IBC 2009/2012 COMPLIANT

SSFSA SM

SUPREME STEEL FRAMING SYSTEM ASSOCIATION

ICC ES ESR #2507
(IBC 2006 ONLY)

ICC ES ESR #3054
(IBC 2006 ONLY)

Architectural Testing Approved

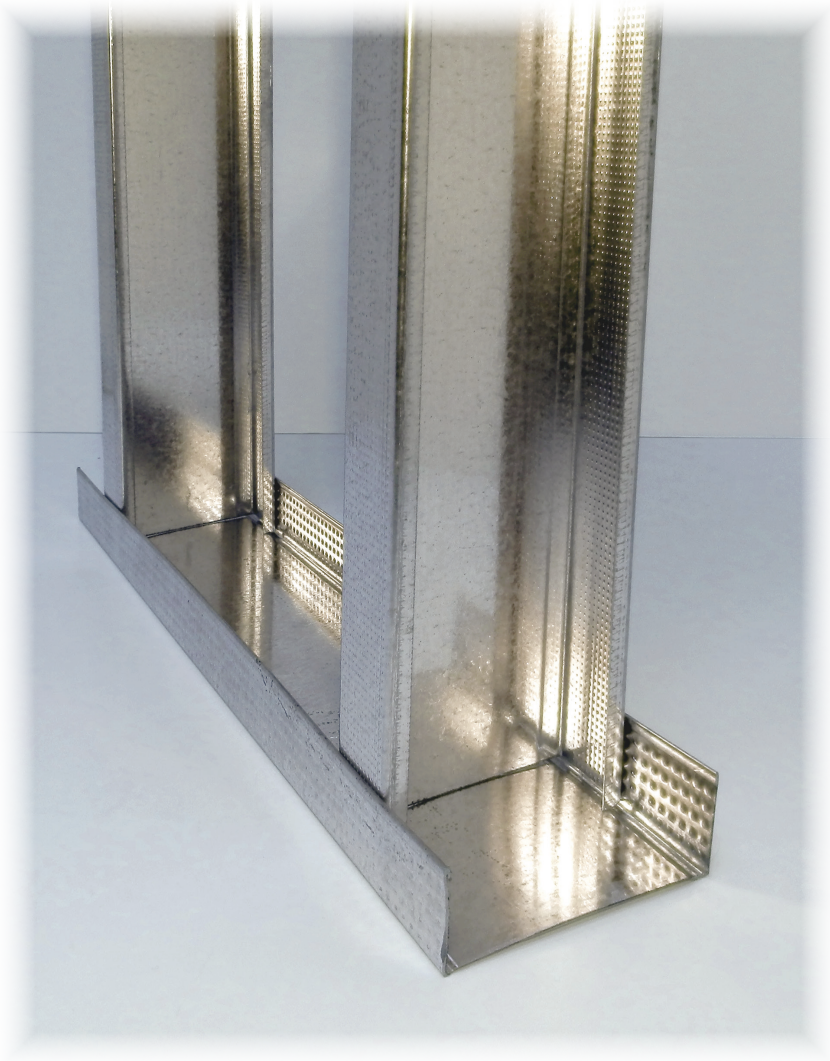
c UL us

Supreme Framing System

Product Catalog

SFS SUPREME FRAMING SYSTEM

The Benefits of Supreme Framing System™ Speak for Themselves



SFS®
SUPREME FRAMING SYSTEM®

What is the Supreme Framing System™?

Supreme Framing System™ stud and track is a design that uses thinner steel and superior 57 ksi yield strength when compared to traditional material. Supreme Framing System™ is available nationally through multiple independent steel stud manufacturers.

- Complies with 2009 and 2012 IBC
- Multiple UL approved fire rated assemblies
- Excellent acoustical performance
- 57 ksi steel - reduces screw stripping
- Fastens with sharp point screws (30EQD and D20)
- Wider flanges for screw placement
- Full line of Supreme Framing accessories
    - Hat Channel and Z-Furring
    - Slotted Track
    - Custom Brake Shapes

Supreme Is Certified!

All inspections and testing for the Supreme Steel Framing System Association (SSFSA) are provided by Architectural Testing, Inc. SSFSA sponsors a third-party certification program requiring that products are continually audited in order to ensure consistent quality and compliance to ASTM C645, C955, and IBC Codes.

Products must be tested twice a year on unannounced visits. Steel is chemically stripped and tested for coating weight and bare metal thickness, and the dimensional properties of the stud are measured. All requirements must be satisfied in order to earn certification. All members of the SSFSA must satisfy the requirements each time they are audited.

All certified Supreme Steel has a label showing that it is third-party certified. Labels may be located on bundles or each framing member. The third-party certification label guarantees to the contractor and owner that materials are high quality and code compliant.

Look for the sticker! Third-Party Certified Code Compliant by nationally recognized Architectural Testing, Inc.

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Table of Contents

Technical Information **4**
Supreme Nomenclature 4
Definitions of Section Property Symbols 4
Supreme Stud Profiles 4
Steel Thickness and Stiffening Lip Length 5
General Notes for All Tables 5
Screw and Weld Capacities 5

Section Properties **6**
Supreme (SFS) Studs 6
Supreme (SFT) Track 7-8

Composite Interior Wall Heights **8**

Non-Composite Interior Wall Heights **9**

Curtain Wall Limiting Heights **10-12**

Combined Axial and Lateral Loads **13-15**

Web Crippling Loads **16**
Web Crippling Allowable Loads 16
Web Crippling Conditions 16

Ceiling Spans **17**
Ceiling Span Deflection Limits 17
Mid-Span Bracing Details 17

Hat Channel Section Properties **18**
Hat Channel Section Properties 18
Hat Channel Span Tables 18

Supreme Acoustical Performance Testing **19**

Supreme Fire Rated Assemblies **20**
UL Approved Designs 20-21

Supreme Deep Leg Deflection Track **21**
Supreme Deep Leg Deflection Track 21

Supreme Framing Accessories **22-23**
Supreme Z-Furring 22
Supreme Custom Shapes 23

LEED Credits

MR Credit 2 - construction waste management (1-2 points)
MR Credit 4 - recycled content (1-2 points)
MR Credit 5 - regional materials (1-2 points)

ICC-ES Code Approvals

ICC-ES ESR-2507: Supreme-22 (30EQD)
ICC-ES ESR-3054: Supreme-38 (43EQS)

Independent Product Certification

- Fire testing - Underwriters Laboratories, Inc.
- Sound ratings - Riverbank Acoustical Laboratories
- Third party testing - Architectural Testing, Inc.
- Structural testing - O.S.U. (Oregon State University)
  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"

American Society for Testing and Materials (ASTM)

- A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized), or Zinc-Iron Alloy-Coated 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
- 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

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Supreme Nomenclature

Stud Example

6" Drywall Stud for 30EQD Supreme: 600SFS-30EQD

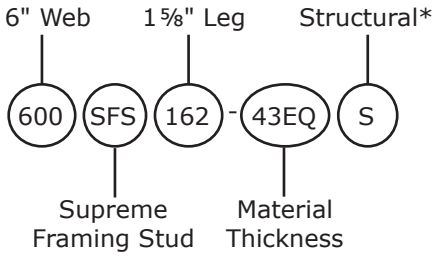
6" Structural Stud for 43EQS Supreme: 600SFS162-43EQS

Track Example

6" Track, 1¼" Leg for Drywall D20 Supreme: 600SFT125-D20

6" Track, 2" Leg for Structural 33EQS Supreme: 600SFT200-33EQS

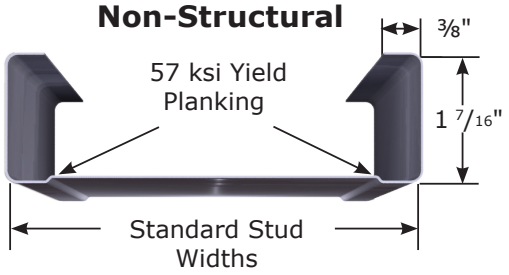
Example



** "D" Drywall Studs and Track "S" Structural Studs and Track*

Supreme Stud Profiles

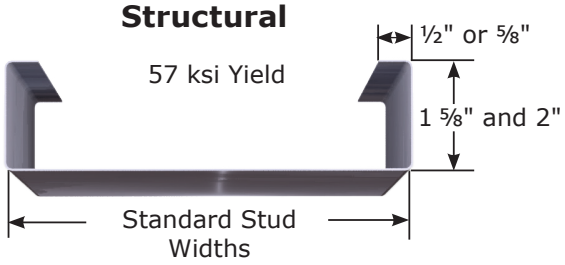
Non-Structural



Available Sizes

1 5/8", 2 ½", 3 ½", 3 5/8", 4", 5 ½" and 6"

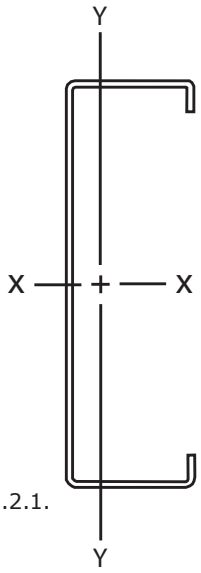
Structural



Available Sizes

2 ½", 3 ½", 3 5/8", 4", 5 ½", 6" and (8" 43EQS only)

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_x: Effective moment of inertia about the X-axis.
- S_x: Effective section modulus about the X-axis.
- M_{al}: Allowable moment based on local buckling.
- M_{ad}: Allowable moment based on distortional buckling, assuming $K\varphi = 0$.
- M_a: Allowable moment for track and channel members, based on local buckling only.
- V_{ag}: Allowable strong axis shear away from punchout, calculated in accordance with AISI S100 section C3.2.1.
- V_{anet}: 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.
- C_w: Torsional warping constant.
- X_o: Distance from the shear center to the centroid along the principal X-axis.
- m: Distance from shear center to mid-plane of web.
- R_o: Polar radius of gyration of cross section about the shear center.
- β: $1- (X_o/R_o)^2$
- L_u: Critical unbraced length for lateral-torsional buckling. Members are considered fully braced when unbraced length is less than L_u.

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General Notes for All Tables

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 IBC 2012.
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 US provisions.
3. The strength increase from cold work of forming has been incorporated for flexural strength per AISI S100 section A7.2.
4. The effective moment of inertia for deflection is calculated at a stress which results in a section modulus such that the stress times the section modulus at that stress is equal to the allowable moment. AISI S100-07 Procedure I for serviceability determination has been used.
5. When provided, factory punchouts will be located along the centerline of the webs of the stud members and will have a minimum center-to-center spacing of 24". Punchouts for members > 2 ½" deep are a maximum of 1 ½" wide x 4" long. Members with depths 2 ½" and smaller are maximum ¾" wide x 4" long.
6. Members with loads that exceed the 10 psf limit for non-structural members require the use of structural material with G-60 coating.

Steel Thickness and Stiffening Lip Length

Steel Thickness Table

Designation Thickness (mils)	Minimum Thickness [1] (in)	Design Thickness [1] (in)	Design Inside Corner Radii (in)
D20	0.0179	0.0188	0.0844
30EQD	0.0223	0.0235	0.0820
33EQS	0.0280	0.0295	0.0790
43EQS	0.0380	0.0400	0.0712

Stiffening Lip Length

Member	Flange Width	Stiffening Lip Length (in)
S143	1 7/16"	0.375
S162	1 5/8"	0.500
S200	2"	0.625

1. Minimum thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the job site based on section A2.4 of AISI S100.

Screw and Weld Capacities

Screw Table Notes

1. Capacities based on section E4 of the AISI S100 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 ½ times the nominal diameter (d) of the screw.
6. Tension capacity is based on the lesser of pullout capacity in sheet closest to screw tip, or pullover capacity for sheet closest to screw head (based on head diameter shown).
7. Note that for all tension values shown in this table, pullover values have been reduced by 50% assuming eccentrically loaded connections that produce a non-uniform pull-over force on the fastener.
8. Values are for pure shear or tension loads. See AISI S100 section E4.5 for combined shear and pull-over.
9. Higher values, especially for screw strength, may be obtained by specifying screws from a specific manufacturer.
10. Shear and tension data for screws was developed with the assistance of the Wei-Wen Yu Center for Cold-Formed Steel Structures (CCFSS), using manufacturers' data and evaluation reports available at the time of publication.

Allowable Screw Connection Capacity (Pounds Per Screw)

Thickness (Mils)	Design Thickness	Fy Yield (ksi)	Fu Tensile (ksi)	#6 Screw 0.138" Dia; ¼" Head		#8 Screw 0.164" Dia; 5/16" Head		#10 Screw 0.190" Dia; 0.340" Head		#12 Screw 0.216" Dia; 0.340" Head		¼" Screw 0.250" Dia; 0.409" Head	
				Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension
D20	0.0188	57	65	142 [1]	48	150 [1]	57	164 [1]	66	109	75	-	-
30EQD	0.0235	57	65	174 [1]	60	184 [1]	71	236 [1]	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

1. Values are based on testing using AISI S100 procedures.

Weld Table Notes

1. Capacities based on section E2.4 (for fillet welds) and E2.5 (for flare groove welds) of the AISI S100 specification.
2. When connecting materials of different steel thicknesses or tensile strengths, use the lowest values.
3. Capacities are based on Allowable Strength Design (ASD) and include appropriate safety factors.
4. Weld capacities are based on either 3/32" or ⅛" diameter E60 or E70 electrodes. The use of 0.030" to 0.035" diameter wire electrodes may provide best results.
5. Parallel capacity is considered to be loading in the direction of the length of the weld.
6. For flare groove welds, the effective throat of weld is conservatively assumed to be less than 2t.

Weld Capacity (Pounds Per 1" Weld)

Steel Thickness		Fy (ksi)	Fu (ksi)	Nominal Weld Size	Weld Type			
					Fillet		Flare Groove	
Mils	Design				Longitudinal	Transverse	Longitudinal [1]	Transverse
43EQS	0.0400	57	65	639	1106	696	849	849

1. For weld lengths greater than 1", equations E2.4-1 and E2.4-2 must be checked.

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Section Properties

Table Notes

1. The centerline bend radius is based on inside corner radii shown in the Steel Thickness Table on page 5.
2. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI S100 A7.2.
3. Tabulated gross properties are based on the full-unreduced cross section of the studs, away from punchouts.
4. For deflection calculations, use the effective moment of inertia.
5. Allowable moment is the lesser of Mal and Mad. Stud distortional buckling is based on an assumed Kφ = 0.

Non-Structural (SFS) Supreme Studs - Section Properties

Section	Design Thickness (in)	Fy (ksi)	Gross Properties							Effective Properties						Torsional Properties						Lu (in)
			Area (in2)	Weight (lb/ft)	Ix (in4)	Sx (in3)	Rx (in)	Iy (in4)	Ry (in)	Ixe (in4)	Sxe (in3)	Mal (in-k)	Mad (in-k)	Vag (lb)	VaNet (lb)	Jx1000 (in4)	Cw (in6)	Xo (in)	m (in)	Ro (in)	ß	
162SFS-D20	0.0188	57	0.094	0.32	0.044	0.055	0.686	0.028	0.545	0.042	0.033	0.93	1.08	397	131	0.011	0.022	-1.365	0.779	1.622	0.292	29.1
162SFS-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	29.0
250SFS-D20	0.0188	57	0.111	0.38	0.117	0.093	1.027	0.033	0.545	0.110	0.060	1.71	1.72	258	196	0.013	0.049	-1.217	0.719	1.683	0.477	28.1
250SFS-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	28.0
350SFS-D20	0.0188	57	0.130	0.44	0.252	0.144	1.395	0.037	0.533	0.233	0.077	2.20	2.46	180	159	0.015	0.097	-1.088	0.662	1.847	0.653	27.6
350SFS-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	27.6
362SFS-D20	0.0188	57	0.132	0.45	0.273	0.151	1.439	0.037	0.531	0.253	0.080	2.28	2.56	173	164	0.016	0.104	-1.074	0.655	1.873	0.671	27.6
362SFS-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	27.5
400SFS-D20	0.0188	57	0.139	0.47	0.343	0.172	1.572	0.038	0.526	0.300	0.087	2.48	2.83	156	156	0.016	0.129	-1.034	0.637	1.954	0.720	27.5
400SFS-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	27.4
550SFS-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	N/A
550SFS-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	26.9
600SFS-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	N/A
600SFS-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	26.7

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 B1, but may be used in accordance with SSFSA's published composite wall data for these members.

Structural (SFS) Supreme Studs - Section Properties

Section	Design Thickness (in)	Fy (ksi)	Gross Properties							Effective Properties						Torsional Properties						Lu (in)
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ixe (in^4)	Sxe (in^3)	Mal (in-k)	Mad (in-k)	Vag (lb)	VaNet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	ß	
250SFS162-33EQS	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	33.4
250SFS162-43EQS	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	33.4
250SFS200-43EQS	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	39.4
350SFS162-33EQS	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	32.5
350SFS162-43EQS	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	32.3
350SFS200-43EQS	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	38.4
362SFS162-33EQS	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	32.4
362SFS162-43EQS	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	32.3
362SFS200-43EQS	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	38.4
400SFS162-33EQS	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	32.2
400SFS162-43EQS	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	32.0
400SFS200-43EQS	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	38.2
550SFS162-33EQS	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	31.5
550SFS162-43EQS	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	31.3
550SFS200-43EQS	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	37.7
600SFS162-33EQS	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	31.3
600SFS162-43EQS	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	31.1
600SFS200-43EQS	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	37.5
800SFS162-43EQS	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	30.4
800SFS200-43EQS	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	36.9

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Table Notes

1. The centerline bend radius is based on inside corner radii shown in the Steel Thickness Table on page 5.
2. Web depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius.
3. Hems on non-structural track sections are ignored.
4. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI S100 section A7.2.
5. For deflection calculations, use the effective moment of inertia.

Supreme (SFT) Track - Section Properties

Section	Design Thickness (in)	Fy (ksi)	Gross Properties							Effective Properties				Torsional Properties					
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ixe (in^4)	Sxe (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	ß
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-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	6.230	1.422	0.399
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-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	0.082	1.927	4.520
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
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	-0.675	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-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
362SFT125-D20	0.0188	57	0.115	0.39	0.237	0.126	1.436	0.017	0.380	0.188	0.053	1.80	169	0.014	0.042	-0.665	0.413	1.627	0.833
362SFT125-30EQD	0.0235	57	0.144	0.49	0.297	0.158	1.437	0.021	0.379	0.240	0.076	2.60	326	0.027	0.052	-0.663	0.412	1.628	0.834
362SFT125-33EQS	0.0295	57	0.181	0.61	0.374	0.199	1.438	0.026	0.378	0.311	0.117	4.00	644	0.052	0.065	-0.660	0.411	1.627	0.835
362SFT125-43EQS	0.0400	57	0.245	0.83	0.506	0.268	1.438	0.035	0.376	0.439	0.194	6.61	1603	0.131	0.087	-0.656	0.408	1.625	0.837
362SFT150-D20	0.0188	57	0.125	0.42	0.271	0.144	1.474	0.028	0.470	-	-	-	-	0.015	0.067	-0.861	0.526	1.770	0.763
362SFT150-30EQD	0.0235	57	0.156	0.53	0.338	0.180	1.474	0.034	0.469	0.258	0.076	2.60	326	0.029	0.085	-0.859	0.525	1.769	0.764
362SFT150-33EQS	0.0295	57	0.195	0.66	0.425	0.226	1.475	0.043	0.468	0.335	0.117	3.98	644	0.057	0.106	-0.857	0.523	1.768	0.765
362SFT150-43EQS	0.0400	57	0.265	0.90	0.576	0.305	1.475	0.057	0.466	0.474	0.201	6.85	1603	0.141	0.142	-0.852	0.521	1.766	0.767
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
400SFT125-D20 [1]	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	0.109	-0.628	0.395	1.724	0.867
400SFT150-D20 [1]	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	0.598	0.232	7.92	1450	0.149	0.178	-0.819	0.506	1.858	0.806
400SFT200-D20 [1]	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

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 B1, but may be used in accordance with SSFSA's published composite wall data for these members.

Section Properties Continued on Next Page

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Section Properties Continued

Supreme (SFT) Track - Section Properties

Section	Design Thickness (in)	Fy (ksi)	Gross Properties							Effective Properties				Torsional Properties					
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ixe (in^4)	Sxe (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	ß
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
550SFT125-D20 [2]	0.0188	57	0.15	0.51	0.63	0.224	2.046	0.018	0.349	-	-	-	-	0.018	0.108	-0.546	0.354	2.146	0.935
550SFT125-30EQD [1]	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-D20 [2]	0.0188	57	0.16	0.54	0.703	0.25	2.098	0.031	0.437	-	-	-	-	0.019	0.176	-0.72	0.458	2.26	0.899
550SFT150-30EQD [1]	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-D20 [2]	0.0188	57	0.179	0.61	0.851	0.303	2.182	0.068	0.616	-	-	-	-	0.021	0.38	-1.095	0.677	2.518	0.811
550SFT200-30EQD [1]	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
600SFT125-D20 [2]	0.0235	57	0.16	0.54	0.776	0.254	2.204	0.019	0.342	-	-	-	-	0.019	0.131	-0.522	0.341	2.29	0.948
600SFT125-30EQD [1]	0.0235	57	0.200	0.68	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 [1]	0.0295	57	0.251	0.85	1.218	0.397	2.204	0.029	0.340	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	1.16	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-D20 [2]	0.0188	57	0.169	0.58	0.864	0.282	2.259	0.031	0.429	-	-	-	-	0.02	0.214	-0.69	0.443	2.401	0.917
600SFT150-30EQD [1]	0.0235	57	0.212	0.72	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 [1]	0.0295	57	0.266	0.90	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	1.22	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 [2]	0.0188	57	0.188	0.64	1.039	0.339	2.35	0.069	0.607	-	-	-	-	0.022	0.464	-1.055	0.659	2.647	0.841
600SFT200-30EQD [1]	0.0235	57	0.235	0.80	1.299	0.424	2.351	0.086	0.606	-	-	-	-	0.043	0.578	-1.053	0.658	2.646	0.842
600SFT200-33EQS [1]	0.0295	57	0.295	1.00	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	1.36	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 [1]	0.0400	57	0.420	1.43	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 [1]	0.0400	57	0.440	1.50	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 [1]	0.0400	57	0.480	1.63	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

[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 B1, but may be used in accordance with SSFSA's published composite wall data for these members.

See Table Notes on Page 7.

Composite Interior Wall Heights

Table Notes

1. Allowable composite limiting heights are calculated using ICC-ES AC86-2010. The $^1/_3$ stress increase for strength was not used.
2. The gypsum board must be applied full height to each stud flange and installed using minimum No. 6 Type S drywall screws.
3. No fasteners are required for attaching the stud to the track.
4. Stud and bearing must be a minimum of 1".
5. Galvanizing to be G-40 minimum for 10 PSF or less, and G-60 minimum for greater than 10 PSF lateral loads.

Composite Interior Wall Heights

Stud Member	Fy (ksi)	Spacing (in) o.c.	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
162SFS-D20	57	16	11' 5"	9' 3"	8' 3"	9' 11"	8' 1"	-	9' 0"	-	-	-	-	-
	57	24	9' 11"	8' 1"	-	8' 8"	-	-	7' 11"	-	-	-	-	-
250SFS-D20	57	16	14' 11"	12' 3"	10' 8"	13' 0"	10' 8"	9' 2"	11' 10"	9' 7"	8' 3"	7' 11"	7' 11"	-
	57	24	13' 0"	10' 8"	9' 2"	11' 4"	9' 2"	7' 11"	9' 10" f	8' 4"	-	-	-	-
362SFS-D20	57	16	19' 0"	15' 11"	14' 0"	16' 5" f	13' 11"	12' 3"	14' 3" f	12' 7"	11' 1"	9' 4" f	9' 4" f	9' 4" f
	57	24	16' 5" f	13' 11"	12' 3"	13' 5" f	12' 1"	10' 7"	11' 7" f	10' 11"	9' 6"	-	-	-
400SFS-D20	57	16	20' 8"	17' 0"	14' 11"	17' 6" f	14' 10"	13' 0"	15' 2" f	13' 6"	11' 10"	10' 0" f	10' 0" f	10' 0" f
	57	24	17' 6" f	14' 10"	13' 0"	14' 4" f	12' 11"	11' 4"	12' 5" f	11' 9"	10' 1"	8' 2" f	8' 2" f	8' 2" f
600SFS-D20	57	16	26' 4" f	22' 4"	19' 9"	21' 6" f	16' 6"	17' 3"	18' 8" f	17' 9"	15' 8"	12' 3" f	12' 3" f	12' 3" f
	57	24	21' 6" f	19' 6"	17' 3"	17' 7" f	17' 1"	15' 1"	15' 3" f	15' 3" f	13' 7"	-	-	-
162SFS-30EQD	57	16	12' 10"	10' 2"	8' 9"	11' 2"	8' 9"	-	10' 2"	-	-	-	-	-
	57	24	11' 6"	9' 1"	-	10' 0"	-	-	9' 1"	-	-	-	-	-
250SFS-30EQD	57	16	15' 7"	12' 5"	10' 10"	13' 8"	10' 10"	9' 5"	12' 5"	9' 9"	8' 6"	9' 3" f	8' 6"	-
	57	24	13' 7"	10' 10"	9' 5"	11' 11"	9' 5"	8' 3"	10' 10"	8' 7"	-	-	-	-
362SFS-30EQD	57	16	20' 5"	15' 8"	13' 8"	17' 10"	13' 8"	12' 0"	16' 3"	12' 5"	10' 10"	11' 1" f	10' 10"	9' 4"
	57	24	18' 7"	14' 3"	12' 5"	15' 8" f	12' 5"	10' 9"	13' 3" f	11' 3"	9' 8"	9' 1" f	9' 1" f	8' 4"
400SFS-30EQD	57	16	20' 9"	16' 6"	14' 5"	18' 2"	14' 5"	12' 7"	16' 6"	13' 1"	11' 5"	11' 5" f	11' 5" f	9' 9"
	57	24	18' 9"	14' 8"	12' 10"	16' 0" f	12' 10"	11' 2"	13' 7" f	11' 8"	10' 1"	9' 4" f	9' 4" f	8' 9"
600SFS-30EQD	57	16	28' 6"	21' 6"	18' 9"	24' 11"	18' 9"	16' 5"	21' 11" f	17' 1"	14' 11"	13' 4" f	13' 4" f	13' 0"
	57	24	24' 9"	18' 6"	16' 6"	20' 6" f	16' 2"	14' 5"	16' 6" f	14' 8" f	13' 1"	10' 4" f	10' 4" f	10' 4" f

"f" Flexural stress controls allowable height.

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Non-Composite Interior Wall Heights

Table Notes

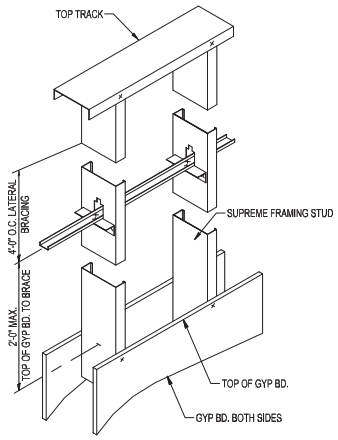
1. 5 pounds per square foot (psf), 7.5 psf, and 10 psf loads have NOT been reduced for strength or deflection checks; full lateral load is applied.
2. Limiting heights are based on properly fastened sheathing on both flanges over the full height of the stud.
3. Limiting heights are based on steel properties only (non-composite).
4. Web crippling check based on 1" end bearing.
5. Allowable moment is the lesser of Mal and Mad. Stud distortional buckling based on an assumed Kφ = 0.

Non-Composite Interior Wall Heights

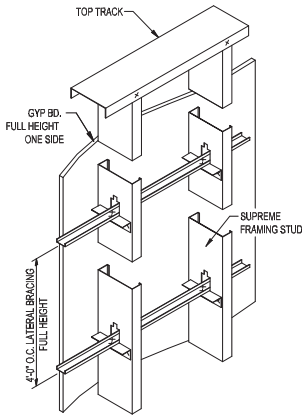
Stud Member	Fy (ksi)	Spacing (in) o.c.	5 psf			7.5 psf			10 psf		
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162SFS-D20	57	12	10' 4"	8' 2"	-	9' 0"	-	-	-	-	-
	57	16	9' 5"	-	-	-	-	-	-	-	-
	57	24	-	-	-	-	-	-	-	-	-
250SFS-D20	57	12	14' 3"	11' 3"	9' 10"	12' 4"	9' 10"	8' 7"	10' 8"	8' 11"	-
	57	16	12' 11"	10' 3"	8' 11"	10' 8"	8' 11"	-	9' 3"	8' 2"	-
	57	24	10' 8"	8' 11"	-	8' 9"	-	-	-	-	-
350SFS-D20	57	12	17' 1"	14' 6"	12' 8"	14' - 0"	12' 8"	11' 1"	12' 1"	11' 6"	10' 1"
	57	16	14' 10"	13' 2"	11' 6"	12' 1"	11' 6"	10' 1"	10' 6"	10' 6"	9' 2"
	57	24	12' 1"	11' 6"	10' 1"	9' 11"	9' 11"	8' 9"	8' 6"	8' 6"	-
362SFS-D20	57	12	17' 5"	15' 2"	13' 3"	14' 3"	13' 2"	11' 7"	12' 4"	11' 10"	10' 6"
	57	16	15' 1"	13' 9"	12' 0"	12' 4"	11' 10"	10' 6"	10' 8"	10' 8"	9' 7"
	57	24	12' 4"	11' 10"	10' 6"	10' 1"	10' 1"	9' 2"	8' 5"	8' 5"	8' 3"
400SFS-D20	57	12	18' 2"	15' 9"	13' 9"	14' 10"	13' 9"	12' 1"	12' 10"	12' 6"	10' 11"
	57	16	15' 9"	14' 4"	12' 6"	12' 10"	12' 6"	10' 11"	11' 2"	11' 2"	9' 11"
	57	24	12' 10"	12' 6"	10' 11"	10' 6"	10' 6"	9' 7"	9' 1"	9' 1"	8' 8"
162SFS-30EQD	57	12	11' 0"	8' 9"	-	9' 8"	-	-	8' 9"	-	-
	57	16	10' 0"	-	-	8' 9"	-	-	-	-	-
	57	24	8' 9"	-	-	-	-	-	-	-	-
250SFS-30EQD	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-30EQD	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-30EQD	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-30EQD	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-30EQD [1]	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-30EQD [1]	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" e	17' 0" e	14' 10"
	57	24	20' 11"	18' 9"	16' 4"	17' 1" e	16' 4" e	14' 3"	14' 10" e	14' 10" e	13' 0" e

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

Example of lateral bracing at wall not sheathed full-height.



Example of lateral bracing at wall sheathed full-height on one side.



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Curtain Wall Limiting Heights

Table Notes

1. Lateral loads have not been modified for strength checks; full loads are applied.
2. 15 psf and higher wind pressures have been multiplied by 0.7 for deflection determination, in accordance with footnote "f" of IBC table 1604.3. The 5 psf pressure has not been reduced for deflection checks.
3. For bending, studs are assumed to be adequately braced to develop full allowable moment.
4. Stud distortional buckling based on an assumed Kφ = 0.
5. Web crippling check based on 1" end bearing.
6. Limiting heights are based on steel properties only (non-composite).
7. End shear and web crippling capacity have not been reduced for punchouts. Punchouts are assumed to be in accordance with section C5 of AISI S201.
8. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore, span values may be greater than spans based on an effective moment of inertia listed in section property tables.

350 SFS

Stud Member	Fy (ksi)	Spacing (in) o.c.	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"

Stud Member	Fy (ksi)	Spacing (in) o.c.	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"	-	-	-	-

362 SFS

Stud Member	Fy (ksi)	Spacing (in) o.c.	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"

"e" Web stiffeners required at ends.

362 SFS table continues on next page.

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362 SFS table continued from previous page.

Stud Member	Fy (ksi)	Spacing (in) o.c.	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"	-	-	-	-

400 SFS

Stud Member	Fy (ksi)	Spacing (in) o.c.	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"

Stud Member	Fy (ksi)	Spacing (in) o.c.	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	-

550 SFS

Stud Member	Fy (ksi)	Spacing (in) o.c.	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"

"e" Web stiffeners required at ends.

550 SFS Table Continued on Next Page.

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550 SFS Table, Continued.

Stud Member	Fy (ksi)	Spacing (in) o.c.	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

600 SFS

Stud Member	Fy (ksi)	Spacing (in) o.c.	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"

Stud Member	Fy (ksi)	Spacing (in) o.c.	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

800 SFS

Stud Member	Fy (ksi)	Spacing (in) o.c.	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

Stud Member	Fy (ksi)	Spacing (in) o.c.	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 10.

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Combined Axial and Lateral Loads

Table Notes

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads determined in accordance with section C5 of AISI S100, with section D4 used for treatment of punchouts, and assuming that all axial loads pass through centroid of the effective section.
3. Listed lateral pressures and axial loads have not been modified for $^1/_3$ stress increase based on wind/earthquake or multiple transient loads.
4. Allowable axial loads based on lateral and torsional bracing at a maximum spacing of 4 feet on center.
5. For bending, studs are assumed adequately braced to develop full allowable moment.
6. With the exception of 5 psf interior walls, wind pressures have been multiplied by 0.7 for deflection determination, in accordance with footnote "f" of IBC table 1604.3.
7. Studs are assumed to be adequately braced at a maximum of spacing of Lu to develop full allowable moment, Mal.
8. Ends supports have not been checked for web crippling. See page 16 for web crippling values.
9. All table are based on simple (single) span.
10. Stud distortional buckling based on an assumed Kφ = 0.
11. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore, span values may be greater than spans based on effective moment of inertia listed in section property tables.

5 psf

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

15 psf

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

If no note, deflection is less than L/720.
[1] Deflection exceeds L/120. [2] Deflection exceeds L/240. [3] Deflection exceeds L/360. [4] Deflection exceeds L/600. [5] Deflection exceeds L/720.

Combined Axial and Lateral Loads Continued on Next Page

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Combined Axial and Lateral Loads Continued

20 psf

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

25 psf

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

30 psf

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

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

[1] Deflection exceeds L/120 [2] Deflection exceeds L/240. [3] Deflection exceeds L/360 [4] Deflection exceeds L/600 [5] Deflection exceeds L/720

See Table Notes on Page 13

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35 psf

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

40 psf

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

50 psf

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

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

[1] Deflection exceeds L/120 [2] Deflection exceeds L/240. [3] Deflection exceeds L/360 [4] Deflection exceeds L/600 [5] Deflection exceeds L/720

See Table Notes on Page 13

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Web Crippling Loads

Table Notes

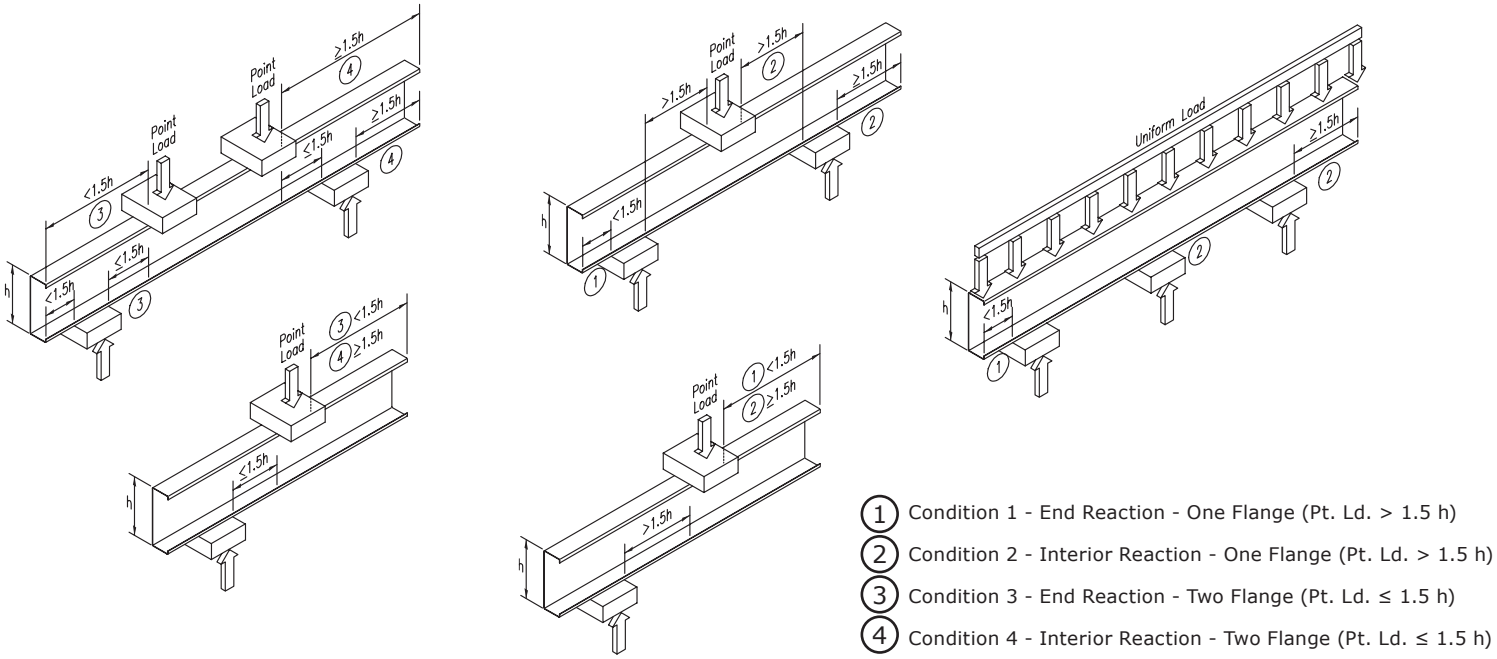
1. Listed allowable loads apply only to channel members with stiffened flanges (S-sections).
2. Listed allowable loads are based on members 'fastened to supports'.
3. "h" refers to the flat dimension of the web.
4. Listed allowable loads are for unpunched webs. Capacity reductions for end and interior one flange loading (Conditions 1 and 2) near punchouts may be calculated per AISI S100 specification.

Allowable Loads (lbs) - Single Members

Section (h)	Design Thickness (in)	Thickness (mil)	Fy (ksi)	Condition 1 Bearing Length (in)			Condition 2 Bearing Length (in)			Condition 3 Bearing Length (in)			Condition 4 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	131	210	277	322
162	0.0235	30EQD	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	30EQD	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
250	0.0400	43EQS	57	396	615	761	783	1063	1250	356	473	550	969	1210	1370
350	0.0188	D20	57	85	138	173	143	206	247	49	69	82	169	224	260
350	0.0235	30EQD	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
350	0.0400	43EQS	57	382	593	734	770	1046	1230	316	419	488	910	1136	1286
362	0.0188	D20	57	84	137	142	142	205	247	47	67	80	167	221	257
362	0.0235	30EQD	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
362	0.0400	43EQS	57	380	591	731	769	1044	1227	311	413	481	903	1128	1277
400	0.0235	30EQD	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
400	0.0400	43EQS	57	376	584	722	764	1039	1221	298	395	460	884	1103	1249
550[1]	0.0235	30EQD	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
550	0.0400	43EQS	57	359	558	690	749	1018	1197	251	332	387	814	1017	1151
600[1]	0.0235	30EQD	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
600	0.0400	43EQS	57	354	550	681	745	1012	1190	236	314	365	793	991	1122
800	0.0400	43EQS	57	336	522	646	729	990	1164	185	245	285	718	897	1015

[1] h/t of web exceeds AISI S100 section B1.2 limit of 200; however, confirmatory testing has shown that the equations conservatively predict web crippling capacities for these members. Thus, loads at or below those listed require no web stiffeners.

Web Crippling Conditions



1. Condition 1 - End Reaction - One Flange (Pt. Ld. > 1.5 h)
2. Condition 2 - Interior Reaction - One Flange (Pt. Ld. > 1.5 h)
3. Condition 3 - End Reaction - Two Flange (Pt. Ld. ≤ 1.5 h)
4. Condition 4 - Interior Reaction - Two Flange (Pt. Ld. ≤ 1.5 h)

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Ceiling Spans

Table Notes

1. For unbraced sections, allowable moment is based on the AISI S100 section C3.1.2 with weak axis and torsional unbraced length assumed to be the listed span (completely unbraced). For mid-span braced sections, allowable moment based on AISI S100 section C3.1.2 with weak axis and torsional unbraced length assumed to be one-half of the listed span (bracing at midspan).
2. Web crippling calculation based on bearing length = 1".
3. 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 the AISI S100.
4. Values are for simple span conditions.
5. Stud distortional buckling based on an assumed Kφ = 0.
6. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore, span values may be greater than spans based on effective moment of inertia listed in section property tables.

Deflection Limit L/240 - Ceiling Spans

Section	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) o.c.			Joist Spacing (in) o.c.			Joist Spacing (in) o.c.			Joist Spacing (in) o.c.			Joist Spacing (in) o.c.			Joist Spacing (in) o.c.		
		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-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"
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"

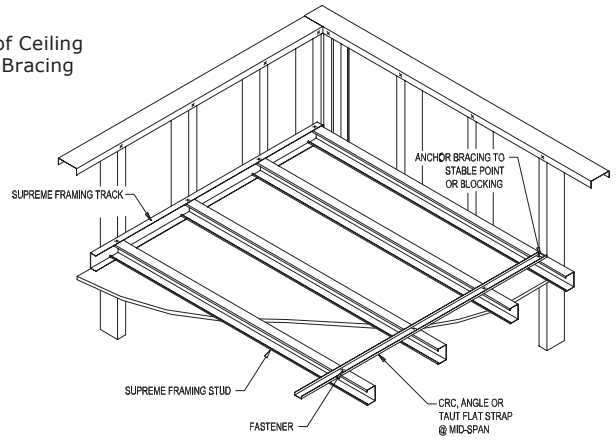
Deflection Limit L/360 - Ceiling Spans

Section	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) o.c.			Joist Spacing (in) o.c.			Joist Spacing (in) o.c.			Joist Spacing (in) o.c.			Joist Spacing (in) o.c.			Joist Spacing (in) o.c.		
		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-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"
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"

** Loads that exceed the 10 psf limit for non-structural members require the use of structural material with G-60 coating.*
"e" Web stiffeners required at ends.

Mid-Span Bracing Details

Example of Ceiling Mid-Span Bracing



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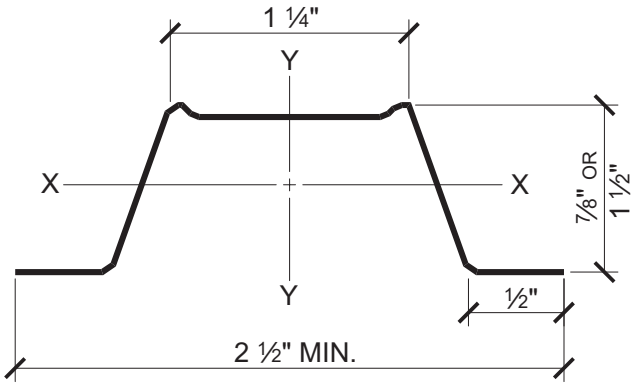
Hat Channel Section Properties

Table Notes

1. Properties based on the AISI S100.
2. Hems and offset in flange of non-structural channel sections are ignored.
3. For deflection calculations, use effective Ix. Effective Ix is based on AISI S100.
4. Effective properties are given as the minimum value for positive or negative bending.

SFS (Hat) Furring (F) Channel Section Properties

Section	Fy (ksi)	Design Thickness (in)	Gross Properties					Effective Properties			
			Area (in2)	Weight (lb/ft)	Ix (in4)	Rx (in)	Iy (in4)	Ry (in)	Ix (in4)	Sx (in3)	Ma (ft-lb)
087F125-D20	57	0.0188	0.070	0.239	0.009	0.357	0.0354	0.711	0.0080	0.0146	41.39
087F125-30EQD	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
150F125-30EQD	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



Hat Channel Span Tables

Table Notes

1. Single spans taken as the minimum span based on moment, shear, web crippling or deflection.
2. Multiple spans indicate two or more equal, continuous spans with span length measured support to support.
3. Multiple spans taken as the minimum span based on moment, shear, web crippling, deflection, combined bending and shear, or combined bending and web crippling.
4. Web crippling values based on 1" bearing at end and interior supports.

SFS (Hat) Furring (F) Channel Allowable Ceiling Spans L/240

Section	Fy (ksi)	Spans	4 psf Spacing (in) o.c.			6 psf Spacing (in) o.c.			13 psf * Spacing (in) o.c.		
			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"
087F125-30EQD	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"
150F125-30EQD	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 the 10 psf limit for non-structural members require the use of structural material with G-60 coating.*

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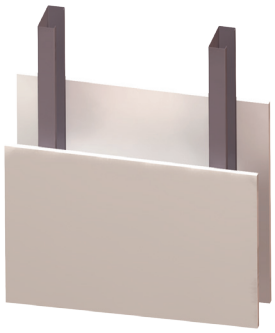
SFS (Hat) Furring (F) Channel Allowable Ceiling Spans L/360											
Section	Fy (ksi)	Spans	4 psf Spacing (in) o.c.			6 psf Spacing (in) o.c.			13 psf * Spacing (in) o.c.		
			12	16	24	12	16	24	12	16	24
087F125-D20	57	Single	4' 5"	4' 0"	3' 6"	3' 11"	3' 6"	3' 1"	3' 0"	2' 9"	2' 5"
		Multiple	5' 6"	5' 0"	4' 4"	4' 10"	4' 4"	3' 10"	3' 9"	3' 4"	2' 11"
087F125-30EQD	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"
150F125-30EQD	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 the 10 psf limit for non-structural members require the use of structural material with G-60 coating.*

Supreme Acoustical Performance Testing

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).

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



Partition Type 1

38 STC

3 ⅝" Stud

Partition Type 2

47 STC

3 ⅝" Stud

Partition Type 3

52 STC

3 ⅝" Stud

Partition Type 4

61 STC

3 ⅝" Stud

Partition Specifications						
Partition Type	Side A	Side B	Gypsum Type	Insulation Type	Stud Spacing	STC Rating
1	1 layer	1 layer	⅝" Type X	-	24" o.c.	38
2	1 layer	1 layer	⅝" Type X	R-11 insulated	24" o.c.	47
3	1 layer	1 layer on RC-1	⅝" Type X	R-11 insulated	24" o.c.	52
4	2 layers	2 layers on RC-1	⅝" Type X	R-11 insulated	24" o.c.	61

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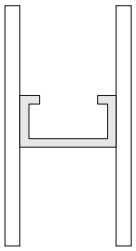
Supreme Fire Rated Assemblies
UL Approved Designs

Fire Testing Data ASTM E 119

One Hour Wall Assemblies
Non-Load Bearing

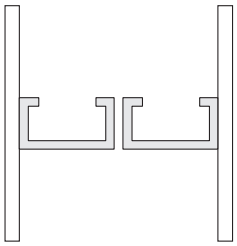
1 ⅝" · 2 ½" · 3 ⅝" · 4" · 6"

One Hour Wall Assembly



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

One Hour Chase Wall Assembly

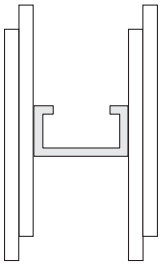


- Two rows of Supreme Stud
- Studs spaced 24" o.c.
- Can be aligned with 1" minimum spacing between studs from each row, staggered, or staggered and overlapped.
- One layer of gypsum wallboard (GWB per UL design assembly).
- No insulation required.

Two Hour Wall Assemblies
Non-Load Bearing

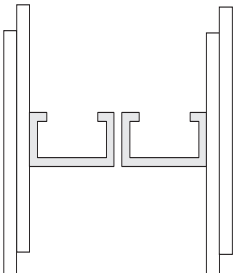
1 ⅝" · 2 ½" · 3 ⅝" · 4" · 6"

Two Hour Wall Assembly



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

Two Hour Chase Wall Assembly



- Two rows of Supreme Stud
- Studs spaced 24" o.c.
- 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 *V486, V496, V498, U411, U412, U419, U435, U465, U493*

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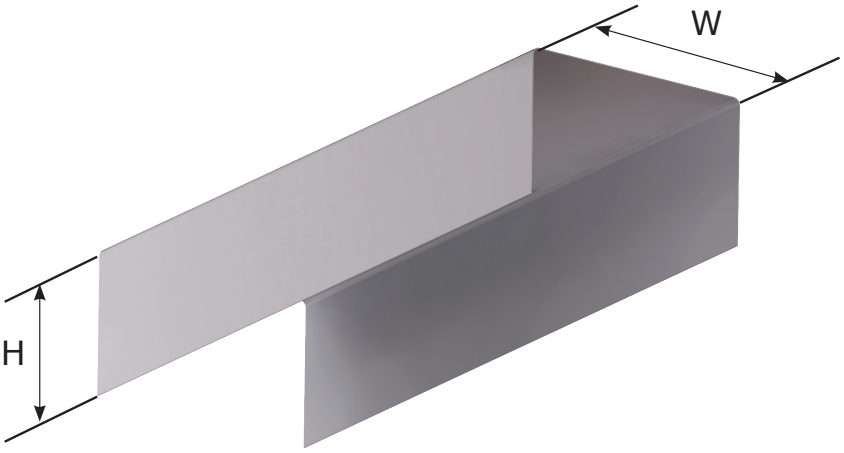
Effective 10/30/12 and supersedes all previous information.

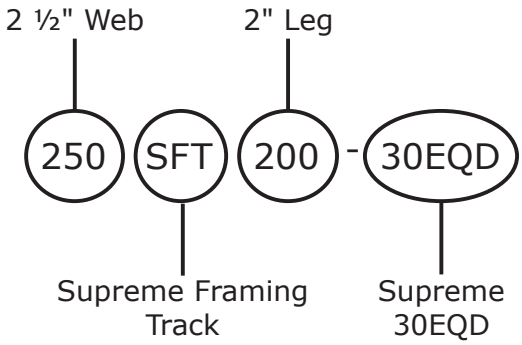
Supreme Deep Leg Deflection Track

Fully sheathed with no additional bracing



Kwik-Bridged Punched Stud non-sheathed with CRC 12" down from end of stud on each side

Nomenclature Example:



Non-sheathed with CRC 12" down from end of stud on each side

Supreme Framing Deep Leg Track (SFT)							
Track Member (W)	Leg Size (H)	Gap (in)	Coating				
			D20	30EQD	33EQD	33EQS	43EQS
2 ½", 3 ½", 3 ⅝", 4", 5 ½", 6", 8"*	2"	½"	G40	G40	G60	G60	G60
	2 ½"	¾"	G40	G40	G60	G60	G60
	3"	1"	G40	G40	G60	G60	G60

**8" members are only available in 43EQS.*

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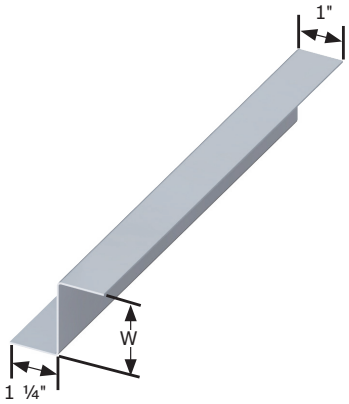
Supreme Z-Furring

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

- Available widths are 1", 1 ½", 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

Model No.	Galvanized Coating	Yield Strength	Design Thickness	Web (W) Width	Stock Length (ft)
100ZF125-D20	G-40	57	0.0188	1"	10
150ZF125-D20	G-40	57	0.0188	1 ½"	10
200ZF125-D20	G-40	57	0.0188	2"	10
100ZF125-30EQD	G-40*	57	0.0235	1"	10
150ZF125-30EQD	G-40*	57	0.0235	1 ½"	10
200ZF125-30EQD	G-40*	57	0.0235	2"	10
100ZF125-33EQS	G-60	57	0.0295	1"	10
150ZF125-33EQS	G-60	57	0.0295	1 ½"	10
200ZF125-33EQS	G-60	57	0.0295	2"	10
100ZF125-43EQS	G-60	57	0.0400	1"	10
150ZF125-43EQS	G-60	57	0.0400	1 ½"	10
200ZF125-43EQS	G-60	57	0.0400	2"	10

**Also Available in G-60 Galvanized Coating.*

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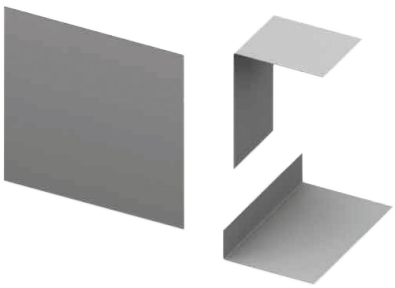
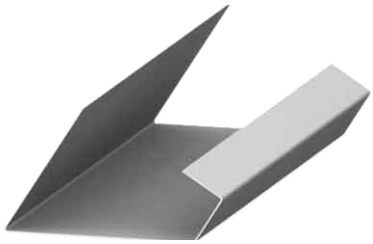
Supreme Custom Shapes

United Metal Products offers a broad selection of custom brake shapes for a wide range of construction applications.

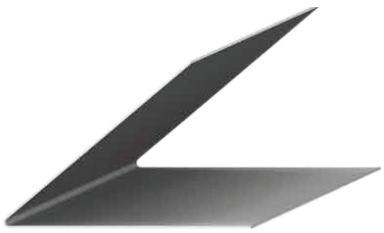
- Manufactured exclusively to your specifications
- Standard lengths are 10' and 12' (additional lengths available)
- Odd shapes, multiple bends, deep legs
- Corrosion resistant galvanized coating (G-40 and G-60)
- 57 ksi yield strength (mill certified steel)
- Flat stock sheets also available



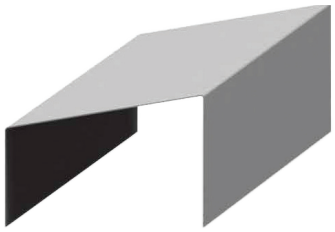
Flat Sheets and Clips



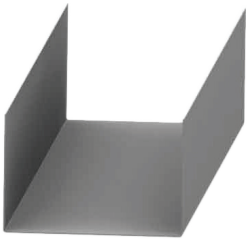
Custom Brake Shape



Custom Angles



Pitch Track



Deep Leg Track

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SUPREME STEEL FRAMING SYSTEM ASSOCIATION

★ Independent Supreme Framing System Manufacturing Sites

Nationwide Availability

Supreme Framing System Manufacturing Companies

AllSteel & Gypsum Products, Inc
Fort Lauderdale, FL

Consolidated Fabricators Corp.
Fontana, CA

Quail Run Building Materials
Phoenix, AZ

SCAFCO Steel Stud Mfg. Co.
Spokane, WA

Steel Construction Systems
Orlando, FL

United Metal Products Inc.
Corona, CA

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