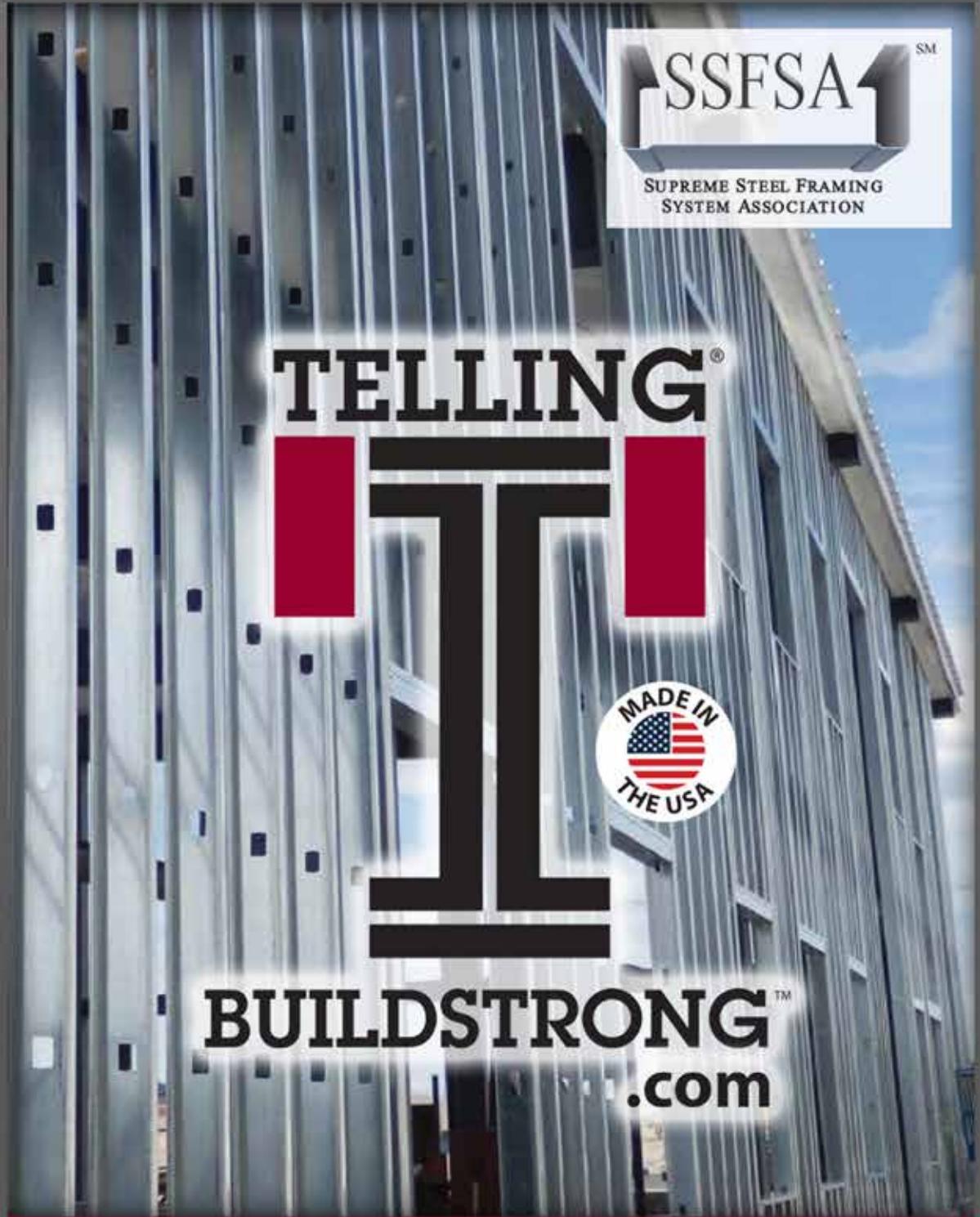


SUPREME FRAMING SYSTEM



TELLING
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.com

MADE IN
THE USA

SSFSASM
SUPREME STEEL FRAMING
SYSTEM ASSOCIATION

THE LEADER IN METAL FRAMING INNOVATION



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SUPREME STUD -BENEFITS OF SUPREME FRAMING SYSTEM™



A High Strength, High Performance Steel Drywall Framing System

The Supreme Framing System offers all the benefits of traditional flat steel studs and track. It consists of high strength metal framing with a design that achieves equal or better performance by using superior 57 ksi yield strength and thinner steel. The Supreme framing system is interchangeable with traditional framing components, with the same installation techniques as traditional framing components. No extra training or special fasteners are required for installation.

Knurl & Rib Technology

The stud and track system utilizes a knurled flange with a flat stud design. The knurling is designed to prevent screws from walking during wall board attachment.

Supreme is Certified

All inspections and testing for the Supreme Steel Framing System Association (SSFSA) are provided by a third-party certification agency where products are required to be audited to ensure consistent quality and compliance to ASTM C645, C955, IBC Codes, and AISI SI00-07 standards.

Stud and track products must be tested on an unannounced visit for coating weight, metal thickness and yield strength. The dimensional properties are also measured. All requirements must be satisfied in order to be certified code compliant. All members of the SSFSA must satisfy the requirements each time they are audited.

All certified Supreme Steel products are marked to show that it is third-party certified. The markings may be located on bundles or each framing member. The third-party certification marking guarantees to the contractor and owner that materials are high quality and code compliant.

- 2018, 2015, 2012 & 2009 International Building Code® (IBC)
- 2018, 2015 & 2012 International Residential Code® (IRC)
- 2017 Florida Building Code, Building (FBC Building)
- 2017 Florida Building Code, Residential (FBC Residential)
- Multiple UL approved fire-rated assemblies
- Excellent acoustical performance
- 57 ksi steel reduces screw stripping
- Fastens with sharp point screws (D25, D20 and 30EQD)
- Wider flanges available for screw placement
- Custom Press Brake Shapes

LEED Credits

- **MR Credit** - Building product disclosure and optimization - Environmental product declarations (1 point).
- **MR Credit** - Building product disclosure and optimization sourcing of raw materials (1 point).
- **MR Credit** - Construction and demolition waste management (Up to 2 points).
- **In Credit:** Innovation (up to 2 points).

Independent Product Certification

- Code Compliance - ICC Evaluation Services, LLC - IAPMO Report UES-0313
- **Fire Testing** - Underwriters Laboratories, Inc.
 - **UL 263** – Standard for Fire Tests of Building Construction and Materials
- **Wall Designs in the UL Fire Resistance Directory:**
V438, V486, V496, V498, U411, U412, U419, U435, U465, U493
- **Sound Ratings** - Riverbank Acoustical Laboratories
- **Third-Party Testing** - Intertek/Architectural Testing Inc. (ATI)
- **Structural Testing** - STAR Laboratories
- **Structural Engineer** - DEVCO Engineering

Code Approvals, Performance Standards, and Product Certifications**AISI S100**

- 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.
- **AI003** - 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.



SUPREME STUD - TECHNICAL INFORMATION

Nomenclature Example

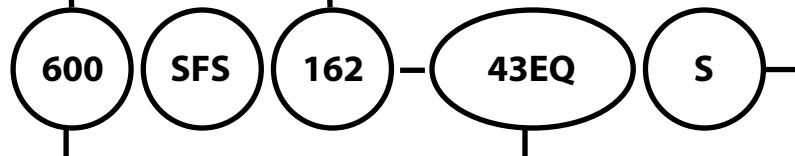
Supreme products have a four-part identification code that identifies the web depth, flange width, style, and mil thickness.

Member Web Depth

(Example: 6" = **600** x 1/100 inch)

All member depths are given in 1/100 inch.

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



Style

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

Nomenclature uses the following characters to designate the profile:

SFS = Supreme Framing Stud

SFT = Supreme Framing Track Sections

F = Furring Channel Sections

SLT = Slotted Leg Track

ZF = Z=Furring

Flange Width

(Example: 1-5/8" = 1.625" = **162** x 1/200 inch)

All flange widths are given in 1/100 inch.

Thickness Designation

See Thickness Tables on page 5.

Design Type

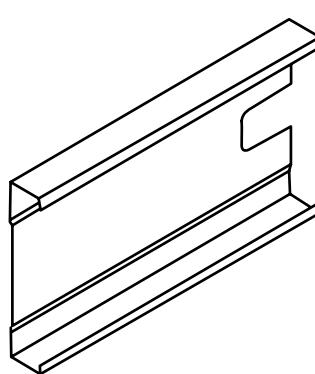
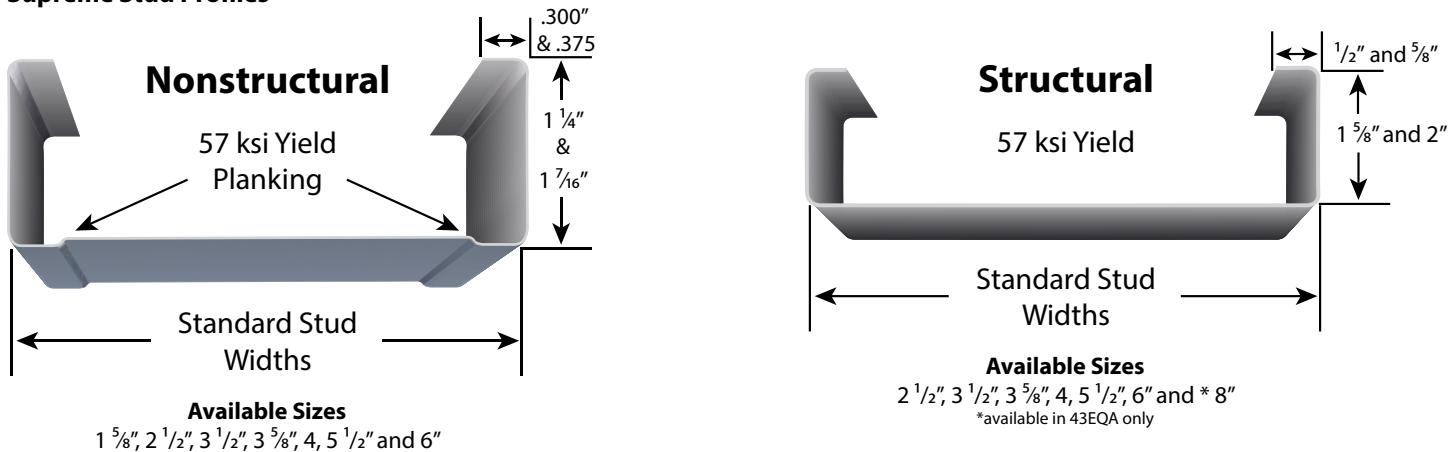
(Example: Structural section = **S**)

Nomenclature uses the following two characters:

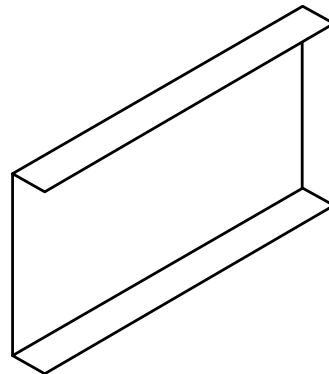
S = Structural studs and track

D = Drywall (Non-Structural) studs and track

Supreme Stud Profiles



"SFS" - C-Stud
Sections



"SFT" - Track
Sections

SUPREME STUD - PROPERTIES AND DATA

- The Supreme Steel Framing System has been successfully utilized in commercial construction for over a decade
- 2018, 2015 & 2012 International Building Code per IAPMO ER0313
- Florida Building Code 2017 approvals
- Multiple UL Designs for Fire Resistance Ratings per ANSI/UL263
- Acoustical Performance 3rd party testing per ASTM E90
- IAPMO Uniform ER0313 certified

Supreme Stud

Thickness Nomenclature	Min Base Metal Thickness (in)	Design Thickness (in)	Min Yield Strength (ksi)	Standard Galvanization	Web Sizes (in)	Stud Flange / Leg Sizes (in)	Track Flange / Leg Sizes (in)	Design Inside Corner Radii (in)
D25 September 2020	0.0147"	0.0155"	50 or 57 ksi	G40	1-5/8", 2.5", 3.5", 3-5/8", 4", 5.5", 6"	1-1/4"	1-1/4" and 1-1/2"*	0.0860"
D20 September 2020	0.0179"	0.0188"	57 ksi	G40	1-5/8", 2.5", 3.5", 3-5/8", 4", 5.5", 6"	1-1/4" and 1-7/16"	1-1/4" and 1-1/2", 2"**	0.0844"
30EQD September 2020	0.0223"	0.0235"	57 ksi	G40	1-5/8", 2.5", 3.5", 3-5/8", 4", 5.5", 6"	1-7/16"	1-1/4", 1-1/2" and 2"**	0.0820"
33EQS Coming Soon	0.0280"	0.0295"	57 ksi	G60	2.5", 3.5", 3-5/8", 4", 5.5", 6"	1-5/8" and 2"	1-1/4", 1-1/2" and 2"**	0.0790"
43EQS Coming Soon	0.0380"	0.0400"	57 ksi	G60	2.5", 3.5", 3-5/8", 4", 5.5", 6", 8"	1-5/8" and 2"	1-1/4", 1-1/2", 2"	0.0712"

D = Drywall / Non Structural, S = Structural

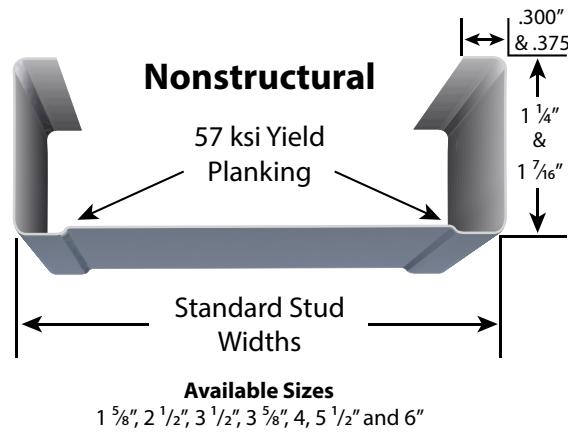
Higher galvanization available

* = Track height to weight ratio exceeds AISI S100 guidelines

Supreme Stud Stiffening Lip Length

Nomenclature	Flange/Leg (in)	Stiffening Lip Length (in)
SFS125-D25	1-1/4"	0.300"
SF125-D20	1-1/4"	0.375"
SFS144	1-7/16"	0.375"
SFS162	1-5/8"	0.500"
SFS200	2"	0.625"

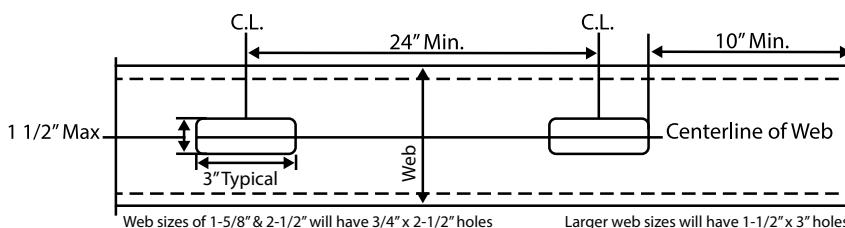
Supreme Stud Stiffening Lip Length remains constant with various web sizes



Supreme Deep Leg Track

Thickness Nomenclature	Min Base Metal Thickness (in)	Design Thickness (in)	Min Yield Strength (ksi)	Standard Galvanization	Track Web Sizes (in)	Track Flange / Leg Sizes (in)	Gap (in)
D20	0.0179"	0.0188"	57 ksi	G40	2.5", 3.5", 3-5/8", 4", 5.5", 6"	2", 2.5", 3"	2" leg = 1/2" gap 2.5" leg = 3/4" gap 3.0" leg = 1.0" gap
30EQD	0.0223"	0.0235"	57 ksi	G40	2.5", 3.5", 3-5/8", 4", 5.5", 6"	2", 2.5", 3"	
33EQS	0.0280"	0.0295"	57 ksi	G60	2.5", 3.5", 3-5/8", 4", 5.5", 6"	2", 2.5", 3"	
43EQS	0.0380"	0.0400"	57 ksi	G60	2.5", 3.5", 3-5/8", 4", 5.5", 6", 8"	2", 2.5", 3"	

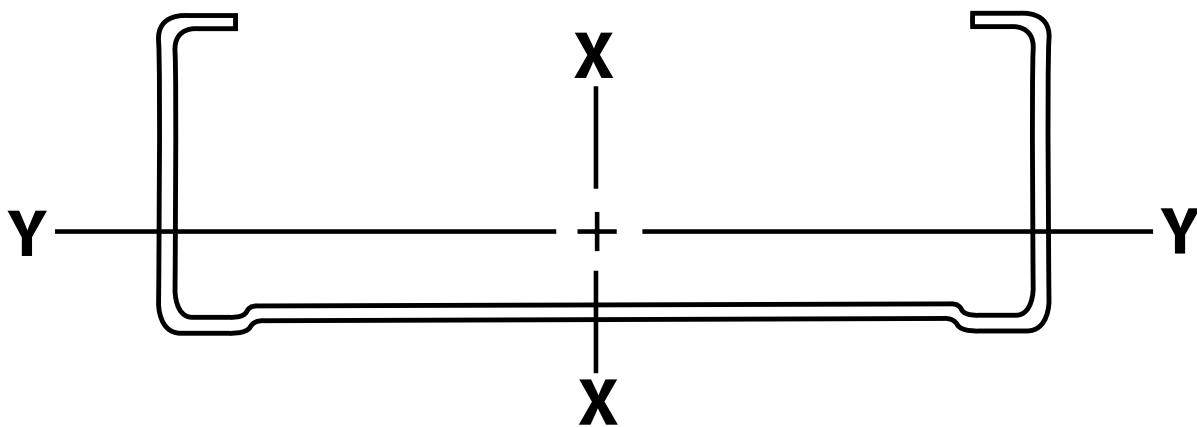
D = Drywall / Non Structural, S = Structural



SUPREME STUD - GENERAL NOTES FOR ALL TABLES

General Table Notes:

1. The values in this catalog are based on the 2007 edition of North American Specification for the Design of Cold-Formed Steel Structural Members, AISI S100-07 as referenced by 2009 International Building Code (IBC) and AISI S100-07 with Supplement S2-10 as referenced by 2012 IBC.
2. Where AISI S100 is referenced, it is the North American Specification for the Design of Cold-Formed Steel Structural Members, S100-07 and AISI S100-07 with Supplement S2-10, as applicable with U.S. provisions.
3. The structural properties included herein have been computed based on allowable strength design (ASD) method.
4. 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.
5. Distortional buckling calculations are based on $K\phi = 0$.
6. Conditions with loads that exceed the 10 psf limit for non-structural members require a G60 galvanized coating.
7. When provided, factory punch-outs 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". Punch-outs for members greater than 2 1/2" deep are a maximum of 1 1/2" wide x 4" 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 punch-out width and length limitations mentioned above shall be permitted; other punch-out configurations and locations not in compliance with limitations listed above must be approved by a design professional. Values herein are based on punch-out configuration and location as illustrated below.
8. The 10" end distance shown may be altered if calculations are in conformance with code.



Non-Structural Supreme Studs (SFS) - Section Properties

Part No.	Design Thickness (in)	Fy (ksi)	Area (in²)	Weight (lb/ft)	Gross Properties					Effective Properties					Torsional Properties					Lu (in)	
					Ix (in⁴)	Sx (in³)	Rx (in)	Iy (in⁴)	Ry (in)	Lxe (in⁴)	Sxe (in³)	Mal (in-k)	Mad (in-k)	Vag (lb)	VaNet (lb)	Jx (in⁴)	CW (in⁶)	Xo (in)	m (in)	Ro (in)	
162SF5125-D25	0.0155	57	0.070	0.24	0.033	0.040	0.682	0.015	0.470	0.031		0.66	0.73			0.006	0.011	-1.130	0.650	1.400	0.350
162SF5144-D20	0.0188	57	0.094	0.32	0.044	0.055	0.686	0.028	0.545	0.043	0.033	0.95	1.08	397	131	0.011	0.022	-1.365	0.779	1.622	0.292
162SF5144-30EQD	0.0235	57	0.117	0.40	0.055	0.068	0.684	0.035	0.543	0.052	0.048	1.63	1.70	621	162	0.022	0.027	-1.359	0.776	1.616	0.292
250SF5125-D25	0.0155	57	0.083	0.28	0.086	0.068	1.015	0.018	0.465	0.079		1.26	1.16			0.007	0.025	-0.990	0.590	1.490	0.560
250SF5144-D20	0.0188	57	0.111	0.38	0.117	0.093	1.027	0.033	0.545	0.112	0.060	1.75	1.72	258	196	0.013	0.049	-1.217	0.719	1.683	0.477
250SF5144-30EQD	0.0235	57	0.138	0.47	0.145	0.116	1.025	0.041	0.542	0.136	0.090	3.06	2.68	505	306	0.025	0.060	-1.212	0.716	1.677	0.478
350SF5125-D25 ¹	0.0155	57	0.099	0.34	0.186	0.106	1.373	0.020	0.451	0.166		1.75	1.66			0.008	0.051	-0.880	0.540	1.690	0.730
350SF5144-D20	0.0188	57	0.130	0.44	0.252	0.144	1.395	0.037	0.533	0.235	0.077	2.40	2.47	180	159	0.015	0.097	-1.088	0.662	1.847	0.653
350SF5144-30EQD	0.0235	57	0.161	0.55	0.313	0.179	1.392	0.046	0.531	0.304	0.112	3.83	3.84	351	248	0.030	0.119	-1.083	0.659	1.842	0.655
362SF5125-D25 ¹	0.0155	57	0.101	0.34	0.202	0.111	1.416	0.020	0.449	0.180		1.84	1.72			0.008	0.055	-0.87	0.540	1.720	0.750
362SF5144-D20	0.0188	57	0.132	0.45	0.273	0.151	1.439	0.037	0.531	0.254	0.080	2.52	2.56	173	164	0.016	0.104	-1.074	0.655	1.873	0.671
362SF5144-30EQD	0.0235	57	0.164	0.56	0.339	0.187	1.437	0.046	0.529	0.331	0.116	3.97	3.98	338	255	0.030	0.128	-1.069	0.652	1.867	0.672
400SF5125-D25 ¹	0.0155	57	0.107	0.36	0.255	0.127	1.545	0.021	0.443	0.223		2.10	1.90			0.009	0.069	-0.830	0.520	1.810	0.790
400SF5144-D20 ¹	0.0188	57	0.139	0.47	0.343	0.172	1.572	0.038	0.526	0.314	0.087	2.86	2.84	156	156	0.016	0.129	-1.034	0.637	1.954	0.720
400SF5144-30EQD	0.0235	57	0.173	0.59	0.427	0.213	1.569	0.047	0.524	0.417	0.129	4.40	4.41	305	275	0.032	0.159	-1.029	0.634	1.949	0.721
550SF5125-D25 ²	0.0155	57	0.130	0.44	0.543	0.198	2.045	0.023	0.419							0.010	0.140	-0.715	0.470	2.207	0.900
550SF5144-D20 ²	0.0188	57	0.167	0.57	0.726	0.264	2.084	0.042	0.502							0.020	0.259	-0.904	0.574	2.327	0.894
550SF5144-30EQD ¹	0.0235	57	0.208	0.71	0.903	0.328	2.081	0.052	0.500	0.896	0.204	6.97	6.09	218	218	0.038	0.320	-0.900	0.571	2.322	0.850
600SF5125-D25 ²	0.0155	57	0.138	0.47	0.670	0.224	2.207	0.023	0.411							0.011	0.170	-0.685	0.450	2.347	0.920
600SF5144-D20 ²	0.0188	57	0.177	0.60	0.894	0.298	2.250	0.043	0.494							0.021	0.314	-0.869	0.556	2.462	0.875
600SF5144-30EQD ¹	0.0235	57	0.220	0.75	1.112	0.371	2.247	0.053	0.492	0.976	0.219	7.46	6.60	200	200	0.041	0.388	-0.864	0.553	2.457	0.876

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

2. Web height-to-thickness ratio exceeds 260. Section is not in compliance with AISI S100 Section 81, but may be used in accordance with SSFSA's published composite wall data for these members.

Structural Supreme Studs (SFS) - Section Properties

Part No.	Design Thickness (in)	Fy (ksi)	Area (in²)	Weight (lb/ft)	Gross Properties					Effective Properties					Torsional Properties					Lu (in)	
					Ix (in⁴)	Sx (in³)	Rx (in)	Iy (in⁴)	Ry (in)	Lxe (in⁴)	Sxe (in³)	Mal (in-k)	Mad (in-k)	Vag (lb)	VaNet (lb)	Jx (in⁴)	CW (in⁶)	Xo (in)	m (in)	Ro (in)	
250SF5162-33EQS	0.0295	57	0.191	0.65	0.202	0.162	1.029	0.075	0.626	0.195	0.134	4.57	4.17	978	471	0.055	0.127	-1.475	0.863	1.905	0.400
250SF5162-43EQS	0.0400	57	0.257	0.88	0.270	0.216	1.025	0.100	0.622	0.270	0.185	6.32	6.26	1798	636	0.137	0.166	-1.463	0.856	1.892	0.402
250SF5200-43EQS	0.0400	57	0.297	1.01	0.320	0.256	1.038	0.177	0.771	0.311	0.215	7.34	7.14	1798	636	0.159	0.344	-1.920	1.104	2.315	0.312
350SF5162-33EQS	0.0295	57	0.220	0.75	0.436	0.249	1.407	0.085	0.619	0.425	0.179	6.10	6.02	696	390	0.064	0.239	-1.330	0.799	2.032	0.572
350SF5162-43EQS	0.0400	57	0.297	1.01	0.585	0.334	1.402	0.112	0.615	0.585	0.257	8.78	9.12	1738	715	0.159	0.315	-1.318	0.792	2.020	0.574
350SF5200-43EQS	0.0400	57	0.337	1.15	0.688	0.393	1.429	0.200	0.771	0.675	0.301	10.28	10.33	1738	715	0.180	0.617	-1.754	1.035	2.389	0.461
362SF5162-33EQS	0.0295	57	0.224	0.76	0.473	0.261	1.452	0.086	0.618	0.462	0.186	6.34	6.25	670	402	0.065	0.257	-1.314	0.792	2.054	0.591
362SF5162-43EQS	0.0400	57	0.302	1.03	0.634	0.350	1.448	0.114	0.613	0.634	0.267	9.12	9.48	1674	737	0.161	0.338	-1.302	0.785	2.042	0.593
362SF5200-43EQS	0.0400	57	0.342	1.16	0.746	0.412	1.476	0.203	0.770	0.732	0.314	10.70	10.74	1674	737	0.183	0.659	-1.735	1.027	2.404	0.479
400SF5162-33EQS	0.0295	57	0.235	0.80	0.593	0.297	1.589	0.088	0.613	0.581	0.206	7.04	6.95	604	433	0.068	0.314	-1.269	0.771	2.124	0.643
400SF5162-43EQS	0.0400	57	0.317	1.08	0.796	0.398	1.584	0.118	0.609	0.796	0.298	10.16	10.57	1508	795	0.169	0.413	-1.258	0.765	2.112	0.645
400SF5200-43EQS	0.0400	57	0.357	1.22	0.935	0.467	1.617	0.210	0.767	0.919	0.350	11.94	11.96	1508	795	0.191	0.795	-1.682	1.004	2.456	0.531
550SF5162-33EQS	0.0295	57	0.279	0.95	1.249	0.454	2.115	0.098	0.591	1.235	0.333	11.36	9.72	433	433	0.081	0.615	-1.119	0.700	2.464	0.794
550SF5162-43EQS	0.0400	57	0.377	1.28	1.679	0.611	2.110	0.130	0.587	1.679	0.515	17.59	14.95	1079	944	0.201	0.813	-1.108	0.694	2.454	0.796
550SF5200-43EQS	0.0400	57	0.417	1.42	1.951	0.709	2.162	0.234	0.748	1.933	0.589	20.10	16.90	1079	944	0.223	1.516	-1.502	0.921	2.737	0.699
600SF5162-33EQS	0.0295	57	0.294	1.00	1.535	0.512	2.285	0.100	0.583	1.522	0.363	12.38	10.62	395	395	0.085	0.743	-1.078	0.680	2.592	0.827
600SF5162-43EQS	0.0400	57	0.397	1.35	2.065	0.688	2.280	0.133	0.579	2.065	0.559	19.08	16.37	986	976	0.212	0.983	-1.067	0.673	2.583	0.829
600SF5200-43EQS	0.0400	57	0.437	1.49	2.390	0.797	2.338	0.240	0.741	2.374	0.640	21.85	18.54	986	976	0.233	1.822	-1.452	0.897	2.850	0.741
800SF5162-43EQS	0.0400	57	0.477	1.62	4.128	1.032	2.941	0.143	0.548	3.870	0.706	24.11	21.67	732	732	0.255	1.862	-0.931	0.603	3.133	0.912
800SF5200-43EQS	0.0400	57	0.517	1.76	4.721	1.180	3.021	0.261	0.710	4.721	0.848	28.94	24.89	732	732	0.276	3.400	-1.283	0.814	3.358	0.854

Table Notes

1. The centerline bend radius is based on inside corner radii shown in the steel thickness table.

2. Effective properties incorporate the strength increase from the

SUPREME STUD - NON-STRUCTURAL & STRUCTURAL TRACK SECTION PROPERTIES

Supreme Track (SFT) - Section Properties

Part No.	Design Thickness (in)	Fy (ksi)	Area (in ²)	Weight (lb/ft)	Gross Properties					Effective Properties				Torsional Properties					
					Ix (in ⁴)	Sx (in ³)	Rx (in)	Iy (in ⁴)	Ry (in)	Lxe (in ⁴)	Sxe (in ³)	Ma (in-k)	Vag (lb)	Jx1000 (in ⁴)	CW (in ⁶)	Xo (in)	m (in)	Ro (in)	β
162SFT125-D25 (50)	0.0155	50	0.064	0.22	0.034	0.042	0.733	0.011	0.412	0.022	N/A	0.37	215	0.005	0.006	-0.878	0.504	1.216	0.478
162SFT125-D25 (57)	0.0155	57	0.064	0.22	0.034	0.042	0.733	0.011	0.412	0.022	N/A	0.37	215	0.005	0.006	-0.878	0.504	1.216	0.478
162SFT125-D20	0.0188	57	0.077	0.26	0.042	0.048	0.733	0.013	0.411	0.029	0.023	0.79	394	0.009	0.007	-0.878	0.503	1.215	0.478
162SFT125-30EQD	0.0235	57	0.097	0.33	0.052	0.060	0.734	0.016	0.410	0.038	0.031	1.06	621	0.018	0.009	-0.874	0.502	1.213	0.481
162SFT150-D25 (57)	0.0155	57	0.072	0.24	0.040	0.046	0.748	0.018	0.497	-	-	-	0.006	0.010	-1.107	0.626	1.425	0.397	
162SFT150-D20	0.0188	57	0.087	0.30	0.049	0.056	0.749	0.021	0.496	-	-	-	0.010	0.012	-1.105	0.625	1.424	0.398	
162SFT150-30EQD	0.0235	57	0.109	0.37	0.061	0.070	0.749	0.027	0.496	0.041	0.032	1.09	621	0.020	0.014	-1.102	0.623	1.422	0.399
162SFT200-D20	0.0188	57	0.106	0.36	0.063	0.072	0.770	0.046	0.662	-	-	-	0.013	0.026	-1.574	0.869	1.873	0.294	
162SFT200-30EQD	0.0235	57	0.132	0.45	0.079	0.090	0.771	0.058	0.661	-	-	-	0.024	0.032	-1.571	0.868	1.871	0.295	
162SFT250-D20	0.0188	57	0.125	0.42	0.077	0.088	0.785	0.085	0.823	-	-	-	0.015	0.047	-2.052	1.116	2.346	0.235	
162SFT250-30EQD	0.0235	57	0.156	0.53	0.096	0.110	0.786	0.105	0.823	-	-	-	0.029	0.059	-2.049	1.115	2.344	0.236	
162SFT300-30EQD	0.0235	57	0.179	0.61	0.114	0.130	0.797	0.172	0.980	-	-	-	0.033	0.099	-2.534	1.363	2.831	0.199	
250SFT125-D25 (50)	0.0155	50	0.078	0.26	0.086	0.069	1.051	0.012	0.400	0.054	N/A	0.61	137	0.006	0.015	-0.769	0.460	1.363	0.682
250SFT125-D25 (57)	0.0155	57	0.078	0.26	0.086	0.069	1.051	0.012	0.400	0.054	N/A	0.61	137	0.006	0.015	-0.769	0.460	1.363	0.682
250SFT125-D20	0.0188	57	0.094	0.32	0.104	0.079	1.051	0.015	0.400	0.078	0.036	1.23	249	0.011	0.018	-0.769	0.460	1.362	0.681
250SFT125-30EQD	0.0235	57	0.118	0.40	0.130	0.099	1.052	0.019	0.399	0.100	0.053	1.80	478	0.022	0.023	-0.765	0.458	1.361	0.684
250SFT125-33EQS	0.0295	57	0.148	0.50	0.164	0.124	1.053	0.023	0.398	0.130	0.077	2.61	944	0.043	0.028	-0.762	0.457	1.359	0.685
250SFT125-43EQS	0.0400	57	0.200	0.68	0.222	0.167	1.053	0.031	0.396	0.186	0.114	3.88	1798	0.107	0.038	-0.758	0.454	1.356	0.688
250SFT150-D25 (57)	0.0155	57	0.085	0.29	0.099	0.075	1.076	0.020	0.488	-	-	-	0.007	0.024	-0.983	0.578	1.537	0.591	
250SFT150-D20	0.0188	57	0.104	0.35	0.120	0.092	1.077	0.025	0.488	-	-	-	0.012	0.030	-0.981	0.577	1.536	0.592	
250SFT150-30EQD	0.0235	57	0.129	0.44	0.150	0.114	1.077	0.031	0.487	0.108	0.052	1.79	478	0.024	0.037	-0.979	0.576	1.535	0.593
250SFT150-33EQS	0.0295	57	0.162	0.52	0.189	0.143	1.078	0.038	0.486	0.141	0.079	2.70	944	0.047	0.046	-0.976	0.574	1.533	0.595
250SFT150-43EQS	0.0400	57	0.220	0.75	0.256	0.193	1.079	0.052	0.484	0.202	0.118	4.02	1798	0.117	0.062	-0.971	0.572	1.530	0.597
250SFT200-D20	0.0188	57	0.122	0.42	0.152	0.116	1.114	0.053	0.661	-	-	-	0.014	0.064	-1.427	0.817	1.927	0.452	
250SFT200-30EQD	0.0235	57	0.153	0.52	0.190	0.144	1.115	0.067	0.660	-	-	-	0.028	0.080	-1.424	0.816	1.926	0.453	
250SFT200-33EQS	0.0295	57	0.192	0.65	0.239	0.181	1.116	0.083	0.659	-	-	-	0.056	0.101	-1.421	0.814	1.923	0.454	
250SFT200-43EQS	0.0400	57	0.260	0.88	0.314	0.244	1.117	0.112	0.657	0.229	0.124	4.22	1798	0.139	0.136	-1.416	0.812	1.919	0.456
250SFT250-D20	0.0188	57	0.141	0.48	0.184	0.140	1.141	0.097	0.830	-	-	-	0.017	0.119	-1.887	1.061	2.356	0.359	
250SFT250-30EQD	0.0235	57	0.176	0.60	0.230	0.175	1.142	0.121	0.829	-	-	-	0.033	0.148	-1.885	1.059	2.355	0.359	
250SFT250-33EQS	0.0295	57	0.221	0.75	0.289	0.219	1.143	0.152	0.828	-	-	-	0.064	0.186	-1.881	1.058	2.352	0.360	
250SFT250-43EQS	0.0400	57	0.300	1.02	0.392	0.296	1.144	0.205	0.827	0.246	0.128	4.37	1798	0.160	0.251	-1.876	1.055	2.347	0.361
250SFT300-D20	0.0188	57	0.160	0.54	0.216	0.164	1.610	0.158	0.995	-	-	-	0.019	0.196	-2.358	1.306	2.810	0.296	
250SFT300-30EQD	0.0235	57	0.200	0.68	0.270	0.205	1.612	0.198	0.994	-	-	-	0.037	0.245	-2.355	1.305	2.808	0.297	
250SFT300-33EQS	0.0295	57	0.251	0.85	0.339	0.257	1.613	0.247	0.994	-	-	-	0.073	0.307	-2.352	1.303	2.805	0.297	
250SFT300-43EQS	0.0400	57	0.340	1.16	0.460	0.347	1.614	0.334	0.992	-	-	-	0.181	0.416	-2.346	1.300	2.800	0.298	
350SFT125-D25 (50)	0.0155	50	0.093	0.32	0.181	0.103	1.395	0.014	0.383	0.114	N/A	0.91	N/A	0.007	0.032	-0.676	0.419	1.597	0.821
350SFT125-D25 (57)	0.0155	57	0.093	0.32	0.181	0.103	1.395	0.014	0.383	0.114	N/A	0.91	N/A	0.007	0.032	-0.676	0.419	1.597	0.821
350SFT125-D20	0.0188	57	0.113	0.38	0.219	0.121	1.394	0.017	0.383	0.173	0.051	1.73	175	0.013	0.038	-6.750	0.418	1.595	0.821
350SFT125-30EQD	0.0235	57	0.141	0.48	0.275	0.151	1.396	0.021	0.381	0.221	0.074	2.51	338	0.026	0.048	-0.673	0.417	1.595	0.822
350SFT125-33EQS	0.0295	57	0.177	0.60	0.345	0.190	1.396	0.026	0.380	0.286	0.114	3.87	668	0.051	0.060	-0.670	0.415	1.595	0.823
350SFT125-43EQS	0.0400	57	0.240	0.82	0.467	0.256	1.396	0.034	0.378	0.404	0.184	6.28	1661	0.128	0.080	-0.666	0.413	1.592	0.825
350SFT150-D25 (57)	0.0155	57	0.101	0.34	0.206	0.114	1.430	0.023	0.472	-	-	-	0.008	0.052	-0.875	0.532	1.742	0.748	
350SFT150-D20	0.0188	57	0.122	0.42	0.250	0.138	1.431	0.027	0.472	-	-	-	0.014	0.063	-0.873	0.531	1.741	0.749	
350SFT150-30EQD	0.0235	57	0.153	0.52	0.313	0.172	1.431	0.034	0.471	0.238	0.074	2.51	338	0.028	0.078	-0.871	0.530	1.740	0.749
350SFT150-33EQS	0.0295	57	0.192	0.65	0.393	0.216	1.432	0.042	0.470	0.308	0.113	3.85	668	0.056	0.098	-0.868	0.529	1.739	0.751
350SFT150-43EQS	0.0400	57	0.260	0.88	0.533	0.292	1.432	0.057	0.468	0.437	0.191	6.50	1661	0.139	0.132	-0.864	0.526	1.736	0.753
350SFT200-D20	0.0188	57	0.141	0.48	0.311	0.172	1.485	0.060	0.649	-	-	-	0.017	0.136	-1.293	0.765	2.073	0.611	
350SFT200-30EQD	0.0235	57	0.176	0.60	0.389	0.215	1.486	0.074	0.649	-	-	-	0.033	0.170	-1.291	0.763	2.072	0.612	
350SFT200-33EQS	0.0295	57	0.221	0.75	0.489	0.269	1.487	0.093	0.647	-	-	-	0.064	0.213	-1.288	0.762	2.071	0.613	
350SFT200-43EQS	0.0400	57	0.300	1.02	0.664	0.363	1.487	0.125	0.646	0.494	0.201	6.85	1661	0.160	0.287	-1.283	0.759	2.067	0.615
350SFT250-D20	0.0188	57	0.160	0.54	0.372	0.206	1.526	0.109	0.824	-	-	-	0.019	0.249	-1.733	1.003	2.452	0.500	
350SFT250-30EQD	0.0235	57	0.200	0.68	0.466	0.257	1.527	0.135	0.823	-	-	-	0.037	0.311	-1.731	1.002	2.450	0.501	
350SFT250-33EQS	0.0295	57	0.251	0.85	0.585	0.322	1.528	0.169	0.822	-	-	-	0.073	0.389	-1.727	1.001	2		

SUPREME STUD - NON-STRUCTURAL & STRUCTURAL TRACK SECTION PROPERTIES

Supreme Track (SFT) - Section Properties

Part No.	Design Thickness (in)	Fy (ksi)	Area (in ²)	Weight (lb/ft)	Gross Properties				Effective Properties				Torsional Properties						
					Ix (in ⁴)	Sx (in ³)	Rx (in)	Iy (in ⁴)	Ry (in)	Lxe (in ⁴)	Sxe (in ³)	Ma (in-k)	Vag (lb)	Jx1000 (in ⁴)	CW (in ⁶)	Xo (in)	m (in)	Ro (in)	β
362SFT250-D20	0.0188	57	0.162	0.55	0.401	0.214	1.573	0.110	0.823	-	-	-	-	0.019	0.269	-1.716	0.997	2.469	0.517
362SFT250-30EQD	0.0235	57	0.203	0.69	0.502	0.267	1.573	0.137	0.822	-	-	-	-	0.037	0.336	-1.713	0.995	2.467	0.518
362SFT250-33EQS	0.0295	57	0.254	0.87	0.631	0.355	1.574	0.171	0.821	-	-	-	-	0.074	0.421	-1.710	0.994	2.465	0.519
362SFT250-43EQS	0.0400	57	0.345	1.17	0.855	0.453	1.575	0.231	0.819	0.571	0.204	6.97	1603	0.184	0.569	-1.705	0.991	2.461	0.520
362SFT300-D20	0.0188	57	0.181	0.62	0.467	0.249	1.605	0.179	0.994	-	-	-	-	0.021	0.442	-2.167	1.238	2.874	0.432
362SFT300-30EQD	0.0235	57	0.226	0.77	0.584	0.311	1.606	0.223	0.994	-	-	-	-	0.042	0.552	-2.165	1.237	2.873	0.432
362SFT300-33EQS	0.0295	57	0.284	0.97	0.733	0.390	1.607	0.280	0.993	-	-	-	-	0.082	0.692	-2.161	1.235	2.870	0.433
362SFT300-43EQS	0.0400	57	0.385	1.31	0.995	0.527	1.608	0.378	0.991	-	-	-	-	0.205	0.935	-2.156	1.232	2.866	0.434
400SFT125-D252 (50)	0.0155	50	0.101	0.34	0.246	0.123	1.561	0.014	0.374	0.153	N/A	1.08	N/A	0.008	0.043	-0.638	0.401	1.728	0.864
400SFT125-D252 (57)	0.0155	57	0.101	0.34	0.246	0.123	1.561	0.014	0.374	0.153	N/A	1.08	N/A	0.008	0.043	-0.638	0.401	1.728	0.864
400SFT125-D202	0.0188	57	0.122	0.42	0.297	0.144	1.560	0.017	0.374	0.239	0.058	1.98	153	0.014	0.052	-0.637	0.400	1.726	0.864
400SFT125-30EQD	0.0235	57	0.153	0.52	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
400SFT125-33EQS	0.0295	57	0.192	0.65	0.468	0.226	1.562	0.027	0.372	0.394	0.129	4.39	583	0.056	0.081	-0.632	0.397	1.726	0.866
400SFT125-43EQS	0.0400	57	0.260	0.88	0.634	0.305	1.562	0.036	0.370	0.556	0.224	7.65	1450	0.139	1.09	-0.628	0.395	1.724	0.867
400SFT150-D252 (57)	0.0155	57	0.101	0.43	0.246	0.119	1.561	0.014	0.374	0.153	1.08	-	-	0.008	0.043	-0.640	0.400	1.730	0.860
400SFT150-D202	0.0188	57	0.132	0.45	0.338	0.164	1.601	0.028	0.463	-	-	-	-	0.016	0.085	-0.828	0.511	1.861	0.802
400SFT150-30EQD	0.0235	57	0.153	0.52	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	0.70	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	0.95	0.719	0.346	1.603	0.059	0.459	0.232	0.232	7.92	1450	0.149	1.18	-0.819	0.506	1.858	0.806
400SFT200-D202	0.0188	57	0.151	0.51	0.417	0.202	1.664	0.062	0.642	-	-	-	-	0.018	0.184	-1.236	0.741	2.170	0.676
400SFT200-30EQD	0.0235	57	0.188	0.64	0.521	0.253	1.665	0.077	0.641	-	-	-	-	0.035	0.229	-1.234	0.740	2.169	0.676
400SFT200-33EQS	0.0295	57	0.236	0.80	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	1.09	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
400SFT250-D20	0.0188	57	0.169	0.58	0.496	0.241	1.712	0.113	0.818	-	-	-	-	0.020	0.335	-1.666	0.977	2.525	0.565
400SFT250-30EQD	0.0235	57	0.212	0.72	0.620	0.300	1.712	0.141	0.817	-	-	-	-	0.039	0.419	-1.664	0.976	2.523	0.565
400SFT250-33EQS	0.0295	57	0.266	0.90	0.779	0.377	1.713	0.177	0.816	-	-	-	-	0.077	0.525	-1.661	0.974	2.522	0.566
400SFT250-43EQS	0.0400	57	0.360	1.22	1.057	0.509	1.714	0.238	0.814	0.720	0.226	7.71	1450	0.192	0.709	-1.656	0.972	2.518	0.568
400SFT300-D20	0.0188	57	0.188	0.64	0.575	0.279	1.749	0.185	0.991	-	-	-	-	0.022	0.550	-2.111	1.217	2.915	0.475
400SFT300-30EQD	0.0235	57	0.235	0.80	0.719	0.348	1.749	0.231	0.991	-	-	-	-	0.043	0.687	-2.109	1.216	2.913	0.476
400SFT300-33EQS	0.0295	57	0.295	1.00	0.904	0.437	1.750	0.289	0.990	-	-	-	-	0.086	0.861	-2.106	1.214	2.911	0.477
400SFT300-43EQS	0.0400	57	0.400	1.36	1.226	0.591	1.751	0.390	0.988	-	-	-	-	0.213	1.164	-2.100	1.211	2.907	0.478
550SFT125-D252 (57)	0.0155	57	0.124	0.42	0.519	0.185	2.046	0.015	0.350	-	-	-	-	0.010	0.089	-0.548	0.355	2.146	0.935
550SFT125-D201	0.0188	57	0.150	0.51	0.630	0.224	2.046	0.018	0.349	See note 1 below				0.018	0.108	-0.546	0.354	2.146	0.935
550SFT125-30EQD	0.0235	57	0.188	0.64	0.787	0.280	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	0.80	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	1.09	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-D252 (57)	0.0155	57	0.132	0.45	0.580	0.207	2.098	0.025	0.438	-	-	-	-	0.011	0.145	-0.721	0.459	2.261	0.898
550SFT150-D201	0.0188	57	0.160	0.54	0.703	0.250	2.098	0.031	0.437	See note 1 below				0.019	0.176	-0.720	0.458	2.260	0.899
550SFT150-30EQD	0.0235	57	0.200	0.68	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	0.85	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	1.16	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-D201	0.0188	57	0.179	0.61	0.851	0.303	2.182	0.068	0.616	-	-	-	-	0.021	0.380	-1.095	0.677	2.518	0.811
550SFT200-30EQD2	0.0235	57	0.223	0.76	1.064	0.378	2.183	0.085	0.615	-	-	-	-	0.041	0.474	-1.093	0.676	2.517	0.812
550SFT200-33EQS	0.0295	57	0.280	0.95	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	1.29	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
550SFT250-D20	0.0188	57	0.198	0.67	0.999	0.355	2.249	0.125	0.795	-	-	-	-	0.023	0.691	-1.496	0.906	2.816	0.718
550SFT250-30EQD	0.0235	57	0.247	0.84	1.249	0.444	2.249	0.156	0.794	-	-	-	-	0.045	0.862	-1.494	0.905	2.815	0.718
550SFT250-33EQS	0.0295	57	0.310	1.05	1.568	0.556	2.250	0.195	0.793	-	-	-	-	0.090	1.080	-1.491	0.903	2.813	0.719
550SFT250-43EQS	0.0400	57	0.420	1.43	2.126	0.752	2.251	0.263	0.791	1.546	0.312	10.64	1049	0.224	1.458	-1.487	0.900	2.811	0.720
550SFT300-D20	0.0188	57	0.216	0.74	1.146	0.408	2.302	0.205	0.972	-	-	-	-	0.026	1.127	-1.917	1.139	3.150	0.630
550SFT300-30EQD	0.0235	57	0.270	0.92	1.433	0.509	2.303	0.255	0.972	-	-	-	-	0.050	1.408	-1.915	1.138	3.148	0.630
550SFT300-33EQS	0.0295	57	0.339	1.15	1.800	0.639	2.304	0.319	0.970	-	-	-	-	0.098	1.764	-1.912	1.137	3.147	0.631
550SFT300-43EQS	0.0400	57	0.460	1.56															

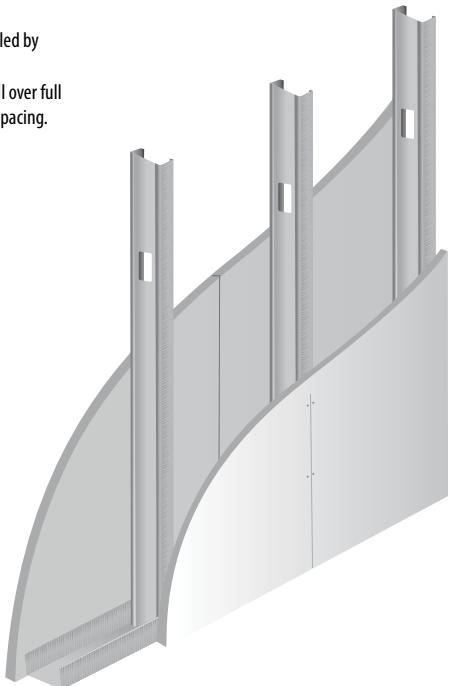
SUPREME STUD - INTERIOR WALL HEIGHTS - COMPOSITE

Supreme stud - Interior Wall Heights - Composite

Section	Fy (ksi)	Spacing (in) oc	5 psf			7.5 psf			10 psf			15 psf		
			L/120	L/240	L/360	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"	-	-	-	-
		16	12' 1"	9' 12"	8' 10"	10' 7"	8' 9"	-	9' 7"	7' 11"	-	-	-	-
		24	10' 7"	8' 9"	-	9' 3"	-	-	8' 2" f	-	-	-	-	-
162SFS144-D20	57	12	13' 7"	11' 1"	9' 9"	11' 11"	9' 9"	8' 6"	10' 10"	8' 10"	7' 9"	8' 2" f	7' 9"	-
		16	12' 4"	10' 1"	8' 10"	10' 10"	8' 10"	7' 9"	9' 10"	8' 1"	-	-	-	-
		24	10' 10"	8' 10"	7' 9"	9' 5"	7' 9"	-	8' 5"	-	-	-	-	-
162SFS144-30EQD	57	12	13' 11"	11' 4"	10' 0"	12' 2"	9' 11"	8' 8"	11' 0"	9' 0"	7' 10"	8' 7" f	7' 9"	-
		16	12' 8"	10' 4"	9' 1"	11' 0"	9' 0"	7' 10"	10' 0"	8' 1"	-	-	-	-
		24	11' 0"	9' 0"	7' 10"	9' 7"	7' 9"	-	8' 6"	-	-	-	-	-
250SFS125-D25	57	12	15' 8"	13' 7"	12' 2"	13' 8"	11' 11"	10' 7"	12' 5"	10' 10"	9' 7"	8' 5" f	8' 5" f	8' 1"
		16	14' 3"	12' 4"	11' 0"	12' 5"	10' 10"	9' 7"	11' 1" f	9' 10"	8' 6"	-	-	-
		24	12' 5"	10' 10"	9' 7"	10' 5" f	9' 4"	8' 1"	9' 0" f	8' 4"	-	-	-	-
250SFS-D20	57	12	17' 1"	14' 0"	12' 5"	14' 11"	12' 3"	10' 10"	13' 7"	11' 1" f	9' 10"	9' 5" f	9' 5" f	8' 2"
		16	15' 6"	12' 9"	11' 3"	13' 7"	11' 11"	9' 10"	12' 4"	10' 1"	8' 8"	8' 2" f	8' 2" f	-
		24	13' 7"	11' 1"	9' 10"	11' 8" f	9' 8"	8' 2"	10' 2" f	8' 7"	-	-	-	-
250SFS-30EQD	57	12	18' 2"	14' 5"	12' 7"	15' 10"	12' 7"	11' 0"	14' 5"	11' 5"	10' 0"	10' 3" f	10' 0"	8' 6"
		16	16' 6"	13' 1"	11' 5"	14' 5"	11' 5"	10' 0"	13' 1"	10' 5"	8' 11"	8' 11" f	8' 11" f	-
		24	14' 5"	11' 5"	10' 0"	12' 7"	10' 0"	8' 6"	11' 0" f	8' 11"	-	-	-	-
362SFS125-D25	57	12	21' 9"	17' 3"	15' 1"	18' 6" f	15' 1"	13' 2"	16' 1" f	13' 9"	12' 0"	10' 7" f	10' 7" f	10' 4"
		16	19' 8" f	15' 8"	13' 9"	16' 1" f	13' 9"	12' 0"	13' 11" f	12' 6"	10' 9"	9' 2" f	9' 2" f	9' 2" f
		24	16' 1" f	13' 9"	12' 0"	13' 1" f	12' 0"	10' 4"	11' 4" f	10' 9"	9' 3"	-	-	-
362SFS-D20	57	12	22' 4"	17' 9"	15' 6"	19' 6"	15' 6"	13' 7"	17' 3" f	14' 1"	12' 4"	11' 4" f	11' 4" f	10' 8"
		16	20' 4"	16' 1"	14' 1"	17' 3" f	14' 1"	12' 4"	15' 0" f	12' 10"	11' 1"	9' 10" f	9' 10" f	9' 7"
		24	17' 3" f	14' 1"	12' 4"	14' 1" f	12' 4"	10' 8"	12' 3" f	11' 1"	9' 7"	8' 0" f	8' 0" f	8' 0" f
362SFS-30EQD	57	12	23' 6"	18' 8"	16' 4"	20' 6"	16' 4"	14' 3"	18' 8"	14' 10"	12' 11"	12' 6" f	12' 6" f	11' 3"
		16	21' 4"	16' 11"	14' 10"	18' 8"	14' 10"	12' 11"	16' 5" f	13' 5"	11' 9"	10' 10" f	10' 10" f	10' 2"
		24	18' 8"	14' 10"	12' 11"	15' 6" f	12' 11"	11' 3"	13' 5" f	11' 9"	10' 2"	8' 10" f	8' 10" f	8' 9"
400SFS125-D25	57	12	21' 8"	17' 7"	15' 8"	18' 6" f	15' 4"	13' 9"	16' 0" f	14' 0"	12' 6"	10' 6" f	10' 6" f	10' 6" f
		16	19' 7" f	16' 0"	14' 3"	16' 0" f	14' 0"	12' 6"	13' 10" f	12' 8"	11' 4" f	9' 1" f	9' 1" f	9' 1" f
		24	16' 0" f	14' 0"	12' 6"	13' 1" f	12' 2"	10' 11"	11' 4" f	11' 1"	9' 11"	-	-	-
400SFS-D20	57	12	23' 1"	18' 4"	16' 0"	20' 2"	16' 0"	14' 0"	17' 8" f	14' 6"	12' 8"	11' 7" f	11' 7" f	11' 1"
		16	21' 0"	16' 8"	14' 6"	17' 8" f	14' 6"	12' 8"	15' 3" f	13' 2"	11' 6"	10' 0" f	10' 0" f	10' 0" f
		24	17' 8" f	14' 6"	12' 8"	14' 5" f	12' 8"	11' 1"	12' 6" f	11' 6"	10' 0"	8' 2" f	8' 2" f	8' 2" f
400SFS-30EQD	57	12	25' 0"	19' 10"	17' 4"	21' 10"	17' 4"	15' 2"	19' 8" f	15' 9"	13' 9"	12' 11" f	12' 11" f	12' 0"
		16	22' 9"	18' 1"	15' 9"	19' 8" f	15' 9"	13' 9"	17' 0" f	14' 4"	12' 6"	11' 2" f	11' 2" f	10' 11"
		24	19' 8" f	15' 9"	13' 9"	16' 0" f	13' 9"	12' 0"	13' 11" f	12' 6"	10' 11"	9' 2" f	9' 2" f	9' 2" f
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"	13' 4" f	13' 4" f	13' 4" f
		16	24' 10" f	22' 1"	19' 8"	20' 3" f	19' 3"	17' 2"	17' 7"	17' 6"	15' 7"	-	-	-
		24	20' 3" f	19' 3"	17' 2"	16' 7" f	16' 7" f	14' 11"	14' 4" f	14' 4" f	13' 5"	-	-	-
600SFS-D20	57	12	31' 2"	24' 9"	21' 7"	25' 11" f	21' 7"	18' 10"	22' 6" f	19' 7"	17' 2"	14' 9" f	14' 9" f	14' 9" f
		16	27' 6" f	22' 6"	19' 7"	22' 6" f	19' 7"	17' 2"	19' 6" f	17' 10"	15' 7"	12' 9" f	12' 9" f	12' 9" f
		24	22' 6" f	19' 7"	17' 2"	18' 4" f	17' 2"	14' 10"	15' 11" f	15' 7"	13' 4"	-	-	-
600SFS-30EQD	57	12	33' 8"	26' 9"	23' 4"	28' 4" f	23' 4"	20' 5"	24' 6" f	21' 2"	18' 6"	16' 1" f	16' 1" f	16' 1" f
		16	30' 0" f	24' 3"	21' 2"	24' 6" f	21' 2"	18' 6"	21' 3" f	19' 3"	16' 10"	13' 11" f	13' 11" f	13' 11" f
		24	24' 6" f	21' 2"	18' 6"	20' 0" f	18' 6"	16' 2"	17' 4" f	16' 10"	14' 8"	-	-	-

Table Notes

- Allowable composite limiting heights are calculated using ICC-ES AC86-2012.
- No fasteners are required for attaching the stud to the track. Stud end bearing must be a minimum of 1 inch. "f" denotes Wall Height is controlled by Flexure Stress.
- Composite limiting heights are based on a single layer of 5/8" type X gypsum board installed in the vertical orientation to both sides of the wall over full height using minimum No. 6 Type S Drywall screws spaced a maximum of 12" oc for studs at 24" spacing, and 16" oc for studs at 16" and 12" spacing.



SUPREME STUD - LIMITING WALL HEIGHTS

Supreme Non-Composite Limiting Wall Heights: Fully Braced

Section	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
162SFS125-D25	50	12	9' 4"	-	-	8' 0"	-	-	-	-
	50	16	8' 5"	-	-	-	-	-	-	-
	50	24	-	-	-	-	-	-	-	-
162SFS125-D20	57	12	9' 11"	8' 1"	-	8' 8"	-	-	-	-
	57	16	9' 0"	-	-	-	-	-	-	-
	57	24	-	-	-	-	-	-	-	-
162SFS144-D20	57	12	10' 6"	8' 4"	-	9' 1"	-	-	8' 2"	-
	57	16	9' 6"	-	-	8' 2"	-	-	-	-
	57	24	8' 2"	-	-	-	-	-	-	-
162SFS144-30EQD	57	12	11' 0"	8' 9"	-	9' 8"	-	-	8' 9"	-
	57	16	10' 0"	-	-	8' 9"	-	-	-	-
	57	24	8' 9"	-	-	-	-	-	-	-
250SFS125-D25	50	12	12' 5"	10' 5"	9' 1"	10' 2"	9' 0"	-	8' 10"	8' 1"
	50	16	10' 9"	9' 5"	8' 3"	8' 10"	8' 1"	-	-	-
	50	24	8' 10"	8' 1"	-	-	-	-	-	-
250SFS125-D20	57	12	13' 10"	11' 2"	9' 9"	12' 1"	9' 9"	8' 6"	11' 0"	8' 10"
	57	16	12' 7"	10' 2"	8' 10"	11' 0"	8' 10"	-	10' 0"	-
	57	24	11' 0"	8' 10"	-	9' 7"	-	-	8' 5"	-
250SFS144-D20	57	12	14' 5"	11' 6"	10' 1"	12' 5"	10' 1"	8' 10"	11' 2"	9' 2"
	57	16	13' 0"	10' 6"	9' 2"	11' 2"	9' 2"	8' 0"	9' 8"	8' 4"
	57	24	11' 2"	9' 2"	8' 0"	9' 1"	-	-	-	-
250SFS144-30EQD	57	12	15' 4"	12' 2"	10' 7"	13' 5"	10' 7"	9' 3"	12' 2"	9' 8"
	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"	-	9' 8"	-	-
350SFS125-D25	50	12	14' 8"	13' 1"	11' 9"	12' 0"	11' 4"	10' 2"	10' 0"	10' 0"
	50	16	12' 9"	11' 10"	10' 7"	10' 0"	10' 0"	9' 2"	-	-
	50	24	10' 0"	9' 2"	-	-	-	-	-	-
350SFS125-D20	57	12	18' 0"	14' 3"	12' 6"	15' 9"	12' 6"	10' 11"	14' 3"	11' 4"
	57	16	16' 4"	13' 0"	11' 4"	14' 3"	11' 4"	9' 11"	12' 4"	10' 4"
	57	24	14' 3"	11' 4"	9' 11"	11' 7"	9' 11"	8' 8"	9' 5"	9' 0"
350SFS144-D20	57	12	18' 2"	14' 11"	13' 0"	15' 5"	12' 11"	11' 5"	13' 4"	11' 8"
	57	16	16' 4"	13' 6"	11' 10"	13' 4"	11' 8"	10' 4"	11' 7"	10' 6"
	57	24	13' 4"	11' 8"	10' 4"	10' 11"	10' 1"	9' 0"	9' 5"	9' 1"
350SFS144-30EQD	57	12	19' 11"	15' 10"	13' 10"	17' 5"	13' 10"	12' 1"	15' 10"	12' 7"
	57	16	18' 1"	14' 4"	12' 7"	15' 10"	12' 7"	10' 11"	14' 4"	11' 5"
	57	24	15' 10"	12' 7"	10' 11"	13' 8"	10' 11"	9' 7"	11' 10"	9' 11"
362SFS125-D25	50	12	14' 11"	13' 5"	12' 0"	12' 2"	11' 7"	10' 4"	9' 10"	9' 4"
	50	16	12' 11"	12' 1"	10' 10"	9' 10"	9' 10"	9' 4"	-	-
	50	24	9' 10"	9' 4"	-	-	-	-	-	-
362SFS125-D20	57	12	18' 6"	14' 10"	13' 0"	16' 2"	13' 0"	11' 4"	14' 6"	11' 8"
	57	16	16' 10"	13' 6"	11' 10"	14' 6"	11' 8"	10' 4"	12' 7"	10' 7"
	57	24	14' 6"	11' 9"	10' 4"	11' 10"	10' 2"	9' 0"	9' 4"	9' 3"
362SFS144-D20	57	12	18' 8"	15' 4"	13' 5"	15' 8"	13' 3"	11' 8"	13' 7"	12' 0"
	57	16	16' 8"	13' 10"	12' 2"	13' 7"	12' 0"	10' 7"	11' 9"	10' 9"
	57	24	13' 7"	12' 0"	10' 7"	11' 1"	10' 4"	9' 3"	9' 4"	8' 4"
362SFS144-30EQD	57	12	20' 9"	16' 5"	14' 4"	17' 11"	14' 4"	12' 7"	16' 3"	12' 11"
	57	16	18' 8"	14' 11"	13' 1"	16' 5"	13' 1"	11' 5"	14' 9"	11' 9"
	57	24	16' 4"	13' 1"	11' 5"	14' 0"	11' 4"	10' 0"	12' 1"	10' 3"
400SFS125-D25	50	12	15' 8"	14' 3"	12' 9"	12' 10"	12' 4"	11' 0"	9' 7"	9' 7"
	50	16	13' 7"	12' 10"	11' 6"	9' 7"	9' 7"	-	-	-
	50	24	9' 7"	9' 7"	-	-	-	-	-	-
400SFS125-D20	57	12	20' 0"	16' 1"	14' 0"	17' 6"	13' 10"	12' 3"	15' 3"	12' 7"
	57	16	18' 2"	14' 7"	12' 9"	15' 3"	12' 7"	11' 2"	13' 2"	11' 5"
	57	24	15' 3"	12' 7"	11' 2"	11' 10"	11' 0"	9' 9"	8' 11"	8' 10"
400SFS144-D20	57	12	19' 11"	16' 5"	14' 5"	16' 6"	14' 2"	12' 7"	14' 3"	12' 10"
	57	16	17' 6"	14' 10"	13' 1"	14' 3"	12' 10"	11' 5"	12' 4"	11' 7"
	57	24	14' 3"	12' 10"	11' 5"	11' 8"	11' 1"	9' 11"	9' 9"	8' 11"
400SFS144-30EQD	57	12	22' 2"	17' 7"	15' 4"	19' 4"	15' 4"	13' 5"	17' 7"	13' 11"
	57	16	20' 2"	16' 0"	13' 11"	17' 7"	13' 11"	12' 2"	15' 7"	12' 8"
	57	24	17' 7"	13' 11"	12' 2"	14' 8"	12' 2"	10' 8"	12' 9"	11' 1"
550SFS144-30EQD*	57	12	28' 7"	22' 8"	19' 10"	24' 6"	19' 10"	17' 4"	21' 2"	18' 0"
	57	16	26' 0"	20' 7"	18' 0"	21' 2"	18' 0"	15' 9"	18' 4"	16' 4"
	57	24	21' 2"	18' 0"	15' 9"	17' 4"	15' 9"	13' 9"	15' 0"	14' 3"
600SFS144-30EQD*	57	12	29' 9"	23' 7"	20' 8"	25' 6"	20' 8"	18' 0"	22' 1"	18' 9"
	57	16	27' 1"	21' 5"	18' 9"	22' 1"	18' 9"	16' 4"	19' 1"	17' 0"
	57	24	22' 1"	18' 9"	16' 4"	18' 0"	16' 4"	14' 3"	15' 7"	14' 10"
										13' 0"

Table Notes

1. End lateral bearing - 1 inch minimum
2. Heights based on steel properties only
3. Limiting heights based on 1/2" gypsum wall board attached to each face full height
4. 1.0 factor for Deflection Calculations applied throughout
5. 1.0 factor for Strength Calculations applied throughout
6. Web stiffeners are required to achieve the heights listed for all 550SFS-30EQD, all 600SFS-30EQD, and any other members listed with superscript in table. Web stiffeners are not required for other sections to achieve height in table.
7. $k\psi = 0$ in lb/in

SUPREME STUD - LIMITING WALL HEIGHTS

2018 IBC (AISI S100) Limiting Heights for Interior Non-Load Bearing Non-Composite Wall Panels - Braced 48" oc

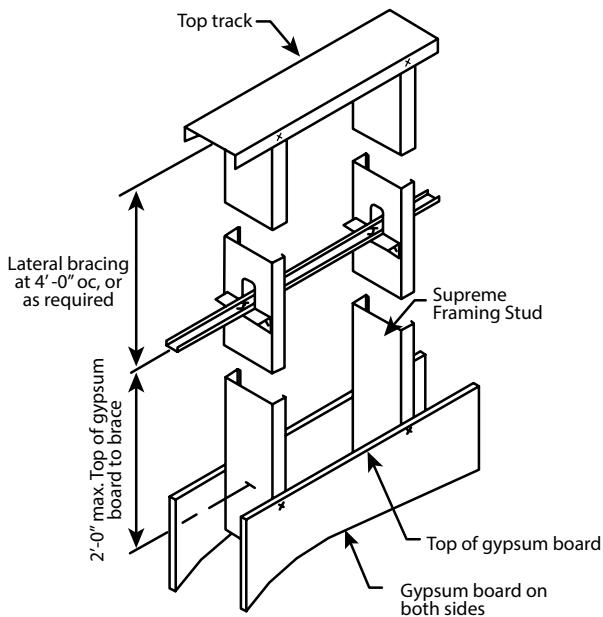
Stud Member	Spacing (in.) o.c.	Fy (ksi)	5 psf		7.5 psf		10 psf			
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240
162SFS144-30EQD	12	57	11' 0"	8' 9"	-	9' 8"	-	-	8' 9"	-
	16		10' 0"	-	-	8' 9"	-	-	-	-
	24		8' 9"	-	-	-	-	-	-	-
250SFS144-30EQD	12	57	15' 4"	12' 2"	10' 7"	13' 5"	10' 7"	9' 3"	12' 2"	9' 8"
	16		13' 11"	11' 1"	9' 8"	12' 2"	9' 8"	8' 5"	11' 1"	8' 9"
	24		12' 2"	9' 8"	8' 5"	10' 7"	8' 5"	-	9' 8"	-
350SFS144-30EQD	12	57	19' 11"	15' 10"	13' 10"	17' 6"	13' 10"	12' 1"	15' 6"	12' 7"
	16		18' 1"	14' 4"	12' 7"	15' 6"	12' 7"	10' 11"	13' 5"	11' 5"
	24		15' 6"	12' 7"	10' 11"	12' 8"	10' 11"	9' 7"	10' 11"	9' 11"
362SFS144-30EQD	12	57	20' 6"	16' 3"	14' 2"	17' 11"	14' 2"	12' 5"	15' 9"	12' 11"
	16		18' 7"	14' 9"	12' 11"	15' 9"	12' 11"	11' 3"	13' 8"	11' 9"
	24		15' 9"	12' 11"	11' 3"	12' 10"	11' 3"	9' 10"	11' 2"	10' 3"
400SFS144-30EQD	12	57	22' 2"	17' 7"	15' 4"	19' 2"	15' 4"	13' 5"	16' 7"	13' 11"
	16		20' 2"	16' 0"	13' 11"	16' 7"	13' 11"	12' 2"	14' 4"	12' 8"
	24		16' 7"	13' 11"	12' 2"	13' 6"	12' 2"	10' 8"	11' 9"	11' 1"
600SFS144-30EQD*	12	57	29' 9"	23' 7"	20' 8"	23' 7"	20' 8"	18' 0"	20' 5"	18' 9"
	16		26' 4"	21' 5"	18' 9"	20' 4"	18' 9"	16' 4"	17' 8'e	17' 0'e
	24		21' 6"	18' 9"	16' 4"	16' 8'e	16' 4'e	14' 3"	14' 5'e	14' 0'e

Table Notes:

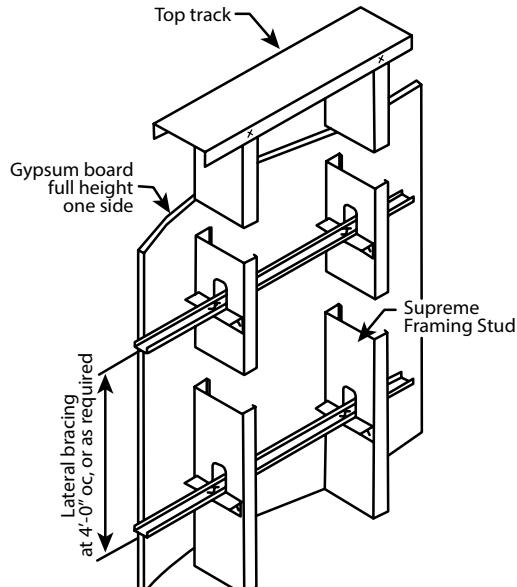
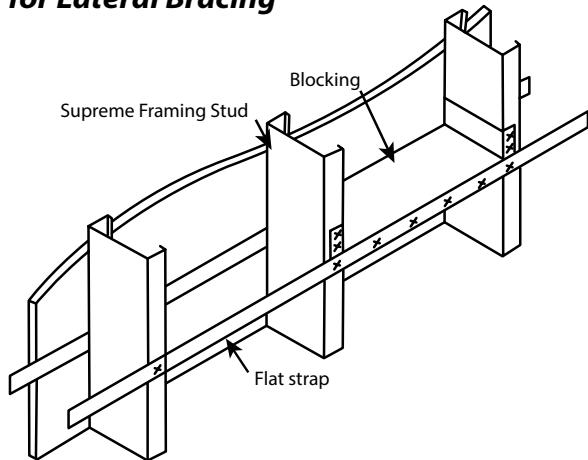
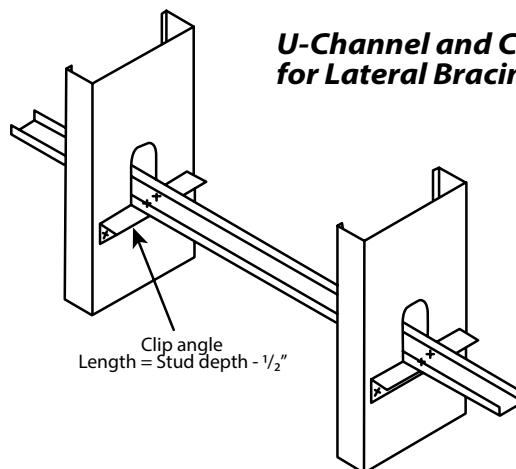
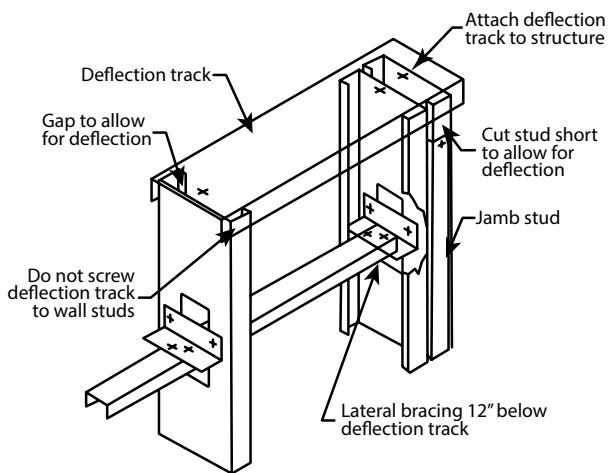
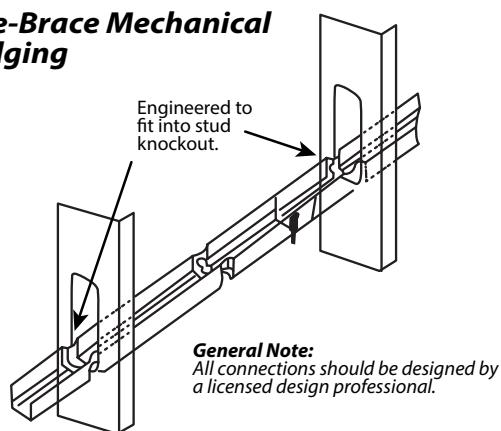
1. End lateral bearing - 1 inch minimum (1.5 inch at 600 SFS-22 members)
2. Heights based on steel properties only
3. Limiting heights based on lateral and torsional bracing spaced 48" on center full height of member
4. 1.0 factor for Deflection Calculations applied throughout
5. 1.0 factor for Strength Calculations applied throughout
6. $k_f = 0 \text{ in}^2/\text{lb/in}$
7. e - web stiffener required to achieve height in table. Web stiffeners may not be required for lesser heights.
8. Check reactions against published web crippling values for lesser heights.
9. * Web-height to thickness ratio exceeds 200. Web crippling values based on test data.

Lateral Bracing

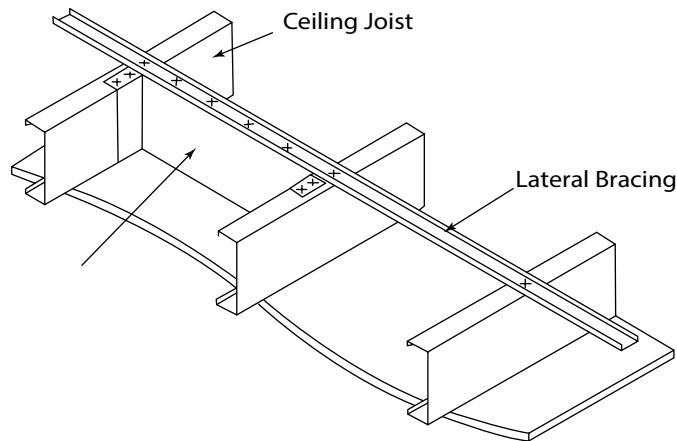
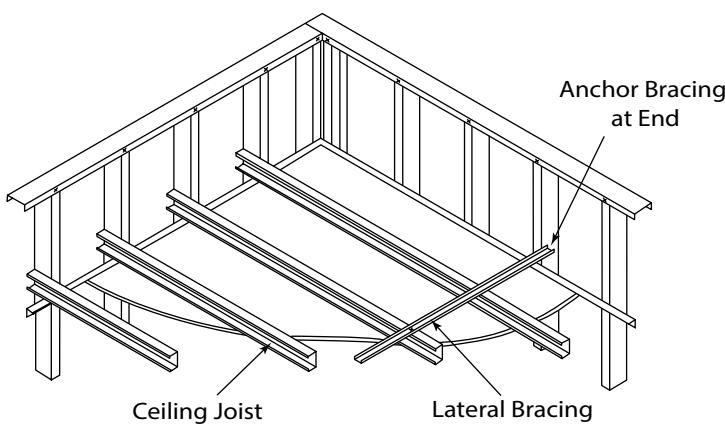
Example of lateral bracing for walls not sheathed full height.

**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 Clip Angle for Lateral Bracing****True-Brace Mechanical Bridging**

SUPREME STUD - NON-STRUCTURAL CEILING SPANS - DEFLECTION LIMIT: L/240 & L360



General Note:

All connections should be designed by a licensed design professional.

Ceiling Span Tables - Deflection Limit L/240

Section	Fy (ksi)	4 psf						6 psf						13 psf					
		Lateral Support of Compression Flange			Lateral Support of Compression Flange			Lateral Support of Compression Flange			Lateral Support of Compression Flange			Lateral Support of Compression Flange					
		Unsupported		Midspan	Unsupported		Midspan	Unsupported		Midspan	Unsupported		Midspan	Unsupported		Midspan			
		12	16	24	12	16	24	12	16	24	12	16	24	12	16	24			
162SFS-D20	57	8' 5"	7' 8"	6' 10"	8' 10"	8' 0"	7' 0"	7' 5"	6' 10"	6' 0"	7' 9"	7' 0"	6' 2"	5' 10"	5' 4"	4' 7"	6' 0"	5' 5"	4' 9"
162SFS-30EQD	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-30EQD	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-30EQD	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-30EQD	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"
362SFS162-33EQS	57	13' 10"	12' 10"	11' 6"	19' 7"	17' 10"	15' 6"	12' 5"	11' 6"	10' 4"	17' 1"	15' 6"	13' 7"	10' 2"	9' 5"	8' 5"	13' 3"	12' 0"	10' 6"
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-30EQD	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-30EQD	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-30EQD	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"

Ceiling Span Tables - Deflection Limit L/360

Section	Fy (ksi)	4 psf						6 psf						13 psf					
		Lateral Support of Compression Flange			Lateral Support of Compression Flange			Lateral Support of Compression Flange			Lateral Support of Compression Flange			Lateral Support of Compression Flange					
		Unsupported		Midspan	Unsupported		Midspan	Unsupported		Midspan	Unsupported		Midspan	Unsupported		Midspan			
		12	16	24	12	16	24	12	16	24	12	16	24	12	16	24			
162SFS-D20	57	7' 9"	7' 0"	6' 2"	7' 9"	7' 0"	6' 2"	6' 9"	6' 2"	5' 4"	6' 9"	6' 2"	5' 4"	5' 3"	4' 9"	4' 2"	5' 3"	4' 9"	4' 2"
162SFS-30EQD	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-30EQD	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-30EQD	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-30EQD	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"
362SFS162-33EQS	57	13' 10"	12' 10"	11' 6"	17' 1"	15' 6"	13' 7"	12' 5"	11' 6"	10' 4"	14' 11"	13' 7"	11' 10"	10' 2"	9' 5"	8' 5"	11' 6"	10' 6"	9' 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-30EQD	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-30EQD	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-30EQD	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"

SUPREME STUD - LIMITING WALL HEIGHTS - CURTAIN WALL

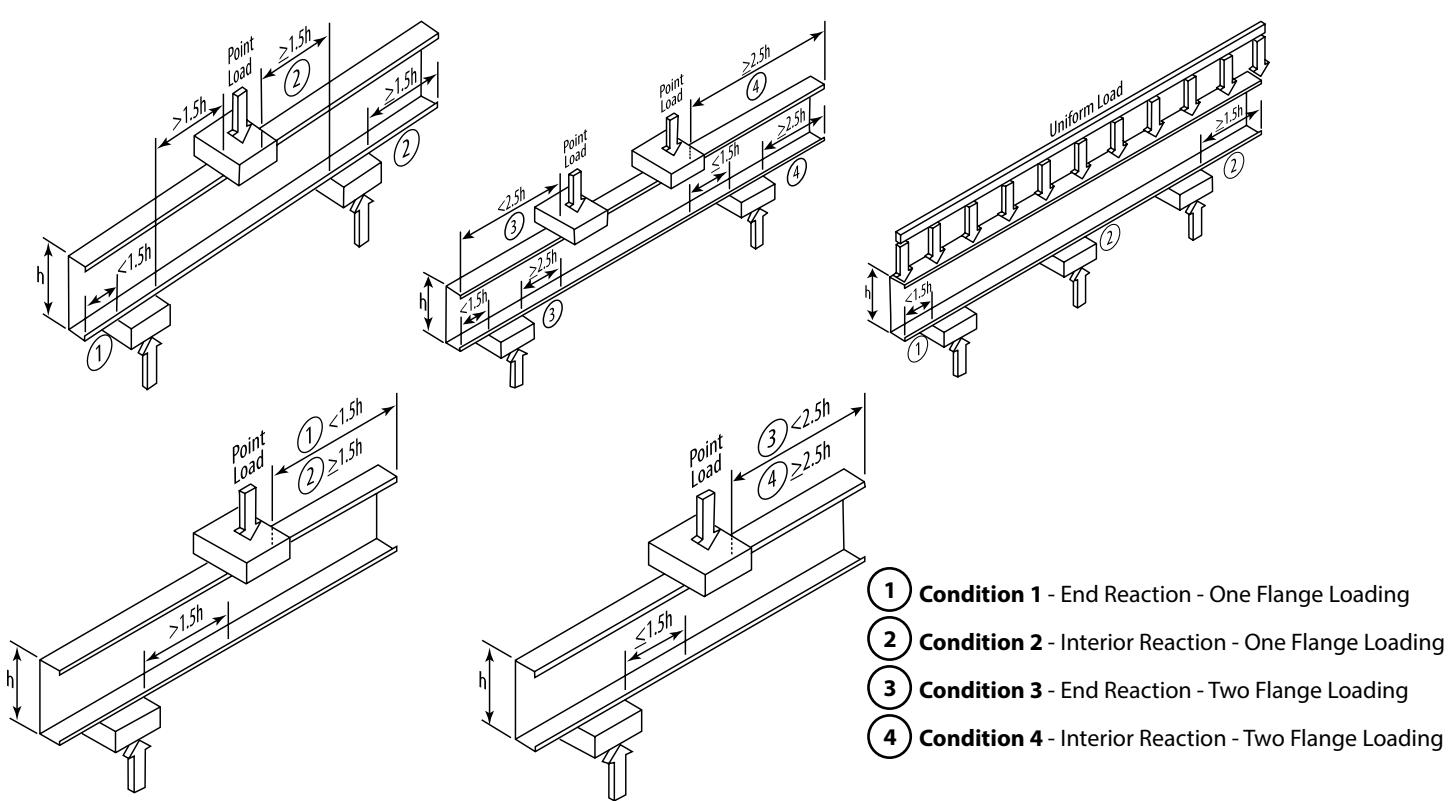
Curtain Wall Limiting Heights - Single Span

Section	Fy (ksi)	Spacing (in) o.c.	5 psf		15 psf		20 psf		25 psf		30 psf		35 psf		40 psf		50 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	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"	10' 11"	9' 7"	8' 1"	10' 5"	9' 1"	-	
	57	16	20' 3"	16' 1"	14' 0"	12' 6"	10' 11"	9' 3"	11' 5"	9' 11"	8' 5"	10' 7"	9' 3"	-	9' 11"	8' 8"	-	9' 3"e	8' 3"	-	
	57	24	17' 8"	14' 0"	12' 3"	10' 11"	9' 7"	8' 1"	9' 11"	8' 8"	-	8' 11"e	8' 1"	-	8' 2"e	-	-	-	-	-	
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"	12' 2"	10' 8"	9' 0"	11' 7"	10' 1"	8' 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"	11' 1"	9' 8"	8' 2"	10' 1"	8' 9"	-	
	57	24	19' 8"	15' 7"	13' 8"	12' 2"	10' 8"	9' 0"	11' 1"	9' 8"	8' 2"	10' 3"	9' 0"	-	9' 8"	8' 5"	-	9' 1"	8' 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"	12' 10"	11' 2"	9' 5"	12' 2"	10' 8"	9' 0"	11' 8"
	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"	11' 8"	10' 2"	8' 7"	11' 1"	9' 8"	8' 2"	-
	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"	10' 1"	8' 11"	-	9' 4"	8' 5"	-	
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"	11' 3"	9' 10"	8' 3"	10' 8"	9' 4"	-	
	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"	8' 11"	-	8' 10"e	8' 1"e	-	-	
	57	24	18' 2"	14' 5"	12' 7"	11' 3"	9' 10"	8' 3"	10' 2"	8' 11"	-	9' 1"e	8' 3"	-	8' 3"e	-	-	-	-	-	
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"	12' 6"	10' 11"	9' 2"	11' 11"	10' 5"	8' 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"	11' 4"	9' 11"	8' 4"	10' 10"	9' 5"	7' 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"	9' 11"	8' 3"	7' 10"	6' 8"	7' 9"	7' 4"	
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"	13' 2"	11' 6"	9' 8"	12' 6"	10' 11"	9' 3"	
	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"	11' 11"	10' 5"	8' 10"	11' 4"e	9' 11"	8' 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"	10' 3"	9' 2"e	-	9' 6"	8' 8"	-	
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"	12' 2"	10' 7"	8' 11"	11' 6"	10' 1"	8' 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"	10' 9"e	9' 8"	8' 1"	9' 11"e	8' 9"	8' 1"e	
	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"	8' 9"	8' 5"	-	8' 1"e	8' 0"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"	13' 6"	11' 9"	9' 11"	12' 10"	11' 2"	9' 5"	
	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"e	12' 3"	10' 9"	9' 0"	11' 5"	10' 1"	8' 7"	
	57	24	21' 10"	17' 4"	15' 1"	13' 6"	11' 9"	9' 11"	12' 3"	10' 9"	8' 5"	10' 7"	9' 4"e	7' 11"	9' 10"	8' 11"	9' 2"	8' 2"e	7' 11"e	6' 8"	
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"	14' 2"	12' 5"	10' 5"	13' 6"	11' 9"	12' 11"	
	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"	12' 11"	11' 3"	9' 6"	11' 10"	10' 5"	8' 10"	
	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"	10' 10"	9' 10"	8' 4"	9' 4"	8' 11"	-	
550SFS162-33EQS	57	12	31' 10"	25' 3"	22' 1"	19' 9"	17' 3"	14' 6"	17' 11"	15' 8"	13' 2"	16' 1"	14' 6"	13' 2"	14' 8"e	13' 8"	11' 6"	13' 7"e	13' 0"	10' 11"	
	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"	12' 8"e	12' 5"e	10' 5"e	11' 6"e	11' 0"e	9' 10"e	
	57	24	25' 3"	20' 0"	17' 6"	14' 8"	13' 8"e	11' 6"	12' 8"e	12' 5"e	10' 5"e	11' 4"e	11' 4"e	10' 4"e	9' 2"e	9' 7"e	8' 8"e	9' 0"e	8' 3"e	8' 0"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"	17' 4"	15' 2"	12' 9"	14' 4"	12' 1"	15' 9"	
	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"	15' 9"	13' 9"	11' 7"	14' 7"	13' 1"	11' 0"	
	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"	12' 10"e	12' 0"e	10' 1"	11' 11"e	11' 5"e	9' 7"e	
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"	18' 1"	15' 10"	13' 4"	17' 2"	15' 0"	12' 8"	
	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"	16' 1"	14' 4"	12' 11"	13' 8"	11' 6"	12' 6"e	
	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"	13' 2"e	12' 7"e	10' 7"	12' 2"e	11' 11"e	10' 1"	
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"	15' 4"e	14' 8"e	12' 4"	14' 2"e	13' 11"e	13' 3"e	11' 10"e
	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	13' 3"e	11' 3"e	12' 3"e	10' 8"e	11' 6"e	10' 2"e	10' 3"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	10' 5"e	10' 10"e	10' 10"e	9' 9"e	10' 0"e	9' 4"e	9' 4"e	8' 11"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"	18' 7"	16' 3"	13' 8"	17' 7"	15' 5"	13' 0"	
	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"	16' 6"	14' 9"	12' 5"	15' 3"e	14' 0"	11' 10"	14' 3"e
	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"	13' 5"e	12' 10"e	10' 10"	12' 5"e	12' 3"e	11' 10"e	9' 2"e
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"	19' 5"	16' 11"	14' 3"	18' 0"	16' 1"	13' 7"	16' 10"
	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"	16' 10"	15' 5"	13' 0"	15' 7"e	14' 7"	12' 4"	14' 7"e
	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"	13' 9"e	12' 11"e	11' 11"e	10' 4"e	10' 8"e	9' 7"e	-
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"	21' 11"	20' 1"	16' 11"	20' 3"e	19' 1"	16' 1"	18' 3"e
	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"	19' 0"	18' 3"e	15' 4"	17' 7"	17' 4"e	14' 7"e	16' 5"e
	57	24	37' 1"	29' 5"	25' 8"	21' 11"	20' 1"	16' 11"	19' 0"e	18											

SUPREME STUD - WEB CRIPPLING

Supreme Web Crippling

Web Section	Design Thickness (in)	Mil Thickness	Fy (ksi)	Condition 1		Condition 2		Condition 3		Condition 4			
				Bearing Length (in)	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	131	210
162	0.0235	30EQD	57	147	237	296	250	353	422	128	177	210	338
250	0.0188	D20	57	90	146	183	146	211	254	63	89	106	189
250	0.0235	30EQD	57	140	225	281	244	345	413	108	149	176	309
250	0.0295	33EQS	57	219	347	432	403	561	666	181	246	289	505
250	0.0400	43EQS	57	396	615	761	783	1063	1250	356	473	550	969
350	0.0188	D20	57	85	138	173	143	206	247	49	69	82	169
350	0.0235	30EQD	57	133	214	267	239	338	404	88	122	145	282
350	0.0295	33EQS	57	209	332	413	396	550	653	155	210	247	468
350	0.0400	43EQS	57	382	593	734	770	1046	1230	316	419	488	910
362	0.0188	D20	57	84	137	142	142	205	247	47	67	80	167
362	0.0235	30EQD	57	132	213	266	238	337	403	86	119	141	279
362	0.0295	33EQS	57	208	330	411	395	549	652	152	206	243	463
362	0.0400	43EQS	57	380	591	731	769	1044	1227	311	413	481	903
400	0.0188	D20	57	See Note 2 below									
400	0.0235	30EQD	57	130	209	261	236	334	400	80	110	131	270
400	0.0295	33EQS	57	205	325	405	392	546	648	143	195	229	451
400	0.0400	43EQS	57	376	584	722	764	1039	1221	298	395	460	884
550	0.0188	D20	57	See Note 1 below									
550	0.0235	30EQD	57	122	196	245	230	326	389	57	79	94	238
550	0.0295	33EQS	57	194	308	384	383	533	633	112	152	179	407
550	0.0400	43EQS	57	359	558	690	749	1018	1197	251	332	387	814
600	0.0188	D20	57	See Note 1 below									
600	0.0235	30EQD	57	107	192	240	228	323	386	50	70	83	229
600	0.0295	33EQS	57	191	303	377	380	529	628	103	140	164	393
600	0.0400	43EQS	57	354	550	681	745	1012	1190	236	314	365	793
800	0.0400	43EQS	57	336	522	646	729	990	1164	185	245	285	718
Table Notes:													
1. h/t exceeds 260. Section is not in compliance with AISI NASPEC Section B1.2 for steel only design, but may be used in accordance with SSFSA's published composite wall data for these members													
2. h/t of web exceeds AISI NASPEC Section B1.2 limit of 200, therefore bearing stiffeners are required when used in non-composite wall assemblies.													
3. For 550 and 600SF30EQD h/t exceeds 200. However, confirmatory testing has shown that the NASPEC equations conservatively predict web crippling capacities for these members. Thus, loads at or below those listed require no web stiffeners.													



- 1 **Condition 1** - End Reaction - One Flange Loading
- 2 **Condition 2** - Interior Reaction - One Flange Loading
- 3 **Condition 3** - End Reaction - Two Flange Loading
- 4 **Condition 4** - Interior Reaction - Two Flange Loading

SUPREME STUD - DEEP LEG TRACK

Supreme Deep Leg Track (SFT) - Section Properties

Part Number	Design Thickness (in)	Fy (ksi)	Area (in ²)	Weight (lb/ft)	Gross Properties					Effective Properties				Torsional Properties					
					Ix (in ⁴)	Sx (in ³)	Rx (in)	Iy (in ⁴)	Ry (in)	Lx (in ⁴)	Sxe (in ³)	Ma (in-k)	Vag (lb)	Jx1000 (in ⁴)	CW (in ⁶)	Xo (in)	m (in)	Ro (in)	β
162SFT200-D20	0.0188	57	0.106	0.36	0.063	0.072	0.770	0.046	0.662	-	-	-	-	0.013	0.026	-1.574	0.869	1.873	0.294
162SFT200-30EQD	0.0235	57	0.132	0.45	0.079	0.090	0.771	0.058	0.661	-	-	-	-	0.024	0.032	-1.571	0.868	1.871	0.295
162SFT250-D20	0.0188	57	0.125	0.42	0.077	0.088	0.785	0.085	0.823	-	-	-	-	0.015	0.047	-2.052	1.116	2.346	0.235
162SFT250-30EQD	0.0235	57	0.156	0.53	0.096	0.110	0.786	0.105	0.823	-	-	-	-	0.029	0.059	-2.049	1.115	2.344	0.236
162SFT300-30EQD	0.0235	57	0.179	0.61	0.114	0.130	0.797	0.172	0.980	-	-	-	-	0.033	0.099	-2.534	1.363	2.831	0.199
250SFT200-D20	0.0188	57	0.122	0.42	0.152	0.116	1.114	0.053	0.661	-	-	-	-	0.014	0.064	-1.427	0.082	1.927	0.452
250SFT200-30EQD	0.0235	57	0.153	0.52	0.190	0.144	1.115	0.067	0.660	-	-	-	-	0.028	0.080	-1.424	0.816	1.926	0.453
250SFT200-33EQS	0.0295	57	0.192	0.65	0.239	0.181	1.116	0.083	0.659	-	-	-	-	0.056	0.101	-1.421	0.814	1.923	0.454
250SFT200-43EQS	0.0400	57	0.260	0.88	0.314	0.244	1.117	0.112	0.657	0.229	0.124	4.22	1798	0.139	0.136	-1.416	0.812	1.919	0.456
250SFT250-D20	0.0188	57	0.141	0.48	0.184	0.140	1.141	0.097	0.830	-	-	-	-	0.017	0.119	-1.887	1.061	2.356	0.359
250SFT250-30EQD	0.0235	57	0.176	0.60	0.230	0.175	1.142	0.121	0.829	-	-	-	-	0.033	0.148	-1.885	1.059	2.355	0.359
250SFT250-33EQS	0.0295	57	0.221	0.75	0.289	0.219	1.143	0.152	0.828	-	-	-	-	0.064	0.186	-1.881	1.058	2.352	0.360
250SFT250-43EQS	0.0400	57	0.300	1.02	0.392	0.296	1.144	0.205	0.827	0.246	0.128	4.37	1798	0.160	0.251	-1.876	1.055	2.347	0.361
250SFT300-D20	0.0188	57	0.160	0.54	0.216	0.164	1.610	0.158	0.995	-	-	-	-	0.019	0.196	-1.421	0.814	2.810	0.296
250SFT300-30EQD	0.0235	57	0.200	0.68	0.270	0.205	1.162	0.198	0.994	-	-	-	-	0.037	0.245	-2.355	1.305	2.808	0.297
250SFT300-33EQS	0.0295	57	0.251	0.85	0.339	0.257	1.163	0.247	0.994	-	-	-	-	0.073	0.307	-2.352	1.303	2.805	0.297
250SFT300-43EQS	0.0400	57	0.340	1.16	0.793	0.435	1.528	0.229	0.820	0.526	0.197	6.72	1661	0.181	0.526	-1.733	1.003	2.452	0.500
350SFT200-D20	0.0188	57	0.141	0.48	0.311	0.172	1.485	0.060	0.649	-	-	-	-	0.017	0.136	-1.293	0.765	2.073	0.611
350SFT200-30EQD	0.0235	57	0.176	0.60	0.389	0.215	1.486	0.074	0.649	-	-	-	-	0.033	0.170	-1.291	0.763	2.072	0.612
350SFT200-33EQS	0.0295	57	0.221	0.75	0.489	0.269	1.487	0.093	0.647	-	-	-	-	0.064	0.213	-1.288	0.762	2.071	0.613
350SFT200-43EQS	0.0400	57	0.300	1.02	0.664	0.363	1.487	0.125	0.646	0.494	0.201	6.85	1661	0.160	0.287	-1.283	0.759	2.067	0.615
350SFT250-D20	0.0188	57	0.160	0.54	0.372	0.206	1.526	0.109	0.824	-	-	-	-	0.019	0.249	-1.733	1.003	2.452	0.500
350SFT250-30EQD	0.0235	57	0.200	0.68	0.466	0.257	1.527	0.135	0.823	-	-	-	-	0.037	0.311	-1.731	1.002	2.450	0.501
350SFT250-33EQS	0.0295	57	0.251	0.85	0.585	0.322	1.528	0.169	0.822	-	-	-	-	0.073	0.389	-1.727	1.001	2.448	0.502
350SFT250-43EQS	0.0400	57	0.340	1.16	0.793	0.435	1.528	0.229	0.820	0.526	0.197	6.72	1661	0.181	0.526	-1.722	0.998	2.444	0.504
350SFT300-D20	0.0188	57	0.179	0.61	0.433	0.239	1.557	0.177	0.995	-	-	-	-	0.021	0.409	-2.186	1.245	2.863	0.417
350SFT300-30EQD	0.0235	57	0.223	0.76	0.542	0.299	1.558	0.221	0.994	-	-	-	-	0.041	0.510	-2.184	1.244	2.861	0.417
350SFT300-33EQS	0.0295	57	0.280	0.95	0.681	0.374	1.559	0.277	0.993	-	-	-	-	0.081	0.640	-2.181	1.242	2.859	0.418
350SFT300-43EQS	0.0400	57	0.380	1.29	0.924	0.506	1.560	0.373	0.992	-	-	-	-	0.203	0.865	-2.175	1.240	2.854	0.419
362SFT200-D20	0.0188	57	0.143	0.49	0.336	0.179	1.530	0.060	0.648	-	-	-	-	0.017	0.147	-1.278	0.759	2.096	0.628
362SFT200-30EQD	0.0235	57	0.179	0.61	0.420	0.224	1.531	0.075	0.647	-	-	-	-	0.033	0.184	-1.276	0.758	2.095	0.629
362SFT200-33EQS	0.0295	57	0.225	0.77	0.528	0.281	1.532	0.094	0.646	-	-	-	-	0.065	0.230	-1.273	0.756	2.094	0.630
362SFT200-43EQS	0.0400	57	0.305	1.04	0.716	0.379	1.532	0.126	0.644	0.536	0.208	7.10	1603	0.163	0.310	-1.268	0.753	2.090	0.632
362SFT250-D20	0.0188	57	0.162	0.55	0.401	0.214	1.573	0.110	0.823	-	-	-	-	0.019	0.269	-1.716	0.997	2.469	0.517
362SFT250-30EQD	0.0235	57	0.203	0.69	0.502	0.267	1.573	0.137	0.822	-	-	-	-	0.037	0.336	-1.713	0.995	2.467	0.518
362SFT250-33EQS	0.0295	57	0.254	0.87	0.631	0.335	1.574	0.171	0.821	-	-	-	-	0.074	0.421	-2.180	1.094	2.465	0.519
362SFT250-43EQS	0.0400	57	0.345	1.17	0.855	0.453	1.575	0.231	0.819	0.571	0.204	6.97	1603	0.184	0.569	-1.705	0.991	2.461	0.520
362SFT300-D20	0.0188	57	0.181	0.62	0.467	0.249	1.605	0.179	0.994	-	-	-	-	0.021	0.442	-2.167	1.238	2.874	0.432
362SFT300-30EQD	0.0235	57	0.226	0.77	0.584	0.311	1.606	0.223	0.994	-	-	-	-	0.042	0.552	-2.165	1.237	2.873	0.432
362SFT300-33EQS	0.0295	57	0.284	0.97	0.733	0.390	1.607	0.280	0.993	-	-	-	-	0.082	0.692	-2.161	1.235	2.870	0.433
362SFT300-43EQS	0.0400	57	0.385	1.31	0.995	0.527	1.608	0.378	0.991	-	-	-	-	0.205	0.935	-2.156	1.232	2.866	0.434
400SFT200-D20	0.0188	57	0.151	0.51	0.417	0.202	1.664	0.062	0.642	-	-	-	-	0.018	0.184	-1.236	0.741	2.170	0.676
400SFT200-30EQD	0.0235	57	0.188	0.64	0.521	0.253	1.665	0.077	0.641	-	-	-	-	0.035	0.229	-1.234	0.740	2.169	0.676
400SFT200-33EQS	0.0295	57	0.236	0.80	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	1.09	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
400SFT250-D20	0.0188	57	0.169	0.58	0.496	0.241	1.712	0.113	0.818	-	-	-	-	0.020	0.335	-1.666	0.977	2.525	0.565
400SFT250-30EQD	0.0235	57	0.212	0.72	0.620	0.300	1.712	0.141	0.817	-	-	-	-	0.039	0.419	-1.664	0.976	2.523	0.565
400SFT250-33EQS	0.0295	57	0.266	0.90	0.779	0.377	1.713	0.177	0.816	-	-	-	-	0.077	0.525	-1.661	0.974	2.522	0.566
400SFT250-43EQS	0.0400	57	0.360	1.22	1.057	0.509	1.714	0.238	0.814	0.720	0.226	7.71	1450	0.192	0.709	-1.656	0.972	2.518	0.568
400SFT300-D20	0.0188	57	0.188	0.64	0.575	0.279	1.749	0.185	0.991	-	-	-	-	0.022	0.550	-2.111	1.217	2.915	0.475
400SFT300-30EQD	0.0235	57	0.235	0.80	0.719	0.348	1.749	0.231	0.991	-	-	-	-	0.043	0.687	-2.109	1.216	2.913	0.476
400SFT300-33EQS	0.0295	57	0.295	1.00	0.904	0.437	1.750	0.289	0.990	-	-	-	-	0.086	0.861	-2.106	1.214	2.911	0.477
400SFT300-43EQS	0.0400	57	0.400	1.36	1.039	0.339	1.750	0.069	0.607	-	-	-	-	0.213	1.164	-2.100	1.211	2.907	0.478
550SFT200-D20	0.0188	57	0.223	0.76	1.064	0.378	2.183	0.085	0.615	-	-	-	-	0.041	0.474</td				

SUPREME STUD - WEB DEPTH-TO-THICKNESS RATIOS & SECTION PROPERTY SYMBOLS

Web Depth-to-Thickness Ratios

Mil Thickness Design Thickness (in) Inside Bend Radius (in) Depth (in)	D25 0.0155 0.086		D20 0.0188 0.0844		30EQD/33EQD 0.0235 0.082		33EQS 0.0295 0.079		43EQS 0.0400 0.0712	
	$h \text{ (in)}^2$	hit	$h \text{ (in)}^2$	hit	$h \text{ (in)}^2$	hit	$h \text{ (in)}^2$	hit	$h \text{ (in)}^2$	hit
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	2131	3.294	175	3.289	139	3.283	111	3.278	81
3.625	3.422	2211	3.419	181	3.414	145	3408	115	3.403	85
4	3.797	2451	3.794	200	3.789	161	3.783	128	3.778	94
5.5	5.297		5.294		5.289	2251	5.283	179	5.278	131
6	5.797		5.794		5.789	2461	5.783	196	5.778	144
8	7.797		7.794		7.789		7.783		7.778	194

NOTES: 1 h/t exceeds 200, web stiffeners required

2 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.

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

4 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

I_x: Moment of inertia of the cross section about the x-axis.

S_x: Section modulus about the x-axis.

R_x: Radius of gyration of cross section about the x-axis.

I_y: Moment of inertia of cross section about the y-axis.

R_y: Radius of gyration of cross section about the y-axis.

Effective Properties

I_{xe}: Effective moment of inertia about the x-axis. **S_{xe}:** Effective section modulus about the x-axis. **Ma:** Allowable moment based on local buckling.

Mad: Allowable moment based on distortional buckling assuming K_φ = 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.l.

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.

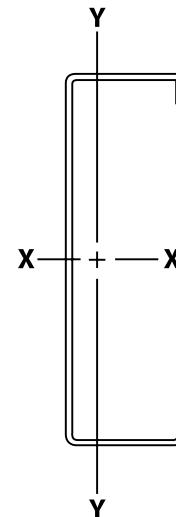
m: Distance from shear center to mid-plane of web.

Ro: Polar radius of gyration of cross section about the shear center.

β: $1 - (X_o / R_o)^2$

Lu: Critical unbraced length for lateral-torsional buckling. Members are considered fully braced when unbraced length is less than Lu.

K_φ: Distortional buckling moment (Mad) is calculated without the beneficial effect of sheathing to rotational stiffness. K_φ = 0.



Supreme Tested Assemblies

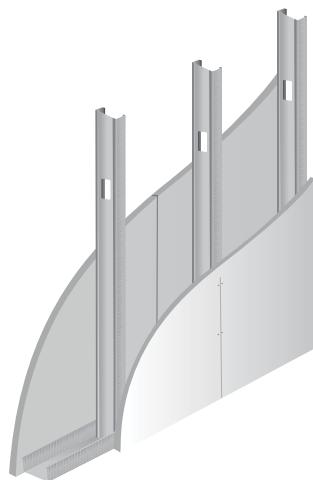
Riverbank Acoustical

LABORATORIES

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).

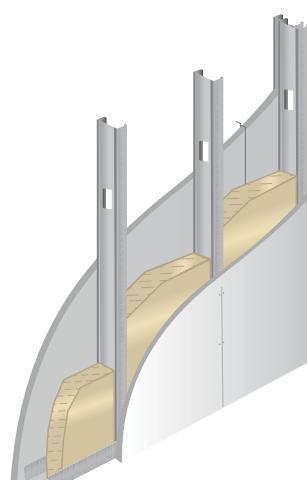
Partition Specifications

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	2 layers	2 layers on RC-1	5/8" Type X	R-11 insulated	24" oc	61



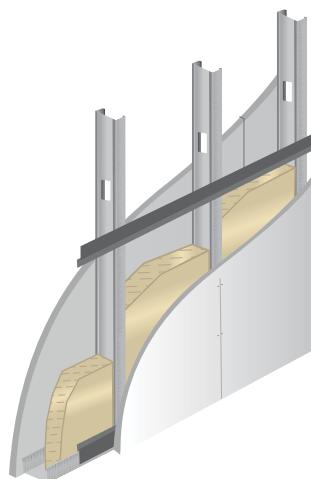
Partition Type 1

38 STC
3 5/8" Stud



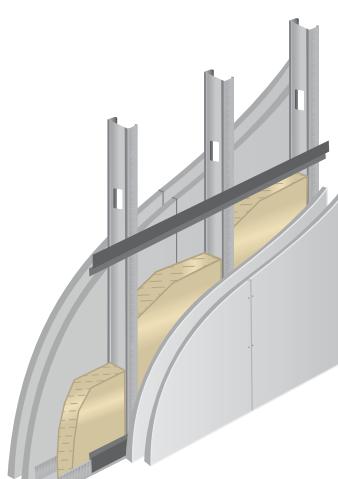
Partition Type 2

47 STC
3 5/8" Stud



Partition Type 3

61 STC
3 5/8" Stud



Partition Type 4

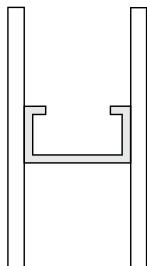
52 STC
3 5/8" Stud

SUPREME STUD - TECHNICAL DATA - FIRE RATED ASSEMBLIES

UL Approved Designs

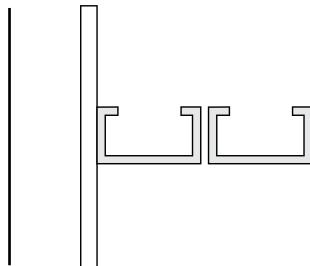
One-Hour Wall Assemblies - Non-Load Bearing

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

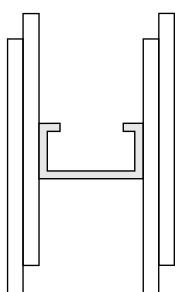


One-Hour Chase Wall Assembly

- 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

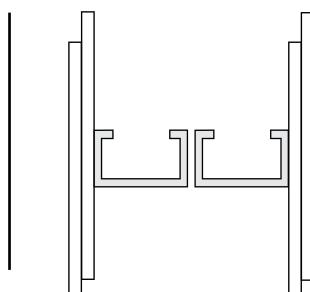
Two-Hour Wall Assemblies - Non-Load Bearing

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

Notes:

1. Fire Ratings are for wall assemblies, not individual wall components.
2. Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
3. Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements.
4. The published information cannot always address every construction nuance encountered in the field. When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design.
5. Users of fire resistance assemblies are advised to consult the general UL Guide Information for each product category and each group of assemblies. The UL Guide Information includes specifics concerning alternate materials and alternate methods of construction.

Screw Table Notes

- Capacities based on AISI S100 Section E4 specification.
- When connecting materials of different steel thicknesses or tensile strengths, use the lowest values. Tabulated values assume two sheets of equal thickness are connected.
- Capacities are based on Allowable Strength Design (ASD) and include safety factor of 3.0.
- Where multiple fasteners are used, screws are assumed to have a center-to-center spacing of at least 3 times the nominal diameter (d).

- 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.
- Values are for pure shear of tension loads. See AISI S100 Section E4.5 for combined shear and pull-over
- 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).
- Higher values, especially for screw strength, may be obtained by specifying screws from a specific manufacturer.

Allowable Screw Connection Capacity (Pounds Per Screw)

Thickness (Mils)	Design Thickness	Fy Yield (ksi)	Fu Tensile (ksi)	#6 Screw			#8 Screw			#10 Screw			#12 Screw			1/4" Screw	
				0.138" dia; 1/4" Head			0.164" dia; 5/16" Head			0.190" dia; 0.340" Head			0.216" dia; 0.340" Head			0.250" dia; 0.409" Head	
				Shear	Tension / Pullout	Pullover	Shear	Tension / Pullout	Pullover	Shear	Tension / Pullout	Pullover	Shear	Tension / Pullout	Pullover	Shear	Tension / Pullout
D25	0.0155	50	65	111 ¹	39	137	111 ¹	47	157	111 ¹	54	171	-	-	-	-	-
D20	0.0188	57	65	142 ¹	48	166	150 ¹	57	191	164 ¹	66	208	109	75	208	-	-
30EQD	0.0235	57	65	174 ¹	60	208	184 ¹	71	239	236 ¹	82	260	152	93	260	-	-
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

NOTES:

Values are based on testing using AISI procedures.

Weld Table Notes

- Weld capacities are based the AISI S100 Specification Sections E2.4 for fillet welds and E2.5 for groove welds.
- When connecting materials of different steel thicknesses or tensile strengths (Fu), the lowest values should be used.
- Capacities are based on Allowable Strength Design (ASD) and include appropriate safety factors.
- Longitudinal capacity is loading in parallel direction of the length of the weld.
- 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.
- Transverse capacity is loading in perpendicular direction of the length of the weld.
- For flare groove welds, the effective throat of weld is conservatively assumed to be less than 2t.

Allowable Welds Capacity (Pounds) for 1" Long Welds

Thickness (Mils)	Design Thickness	Fy Yield (ksi)	Fu (ksi)	Fillet Welds		Flare Groove Welds	
				Parallel 1	Perpendicular	Parallel 2	Perpendicular
43EQS	0.0400	57	65	639	1106	696	849

- NOTES:**
- For welds with $L/t > 25$ where L is weld length and t is the thickness of the welded member
 - For $t \leq tw < 2t$ where t = thickness of welded member and tw is effective throat thickness of weld
 - Weld Capacities based on 2007 NASPEC Section E2.4 and E2.5



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