14' 2"	12' 5"	10' 5"	12' 11"	11' 3"	9' 6"	11' 10"	10' 5"	8' 10"

Part No.	Fy (ksi)	Spacing (in) oc	30 psf			35 psf			40 psf			50 psf		
			L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
400SFS162-33EQS	57	12	12' 2"	10' 7"	8' 11"	11' 6"	10' 1"	8' 6"	10' 9" e	9' 8"	8' 1"	9' 7" e	8' 11" e	-
	57	16	10' 9" e	9' 8"	8' 1"	9' 11" e	9' 2" e	-	9' 3" e	8' 9" e	-	8' 4" e	8' 1" e	-
	57	24	8' 9" e	8' 5" e	-	8' 1" e	8' 0" e	-	-	-	-	-	-	-
400SFS162-43EQS	57	12	13' 6"	11' 9"	9' 11"	12' 10"	11' 2"	9' 5"	12' 3"	10' 9"	9' 0"	11' 5"	9' 11"	8' 5"
	57	16	12' 3"	10' 9"	9' 0"	11' 8"	10' 2"	8' 7"	11' 2"	9' 9"	8' 2"	10' 1"	9' 0"	7' 7"
	57	24	10' 7"	9' 4"	7' 11"	9' 10"	8' 11"	7' 6"	9' 2"	8' 6"	7' 2"	8' 2" e	7' 11" e	6' 8"
400SFS200-43EQS	57	12	14' 2"	12' 5"	10' 5"	13' 6"	11' 9"	9' 11"	12' 11"	11' 3"	9' 6"	11' 10"	10' 5"	8' 10"
	57	16	12' 11"	11' 3"	9' 6"	12' 3"	10' 8"	9' 0"	11' 6"	10' 3"	8' 8"	10' 3"	9' 6"	8' 0"
	57	24	10' 10"	9' 10"	8' 4"	10' 0"	9' 4"	-	9' 4"	8' 11"	-	8' 5" e	8' 4" e	-

"e" Web stiffeners required at ends.

550 SFS

Part No.	Fy (ksi)	Spacing (in) oc	5 psf			15 psf			20 psf			25 psf		
			L/120	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
550SFS162-33EQS	57	12	31' 10"	25' 3"	22' 1"	19' 9"	17' 3"	14' 6"	17' 11"	15' 8"	13' 2"	16' 1" e	14' 6"	12' 3"
	57	16	28' 11"	22' 11"	20' 0"	17' 11"	15' 8"	13' 2"	15' 7" e	14' 2"	12' 0"	13' 11" e	13' 2" e	11' 1"
	57	24	25' 3"	20' 0"	17' 6"	14' 8" e	13' 8" e	11' 6"	12' 8" e	12' 5" e	10' 5" e	11' 4" e	11' 4" e	9' 8" e
550SFS162-43EQS	57	12	35' 3"	28' 0"	24' 5"	21' 10"	19' 1"	16' 1"	19' 10"	17' 4"	14' 7"	18' 5"	16' 1"	13' 7"
	57	16	32' 0"	25' 5"	22' 2"	19' 10"	17' 4"	14' 7"	18' 0"	15' 9"	13' 3"	16' 9"	14' 7"	12' 4"
	57	24	28' 0"	22' 2"	19' 5"	17' 4"	15' 2"	12' 9"	15' 9"	13' 9"	11' 7"	14' 1"	12' 9"	10' 9"
550SFS200-43EQS	57	12	26' 6"	29' 0"	25' 4"	22' 10"	19' 11"	16' 10"	20' 9"	18' 1"	15' 3"	19' 3"	16' 10"	14' 2"
	57	16	33' 2"	26' 4"	23' 0"	20' 9"	18' 1"	15' 3"	18' 10"	16' 5"	13' 11"	17' 6"	15' 3"	12' 11"
	57	24	29' 0"	23' 0"	20' 1"	18' 1"	15' 10"	13' 4"	16' 1"	14' 4"	12' 1"	14' 5" e	13' 4"	11' 3"

Part No.	Fy (ksi)	Spacing (in) oc	30 psf			35 psf			40 psf			50 psf		
			L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
550SFS162-33EQS	57	12	14' 8" e	13' 8" e	11' 6"	13' 7" e	13' 0" e	10' 11"	12' 8" e	12' 5" e	10' 5" e	11' 4" e	11' 4" e	9' 8" e
	57	16	12' 8" e	12' 5" e	10' 5" e	11' 9" e	11' 9" e	9' 11" e	11' 0" e	11' 0" e	9' 6" e	9' 10" e	9' 10" e	8' 10" e
	57	24	10' 4" e	10' 4" e	9' 2" e	9' 7" e	9' 7" e	8' 8" e	9' 0" e	9' 0" e	8' 3" e	8' 0" e	8' 0" e	-
550SFS162-43EQS	57	12	17' 4"	15' 2"	12' 9"	16' 6"	14' 4"	12' 1"	15' 9"	13' 9"	11' 7"	14' 1"	12' 9"	10' 9"
	57	16	15' 9"	13' 9"	11' 7"	14' 7"	13' 1"	11' 0"	13' 8" e	12' 6"	10' 6"	12' 2" e	11' 7" e	9' 9"
	57	24	12' 10" e	12' 0" e	10' 1"	11' 11" e	11' 5" e	9' 7"	11' 1" e	10' 11" e	9' 2" e	9' 11" e	9' 11" e	8' 6" e
550SFS200-43EQS	57	12	18' 1"	15' 10"	13' 4"	17' 2"	15' 0"	12' 8"	16' 1"	14' 4"	12' 1"	14' 5" e	13' 4"	11' 3"
	57	16	16' 1"	14' 4"	12' 1"	14' 11"	13' 8"	11' 6"	13' 11" e	13' 1"	11' 0"	12' 6" e	12' 1" e	10' 3"
	57	24	13' 2" e	12' 7" e	10' 7"	12' 2" e	11' 11" e	10' 1"	11' 4" e	11' 4" e	9' 7" e	10' 2" e	10' 2" e	8' 11" e

"e" Web stiffeners required at ends.

# Curtain Wall Limiting Heights

## 600 SFS

Part No.	F <sub>y</sub> (ksi)	Spacing (in) oc	5 psf			15 psf			20 psf			25 psf		
			L/120	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
600SFS162-33EQS	57	12	34' 2"	27' 1"	23' 8"	21' 2"	18' 6"	15' 7"	18' 9"	16' 9"	14' 2"	16' 9" e	15' 7" e	13' 1"
	57	16	31' 0"	24' 7"	21' 6"	18' 9"	16' 9"	14' 2"	16' 3" e	15' 3" e	12' 10"	14' 6" e	14' 2" e	11' 11" e
	57	24	26' 7"	21' 6"	18' 9"	15' 4" e	14' 8" e	12' 4"	13' 3" e	13' 3" e	11' 3" e	11' 10" e	11' 10" e	10' 5" e
600SFS162-43EQS	57	12	37' 9"	30' 0"	26' 2"	23' 5"	20' 5"	17' 3"	21' 3"	18' 7"	15' 8"	19' 9"	17' 3"	14' 6"
	57	16	34' 4"	27' 3"	23' 9"	21' 3"	18' 7"	15' 8"	19' 4"	16' 10"	14' 3"	17' 11"	15' 8"	13' 2"
	57	24	30' 0"	23' 9"	20' 9"	18' 7"	16' 3"	13' 8"	16' 6"	14' 9"	12' 5"	14' 9" e	13' 8"	11' 6"
600SFS200-43EQS	57	12	39' 2"	31' 1"	27' 2"	24' 5"	21' 4"	18' 0"	22' 2"	19' 5"	16' 4"	20' 7"	18' 0"	15' 2"
	57	16	35' 7"	28' 3"	24' 8"	22' 2"	19' 5"	16' 4"	20' 2"	17' 7"	14' 10"	18' 5"	16' 4"	13' 9"
	57	24	31' 1"	24' 8"	21' 7"	19' 5"	16' 11"	14' 3"	16' 10"	15' 5"	13' 0"	15' 1" e	14' 3" e	12' 1"

Part No.	F <sub>y</sub> (ksi)	Spacing (in) oc	30 psf			35 psf			40 psf			50 psf		
			L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
600SFS162-33EQS	57	12	15' 4" e	14' 8" e	12' 4"	14' 2" e	13' 11" e	11' 9" e	13' 3" e	13' 3" e	11' 3" e	11' 10" e	11' 10" e	10' 5" e
	57	16	13' 3" e	13' 3" e	11' 3" e	12' 3" e	12' 3" e	10' 8" e	11' 6" e	11' 6" e	10' 2" e	10' 3" e	10' 3" e	9' 5" e
	57	24	10' 10" e	10' 10" e	9' 9" e	10' 0" e	10' 0" e	9' 4" e	9' 4" e	9' 4" e	8' 11" e	-	-	-
600SFS162-43EQS	57	12	18' 7"	16' 3"	13' 8"	17' 7"	15' 5"	13' 0"	16' 6"	14' 9"	12' 5"	14' 9" e	13' 8"	11' 6"
	57	16	16' 6"	14' 9"	12' 5"	15' 3" e	14' 0"	11' 10"	14' 3" e	13' 5" e	11' 3"	12' 9" e	12' 5" e	10' 6"
	57	24	13' 5" e	12' 10" e	10' 10"	12' 5" e	12' 3" e	10' 4" e	11' 8" e	11' 8" e	9' 10" e	10' 5" e	10' 5" e	9' 2" e
600SFS200-43EQS	57	12	19' 5"	16' 11"	14' 3"	18' 0"	16' 1"	13' 7"	16' 10"	15' 5"	13' 0"	15' 1" e	14' 3" e	12' 1"
	57	16	16' 10"	15' 5"	13' 0"	15' 7" e	14' 7"	12' 4"	14' 7" e	14' 0" e	11' 9"	13' 1" e	13' 0" e	10' 11" e
	57	24	13' 9" e	13' 5" e	11' 4"	12' 9" e	12' 9" e	10' 9" e	11' 11" e	11' 11" e	10' 4" e	10' 8" e	10' 8" e	9' 7" e

"e" Web stiffeners required at ends.

## 800 SFS

Part No.	F <sub>y</sub> (ksi)	Spacing (in) oc	5 psf			15 psf			20 psf			25 psf		
			L/120	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
800SFS162-43EQS	57	12	46' 9"	37' 1"	32' 5"	28' 11"	25' 3"	21' 4"	26' 3"	23' 0"	19' 4"	24' 0"	21' 4"	18' 0"
	57	16	42' 5"	33' 8"	29' 5"	26' 3"	23' 0"	19' 4"	23' 3"	20' 10"	17' 7"	20' 9" e	19' 4"	16' 4"
	57	24	37' 1"	29' 5"	25' 8"	21' 11"	20' 1"	16' 11"	19' 0" e	18' 3" e	15' 4"	16' 11" e	16' 11" e	14' 3" e
800SFS200-43EQS	57	12	49' 5"	39' 2"	34' 3"	30' 8"	26' 9"	22' 7"	27' 6"	24' 4"	20' 6"	24' 7"	22' 7"	19' 0"
	57	16	44' 10"	35' 7"	31' 1"	27' 6"	24' 4"	20' 6"	23' 10"	22' 1"	18' 8"	21' 4" e	20' 6" e	17' 4"
	57	24	38' 11"	31' 1"	27' 2"	22' 6" e	21' 3"	17' 11"	19' 6" e	19' 4" e	16' 3"	17' 5" e	17' 5" e	15' 1" e

Part No.	F <sub>y</sub> (ksi)	Spacing (in) oc	30 psf			35 psf			40 psf			50 psf		
			L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
800SFS162-43EQS	57	12	21' 11"	20' 1"	16' 11"	20' 3" e	19' 1"	16' 1"	19' 0" e	18' 3" e	15' 4"	16' 11" e	16' 11" e	14' 3" e
	57	16	19' 0" e	18' 3" e	15' 4"	17' 7" e	17' 4" e	14' 7" e	16' 5" e	16' 5" e	13' 11" e	14' 8" e	14' 8" e	12' 11" e
	57	24	15' 6" e	15' 6" e	13' 5" e	14' 4" e	14' 4" e	12' 9" e	13' 5" e	13' 5" e	12' 2" e	12' 0" e	12' 0" e	11' 4" e
800SFS200-43EQS	57	12	22' 6" e	21' 3"	17' 11"	20' 10" e	20' 2" e	17' 0"	19' 6" e	19' 4" e	16' 3"	17' 5" e	17' 5" e	15' 1" e
	57	16	19' 6" e	19' 4" e	16' 3"	18' 0" e	18' 0" e	15' 6" e	16' 10" e	16' 10" e	14' 9" e	15' 1" e	15' 1" e	13' 9" e
	57	24	15' 11" e	15' 11" e	14' 3" e	14' 9" e	14' 9" e	13' 6" e	13' 9" e	13' 9" e	12' 11" e	12' 4" e	12' 4" e	12' 0" e

"e" Web stiffeners required at ends.

See Table Notes on Page 18

## Table Notes

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads listed are based on simple single span condition.
3. Allowable axial load determined in accordance with AISI S100 Section C5 and with the assumption that axial load passes through centroid of the effective section.
4. Allowable axial loads are based on 4'-0" on center axial bracing.
5. Studs are assumed to be adequately braced for flexure at a maximum of spacing of  $L_u$ , to develop full allowable moment,  $M_u$ .  $L_u$  spacing shown in section property tables on page 10.
6. Listed wind pressures represent calculated designed wind pressure (0.6 W based on 2015 IBC). For deflection calculations, listed wind pressures have been reduced by 0.70 as allowed by IBC. The 5 psf pressure has not been reduced for deflection checks.
7. Ends supports have not been checked for web crippling. See web crippling tables on page 29.
8. Framing members for interior non-bearing wall conditions with 5 psf loading may be selected using the information in this table.
9. See page 7 for additional table notes.

## » 5 psf

Wall Height (ft)	F <sub>y</sub> (ksi)	Spacing (in) oc	362SFS162-(mil)		400SFS162-(mil)		600SFS162-(mil)		600SFS200-(mil)	800SFS162-(mil)	800SFS200-(mil)
			33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS	43EQS	43EQS
8	57	12	1.79	2.74	1.98	3.07	2.43	3.85	4.14	3.71	4.29
	57	16	1.73	2.68	1.92	3.01	2.39	3.81	4.09	3.68	4.26
	57	24	1.61	2.55	1.80	2.88	2.30	3.73	4.00	3.62	4.19
9	57	12	1.65	2.52	1.85	2.87	2.39	3.82	4.06	3.69	4.26
	57	16	1.57	2.44	1.77	2.79	2.34	3.76	4.00	3.65	4.22
	57	24	1.42	2.28	1.63	2.63	2.23	3.65	3.89	3.57	4.14
10	57	12	1.48	2.27	1.70	2.65	2.34	3.77	3.96	3.66	4.23
	57	16	1.39	2.17	1.61	2.55	2.28	3.70	3.89	3.61	4.18
	57	24	1.22	1.99	1.44	2.36	2.14	3.55	3.75	3.52	4.08
12	57	12	1.15	1.78	1.37	2.14	2.17	3.54	3.71	3.59	4.15
	57	16	1.04 <sup>5</sup>	1.67	1.26	2.02	2.07	3.43	3.61	3.52	4.08
	57	24	0.84 <sup>4</sup>	1.45 <sup>4</sup>	1.05 <sup>4</sup>	1.79	1.88	3.23	3.40	3.38	3.92
14	57	12	0.85 <sup>4</sup>	1.36	1.05 <sup>5</sup>	1.68	1.94	3.19	3.39	3.50	4.02
	57	16	0.73 <sup>4</sup>	1.24 <sup>4</sup>	0.93 <sup>4</sup>	1.54 <sup>5</sup>	1.81	3.05	3.25	3.40	3.91
	57	24	0.53 <sup>3</sup>	1.01 <sup>4</sup>	0.71 <sup>3</sup>	1.30 <sup>4</sup>	1.57	2.79	2.98	3.20	3.69
16	57	12	0.61 <sup>3</sup>	1.03 <sup>4</sup>	0.78 <sup>4</sup>	1.29 <sup>5</sup>	1.67	2.78	3.01	3.39	3.79
	57	16	0.50 <sup>3</sup>	0.90 <sup>4</sup>	0.65 <sup>3</sup>	1.15 <sup>4</sup>	1.52	2.61	2.83	3.25	3.65
	57	24	0.30 <sup>2</sup>	0.68 <sup>3</sup>	0.43 <sup>2</sup>	0.90 <sup>3</sup>	1.23 <sup>4</sup>	2.29	2.51	2.99	3.37

## » 15 psf

Wall Height (ft)	F <sub>y</sub> (ksi)	Spacing (in) oc	362SFS162-(mil)		400SFS162-(mil)		600SFS162-(mil)		600SFS200-(mil)	800SFS162-(mil)	800SFS200-(mil)
			33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS	43EQS	43EQS
8	57	12	1.43	2.36	1.63	2.70	2.18	3.60	3.87	3.54	4.10
	57	16	1.27	2.18	1.47	2.52	2.05	3.47	3.74	3.45	4.00
	57	24	0.95 <sup>5</sup>	1.83	1.16	2.17	1.81	3.22	3.48	3.27	3.81
9	57	12	1.21	2.05	1.42	2.41	2.07	3.48	3.72	3.46	4.01
	57	16	1.02 <sup>5</sup>	1.84	1.23	2.19	1.91	3.32	3.55	3.35	3.89
	57	24	0.66 <sup>4</sup>	1.45 <sup>5</sup>	0.86 <sup>4</sup>	1.79	1.61	2.99	3.22	3.12	3.64
10	57	12	0.99 <sup>5</sup>	1.74	1.20	2.10	1.94	3.35	3.54	3.38	3.92
	57	16	0.78 <sup>4</sup>	1.50 <sup>5</sup>	0.98 <sup>5</sup>	1.86	1.75	3.14	3.33	3.24	3.77
	57	24	0.39 <sup>3</sup>	1.08 <sup>4</sup>	0.58 <sup>4</sup>	1.41 <sup>4</sup>	1.38	2.74	2.93	2.96	3.46
12	57	12	0.59 <sup>4</sup>	1.17 <sup>4</sup>	0.78 <sup>4</sup>	1.49 <sup>5</sup>	1.60	2.93	3.11	3.17	3.69
	57	16	0.36 <sup>3</sup>	0.92 <sup>4</sup>	0.53 <sup>4</sup>	1.21 <sup>4</sup>	1.34	2.65	2.82	2.97	3.47
	57	24	-	0.47 <sup>3</sup>	0.09 <sup>3</sup>	0.72 <sup>3</sup>	0.85 <sup>5</sup>	2.11	2.28	2.57	3.02
14	57	12	0.28 <sup>3</sup>	0.73 <sup>3</sup>	0.42 <sup>3</sup>	0.97 <sup>4</sup>	1.22	2.41	2.60	2.92	3.38
	57	16	0.05 <sup>2</sup>	0.48 <sup>3</sup>	0.17 <sup>2</sup>	0.69 <sup>3</sup>	0.90 <sup>5</sup>	2.06	2.24	2.64	3.07
	57	24	-	0.04 <sup>2</sup>	-	0.20 <sup>2</sup>	0.32 <sup>4</sup>	1.41 <sup>4</sup>	1.58 <sup>5</sup>	2.10	2.49
16	57	12	0.06 <sup>2</sup>	0.40 <sup>2</sup>	0.15 <sup>2</sup>	0.59 <sup>3</sup>	0.84 <sup>4</sup>	1.86	2.06	2.62	2.97
	57	16	-	0.16 <sup>2</sup>	-	0.31 <sup>2</sup>	0.49 <sup>4</sup>	1.47 <sup>4</sup>	1.65 <sup>5</sup>	2.26	2.59
	57	24	-	-	-	-	-	0.77 <sup>4</sup>	0.92 <sup>4</sup>	1.59 <sup>5</sup>	1.87

If no note, deflection is less than L/720.

<sup>1</sup>Deflection exceeds L/120

<sup>2</sup>Deflection exceeds L/240

<sup>3</sup>Deflection exceeds L/360

<sup>4</sup>Deflection exceeds L/600

<sup>5</sup>Deflection exceeds L/720

# Combined Axial and Lateral Loads

## » 20 psf

Wall Height (ft)	Fy (ksi)	Spacing (in) oc	362SFS162-(mil)		400SFS162-(mil)		600SFS162-(mil)		600SFS200-(mil)	800SFS162-(mil)	800SFS200-(mil)
			33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS	43EQS	43EQS
8	57	12	1.27	2.18	1.47	2.52	2.05	3.47	3.74	3.45	4.00
	57	16	1.06	1.95	1.26	2.29	1.89	3.30	3.57	3.33	3.87
	57	24	0.66 <sup>4</sup>	1.51 <sup>5</sup>	0.86 <sup>5</sup>	1.85	1.57	2.97	3.23	3.10	3.61
9	57	12	1.02 <sup>5</sup>	1.84	1.23	2.19	1.91	3.32	3.55	3.35	3.89
	57	16	0.78 <sup>4</sup>	1.58	0.98 <sup>5</sup>	1.92	1.71	3.10	3.33	3.20	3.73
	57	24	0.34 <sup>3</sup>	1.09 <sup>4</sup>	0.53 <sup>4</sup>	1.41 <sup>5</sup>	1.31	2.68	2.90	2.90	3.40
10	57	12	0.78 <sup>4</sup>	1.50 <sup>5</sup>	0.98 <sup>5</sup>	1.86	1.75	3.14	3.33	3.24	3.77
	57	16	0.52 <sup>4</sup>	1.22 <sup>4</sup>	0.71 <sup>4</sup>	1.55 <sup>5</sup>	1.50	2.87	3.06	3.05	3.56
	57	24	0.05 <sup>3</sup>	0.70 <sup>3</sup>	0.21 <sup>3</sup>	0.99 <sup>4</sup>	1.02	2.36	2.55	2.68	3.16
12	57	12	0.36 <sup>3</sup>	0.92 <sup>4</sup>	0.53 <sup>4</sup>	1.21 <sup>4</sup>	1.34	2.65	2.82	2.97	3.47
	57	16	0.09 <sup>2</sup>	0.61 <sup>3</sup>	0.23 <sup>3</sup>	0.87 <sup>4</sup>	1.01	2.28	2.45	2.70	3.17
	57	24	-	0.08 <sup>2</sup>	-	0.28 <sup>3</sup>	0.39 <sup>4</sup>	1.60 <sup>5</sup>	1.76	2.18	2.59
14	57	12	0.05 <sup>2</sup>	0.48 <sup>3</sup>	0.17 <sup>2</sup>	0.69 <sup>3</sup>	0.90 <sup>5</sup>	2.06	2.24	2.64	3.07
	57	16	-	0.18 <sup>2</sup>	-	0.36 <sup>3</sup>	0.51 <sup>4</sup>	1.62 <sup>5</sup>	1.79 <sup>5</sup>	2.28	2.68
	57	24	-	-	-	-	-	0.83 <sup>4</sup>	0.98 <sup>4</sup>	1.59	1.92
16	57	12	-	0.16 <sup>2</sup>	-	0.31 <sup>2</sup>	0.49 <sup>4</sup>	1.47 <sup>4</sup>	1.65 <sup>5</sup>	2.26	2.59
	57	16	-	-	-	-	0.06 <sup>3</sup>	0.99 <sup>4</sup>	1.15 <sup>4</sup>	1.81	2.10
	57	24	-	-	-	-	-	0.15 <sup>3</sup>	0.26 <sup>3</sup>	0.96 <sup>4</sup>	1.19 <sup>5</sup>

## » 25 psf

Wall Height (ft)	Fy (ksi)	Spacing (in) oc	362SFS162-(mil)		400SFS162-(mil)		600SFS162-(mil)		600SFS200-(mil)	800SFS162-(mil)	800SFS200-(mil)
			33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS	43EQS	43EQS
8	57	12	1.11	2.00	1.31	2.34	1.93	3.34	3.61	3.36	3.90
	57	16	0.85 <sup>5</sup>	1.73	1.06	2.06	1.73	3.13	3.40	3.21	3.74
	57	24	0.39 <sup>4</sup>	1.21 <sup>4</sup>	0.58 <sup>4</sup>	1.54 <sup>5</sup>	1.34	2.72	2.97	2.92	3.42
9	57	12	0.84 <sup>4</sup>	1.64	1.04 <sup>5</sup>	1.99	1.76	3.15	3.39	3.24	3.77
	57	16	0.55 <sup>4</sup>	1.33 <sup>4</sup>	0.75 <sup>4</sup>	1.66	1.51	2.89	3.12	3.05	3.56
	57	24	0.04 <sup>3</sup>	0.75 <sup>4</sup>	0.21 <sup>3</sup>	1.06 <sup>4</sup>	1.02	2.37	2.59	2.68	3.16
10	57	12	0.58 <sup>4</sup>	1.29 <sup>4</sup>	0.78 <sup>4</sup>	1.62 <sup>5</sup>	1.56	2.94	3.13	3.10	3.61
	57	16	0.28 <sup>3</sup>	0.95 <sup>4</sup>	0.45 <sup>4</sup>	1.26 <sup>4</sup>	1.26	2.61	2.80	2.87	3.36
	57	24	-	0.35 <sup>3</sup>	-	0.62 <sup>3</sup>	0.68 <sup>5</sup>	1.99	2.17	2.41	2.86
12	57	12	0.15 <sup>3</sup>	0.69 <sup>3</sup>	0.30 <sup>3</sup>	0.95 <sup>4</sup>	1.09	2.37	2.54	2.76	3.24
	57	16	-	0.34 <sup>3</sup>	-	0.57 <sup>3</sup>	0.69 <sup>4</sup>	1.93	2.10	2.44	2.88
	57	24	-	-	-	-	-	1.13 <sup>4</sup>	1.28 <sup>4</sup>	1.80	2.17
14	57	12	-	0.25 <sup>2</sup>	-	0.44 <sup>3</sup>	0.61 <sup>4</sup>	1.73 <sup>5</sup>	1.90	2.37	2.78
	57	16	-	-	-	0.05 <sup>2</sup>	0.15 <sup>4</sup>	1.21 <sup>4</sup>	1.37 <sup>4</sup>	1.93	2.29
	57	24	-	-	-	-	-	0.29 <sup>3</sup>	0.41 <sup>4</sup>	1.10 <sup>5</sup>	1.38
16	57	12	-	-	-	0.07 <sup>2</sup>	0.16 <sup>3</sup>	1.11 <sup>4</sup>	1.27 <sup>4</sup>	1.92	2.22
	57	16	-	-	-	-	-	0.56 <sup>3</sup>	0.69 <sup>4</sup>	1.37 <sup>5</sup>	1.64
	57	24	-	-	-	-	-	-	0.37 <sup>4</sup>	0.56 <sup>4</sup>	0.56 <sup>4</sup>

## » 30 psf

Wall Height (ft)	Fy (ksi)	Spacing (in) oc	362SFS162-(mil)		400SFS162-(mil)		600SFS162-(mil)		600SFS200-(mil)	800SFS162-(mil)	800SFS200-(mil)
			33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS	43EQS	43EQS
8	57	12	0.95 <sup>5</sup>	1.83	1.16	2.17	1.81	3.22	3.48	3.27	3.81
	57	16	0.66 <sup>4</sup>	1.51 <sup>5</sup>	0.86 <sup>5</sup>	1.85	1.57	2.97	3.23	3.10	3.61
	57	24	0.13 <sup>3</sup>	0.92 <sup>4</sup>	0.31 <sup>4</sup>	1.24 <sup>4</sup>	1.11	2.48	2.72	2.75	3.23
9	57	12	0.66 <sup>4</sup>	1.45 <sup>5</sup>	0.86 <sup>4</sup>	1.79	1.61	2.99	3.22	3.12	3.64
	57	16	0.34 <sup>3</sup>	1.09 <sup>4</sup>	0.53 <sup>4</sup>	1.41 <sup>5</sup>	1.31	2.68	2.90	2.90	3.40
	57	24	-	0.44 <sup>3</sup>	-	0.73 <sup>4</sup>	0.74	2.07	2.28	2.46	2.92
10	57	12	0.39 <sup>3</sup>	1.08 <sup>4</sup>	0.58 <sup>4</sup>	1.41 <sup>4</sup>	1.38	2.74	2.93	2.96	3.46
	57	16	0.05 <sup>3</sup>	0.70 <sup>3</sup>	0.21 <sup>3</sup>	0.99 <sup>4</sup>	1.02	2.36	2.55	2.68	3.16
	57	24	-	0.03 <sup>2</sup>	-	0.26 <sup>3</sup>	0.34 <sup>4</sup>	1.63	1.80	2.15	2.56
12	57	12	-	0.47 <sup>3</sup>	0.09 <sup>3</sup>	0.72 <sup>3</sup>	0.85 <sup>5</sup>	2.11	2.28	2.57	3.02
	57	16	-	0.08 <sup>2</sup>	-	0.28 <sup>3</sup>	0.39 <sup>4</sup>	1.60 <sup>5</sup>	1.76	2.18	2.59
	57	24	-	-	-	-	-	0.67 <sup>4</sup>	0.82 <sup>4</sup>	1.42	1.76
14	57	12	-	0.04 <sup>2</sup>	-	0.20 <sup>2</sup>	0.32 <sup>4</sup>	1.41 <sup>4</sup>	1.58 <sup>5</sup>	2.10	2.49
	57	16	-	-	-	-	-	0.83 <sup>4</sup>	0.98 <sup>4</sup>	1.59	1.92
	57	24	-	-	-	-	-	-	0.62 <sup>4</sup>	0.86 <sup>5</sup>	0.86 <sup>5</sup>
16	57	12	-	-	-	-	-	0.77 <sup>4</sup>	0.92 <sup>4</sup>	1.59 <sup>5</sup>	1.87
	57	16	-	-	-	-	-	0.15 <sup>3</sup>	0.26 <sup>3</sup>	0.96 <sup>4</sup>	1.19 <sup>5</sup>
	57	24	-	-	-	-	-	-	-	-	-

If no note, deflection is less than L/720.

<sup>1</sup>Deflection exceeds L/120

<sup>2</sup>Deflection exceeds L/240

<sup>3</sup>Deflection exceeds L/360

<sup>4</sup>Deflection exceeds L/600

<sup>5</sup>Deflection exceeds L/720

See Table Notes on Page 21

» 35 psf

Wall Height (ft)	Fy (ksi)	Spacing (in) oc	362SFS162-(mil)		400SFS162-(mil)		600SFS162-(mil)		600SFS200-(mil)	800SFS162-(mil)	800SFS200-(mil)
			33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS	43EQS	43EQS
8	57	12	0.80 <sup>4</sup>	1.67	1.01	2.01	1.69	3.09	3.35	3.18	3.71
	57	16	0.48 <sup>4</sup>	1.31 <sup>4</sup>	0.67 <sup>4</sup>	1.64	1.42	2.80	3.06	2.98	3.49
	57	24	-	0.64 <sup>4</sup>	0.06 <sup>4</sup>	0.95 <sup>4</sup>	0.88	2.24	2.48	2.58	3.04
9	57	12	0.50 <sup>4</sup>	1.27 <sup>4</sup>	0.69 <sup>4</sup>	1.60 <sup>5</sup>	1.46	2.84	3.06	3.01	3.52
	57	16	0.14 <sup>3</sup>	0.86 <sup>4</sup>	0.32 <sup>4</sup>	1.18 <sup>4</sup>	1.11	2.48	2.69	2.76	3.24
	57	24	-	0.15 <sup>3</sup>	-	0.41 <sup>3</sup>	0.46 <sup>5</sup>	1.78	1.98	2.25	2.68
10	57	12	0.22 <sup>3</sup>	0.88 <sup>4</sup>	0.39 <sup>4</sup>	1.20 <sup>4</sup>	1.20	2.55	2.74	2.82	3.31
	57	16	-	0.46 <sup>3</sup>	-	0.74 <sup>4</sup>	0.79	2.11	2.29	2.50	2.96
	57	24	-	-	-	-	0.02 <sup>4</sup>	1.28 <sup>5</sup>	1.45	1.88	2.27
12	57	12	-	0.27 <sup>2</sup>	-	0.49 <sup>3</sup>	0.62 <sup>4</sup>	1.85	2.02	2.37	2.81
	57	16	-	-	-	0.02 <sup>2</sup>	0.11 <sup>4</sup>	1.28 <sup>4</sup>	1.44 <sup>5</sup>	1.92	2.31
	57	24	-	-	-	-	-	0.24 <sup>4</sup>	0.37 <sup>4</sup>	1.06 <sup>5</sup>	1.36
14	57	12	-	-	-	-	0.06 <sup>3</sup>	1.12 <sup>4</sup>	1.27 <sup>4</sup>	1.84	2.20
	57	16	-	-	-	-	-	0.47 <sup>4</sup>	0.60 <sup>4</sup>	1.26 <sup>5</sup>	1.56
	57	24	-	-	-	-	-	-	-	0.17 <sup>4</sup>	0.36 <sup>4</sup>
16	57	12	-	-	-	-	-	0.45 <sup>3</sup>	0.58 <sup>3</sup>	1.27 <sup>5</sup>	1.52 <sup>5</sup>
	57	16	-	-	-	-	-	-	-	0.56 <sup>4</sup>	0.76 <sup>4</sup>
	57	24	-	-	-	-	-	-	-	-	-

» 40 psf

Wall Height (ft)	Fy (ksi)	Spacing (in) oc	362SFS162-(mil)		400SFS162-(mil)		600SFS162-(mil)		600SFS200-(mil)	800SFS162-(mil)	800SFS200-(mil)
			33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS	43EQS	43EQS
8	57	12	0.66 <sup>4</sup>	1.51 <sup>5</sup>	0.86 <sup>5</sup>	1.85	1.57	2.97	3.23	3.10	3.61
	57	16	0.30 <sup>4</sup>	1.11 <sup>4</sup>	0.49 <sup>4</sup>	1.44 <sup>5</sup>	1.26	2.64	2.89	2.87	3.36
	57	24	-	0.38 <sup>3</sup>	-	0.68 <sup>4</sup>	0.66	2.01	2.23	2.41	2.85
9	57	12	0.34 <sup>3</sup>	1.09 <sup>4</sup>	0.53 <sup>4</sup>	1.41 <sup>5</sup>	1.31	2.68	2.90	2.90	3.40
	57	16	-	0.65 <sup>4</sup>	0.11 <sup>3</sup>	0.95 <sup>4</sup>	0.92	2.27	2.48	2.61	3.08
	57	24	-	-	-	0.11 <sup>3</sup>	0.19 <sup>4</sup>	1.49	1.68	2.03	2.44
10	57	12	0.05 <sup>3</sup>	0.70 <sup>3</sup>	0.21 <sup>3</sup>	0.99 <sup>4</sup>	1.02	2.36	2.55	2.68	3.16
	57	16	-	0.24 <sup>3</sup>	-	0.50 <sup>3</sup>	0.56 <sup>5</sup>	1.87	2.05	2.32	2.76
	57	24	-	-	-	-	-	0.94 <sup>4</sup>	1.10 <sup>5</sup>	1.62	1.98
12	57	12	-	0.08 <sup>2</sup>	-	0.28 <sup>3</sup>	0.39 <sup>4</sup>	1.60 <sup>5</sup>	1.76	2.18	2.59
	57	16	-	-	-	-	-	0.97 <sup>4</sup>	1.12 <sup>4</sup>	1.67	2.03
	57	24	-	-	-	-	-	-	-	0.70 <sup>5</sup>	0.96
14	57	12	-	-	-	-	-	0.83 <sup>4</sup>	0.98 <sup>4</sup>	1.59	1.92
	57	16	-	-	-	-	-	0.12 <sup>3</sup>	0.24 <sup>3</sup>	0.94 <sup>4</sup>	1.21 <sup>5</sup>
	57	24	-	-	-	-	-	-	-	-	-
16	57	12	-	-	-	-	-	0.15 <sup>3</sup>	0.26 <sup>3</sup>	0.96 <sup>4</sup>	1.19 <sup>5</sup>
	57	16	-	-	-	-	-	-	-	0.18 <sup>4</sup>	0.35 <sup>4</sup>
	57	24	-	-	-	-	-	-	-	-	-

» 50 psf

Wall Height (ft)	Fy (ksi)	Spacing (in) oc	362SFS162-(mil)		400SFS162-(mil)		600SFS162-(mil)		600SFS200-(mil)	800SFS162-(mil)	800SFS200-(mil)
			33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS	43EQS	43EQS
8	57	12	0.39 <sup>4</sup>	1.21 <sup>4</sup>	0.58 <sup>4</sup>	1.54 <sup>5</sup>	1.34	2.72	2.97	2.92	3.42
	57	16	-	0.74 <sup>4</sup>	0.14 <sup>4</sup>	1.05 <sup>4</sup>	0.96	2.32	2.56	2.64	3.10
	57	24	-	-	-	0.15 <sup>3</sup>	0.23 <sup>5</sup>	1.54	1.75	2.07	2.48
9	57	12	0.04 <sup>3</sup>	0.75 <sup>4</sup>	0.21 <sup>3</sup>	1.06 <sup>4</sup>	1.02	2.37	2.59	2.68	3.16
	57	16	-	0.24 <sup>3</sup>	-	0.52 <sup>4</sup>	0.55 <sup>5</sup>	1.88	2.08	2.32	2.76
	57	24	-	-	-	-	-	0.93 <sup>5</sup>	1.10 <sup>5</sup>	1.61	1.97
10	57	12	-	0.35 <sup>3</sup>	-	0.62 <sup>3</sup>	0.68 <sup>5</sup>	1.99	2.17	2.41	2.86
	57	16	-	-	-	0.04 <sup>3</sup>	0.13 <sup>4</sup>	1.40 <sup>5</sup>	1.57	1.97	2.37
	57	24	-	-	-	-	-	0.29 <sup>4</sup>	0.43 <sup>4</sup>	1.11	1.41
12	57	12	-	-	-	-	-	1.13 <sup>4</sup>	1.28 <sup>4</sup>	1.80	2.17
	57	16	-	-	-	-	-	0.38 <sup>4</sup>	0.52 <sup>4</sup>	1.18	1.49
	57	24	-	-	-	-	-	-	-	0.01 <sup>4</sup>	0.20 <sup>4</sup>
14	57	12	-	-	-	-	-	0.29 <sup>3</sup>	0.41 <sup>4</sup>	1.10 <sup>5</sup>	1.38
	57	16	-	-	-	-	-	-	-	0.32 <sup>4</sup>	0.52 <sup>4</sup>
	57	24	-	-	-	-	-	-	-	-	-
16	57	12	-	-	-	-	-	-	-	0.37 <sup>4</sup>	0.56 <sup>4</sup>
	57	16	-	-	-	-	-	-	-	-	-
	57	24	-	-	-	-	-	-	-	-	-

If no note, deflection is less than L/720.

<sup>1</sup>Deflection exceeds L/120

<sup>2</sup>Deflection exceeds L/240

<sup>3</sup>Deflection exceeds L/360

<sup>4</sup>Deflection exceeds L/600

<sup>5</sup>Deflection exceeds L/720

See Table Notes on Page 21

## Ceilings

Supreme Stud framing often supports interior ceilings. The design criteria may change based on the weight of the ceiling, bracing, support points and other products that may increase the overall load per square foot in a ceiling.

### Table Notes

1. Values are for simple span conditions.
2. For unbraced sections, allowable moment is based on the AISI S100 Section C3.1.2 with unbraced length assumed to be the listed span. For mid-span braced sections, allowable moment is based on AISI S100 Section C3.1.2 with unbraced length assumed to be half of the listed span.
3. Web crippling check is based on 1" of bearing at end supports.
4. Web crippling and shear capacity have **not** been reduced for punchouts. If web punchouts occur near supports, members must be checked for reduced shear and web crippling in accordance with AISI S100.
5. See page 7 for additional table notes.

### Deflection Limit L/240 - Ceiling Spans

Part No.	Fy (ksi)	4 psf						6 psf						13 psf*					
		Lateral Support of Compression Flange						Lateral Support of Compression Flange						Lateral Support of Compression Flange					
		Unsupported			Midspan			Unsupported			Midspan			Unsupported			Midspan		
		Joist Spacing (in) oc			Joist Spacing (in) oc			Joist Spacing (in) oc			Joist Spacing (in) oc			Joist Spacing (in) oc			Joist Spacing (in) oc		
		12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
162SFS-D20	57	7' 4"	6' 8"	5' 10"	7' 4"	6' 8"	5' 10"	6' 5"	5' 10"	5' 1"	6' 5"	5' 10"	5' 1"	4' 11"	4' 6"	3' 11"	4' 11"	4' 6"	3' 11"
162SFS-D24	57	9' 5"	8' 7"	7' 6"	9' 5"	8' 7"	7' 6"	8' 3"	7' 6"	6' 6"	8' 3"	7' 6"	6' 6"	6' 4"	5' 9"	5' 0"	6' 4"	5' 9"	5' 0"
250SFS-D20	57	9' 5"	8' 9"	7' 10"	12' 2"	11' 1"	9' 8"	8' 6"	7' 10"	6' 11"	10' 7"	9' 8"	8' 5"	6' 9"	6' 2"	5' 6"	8' 2"	7' 5"	6' 6"
250SFS-D24	57	10' 7"	9' 10"	8' 10"	13' 1"	11' 11"	10' 5"	9' 6"	8' 10"	7' 11"	11' 5"	10' 5"	9' 1"	7' 9"	7' 2"	6' 5"	8' 10"	8' 0"	7' 0"
350SFS-D20	57	10' 5"	9' 8"	8' 8"	14' 7"	13' 4"	11' 10"	9' 4"	8' 8"	7' 9"	12' 10"	11' 10"	10' 4"	7' 6"	6' 11"	6' 1"	10' 0"	9' 0"	6' 6"
350SFS-D24	57	11' 6"	10' 8"	9' 7"	16' 6"	15' 2"	13' 5"	10' 4"	9' 7"	8' 7"	14' 8"	13' 5"	11' 10"	8' 5"	7' 9"	6' 11"	11' 6"	10' 5"	9' 0"
362SFS-D20	57	10' 6"	9' 9"	8' 10"	14' 8"	13' 6"	11' 11"	9' 6"	8' 10"	7' 10"	13' 0"	11' 11"	10' 5"	7' 7"	7' 0"	6' 2"	10' 2"	9' 2"	6' 6"
362SFS-D24	57	11' 7"	10' 9"	9' 8"	16' 7"	15' 4"	13' 7"	10' 5"	9' 8"	8' 8"	14' 10"	13' 7"	12' 0"	8' 6"	7' 10"	7' 0"	11' 9"	10' 8"	9' 2"
400SFS-D20	57	10' 10"	10' 1"	9' 0"	15' 0"	13' 9"	12' 2"	9' 9"	9' 0"	8' 0"	13' 3"	12' 2"	10' 8"	7' 9"	7' 2"	6' 4"	10' 5"	9' 5"	8' 0"
400SFS-D24	57	11' 11"	11' 0"	9' 11"	17' 0"	15' 9"	14' 0"	10' 8"	9' 11"	8' 11"	15' 3"	14' 0"	12' 5"	8' 8"	8' 1"	7' 2"	12' 1"	11' 1"	9' 7"
550SFS-D24	57	13' 3"	12' 4"	11' 1"	19' 3"	17' 11"	16' 2"	11' 11"	11' 1"	10' 0"	17' 5"	16' 2"	14' 6"	9' 10"	9' 1"	8' 3"	14' 1"	12' 4"	8' 3"
600SFS-D24	57	13' 7"	12' 7"	11' 4"	19' 5"	18' 0"	16' 2"	12' 3"	11' 4"	10' 2"	17' 5"	16' 2"	14' 5"	9' 11"	9' 2"	8' 3"	14' 1"	12' 4"	8' 3"

\*Loads that exceed 10 psf limit require a G60 galvanized coating.  
 "e" Web stiffeners required at ends.

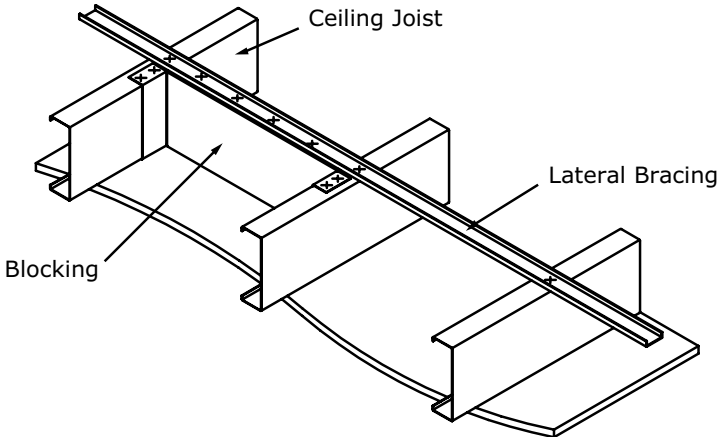
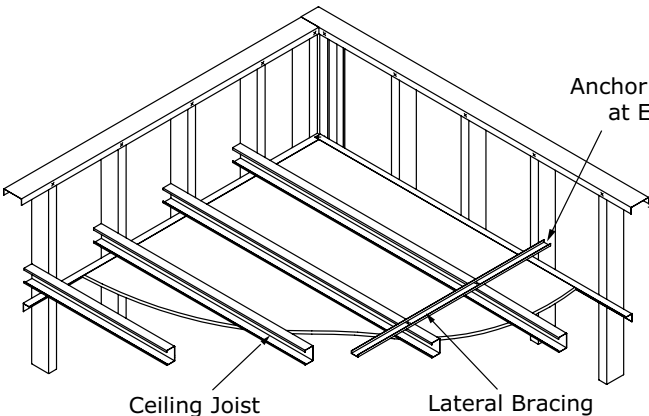
### Deflection Limit L/360 - Ceiling Spans

Part No.	Fy (ksi)	4 psf						6 psf						13 psf*					
		Lateral Support of Compression Flange						Lateral Support of Compression Flange						Lateral Support of Compression Flange					
		Unsupported			Midspan			Unsupported			Midspan			Unsupported			Midspan		
		Joist Spacing (in) oc			Joist Spacing (in) oc			Joist Spacing (in) oc			Joist Spacing (in) oc			Joist Spacing (in) oc			Joist Spacing (in) oc		
		12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
162SFS-D20	57	6' 5"	5' 10"	5' 1"	6' 5"	5' 10"	5' 1"	5' 7"	5' 1"	4' 5"	5' 7"	5' 1"	4' 5"	4' 4"	3' 11"	3' 5"	4' 4"	3' 11"	3' 5"
162SFS-D24	57	8' 3"	7' 6"	6' 6"	8' 3"	7' 6"	6' 6"	7' 2"	6' 6"	5' 8"	7' 2"	6' 6"	5' 8"	5' 7"	5' 0"	4' 5"	5' 7"	5' 0"	4' 5"
250SFS-D20	57	9' 5"	8' 9"	7' 10"	10' 7"	9' 8"	8' 5"	8' 6"	7' 10"	6' 11"	9' 3"	8' 5"	7' 4"	6' 9"	6' 2"	5' 6"	7' 2"	6' 6"	5' 8"
250SFS-D24	57	10' 7"	9' 10"	8' 10"	11' 5"	10' 5"	9' 1"	9' 6"	8' 10"	7' 11"	10' 0"	9' 1"	7' 11"	7' 9"	7' 0"	6' 1"	7' 9"	7' 0"	6' 1"
350SFS-D20	57	10' 5"	9' 8"	8' 8"	13' 8"	12' 5"	10' 10"	9' 4"	8' 8"	7' 9"	11' 11"	10' 10"	9' 6"	7' 6"	6' 11"	6' 1"	9' 3"	8' 5"	6' 6"
350SFS-D24	57	11' 6"	10' 8"	9' 7"	14' 11"	13' 6"	11' 10"	10' 4"	9' 7"	8' 7"	13' 0"	11' 10"	10' 4"	8' 5"	7' 9"	6' 11"	10' 0"	9' 1"	7' 11"
362SFS-D20	57	10' 6"	9' 9"	8' 10"	14' 0"	12' 9"	11' 2"	9' 6"	8' 10"	7' 10"	12' 3"	11' 2"	9' 9"	7' 7"	7' 0"	6' 2"	9' 6"	8' 7"	6' 6"
362SFS-D24	57	11' 7"	10' 9"	9' 8"	15' 4"	13' 11"	12' 2"	10' 5"	9' 8"	8' 8"	13' 4"	12' 2"	10' 7"	8' 6"	7' 10"	7' 0"	10' 4"	9' 4"	8' 2"
400SFS-D20	57	10' 10"	10' 1"	9' 0"	14' 10"	13' 6"	11' 9"	9' 9"	9' 0"	8' 0"	13' 0"	11' 9"	10' 4"	7' 9"	7' 2"	6' 4"	10' 0"	9' 1"	8' 0"
400SFS-D24	57	11' 11"	11' 0"	9' 11"	16' 6"	15' 0"	13' 1"	10' 8"	9' 11"	8' 11"	14' 5"	13' 1"	11' 5"	8' 8"	8' 1"	7' 2"	11' 2"	10' 2"	8' 10"
550SFS-D24	57	13' 3"	12' 4"	11' 1"	19' 3"	17' 11"	16' 2"	11' 11"	11' 1"	10' 0"	17' 5"	16' 2"	14' 6"	9' 10"	9' 1"	8' 3"	14' 1"	12' 4"	8' 3"
600SFS-D24	57	13' 7"	12' 7"	11' 4"	19' 5"	18' 0"	16' 2"	12' 3"	11' 4"	10' 2"	17' 5"	16' 2"	14' 5"	9' 11"	9' 2"	8' 3"	14' 1"	12' 4"	8' 3"

\*Loads that exceed 10 psf limit require a G60 galvanized coating.  
 "e" Web stiffeners required at ends.



Mid-Span Ceiling Bracing Details



**General Note:**  
All connections should be designed by a licensed design professional.

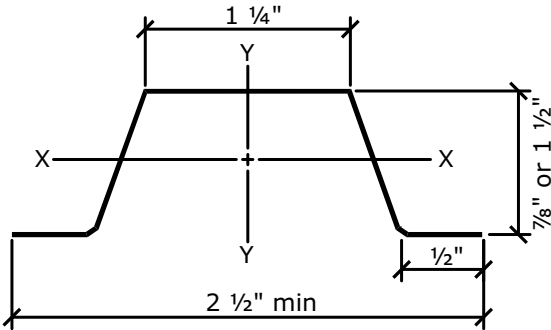
Hat Channel Section Properties

Table Notes

- 1. If present, hems and offsets in flanges are ignored.
- 2. Effective properties are given as the minimum value for positive or negative bending.
- 3. See page 7 for additional table notes.

Furring (F) Channel (Hat) Section Properties

Part No.	F <sub>y</sub> (ksi)	Design Thickness (in)	Area (in <sup>2</sup> )	Weight (lb/ft)	Gross Properties			Effective Properties			M <sub>a</sub> (ft-lb)
					I <sub>x</sub> (in <sup>4</sup> )	R <sub>x</sub> (in)	I <sub>y</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	
087F125-D20	57	0.0188	0.070	0.239	0.009	0.357	0.0354	0.711	0.0080	0.0146	41.39
087F125-D24	57	0.0235	0.087	0.297	0.011	0.355	0.0441	0.711	0.0104	0.0195	55.41
087F125-33EQS	57	0.0295	0.109	0.370	0.014	0.353	0.0550	0.711	0.0135	0.0262	74.39
087F125-43EQS	57	0.0400	0.145	0.495	0.018	0.350	0.0734	0.711	0.0178	0.0381	108.48
150F125-D24	57	0.0235	0.117	0.398	0.038	0.574	0.0581	0.705	0.0368	0.0421	119.63
150F125-33EQS	57	0.0295	0.146	0.497	0.048	0.572	0.0726	0.705	0.0472	0.0557	158.43
150F125-43EQS	57	0.0400	0.196	0.667	0.063	0.568	0.0974	0.705	0.0631	0.0802	228.11



## Table Notes

1. Web crippling check is based on 1" of bearing at end and interior supports.
2. Single spans are the minimum span based on moment, shear, web crippling, or deflection.
3. Multiple spans indicate two or more equal and continuous spans with span length measured support to support.
4. Multiple spans are the minimum spans based on moment, shear, web crippling, deflection, combined bending and shear, or combined bending and web crippling.
5. See page 7 for additional table notes.

## » (F) Channel (Hat) Allowable Ceiling Spans L/240

Part No.	Fy (ksi)	Spans	4 psf			6 psf			13 psf *		
			Spacing (in) on center			Spacing (in) on center			Spacing (in) on center		
			12	16	24	12	16	24	12	16	24
087F125-D20	57	Single	5' 1"	4' 7"	4' 0"	4' 5"	4' 0"	3' 6"	3' 5"	3' 1"	2' 9"
		Multiple	6' 4"	5' 9"	5' 0"	5' 6"	5' 0"	4' 4"	4' 3"	3' 10"	3' 4"
087F125-D24	57	Single	5' 7"	5' 1"	4' 5"	4' 10"	4' 5"	3' 10"	3' 9"	3' 5"	3' 0"
		Multiple	6' 10"	6' 3"	5' 5"	6' 0"	5' 5"	4' 9"	4' 8"	4' 3"	3' 8"
087F125-33EQS	57	Single	6' 1"	5' 6"	4' 10"	5' 3"	4' 10"	4' 2"	4' 1"	3' 9"	3' 3"
		Multiple	7' 6"	6' 10"	5' 11"	6' 6"	5' 11"	5' 2"	5' 1"	4' 7"	4' 0"
087F125-43EQS	57	Single	6' 8"	6' 0"	5' 3"	5' 10"	5' 3"	4' 7"	4' 6"	4' 1"	3' 7"
		Multiple	8' 2"	7' 5"	6' 6"	7' 2"	6' 6"	5' 8"	5' 6"	5' 0"	4' 5"
150F125-D24	57	Single	8' 5"	7' 8"	6' 8"	7' 5"	6' 8"	5' 10"	5' 8"	5' 2"	4' 6"
		Multiple	10' 5"	9' 6"	8' 4"	9' 2"	8' 4"	7' 3"	7' 1"	6' 5"	5' 7"
150F125-33EQS	57	Single	9' 2"	8' 4"	7' 3"	8' 0"	7' 3"	6' 4"	6' 2"	5' 8"	4' 11"
		Multiple	11' 4"	10' 4"	9' 0"	9' 11"	9' 0"	7' 10"	7' 8"	7' 0"	6' 1"
150F125-43EQS	57	Single	10' 1"	9' 2"	8' 0"	8' 10"	8' 0"	7' 0"	6' 10"	6' 2"	5' 5"
		Multiple	12' 6"	11' 4"	9' 11"	10' 11"	9' 11"	8' 8"	8' 5"	7' 8"	6' 8"

\*Loads that exceed 10 psf limit require a G60 galvanized coating.

## » Furring (F) Channel (Hat) Allowable Ceiling Spans L/360

Part No.	Fy (ksi)	Spans	4 psf			6 psf			13 psf *		
			Spacing (in) on center			Spacing (in) on center			Spacing (in) on center		
			12	16	24	12	16	24	12	16	24
087F125-D20	57	Single	4' 5"	4' 0"	3' 6"	3' 11"	3' 6"	3' 1"	3' 0"	2' 9"	2' 5"
		Multiple	5' 6"	5' 0"	4' 4"	4' 10"	4' 4"	3' 10"	3' 9"	3' 4"	2' 11"
087F125-D24	57	Single	4' 10"	4' 5"	3' 10"	4' 3"	3' 10"	3' 4"	3' 3"	3' 0"	2' 7"
		Multiple	6' 0"	5' 5"	4' 9"	5' 3"	4' 9"	4' 2"	4' 1"	3' 8"	3' 3"
087F125-33EQS	57	Single	5' 3"	4' 10"	4' 2"	4' 7"	4' 2"	3' 8"	3' 7"	3' 3"	2' 10"
		Multiple	6' 6"	5' 11"	5' 2"	5' 9"	5' 2"	4' 6"	4' 5"	4' 0"	3' 6"
087F125-43EQS	57	Single	5' 10"	5' 3"	4' 7"	5' 1"	4' 7"	4' 0"	3' 11"	3' 7"	3' 1"
		Multiple	7' 2"	6' 6"	5' 8"	6' 3"	5' 8"	5' 0"	4' 10"	4' 5"	3' 10"
150F125-D24	57	Single	7' 5"	6' 8"	5' 10"	6' 5"	5' 10"	5' 1"	5' 0"	4' 6"	3' 11"
		Multiple	9' 2"	8' 4"	7' 3"	8' 0"	7' 3"	6' 4"	6' 2"	5' 7"	4' 11"
150F125-33EQS	57	Single	8' 0"	7' 3"	6' 4"	7' 0"	6' 4"	5' 7"	5' 5"	4' 11"	4' 4"
		Multiple	9' 11"	9' 0"	7' 10"	8' 8"	7' 10"	6' 11"	6' 8"	6' 1"	5' 4"
150F125-43EQS	57	Single	8' 10"	8' 0"	7' 0"	7' 9"	7' 0"	6' 2"	6' 0"	5' 5"	4' 9"
		Multiple	10' 11"	9' 11"	8' 8"	9' 7"	8' 8"	7' 7"	7' 5"	6' 8"	5' 10"

\*Loads that exceed 10 psf limit require a G60 galvanized coating.

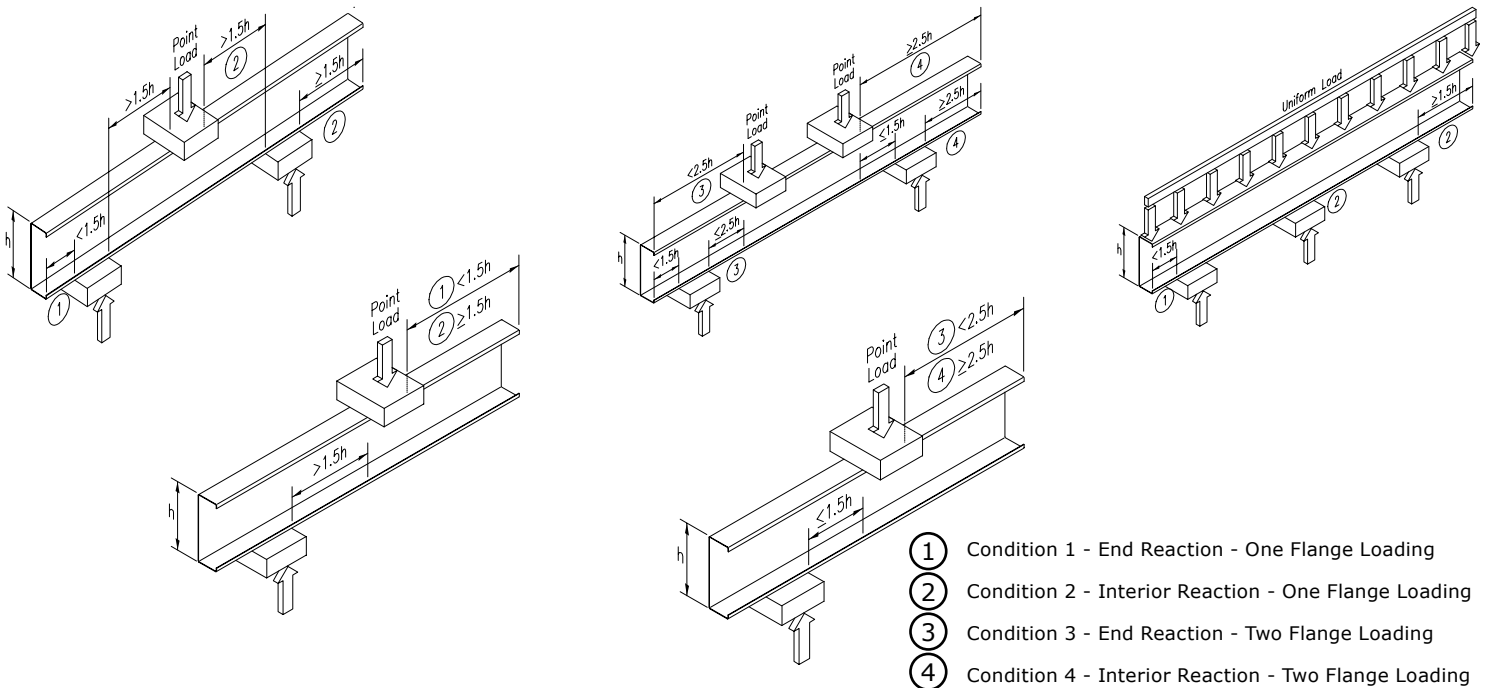
## Table Notes

1. Listed allowable loads apply only to SFS-Sections.
2. Listed allowable loads are based on members fastened to supports.
3. "h" refers to the flat dimension of the web. See Web Depth-to-Thickness Ratios table on page 9.
4. Listed allowable loads are for unpunched webs. Capacity reductions for end and interior one flange loading (conditions 1 and 2) near punchouts may be calculated per AISI S100 Specification Section C3.4.2.
5. See page 7 for additional table notes.

## Allowable Loads (lbs) - Single Members

Section (h)	Design Thickness (in)	Thickness (mil)	F <sub>y</sub> (ksi)	Condition 1 Fasten to Support Bearing Length (in)			Condition 2 Fasten to Support Bearing Length (in)			Condition 3 Fasten to Support Bearing Length (in)			Condition 4 Fasten to Support Bearing Length (in)		
				1	3.5	6	1	3.5	6	1	3.5	6	1	3.5	6
				162	0.0188	D20	57	95	155	194	150	216	260	78	110
162	0.0235	D24	57	147	237	296	250	353	422	128	177	210	338	439	506
250	0.0188	D20	57	90	146	183	146	211	254	63	89	106	189	250	290
250	0.0235	D24	57	140	225	281	244	345	413	108	149	176	309	401	463
250	0.0295	33EQS	57	219	347	432	403	561	666	181	246	289	505	645	738
350	0.0188	D20	57	85	138	173	143	206	247	49	69	82	169	224	260
350	0.0235	D24	57	133	214	267	239	338	404	88	122	145	282	366	422
350	0.0295	33EQS	57	209	332	413	396	550	653	155	210	247	468	597	683
362	0.0188	D20	57	84	137	142	142	205	247	47	67	80	167	221	257
362	0.0235	D24	57	132	213	266	238	337	403	86	119	141	279	362	417
362	0.0295	33EQS	57	208	330	411	395	549	652	152	206	243	463	592	677
400	0.0235	D24	57	130	209	261	236	334	400	80	110	131	270	351	404
400	0.0295	33EQS	57	205	325	405	392	546	648	143	195	229	451	576	659
550 <sup>1</sup>	0.0235	D24	57	122	196	245	230	326	389	57	79	94	238	309	357
550	0.0295	33EQS	57	194	308	384	383	533	633	112	152	179	407	519	594
600 <sup>1</sup>	0.0235	D24	57	107	192	240	228	323	386	50	70	83	229	297	342
600	0.0295	33EQS	57	191	303	377	380	529	628	103	140	164	393	502	574

<sup>1</sup>Bearing length to web height ratio, N/h exceeds limit of 2.



## Supreme Tested Assemblies

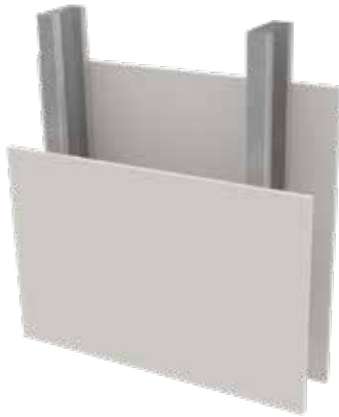
# Riverbank Acoustical

L A B O R A T O R I E S

All acoustical data was independently tested by Riverbank Acoustical Laboratories. Riverbank Acoustical is a nationally recognized company accredited by the National Institute of Standards and Technology (NIST) through the National Voluntary Laboratory Accreditation Program (NVLAP).

### Partition Specifications

Partition Type	Side A	Side B	Gypsum Type	Insulation Type	Stud Spacing	STC Rating
1	1 layer	1 layer	5/8" Type X	-	24" oc	38
2	1 layer	1 layer	5/8" Type X	R-11 insulated	24" oc	47
3	1 layer	1 layer on RC-1	5/8" Type X	R-11 insulated	24" oc	52
4	1 layer	2 layers on RC-1	5/8" Type X	R-13 insulated	24" oc	58
5	2 layers	2 layers on RC-1	5/8" Type X	R-11 insulated	24" oc	61



**Partition Type 1**

38 STC  
3 5/8" Stud



**Partition Type 2**

47 STC  
3 5/8" Stud



**Partition Type 3**

52 STC  
3 5/8" Stud



**Partition Type 4**

58 STC  
3 5/8" Stud



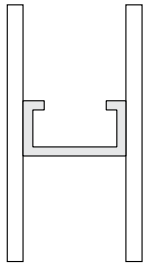
**Partition Type 5**

61 STC  
3 5/8" Stud

UL Approved Designs

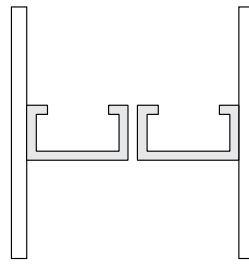
» One-Hour Wall Assemblies - Non-Load Bearing

1 5/8" · 2 1/2" · 3 5/8" · 4" · 6"



**One-Hour Wall Assembly**

- Studs spaced 24" oc
- One layer of gypsum wallboard (GWB per UL design assembly)
- No insulation required

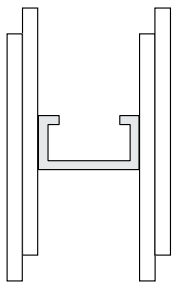


**One-Hour Chase Wall Assembly**

- Two rows of Supreme Studs
- Studs spaced 24" oc
- Can be aligned with 1" minimum spacing between studs from each row, staggered, or staggered and overlapped
- One layer of gypsum wallboard (GWB per UL design assembly)
- No insulation required

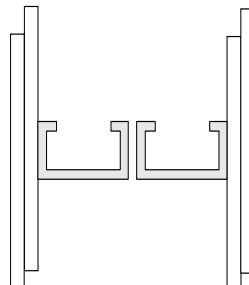
» Two-Hour Wall Assemblies - Non-Load Bearing

1 5/8" · 2 1/2" · 3 5/8" · 4" · 6"



**Two-Hour Wall Assembly**

- Studs spaced 24" oc
- Two layers of gypsum wallboard (GWB per UL design assembly)
- No insulation required



**Two-Hour Chase Wall Assembly**

- Two rows of Supreme Studs
- Studs spaced 24" oc
- Can be aligned with 1" minimum spacing between studs from each row, staggered, or staggered and overlapped
- Two layers of gypsum wallboard (GWB per UL design assembly)
- No insulation required



**UL Classifications for Supreme Framing System**

V438, V486, V496, V498, U411, U412, U419, U435, U465, U493



**Fire Testing Data ASTM E 119**

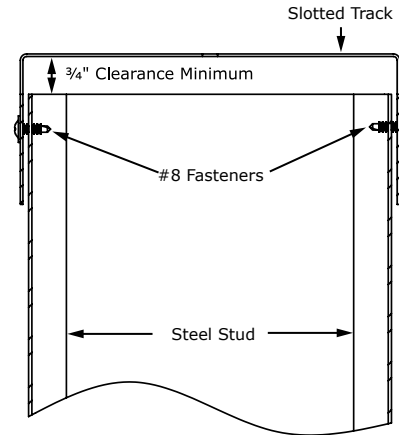
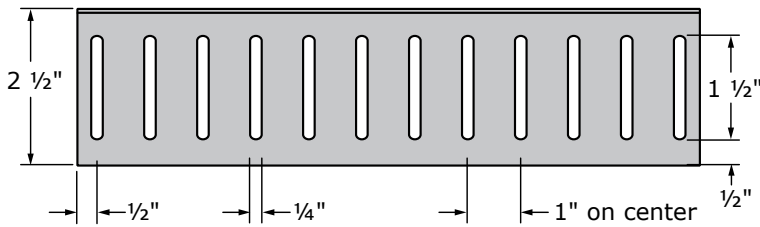
Standards Worldwide

## Supreme Slotted Track

SCAFCO Supreme Slotted Track is the industry preferred system for achieving head-of-wall deflection and fire-rated assemblies for interior and exterior walls. It also provides a positive wall attachment and allows up to 1 1/2" of vertical movement.

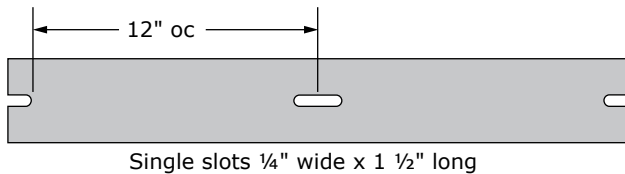


- Available in all standard stud widths
- Standard lengths are 10' (additional lengths available)
- Corrosion resistant galvanized coating
- 57 ksi yield strength (mill certified steel)

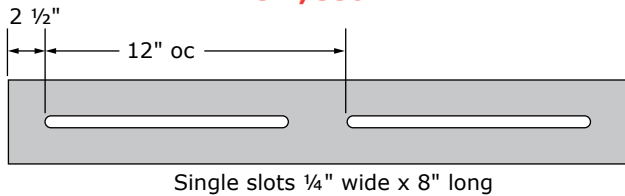


## Optional Web Slots Offered

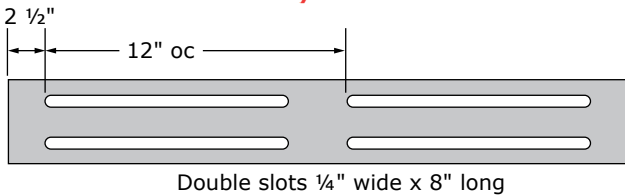
### Standard



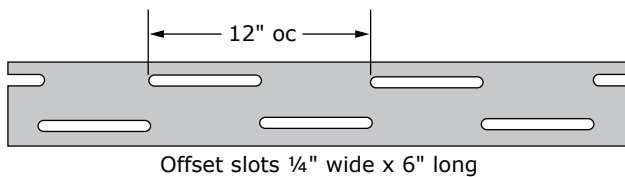
### SLT/SS8



### SLT/DS8



### SLT/OS6



## UL Classified for US and Canada

UL File No. R25017



UL Underwriters Laboratories  
Supreme Framing Classification  
UL 263 Fire Tests of Building  
Construction and Materials

## UL Head-of-Wall Joint Systems Design Numbers

CJ-D-0004	HW-D-0003	HW-D-0016	HW-D-0020	HW-D-0021
HW-D-0024	HW-D-0025	HW-D-0029	HW-D-0031	HW-D-0034
HW-D-0036	HW-D-0042	HW-D-0043	HW-D-0044	HW-D-0045
HW-D-0046	HW-D-0047	HW-D-0048	HW-D-0049	HW-D-0054
HW-D-0062	HW-D-0063	HW-D-0067	HW-D-0068	HW-D-0069
HW-D-0071	HW-D-0072	HW-D-0073	HW-D-0076	HW-D-0077
HW-D-0082	HW-D-0083	HW-D-0084	HW-D-0085	HW-D-0087
HW-D-0088	HW-D-0089	HW-D-0091	HW-D-0099	HW-D-0101
HW-D-0102	HW-D-0106	HW-D-0107	HW-D-0108	HW-D-0111
HW-D-0134	HW-D-0136	HW-D-0137	HW-D-0144	HW-D-0146
HW-D-0152	HW-D-0154	HW-D-0160	HW-D-0162	HW-D-0167
HW-D-0170	HW-D-0173	HW-D-0183	HW-D-0184	HW-D-0185
HW-D-0186	HW-D-0190	HW-D-0193	HW-D-0194	HW-D-0195
HW-D-0205	HW-D-0210	HW-D-0217	HW-D-0218	HW-D-0241
HW-D-0242	HW-D-0243	HW-D-0246	HW-D-0259	HW-D-0260
HW-D-0263	HW-D-0265	HW-D-0271	HW-D-0272	HW-D-0275
HW-D-0277	HW-D-0278	HW-D-0293	HW-D-0313	HW-D-0322
HW-D-0341	HW-D-0420	HW-D-0421	HW-D-0453	HW-D-0455
HW-D-0461	HW-D-0462	HW-D-0463	HW-D-0467	HW-D-0468
HW-D-0517	HW-D-0532	HW-D-0541	HW-D-0542	HW-D-0548
HW-D-0549	HW-D-0564	HW-D-0569	HW-D-0570	HW-D-0571
HW-D-0572	HW-D-0640	HW-D-0687		

**Table Notes**

1. Web height-to-thickness-ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.
2. Gross properties based on the full section, not reduced for flange slots
3. Effective properties based on a compression flange of 1/2" (before local buckling reductions) and a tension flange of 1"
4. For deflection calculations, use effective Ixx
5. All properties based on unpunched webs.
6. Web depth is equal to the nominal depth plus two times the design thickness, plus the inside bend radius.
7. Effective properties based on the "North American Specification for the Design of Cold-Formed Steel Structural Members," 2007 edition.
8. For SI: 1 inch = 25.4 mm, 1 ksi = 6.8948 kPa, 1 lb/ft = 14.594 N/m.
9. Allowable loads represent reaction at each stud bearing on track flange.
10. See page 7 for additional table notes.

**Standard Slotted Leg Track Section Properties**

Part No.	Fy (ksi)	Design Thickness (in)	Gross Properties						Effective Properties		Allowable Lateral Load (lbs)
			Area (in <sup>2</sup> )	Weight (lb/ft)	Ix (in <sup>4</sup> )	Rx (in)	Iy (in <sup>4</sup> )	Ry (in)	Sxx (in <sup>3</sup> )	Ixx (in <sup>4</sup> )	
250SLT250-D20	57	0.0188	0.141	0.48	0.184	1.141	0.097	0.830	0.032	0.062	37
250SLT250-D24	57	0.0235	0.176	0.60	0.230	1.142	0.121	0.829	0.046	0.083	55
250SLT250-33EQS	57	0.0295	0.221	0.75	0.289	1.143	0.152	0.828	0.065	0.110	90
350SLT250-D20	57	0.0188	0.160	0.54	0.372	1.526	0.109	0.824	0.046	0.129	37
350SLT250-D24	57	0.0235	0.200	0.68	0.466	1.527	0.135	0.823	0.067	0.175	55
350SLT250-33EQS	57	0.0295	0.251	0.85	0.585	1.528	0.169	0.822	0.096	0.235	90
362SLT250-D20	57	0.0188	0.162	0.55	0.401	1.573	0.110	0.823	0.048	0.140	37
362SLT250-D24	57	0.0235	0.203	0.69	0.502	1.573	0.137	0.822	0.069	0.190	55
362SLT250-33EQS	57	0.0295	0.254	0.87	0.630	1.574	0.171	0.821	0.100	0.254	90
400SLT250-D20	57	0.0188	0.169	0.58	0.496	1.712	0.113	0.818	0.053	0.173	37
400SLT250-D24	57	0.0235	0.212	0.72	0.620	1.712	0.141	0.817	0.077	0.236	55
400SLT250-33EQS	57	0.0295	0.265	0.90	0.779	1.713	0.177	0.816	0.111	0.317	90
600SLT250-D20	57	0.0188	0.207	0.70	1.214	2.422	0.128	0.786	0.081	0.420	37
600SLT250-D24	57	0.0235	0.259	0.88	1.518	2.423	0.159	0.785	0.118	0.579	55
600SLT250-33EQS	57	0.0295	0.324	1.10	1.906	2.424	0.200	0.784	0.172	0.789	90
800SLT250-33EQS	57	0.0295	0.383	1.30	3.681	3.098	0.215	0.749	0.233	1.504	90

\*D24 may be supplied designated as "33EQD" by SCAFCO Steel Stud Company.

**Table Notes**

1. Web height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.
2. Gross properties based on the full section, not reduced for flange slots
3. Effective properties based on a compression flange of 3/4" (before local buckling reductions) and a tension flange of 1-1/2"
4. For deflection calculations, use effective Ixx
5. All properties based on unpunched webs
6. Web depth is equal to the nominal depth plus two times the design thickness, plus the inside bend radius
7. X-X properties are 'strong-axis' properties, Y-Y properties are about the 'weak-axis'
8. Effective properties based on the "North American Specification for the Design of Cold-Formed Steel Structural Members," 2001 edition with 2004 Supplement
9. For SI: 1 inch = 25.4 mm, 1 ksi = 6.8948 kPa, 1 lb/ft = 14.594 N/m.

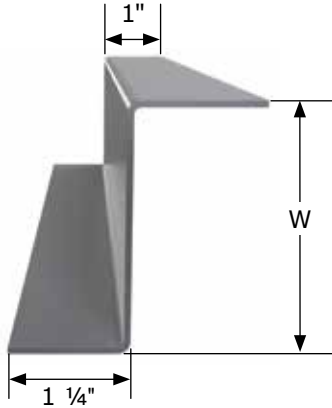
**Slotted Deep Leg Track Section Properties**

Part No.	Fy (ksi)	Design Thickness (in)	Gross Properties						Effective Properties		Allowable Lateral Load (lbs)
			Area (in <sup>2</sup> )	Weight (lb/ft)	Ix (in <sup>4</sup> )	Rx (in)	Iy (in <sup>4</sup> )	Ry (in)	Sxx (in <sup>3</sup> )	Ixx (in <sup>4</sup> )	
250SDLT325-33EQS	57	0.0295	0.265	0.90	0.364	1.171	0.307	1.075	0.075	0.123	33
350SDLT325-33EQS	57	0.0295	0.295	1.00	0.729	1.572	0.343	1.078	0.101	0.263	33
362SDLT325-33EQS	57	0.0295	0.299	1.02	0.785	1.621	0.347	1.077	0.105	0.285	33
400SDLT325-33EQS	57	0.0295	0.310	1.05	0.966	1.766	0.358	1.075	0.117	0.354	33
600SDLT325-33EQS	57	0.0295	0.369	1.25	2.319	2.508	0.407	1.051	0.180	0.873	33
800SDLT325-33EQS	57	0.0295	0.428	1.46	4.409	3.211	0.443	1.018	0.244	1.655	33

## Supreme Z-Furring

Z-Furring channels are ideal for furring out masonry or concrete walls to support rigid insulation board, fiberglass, or mineral insulation.

- Available widths are 1", 1 1/2", and 2" (custom widths available)
- Standard lengths are 10' (additional lengths available)
- Corrosion resistant galvanized coating
- 57 ksi yield strength (mill certified steel)



## Quantity / Order Information

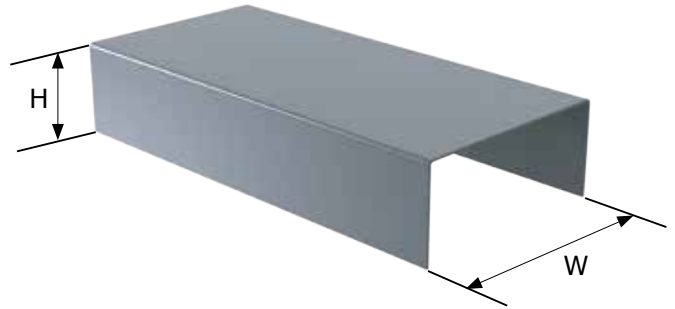
Part No.	Galvanized Coating	Yield Strength	Design Thickness	Web (W) Width	Stock Length (ft)
100ZF125-D20	G60	57	0.0188	1"	10
150ZF125-D20	G60	57	0.0188	1 1/2"	10
200ZF125-D20	G60	57	0.0188	2"	10
100ZF125-D24	G60	57	0.0235	1"	10
150ZF125-D24	G60	57	0.0235	1 1/2"	10
200ZF125-D24	G60	57	0.0235	2"	10
100ZF125-33EQS	G60	57	0.0295	1"	10
150ZF125-33EQS	G60	57	0.0295	1 1/2"	10
200ZF125-33EQS	G60	57	0.0295	2"	10
100ZF125-43EQS	G60	57	0.0400	1"	10
150ZF125-43EQS	G60	57	0.0400	1 1/2"	10
200ZF125-43EQS	G60	57	0.0400	2"	10





» Supreme Framing Deep Leg Track (SFT)

Track Member (W)	Leg Size (H)	Gap (in)	Coating		Coating	
			D20	D24	33EQS	43EQS
2 1/2", 3 1/2", 3 5/8", 4", 5 1/2", 6", 8"	2"	1/2"	G60	G60	G60	G60
	2 1/2"	3/4"	G60	G60	G60	G60
	3"	1"	G60	G60	G60	G60



**Non-Sheathed**

Deep Leg Deflection Track with CRC 12" down from end of stud

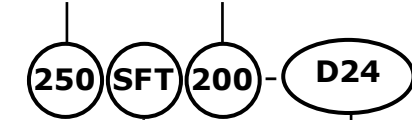


**Fully Sheathed**

Deep Leg Deflection Track with no additional bracing

**Nomenclature Example:**

2 1/2" Web 2" Leg



Supreme Framing Track

Supreme D24





---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

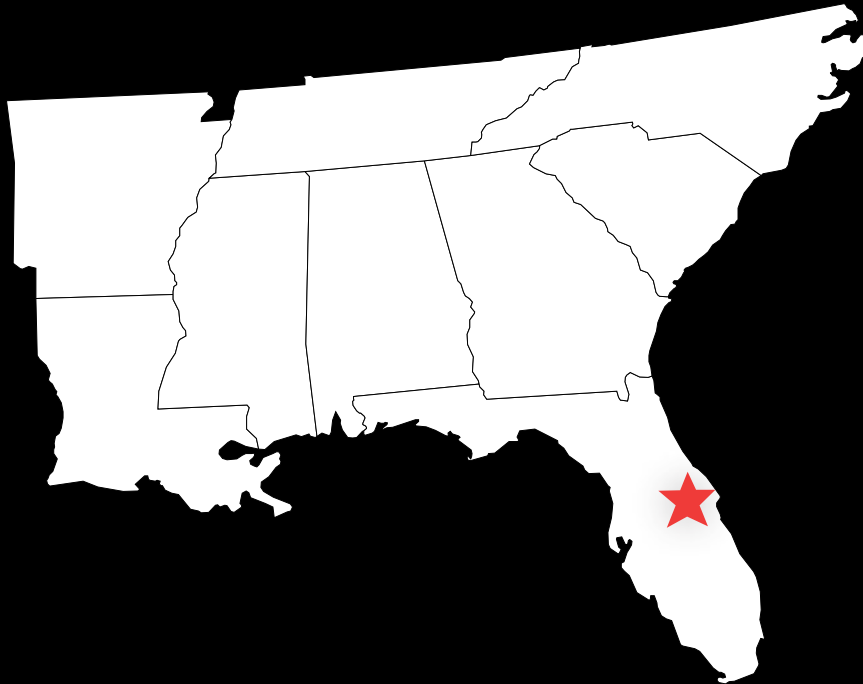
---

---

---

**Steel-Con**<sup>TM</sup>

**Steel Construction  
Systems**



**Servicing the Southeastern United States**

**Orlando Office**

11250 Astronaut Blvd  
Orlando, FL 32837

Ph: 407-438-1664

[www.SteelConSystems.com](http://www.SteelConSystems.com)