

Supreme Framing System™ is available nationally through multiple independent steel stud manufacturers. Supreme Stud and Track products are manufactured from 57 ksi high yield steel.



What is Supreme Framing System™?



Supreme Framing System™ is a new design that uses thinner steel and superior yield strength over traditional material, providing significant cost savings.

The Benefits of Supreme Framing System™ Speak for Themselves

- ICC-ESR Report for 30EQD, 33EQD and 43EQS
- Composite Wall Tests per 2006 IBC
- Multiple UL Approved Fire Rated Assemblies
- Excellent Acoustical Performance
- 57 KSI Steel - Reduces Screw Stripping
- Fastens with Sharp Point Screws (30EQD and 33EQD)
- Wider Flanges for Screw Placement
- Full Line of Supreme Framing Accessories
 - Hat Channel & Z-Furring
 - Slotted Track
 - Custom Brake Shapes

Supreme Nomenclature

Stud Example

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

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

Track Example

6" Track, 1-1/4" Leg for Drywall 30EQD Supreme: 600SFT125-30EQD

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



All of the testing for Supreme Framing System was under the supervision of Principle Investigator Thomas Miller, PhD of Oregon State University's School of Civil and Construction Engineering.

Professor Miller's structural mechanics and research interests include earthquake engineering, timber structures, and cold-formed steel structures. Dr. Miller provided all of the testing of Cold-Formed Steel Wall Stud Panels for the Metal Stud Manufacturer's Association (MSMA) and the Composite Wall Testing for the Steel Stud Manufacturer's Association (SSMA).



Effective 01/01/2011 and supersedes all previous information.

Code Approvals and Performance Standards

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

ASTM American Society for Testing and Materials

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, Metallic - and Nonmetallic-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
E119	Standard Test Methods for Fire Tests of Building Construction and Materials
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

UL Underwriters Laboratories Supreme Framing Classification

UL 263 Fire Tests of Building Construction and Materials

Steel Framing Members Fire Resistance Classification

U411 U412 U419 U435 U465 U493 V486 V496 V498

ICC-ES Code Approvals

ICC-ES ESR2507 30EQD & 33EQD

ICC-ES ESR3054 43EQS

Independent Product Certification

- Code Compliance - ICC Evaluation Services, LLC
- Fire Testing - Underwriters Laboratories, Inc.
- Sound Ratings - Riverbank Acoustical Laboratories
- 3rd Party Testing - Architectural Testing, Inc.
- Structural Testing - O.S.U. (Oregon State University)
- Structural Engineer - Devco Engineering

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Supreme is Certified!

All inspections and testing for the Supreme Steel Framing System Association is 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 2006 IBC Codes.

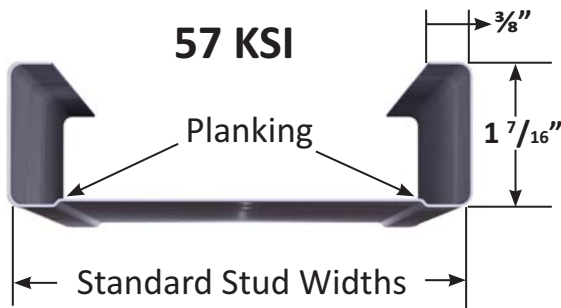


Look for the sticker! 3rd Party Certified Code Compliant by nationally recognized Architectural Testing, Inc.

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 ASTM 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.

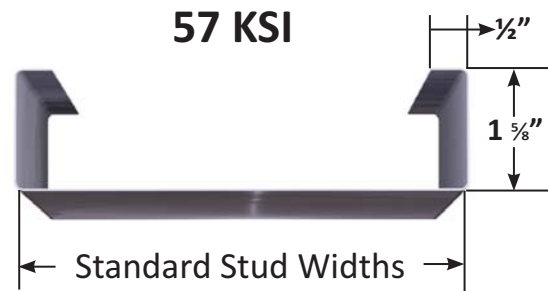
30EQD & 33EQD Stud Profile



Available Sizes

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

33EQS & 43EQS Stud Profile



Available Sizes

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

Screw Capacity - Per AISI Section E4

Steel Thickness		Steel Prop.		Allowable Loads (lb/screw)											
				No. 12 - 0.216 in. dia.			No. 10 - 0.190 in. dia.			No. 8 - 0.164 in. dia.			No. 6 - 0.138 in. dia.		
Mils	Design (in)	Fy (ksi)	Fu (ksi)	Shear	Pullout	Pullover	Shear	Pullout	Pullover	Shear	Pullout	Pullover	Shear	Pullout	Pullover
30EQD	0.0235	57	65	152	93	191	143	82	191	133	71	191	122	60	191
33EQD	0.0235	57	65	152	93	191	143	82	191	133	71	191	122	60	191
33EQS	0.0295	57	65	214	117	240	201	103	240	187	89	240	171	75	240
43EQS	0.0400	57	65	338	159	325	317	140	325	295	121	325	270	102	325

Table Notes:

1. All values assume that the nominal strength of the screw itself is at least 1.25 times the design strength. Listed values use a factor of safety of 3.
2. Pullover values assume a minimum head/washer diameter, d_w , of 1/4"

Weld Capacity - 2001 NASPEC with 2004 Supplement

Steel Thickness		Fy (ksi)	Fu (ksi)	Nominal Weld Size	Weld Type			
Mils	Design				Fillet		Flare Groove	
					Longitudinal ¹	Transverse	Longitudinal ²	Transverse
43EQS	0.0400	57	65	1/16	639	1106	696	849

Table Notes:

1. For welds with $L/t > 25$ where L is weld length and t is the thickness of the welded member.
2. For $t \leq t_w < 2t$ where t = thickness of welded member and t_w is effective throat thickness of weld.
3. Weld capacities based on 2001 NASPEC (including 2004 Supplement), Sections E2.4 and E2.5
4. When connecting materials of different steel thickness or tensile strength (F_u), the lowest applicable values should be used.

30EQD & 33EQD Drywall Studs & Track

Physical Section Properties

Supreme Drywall Stud Section Properties

Stud Member	Design Thickness	Gross Properties							Effective Properties				Torsional Properties					
		Area (in. ²)	Weight (lbs/ft.)	I _{xx} (in. ⁴)	S _{xx} (in. ³)	R _x (in.)	I _{yy} (in. ⁴)	R _y (in.)	I _{xx} (in. ⁴)	S _{xx} (in. ³)	Ma (ft-lbs)	Va (lbs)	J _{x1000} (in. ⁴)	C _w (in. ⁶)	m (in.)	X _o (in.)	R _o (in.)	β
162SFS-30EQD	0.0235	0.117	0.40	0.055	0.068	0.684	0.035	0.543	0.052	0.048	136	621	0.022	0.027	0.776	-1.359	1.616	0.292
250SFS-30EQD	0.0235	0.138	0.47	0.145	0.116	1.025	0.041	0.542	0.136	0.090	255	505	0.025	0.060	0.716	-1.212	1.677	0.478
350SFS-30EQD	0.0235	0.161	0.55	0.313	0.179	1.392	0.046	0.531	0.304	0.112	319	351	0.030	0.119	0.659	-1.083	1.842	0.655
362SFS-30EQD	0.0235	0.164	0.56	0.339	0.187	1.437	0.046	0.529	0.331	0.116	331	338	0.030	0.128	0.652	-1.069	1.867	0.672
400SFS-30EQD	0.0235	0.173	0.59	0.427	0.213	1.569	0.047	0.524	0.417	0.129	367	305	0.032	0.159	0.634	-1.029	1.949	0.721
600SFS-30EQD*	0.0235	0.220	0.75	1.112	0.371	2.247	0.053	0.492	0.976	0.219	622	200	0.041	0.388	0.553	-0.864	2.457	0.876

Table Notes

1. Gross Properties based on full-unreduced cross section of the studs, away from punchouts
2. For deflection calculations, use effective moment of inertia
3. *Web-height to thickness ratio exceeds 200, web stiffeners required at all support points
4. 33EQD to be G-60 Galvanized Minimum with 0.0235" Design Thickness

Supreme Drywall Track Section Properties

Track Member	Gross Properties							Torsional Properties						
	Area (in. ²)	Weight (lbs/ft.)	I _{xx} (in. ⁴)	S _{xx} (in. ³)	R _x (in.)	I _{yy} (in. ⁴)	R _y (in.)	J _{x1000} (in. ⁴)	C _w (in. ⁶)	m (in.)	X _o (in.)	R _o (in.)	β	
162SFT125-30EQD	0.097	0.33	0.052	0.060	0.734	0.016	0.410	0.018	0.009	0.502	-0.874	1.213	0.481	
162SFT150-30EQD	0.109	0.37	0.061	0.070	0.749	0.027	0.496	0.020	0.014	0.623	-1.102	1.422	0.399	
162SFT200-30EQD	0.132	0.45	0.079	0.090	0.771	0.058	0.661	0.024	0.032	0.868	-1.571	1.871	0.295	
250SFT125-30EQD	0.118	0.40	0.130	0.099	1.052	0.019	0.399	0.022	0.023	0.458	-0.765	1.361	0.684	
250SFT150-30EQD	0.129	0.44	0.150	0.114	1.077	0.031	0.487	0.024	0.037	0.576	-0.979	1.535	0.593	
250SFT200-30EQD	0.153	0.52	0.190	0.144	1.115	0.067	0.660	0.028	0.080	0.816	-1.424	1.926	0.453	
250SFT250-30EQD	0.176	0.60	0.230	0.175	1.142	0.121	0.829	0.033	0.148	1.059	-1.885	2.355	0.359	
350SFT125-30EQD	0.141	0.48	0.275	0.151	1.396	0.021	0.381	0.026	0.048	0.417	-0.673	1.595	0.822	
350SFT150-30EQD	0.153	0.52	0.313	0.172	1.431	0.034	0.471	0.028	0.078	0.530	-0.871	1.740	0.749	
350SFT200-30EQD	0.176	0.60	0.389	0.215	1.486	0.074	0.649	0.033	0.170	0.763	-1.291	2.072	0.612	
350SFT250-30EQD	0.200	0.68	0.466	0.257	1.527	0.135	0.823	0.037	0.311	1.002	-1.731	2.450	0.501	
362SFT125-30EQD	0.144	0.49	0.297	0.158	1.437	0.021	0.379	0.027	0.052	0.412	-0.663	1.628	0.834	
362SFT150-30EQD	0.156	0.53	0.338	0.180	1.474	0.034	0.469	0.029	0.085	0.525	-0.859	1.769	0.764	
362SFT200-30EQD	0.179	0.61	0.420	0.224	1.531	0.075	0.647	0.003	0.184	0.758	-1.276	2.095	0.629	
362SFT250-30EQD	0.203	0.69	0.502	0.267	1.573	0.137	0.822	0.037	0.336	0.995	-1.713	2.467	0.518	
400SFT125-30EQD	0.153	0.52	0.373	0.181	1.562	0.021	0.373	0.028	0.065	0.399	-0.635	1.727	0.865	
400SFT150-30EQD	0.165	0.56	0.422	0.205	1.602	0.035	0.462	0.030	0.106	0.510	-0.826	1.861	0.803	
400SFT200-30EQD	0.188	0.64	0.521	0.252	1.665	0.077	0.641	0.035	0.229	0.740	-1.234	2.169	0.676	
400SFT250-30EQD	0.212	0.72	0.620	0.300	1.712	0.141	0.817	0.039	0.419	0.976	-1.664	2.523	0.565	
600SFT125-30EQD	0.200	0.68	0.970	0.317	2.204	0.023	0.341	0.037	0.163	0.340	-0.520	2.290	0.948	
600SFT150-30EQD	0.212	0.72	1.080	0.352	2.259	0.039	0.428	0.039	0.267	0.442	-0.688	2.400	0.918	
600SFT200-30EQD	0.235	0.80	1.299	0.424	2.351	0.086	0.606	0.043	0.578	0.658	-1.053	2.646	0.842	
600SFT250-30EQD	0.259	0.88	1.518	0.495	2.423	0.159	0.785	0.048	1.052	0.883	-1.446	2.929	0.756	

Table Notes

1. Effective section properties shown only for sections complying with NASPEC Section B1.
2. 33EQD to be G-60 Galvanized Minimum with 0.0235" Design Thickness

30EQD & 33EQD Drywall Studs & Track Composite Limiting Wall Heights



Interior COMPOSITE Wall Heights - 5/8" GWB Full Height													
Stud Member	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-30EQD	16	12' 10"	10' 2"	8' 9"	11' 2"	8' 9"	-	10' 2"	-	-	-	-	-
162SFS-30EQD	24	11' 6"	9' 1"	-	10' 0"	-	-	9' 1"	-	-	-	-	-
250SFS-30EQD	16	15' 7"	12' 5"	10' 10"	13' 8"	10' 10"	9' 5"	12' 5"	9' 9"	8' 6"	9' 3"f	8' 6"	-
250SFS-30EQD	24	13' 7"	10' 10"	9' 5"	11' 11"	9' 5"	8' 3"	10' 10"	8' 7"	-	-	-	-
362SFS-30EQD	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"
362SFS-30EQD	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	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"
400SFS-30EQD	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	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"
600SFS-30EQD	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

Table Notes

1. f: Flexural stress controls allowable height
2. 5/8" Gypsum Board both sides full height
3. Tested per 2008 ICC ES Acceptance Criteria AC-86
4. 30EQD Galvanizing to be G-40 Minimum for 10 PSF or less & 33EQD G-60 Minimum for Greater than 10 PSF Lateral Loads
5. 33EQD Galvanizing to be G-60 Minimum with 0.0235" Design Thickness

Allowable Wall Heights for Superimposed Axial Load and 5psf Lateral Load Placed on Each Stud						
Stud Member	1/2" Minimum Gypsum Board On Each Stud Flange				Composite Heights with Revised β_0 Zero Axial Load	
	100 lb. Load		50 lb. Load		16" o.c.	24" o.c.
	16" o.c.	24" o.c.	16" o.c.	24" o.c.		
162SFS-30EQD	10' 0"	8' 8"	10' 0"	8' 8"	12' 10"	11' 6"
250SFS-30EQD	13' 11"	11' 10"	13' 11"	11' 10"	15' 7"	13' 7"
362SFS-30EQD	17' 8"	14' 11"	18' 8"	15' 7"	20' 5"	18' 7"
400SFS-30EQD	18' 9"	15' 10"	19' 9"	16' 4"	20' 9"	18' 9"
600SFS-30EQD	23' 9"	19' 9"	24' 8"	20' 4"	28' 6"	24' 9"

Table Notes:

1. L/120 Deflection Limits
2. Sheathing installed full height of the wall - each side
3. Allowable heights based on Cold-Formed Steel Framing - Wall Stud Design, 2007 Edition
4. Gypsum sheathing installed with No. 6 fasteners at 12" o.c. max.
5. 33EQD to be G-60 Galvanized Minimum with 0.0235" Design Thickness



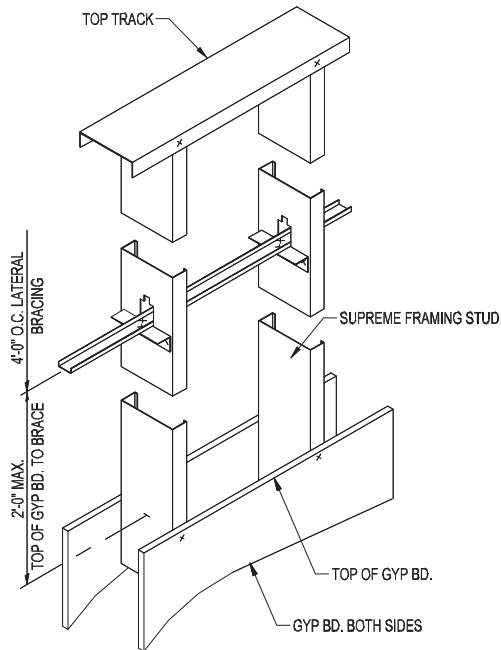
30EQD & 33EQD Drywall Studs & Track Non-Composite Limiting Wall Heights

Interior NON-COMPOSITE Chase Wall or Non-Clad Wall Height													
Stud Member	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-30EQD	16	10' 0"	-	-	8' 9"	-	-	-	-	-	-	-	-
162SFS-30EQD	24	8' 9"	-	-	-	-	-	-	-	-	-	-	-
250SFS-30EQD	16	13' 10"	11' 0"	9' 7"	12' 1"	9' 7"	8' 4"	11' 0"	8' 8"	-	9' 2"	-	-
250SFS-30EQD	24	12' 1"	9' 7"	8' 4"	10' 7"	8' 4"	-	9' 2"	-	-	-	-	-
350SFS-30EQD	16	18' 0"	14' 4"	12' 7"	14' 8"	12' 7"	10' 11"	12' 8"	11' 5"	9' 11"	10' 4"	9' 11"	8' 8"
350SFS-30EQD	24	14' 8"	12' 7"	10' 11"	11' 11"	10' 11"	9' 7"	10' 4"	9' 11"	8' 8"	8' 6"	8' 6"	-
362SFS-30EQD	16	18' 4"	14' 9"	12' 11"	14' 11"	12' 11"	11' 3"	12' 11"	11' 9"	10' 3"	10' 6"	10' 3"	8' 11"
362SFS-30EQD	24	14' 11"	12' 11"	11' 3"	12' 2"	11' 3"	9' 10"	10' 6"	10' 3"	8' 11"	8' 8"	8' 8"	-
400SFS-30EQD	16	19' 3"	16' 0"	13' 11"	15' 8"	13' 11"	12' 2"	13' 7"	12' 8"	11' 1"	11' 1"	11' 1"	9' 8"
400SFS-30EQD	24	15' 8"	13' 11"	12' 2"	12' 10"	12' 2"	10' 8"	11' 1"	11' 1"	9' 8"	8' 8"	8' 8"	8' 5"

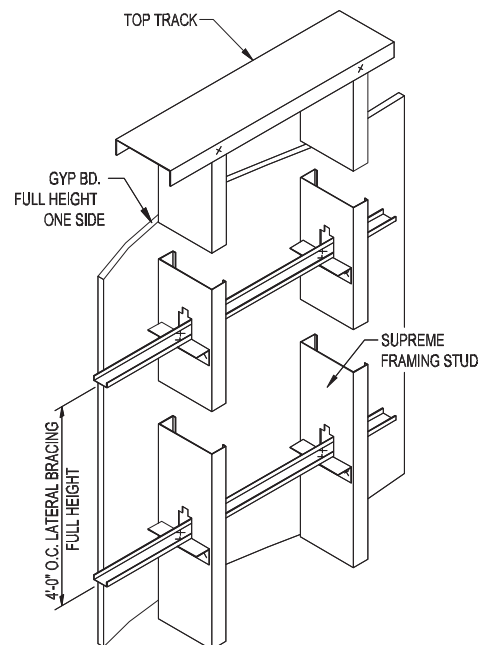
Table Notes

1. End lateral bearing - 1 inch minimum
2. Heights based on steel properties only
3. Limiting heights based on 1/2" minimum gypsum wall board attached to each face to within 4 feet of the end of the stud OR 1/2" minimum gypsum wall board attached to one face and the unsheathed flange laterally braced at 4 foot o.c. for the length of the stud
4. 30EQD Galvanizing to be G-40 Minimum for 10 PSF or less & 33EQD G-60 Minimum for Greater than 10 PSF Lateral Loads
5. 33EQD to be G-60 Galvanized Minimum with 0.0235" Design Thickness

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



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



30EQD & 33EQD Drywall Studs & Track

Allowable Ceiling Spans

Allowable Ceiling Spans - DEFLECTION LIMIT L/240

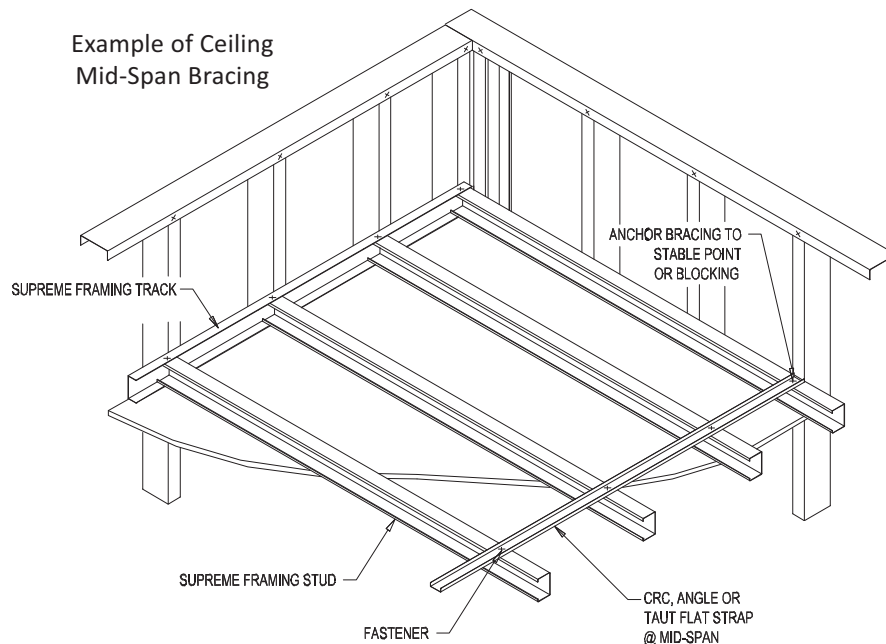
Stud Member	4 psf				6 psf				13 psf			
	Lateral Support of Top Flange		Lateral Support of Top Flange		Lateral Support of Top Flange		Lateral Support of Top Flange		Lateral Support of Top Flange		Lateral Support of Top Flange	
	Unsupported	Midspan	Unsupported	Midspan	Unsupported	Midspan	Unsupported	Midspan	Unsupported	Midspan	Unsupported	Midspan
	Joist spacing o.c.		Joist spacing o.c.		Joist spacing o.c.		Joist spacing o.c.		Joist spacing o.c.		Joist spacing o.c.	
	16"	24"	16"	24"	16"	24"	16"	24"	16"	24"	16"	24"
162SFS-30EQD	8' 7"	7' 6"	8' 7"	7' 6"	7' 6"	6' 6"	7' 6"	6' 6"	5' 9"	5' 0"	5' 9"	5' 0"
250SFS-30EQD	9' 10"	8' 10"	11' 10"	10' 4"	8' 10"	7' 11"	10' 4"	9' 0"	7' 2"	6' 4"	8' 0"	6' 11"
362SFS-30EQD	10' 8"	9' 7"	15' 4"	13' 7"	9' 7"	8' 8"	13' 7"	12' 0"	7' 10"	7' 0"	10' 8"	9' 2"
400SFS-30EQD	11' 0"	9' 10"	15' 9"	14' 0"	9' 10"	8' 10"	14' 0"	12' 4"	8' 1"	7' 2"	11' 0"	9' 7"

Allowable Ceiling Spans - DEFLECTION LIMIT L/360

Stud Member	4 psf				6 psf				13 psf			
	Lateral Support of Top Flange		Lateral Support of Top Flange		Lateral Support of Top Flange		Lateral Support of Top Flange		Lateral Support of Top Flange		Lateral Support of Top Flange	
	Unsupported	Midspan	Unsupported	Midspan	Unsupported	Midspan	Unsupported	Midspan	Unsupported	Midspan	Unsupported	Midspan
	Joist spacing o.c.		Joist spacing o.c.		Joist spacing o.c.		Joist spacing o.c.		Joist spacing o.c.		Joist spacing o.c.	
	16"	24"	16"	24"	16"	24"	16"	24"	16"	24"	16"	24"
162SFS-30EQD	7' 6"	6' 6"	7' 6"	6' 6"	6' 6"	5' 8"	6' 6"	5' 8"	5' 0"	4' 5"	5' 0"	4' 5"
250SFS-30EQD	9' 10"	8' 10"	10' 4"	9' 0"	8' 10"	7' 10"	9' 0"	7' 10"	6' 11"	6' 1"	6' 11"	6' 1"
362SFS-30EQD	10' 8"	9' 7"	13' 11"	12' 2"	9' 7"	8' 8"	12' 2"	10' 7"	7' 10"	7' 0"	9' 4"	8' 2"
400SFS-30EQD	11' 0"	9' 10"	15' 0"	13' 1"	9' 10"	8' 10"	13' 1"	11' 5"	8' 1"	7' 2"	10' 2"	8' 10"

Table Notes

1. Values are for single spans
2. For fully braced ceilings, use mid-span values
3. End bearing length is 1 inch minimum
4. 30EQD Galvanizing to be G-40 Minimum for 10 PSF or less & 33EQD G-60 Minimum for Greater than 10 PSF Lateral Loads
5. 33EQD to be G-60 Galvanized Minimum with 0.0235" Design Thickness



33EQS Structural Studs & Track

Physical Section Properties

Supreme 33EQS Stud Section Properties

Stud Member	Gross Properties							Effective Properties				Torsional Properties					
	Area (in. ²)	Weight (lbs/ft.)	Ixx (in. ⁴)	Sxx (in. ³)	Rx (in.)	Iyy (in. ⁴)	Ry (in.)	Ixx (in. ⁴)	Sxx (in. ³)	Ma (ft-lbs)	Va (lbs)	Jx1000 (in. ⁴)	Cw (in. ⁶)	m (in.)	Xo (in.)	Ro (in.)	β
250SFS162-33EQS	0.191	0.65	0.202	0.162	1.029	0.075	0.626	0.193	0.134	381	978	0.055	0.127	0.863	-1.475	1.905	0.400
362SFS162-33EQS	0.224	0.76	0.473	0.261	1.452	0.086	0.618	0.461	0.186	528	670	0.065	0.257	0.792	-1.314	2.054	0.591
400SFS162-33EQS	0.235	0.80	0.593	0.297	1.589	0.088	0.613	0.580	0.206	587	604	0.068	0.314	0.771	-1.269	2.124	0.643
600SFS162-33EQS	0.294	1.00	1.535	0.512	2.285	0.100	0.583	1.503	0.363	1032	395	0.085	0.743	0.680	-1.078	2.592	0.827

Table Notes

1. Effective section properties shown only for sections complying with NASPEC Section B1.

Supreme 33EQS Track Section Properties

Track Member	Gross Properties							Torsional Properties						
	Area (in. ²)	Weight (lbs/ft.)	Ixx (in. ⁴)	Sxx (in. ³)	Rx (in.)	Iyy (in. ⁴)	Ry (in.)	Jx1000 (in. ⁴)	Cw (in. ⁶)	m (in.)	Xo (in.)	Ro (in.)	β	
250SFT125-33EQS	0.148	0.50	0.164	0.124	1.053	0.023	0.398	0.043	0.028	0.457	-0.762	1.359	0.685	
250SFT150-33EQS	0.162	0.55	0.189	0.143	1.078	0.038	0.486	0.047	0.046	0.574	-0.976	1.533	0.595	
250SFT200-33EQS	0.192	0.65	0.239	0.181	1.116	0.083	0.659	0.056	0.101	0.814	-1.421	1.923	0.454	
250SFT250-33EQS	0.221	0.75	0.289	0.219	1.143	0.152	0.828	0.064	0.186	1.058	-1.881	2.352	0.360	
362SFT125-33EQS	0.181	0.61	0.374	0.199	1.438	0.026	0.378	0.052	0.065	0.411	-0.660	1.627	0.835	
362SFT150-33EQS	0.195	0.66	0.425	0.226	1.475	0.043	0.468	0.057	0.106	0.523	-0.857	1.768	0.765	
362SFT200-33EQS	0.225	0.77	0.528	0.281	1.532	0.094	0.646	0.065	0.230	0.756	-1.273	2.094	0.630	
362SFT250-33EQS	0.254	0.87	0.631	0.335	1.574	0.171	0.821	0.074	0.421	0.994	-1.710	2.465	0.519	
400SFT125-33EQS	0.192	0.65	0.468	0.226	1.562	0.027	0.372	0.056	0.081	0.397	-0.632	1.726	0.866	
400SFT150-33EQS	0.207	0.70	0.530	0.256	1.602	0.044	0.461	0.060	0.132	0.508	-0.824	1.860	0.804	
400SFT200-33EQS	0.236	0.80	0.655	0.316	1.666	0.097	0.640	0.068	0.287	0.738	-1.231	2.168	0.678	
400SFT250-33EQS	0.266	0.90	0.779	0.377	1.713	0.177	0.816	0.077	0.525	0.974	-1.661	2.522	0.566	
600SFT125-33EQS	0.251	0.85	1.218	0.397	2.204	0.029	0.340	0.073	0.204	0.339	-0.518	2.289	0.949	
600SFT150-33EQS	0.266	0.90	1.355	0.442	2.260	0.049	0.427	0.077	0.334	0.441	-0.686	2.400	0.918	
600SFT200-33EQS	0.295	1.00	1.631	0.531	2.351	0.108	0.605	0.086	0.724	0.656	-1.050	2.645	0.842	
600SFT250-33EQS	0.325	1.10	1.906	0.621	2.424	0.200	0.784	0.094	1.318	0.882	-1.443	2.928	0.757	

Table Notes

1. The centerline bend radius is 0.0912"
2. Web depth for track sections is equal to the nominal height plus two time the design thickness plus the bend radius
3. Gross properties are based on the full-unreduced cross section of the studs, away from the punchouts
4. For deflection calculations, use the effective moment of inertia

Supreme 43EQS Stud Section Properties

Stud Member	Gross Properties							Effective Properties				Torsional Properties					
	Area (in. ²)	Weight (lbs/ft.)	Ixx (in. ⁴)	Sxx (in. ³)	Rx (in.)	Iyy (in. ⁴)	Ry (in.)	Ixx (in. ⁴)	Sxx (in. ³)	Ma (ft-lbs)	Va (lbs)	Jx1000 (in. ⁴)	Cw (in. ⁶)	m (in.)	Xo (in.)	Ro (in.)	β
250SFS162-43EQS	0.257	0.88	0.270	0.216	1.025	0.100	0.622	0.270	0.185	527	1798	0.137	0.166	0.856	-1.463	1.892	0.402
250SFS200-43EQS	0.287	0.98	0.316	0.252	1.048	0.163	0.754	0.300	0.195	554	1798	0.153	0.269	1.047	-1.823	2.233	0.334
362SFS162-43EQS	0.302	1.03	0.634	0.350	1.448	0.114	0.613	0.634	0.267	760	1674	0.161	0.338	0.785	-1.302	2.042	0.593
362SFS200-43EQS	0.332	1.13	0.730	0.403	1.482	0.187	0.750	0.707	0.277	789	1674	0.177	0.548	0.970	-1.643	2.336	0.506
400SFS162-43EQS	0.317	1.08	0.796	0.398	1.584	0.118	0.609	0.796	0.298	847	1508	0.169	0.413	0.765	-1.258	2.112	0.645
400SFS200-43EQS	0.347	1.18	0.914	0.457	1.622	0.193	0.746	0.887	0.309	879	1508	0.185	0.670	0.952	-1.591	2.392	0.557
600SFS162-43EQS	0.397	1.35	2.065	0.688	2.280	0.133	0.579	2.065	0.559	1590	986	0.212	0.983	0.673	-1.067	2.583	0.829
600SFS200-43EQS	0.427	1.45	2.331	0.777	2.336	0.220	0.717	2.243	0.569	1619	986	0.228	1.594	0.849	-1.371	2.801	0.761
800SFS162-43EQS	0.477	1.62	4.128	1.032	2.941	0.143	0.548	3.870	0.706	2009	732	0.255	1.862	0.603	-0.931	3.133	0.912
800SFS200-43EQS	0.507	1.73	4.603	1.151	3.012	0.238	0.685	4.529	0.753	2143	732	0.271	3.023	0.770	-1.209	3.317	0.867

Table Notes

1. Effective section properties shown only for sections complying with NASPEC Section B1.

Supreme 43EQS Track Section Properties

Track Member	Gross Properties							Effective Properties				Torsional Properties					
	Area (in. ²)	Weight (lbs/ft.)	Ixx (in. ⁴)	Sxx (in. ³)	Rx (in.)	Iyy (in. ⁴)	Ry (in.)	Ixx (in. ⁴)	Sxx (in. ³)	Ma (ft-lbs)	Va (lbs)	Jx1000 (in. ⁴)	Cw (in. ⁶)	m (in.)	Xo (in.)	Ro (in.)	β
250SFT125-43EQS	0.200	0.68	0.222	0.167	1.053	0.031	0.396	0.185	0.114	323	1798	0.107	0.038	0.454	-0.758	1.356	0.688
250SFT150-43EQS	0.220	0.75	0.256	0.193	1.079	0.052	0.484	0.200	0.118	335	1798	0.117	0.062	0.572	-0.971	1.530	0.597
250SFT200-43EQS	0.260	0.88	0.324	0.244	1.117	0.112	0.657	0.225	0.124	352	1798	0.139	0.136	0.812	-1.416	1.919	0.456
250SFT250-43EQS	0.300	1.02	0.392	0.296	1.144	0.205	0.827	0.246	0.128	364	1798	0.160	0.251	1.055	-1.876	2.347	0.361
362SFT125-43EQS	0.245	0.83	0.506	0.268	1.438	0.035	0.376	0.432	0.194	551	1603	0.131	0.087	0.408	-0.656	1.625	0.837
362SFT150-43EQS	0.265	0.90	0.576	0.305	1.475	0.057	0.466	0.464	0.201	571	1603	0.141	0.142	0.521	-0.852	1.766	0.767
362SFT200-43EQS	0.305	1.04	0.716	0.379	1.532	0.126	0.644	0.520	0.208	591	1603	0.163	0.310	0.753	-1.268	2.090	0.632
362SFT250-43EQS	0.345	1.17	0.855	0.453	1.575	0.231	0.819	0.571	0.204	581	1603	0.184	0.569	0.991	-1.705	2.461	0.520
400SFT125-43EQS	0.260	0.88	0.634	0.305	1.562	0.036	0.370	0.545	0.224	638	1450	0.139	0.109	0.395	-0.628	1.724	0.867
400SFT150-43EQS	0.280	0.95	0.719	0.346	1.603	0.059	0.459	0.584	0.232	660	1450	0.149	0.178	0.506	-0.819	1.858	0.806
400SFT200-43EQS	0.320	1.09	0.888	0.428	1.666	0.130	0.638	0.657	0.229	652	1450	0.171	0.387	0.735	-1.226	2.165	0.679
400SFT250-43EQS	0.360	1.22	1.057	0.509	1.714	0.238	0.814	0.720	0.256	642	1450	0.192	0.709	0.972	-1.656	2.518	0.568
600SFT125-43EQS	0.340	1.16	1.650	0.537	2.204	0.039	0.338	1.390	0.313	889	961	0.181	0.273	0.336	-0.515	2.288	0.949
600SFT150-43EQS	0.360	1.22	1.837	0.597	2.260	0.065	0.425	1.471	0.318	905	961	0.192	0.449	0.438	-0.682	2.398	0.919
600SFT200-43EQS	0.400	1.36	2.210	0.719	2.352	0.145	0.603	1.755	0.341	969	961	0.213	0.976	0.654	-1.046	2.643	0.843
600SFT250-43EQS	0.440	1.50	2.584	0.840	2.424	0.269	0.782	1.911	0.340	968	961	0.235	1.779	0.879	-1.439	2.925	0.758
800SFT125-43EQS	0.420	1.43	3.345	0.821	2.823	0.041	0.312	2.679	0.426	1211	718	0.224	0.525	0.293	-0.437	2.874	0.977
800SFT150-43EQS	0.440	1.50	3.674	0.902	2.891	0.069	0.396	2.812	0.433	1231	718	0.235	0.865	0.387	-0.586	2.976	0.961
800SFT200-43EQS	0.480	1.63	4.332	1.063	3.005	0.156	0.570	3.039	0.442	1256	718	0.256	1.887	0.588	-0.915	3.193	0.918
800SFT250-43EQS	0.520	1.77	4.990	1.224	3.099	0.290	0.747	3.502	0.456	1296	718	0.277	3.443	0.803	-1.276	3.433	0.862

Table Notes

1. The centerline bend radius is 0.0912"
2. Web depth for track sections is equal to the nominal height plus two time the design thickness plus the bend radius
3. Gross properties are based on the full-unreduced cross section of the studs, away from the punchouts
4. For deflection calculations, use the effective moment of inertia

33EQS & 43EQS Structural Studs & Track

Limiting Wall Heights - Curtain Wall

Stud Member	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
250SFS162-33EQS	12	17' 2"	13' 7"	11' 10"	10' 7"	9' 3"	-	9' 8"	8' 5"	-	8' 11"	-	-
	16	15' 7"	12' 4"	10' 9"	9' 8"	8' 5"	-	8' 9"	-	-	8' 1"	-	-
	24	13' 7"	10' 9"	9' 5"	8' 5"	-	-	-	-	-	-	-	-
250SFS162-43EQS	12	19' 2"	15' 2"	13' 3"	11' 10"	10' 4"	8' 9"	10' 9"	9' 5"	-	10' 0"	8' 9"	-
	16	17' 5"	13' 10"	12' 1"	10' 9"	9' 5"	-	9' 9"	8' 7"	-	9' 1"	-	-
	24	15' 2"	12' 1"	10' 6"	9' 5"	8' 3"	-	8' 7"	7' 5"	-	-	-	-
362SFS162-33EQS	12	22' 11"	18' 2"	15' 10"	14' 2"	12' 5"	10' 5"	12' 11"	11' 3"	9' 6"	11' 11"	10' 5"	8' 10"
	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"
	24	18' 2"	14' 5"	12' 7"	11' 3"	9' 10"	8' 3"	10' 3"	8' 11"	-	9' 2"e	8' 3"	-
362SFS162-43EQS	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"
	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"
	24	20' 3"	16' 0"	14' 0"	12' 6"	10' 11"	9' 2"	11' 4"	9' 11"	8' 4"	10' 7"	9' 2"	-
400SFS162-33EQS	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"
	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"
	24	19' 8"	15' 7"	13' 7"	12' 2"	10' 7"	8' 11"	10' 10"e	9' 8"	8' 1"	9' 8"e	8' 11"e	-
400SFS162-43EQS	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"
	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"
	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"
600SFS162-33EQS	12	34' 0"	27' 0"	23' 7"	21' 1"	18' 5"	15' 6"	19' 1"	16' 8"	14' 1"	17' 9"e	15' 6"e	13' 1"
	16	30' 11"	24' 6"	21' 5"	19' 1"	16' 8"	14' 1"	17' 4"e	15' 2"e	12' 9"	15' 8"e	14' 1"e	11' 10"e
	24	27' 0"	21' 5"	18' 8"	16' 7"e	14' 7"e	12' 4"	14' 4"e	13' 3"e	11' 2"e	12' 10"e	12' 4"e	10' 4"e
600SFS162-43EQS	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"
	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"
	24	30' 0"	23' 9"	20' 9"	18' 7"	16' 3"	13' 8"	16' 10"	14' 9"	12' 5"	15' 8"e	13' 8"	11' 6"
800SFS162-43EQS	12	46' 7"	37' 0"	32' 4"	28' 10"	25' 3"	21' 3"	26' 3"	22' 11"	19' 4"	24' 4"	21' 3"	17' 11"
	16	42' 4"	33' 7"	29' 4"	26' 3"	22' 11"	19' 4"	23' 10"	20' 10"	17' 6"	21' 11"e	19' 4"	16' 3"
	24	37' 0"	29' 4"	25' 8"	21' 11"e	20' 0"	16' 10"	20' 0"e	18' 2"e	15' 4"	17' 11"e	16' 10"e	14' 3"e

Stud Member	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
250SFS162-33EQS	12	8' 5"	-	-	8' 0"	-	-	-	-	-	-	-	-
	16	-	-	-	-	-	-	-	-	-	-	-	-
	24	-	-	-	-	-	-	-	-	-	-	-	-
250SFS162-43EQS	12	9' 5"	8' 3"	-	8' 11"	-	-	8' 7"	-	-	-	-	-
	16	8' 7"	-	-	8' 1"	-	-	-	-	-	-	-	-
	24	-	-	-	-	-	-	-	-	-	-	-	-
362SFS162-33EQS	12	11' 3"	9' 10"	8' 3"	10' 8"	9' 4"	-	10' 3"	8' 11"	-	9' 2"e	8' 3"	-
	16	10' 3"	8' 11"	-	9' 6"e	8' 6"	-	8' 10"e	8' 1"e	-	-	-	-
	24	8' 4"e	-	-	-	-	-	-	-	-	-	-	-
362SFS162-43EQS	12	12' 6"	10' 11"	9' 2"	11' 11"	10' 5"	8' 9"	11' 4"	9' 11"	8' 4"	10' 7"	9' 2"	-
	16	11' 4"	9' 11"	8' 4"	10' 10"	9' 5"	-	10' 4"	9' 0"	-	9' 6"	8' 4"	-
	24	9' 11"	8' 8"	-	9' 3"	8' 3"	-	8' 8"	-	-	-	-	-
400SFS162-33EQS	12	12' 2"	10' 7"	8' 11"	11' 6"	10' 1"	8' 6"	10' 10"e	9' 8"	8' 1"	9' 8"e	8' 11"e	-
	16	10' 10"e	9' 8"	8' 1"	10' 0"e	9' 2"e	-	9' 4"e	8' 9"e	-	8' 4"e	8' 1"e	-
	24	8' 10"e	8' 5"e	-	8' 2"e	8' 0"e	-	-	-	-	-	-	-
400SFS162-43EQS	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"
	16	12' 3"	10' 9"	9' 0"	11' 8"	10' 2"	8' 7"	11' 2"	9' 9"	8' 2"	10' 1"	9' 0"	-
	24	10' 7"	9' 4"	-	9' 10"	8' 11"	-	9' 2"	8' 6"	-	8' 2"e	-	-
600SFS162-33EQS	12	16' 7"e	14' 7"e	12' 4"	15' 4"e	13' 10"e	11' 8"e	14' 4"e	13' 3"e	11' 2"e	12' 10"e	12' 4"e	10' 4"e
	16	14' 4"e	13' 3"e	11' 2"e	13' 3"e	12' 7"e	10' 7"e	12' 5"e	12' 0"e	10' 2"e	11' 1"e	11' 1"e	9' 5"e
	24	11' 8"e	11' 7"e	9' 9"e	10' 10"e	10' 10"e	9' 3"e	9' 10"e	9' 10"e	8' 10"e	-	-	-
600SFS162-43EQS	12	18' 7"	16' 3"	13' 8"	17' 8"	15' 5"	13' 0"	16' 10"	14' 9"	12' 5"	15' 8"e	13' 8"	11' 6"
	16	16' 10"	14' 9"	12' 5"	16' 0"e	14' 0"	11' 10"	15' 4"e	13' 5"e	11' 3"	13' 9"e	12' 5"e	10' 6"
	24	14' 6"e	12' 10"e	10' 10"	13' 5"e	12' 3"e	10' 4"e	12' 7"e	11' 8"e	9' 10"e	11' 3"e	10' 10"e	9' 2"e
800SFS162-43EQS	12	21' 11"e	20' 0"	16' 10"	21' 5"e	19' 0"	16' 0"	20' 0"e	18' 2"e	15' 4"	17' 11"e	16' 10"e	14' 3"e
	16	20' 0"e	18' 2"e	15' 4"	18' 6"e	17' 3"e	14' 7"e	17' 4"e	16' 6"e	13' 11"e	15' 6"e	15' 4"e	12' 11"e
	24	16' 4"e	15' 10"e	13' 5"e	15' 1"e	15' 1"e	12' 8"e	14' 2"e	14' 2"e	12' 2"e	12' 8"e	12' 8"e	11' 3"e

Table Notes:

1. Non-Axial Load Bearing wall heights

33EQS & 43EQS Structural Studs & Track Combined Axial & Lateral Loads

Table Notes:

1. Allowable loads based on weak axis and torsional bracing at 48" o.c. maximum for axial load calculation and continuous support of each flange for flexural calculation.
2. Allowable axial load in kips/stud (1 kip = 1000 lbs).
3. Check lateral end reactions for web crippling.
4. Lateral loads greater than 5 psf multiplied by 0.7 for deflection.

Wall Height (ft)	Spacing (in) o.c.	5 psf Lateral Load								
		250SFS162-(Mils)		362SFS162-(Mils)		400SFS162-(Mils)		600SFS162-(Mils)		800SFS162-(Mils)
		33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS
8	12	1.050	1.555	1.796	2.743	1.981	3.070	2.445	3.873	3.720
	16	0.994	1.494	1.734	2.676	1.922	3.006	2.408	3.836	3.694
	24	0.889 ⁴	1.379	1.614	2.547	1.806	2.879	2.337	3.762	3.641
9	12	0.904	1.344	1.649	2.517	1.852	2.871	2.412	3.839	3.698
	16	0.840 ⁵	1.274	1.573	2.435	1.778	2.791	2.365	3.790	3.664
	24	0.722 ⁴	1.144 ⁴	1.427	2.277	1.635	2.634	2.273	3.694	3.596
10	12	0.767 ⁵	1.148	1.485	2.266	1.705	2.646	2.373	3.798	3.672
	16	0.697 ⁴	1.072 ⁵	1.396	2.171	1.617	2.549	2.314	3.736	3.629
	24	0.572 ³	0.933 ⁴	1.229	1.989	1.449	2.363	2.198	3.614	3.544
12	12	0.536 ³	0.821 ⁴	1.151	1.781	1.378	2.143	2.212	3.585	3.609
	16	0.462 ³	0.740 ⁴	1.045 ⁵	1.665	1.267	2.021	2.127	3.494	3.545
	24	0.334 ²	0.597 ³	0.852 ⁴	1.452 ⁴	1.061 ⁴	1.794	1.960	3.316	3.419
14	12	0.362 ²	0.578 ³	0.850 ⁴	1.361	1.055 ⁵	1.675	2.000	3.255	3.528
	16	0.291 ²	0.499 ²	0.739 ⁴	1.236 ⁴	0.933 ⁴	1.539 ⁵	1.887	3.133	3.439
	24	0.169 ¹	0.362 ²	0.540 ³	1.014 ⁴	0.714 ³	1.295 ⁴	1.670	2.899	3.263
16	12	0.237 ²	0.404 ²	0.615 ³	1.025 ⁴	0.781 ⁴	1.287 ⁵	1.740	2.851	3.427
	16	0.171 ¹	0.329 ²	0.504 ³	0.901 ⁴	0.657 ³	1.148 ⁴	1.603	2.703	3.307
	24	0.057 ¹	0.201 ¹	0.311 ²	0.682 ³	0.440 ²	0.901 ³	1.347 ⁴	2.424	3.072

Wall Height (ft)	Spacing (in) o.c.	15 psf Lateral Load								
		250SFS162-(Mils)		362SFS162-(Mils)		400SFS162-(Mils)		600SFS162-(Mils)		800SFS162-(Mils)
		33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS
8	12	0.742 ⁴	1.217	1.441	2.358	1.638	2.695	2.230	3.651	3.562
	16	0.609 ⁴	1.067 ⁴	1.276	2.178	1.476	2.516	2.124	3.541	3.482
	24	0.367 ³	0.795 ⁴	0.965 ⁵	1.834	1.167	2.172	1.914	3.324	3.325
9	12	0.563 ⁴	0.967 ⁴	1.222	2.053	1.431	2.408	2.136	3.551	3.494
	16	0.421 ³	0.808 ⁴	1.030 ⁵	1.841	1.238	2.193	2.000	3.410	3.393
	24	0.170 ²	0.523 ³	0.678 ⁴	1.449 ⁵	0.877 ⁴	1.788	1.735	3.131	3.192
10	12	0.408 ³	0.749 ⁴	0.999 ⁵	1.737	1.213	2.101	2.026	3.434	3.418
	16	0.263 ²	0.586 ³	0.789 ⁴	1.503 ⁵	0.994 ⁵	1.856	1.859	3.257	3.291
	24	0.011 ²	0.300 ²	0.409 ³	1.079 ⁴	0.594 ⁴	1.405 ⁴	1.534	2.911	3.042
12	12	0.171 ²	0.414 ²	0.596 ⁴	1.169 ⁴	0.786 ⁴	1.487 ⁵	1.720	3.057	3.233
	16	0.030 ²	0.255 ²	0.371 ³	0.915 ⁴	0.539 ⁴	1.209 ⁴	1.490	2.807	3.049
	24	-	-	-	0.470 ³	0.104 ³	0.717 ³	1.055 ⁵	2.332	2.687
14	12	0.015 ¹	0.190 ²	0.285 ³	0.726 ³	0.429 ³	0.974 ⁴	1.366	2.568	3.004
	16	-	0.042 ¹	0.063 ²	0.475 ³	0.180 ²	0.691 ³	1.083 ⁵	2.256	2.752
	24	-	-	-	0.042 ²	-	0.201 ²	0.564 ⁴	1.681 ⁴	2.264
16	12	-	0.043 ¹	0.066 ²	0.403 ²	0.163 ²	0.586 ³	0.998 ⁴	2.040	2.732
	16	-	-	-	0.163 ²	-	0.313 ²	0.681 ⁴	1.690 ⁴	2.405
	24	-	-	-	-	-	-	0.117 ³	1.058 ⁴	1.787 ⁵

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
- If not noted, deflection is less than L/720

33EQS & 43EQS Structural Studs & Track Combined Axial & Lateral Loads

Wall Height (ft)	Spacing (in) o.c.	20 psf Lateral Load								
		250SFS162-(Mils)		362SFS162-(Mils)		400SFS162-(Mils)		600SFS162-(Mils)		800SFS162-(Mils)
		33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS
8	12	0.609 ⁴	1.067 ⁴	1.276	2.178	1.476	2.516	2.124	3.541	3.482
	16	0.444 ³	0.883 ⁴	1.066	1.946	1.268	2.285	1.983	3.396	3.377
	24	0.152 ²	0.550 ³	0.676 ⁴	1.513 ⁵	0.876 ⁵	1.846	1.708	3.109	3.168
9	12	0.421 ³	0.808 ⁴	1.030	1.841	1.238	2.193	2.000	3.410	3.393
	16	0.250 ²	0.613 ³	0.791 ⁴	1.575	0.993 ⁵	1.919	1.823	3.223	3.259
	24	-	0.272 ²	0.357 ³	1.089 ⁴	0.545 ⁴	1.413 ⁵	1.476	2.859	2.992
10	12	0.263 ²	0.586 ³	0.789 ⁴	1.503 ⁵	0.994 ⁵	1.856	1.859	3.257	3.291
	16	0.091 ²	0.390 ²	0.530 ⁴	1.215 ⁴	0.723 ⁴	1.550 ⁵	1.641	3.025	3.125
	24	-	0.051 ²	0.072 ³	0.698 ³	0.233 ³	0.994 ⁴	1.221	2.577	2.794
12	12	0.030 ²	0.255 ²	0.371 ³	0.915 ⁴	0.539 ⁴	1.209 ⁴	1.490	2.807	3.049
	16	-	0.068 ²	0.100 ²	0.612 ³	0.242 ³	0.873 ⁴	1.197	2.487	2.806
	24	-	-	-	0.082 ²	-	0.282 ³	0.649 ⁴	1.885 ⁵	2.333
14	12	-	0.042 ¹	0.063 ²	0.475 ³	0.180 ²	0.691 ³	1.083 ⁵	2.256	2.752
	16	-	-	-	0.177 ²	-	0.357 ³	0.731 ⁴	1.867 ⁵	2.424
	24	-	-	-	-	-	-	0.094 ³	1.156 ⁴	1.796
16	12	-	-	-	0.163 ²	-	0.313 ²	0.681 ⁴	1.690 ⁴	2.405
	16	-	-	-	-	-	-	0.297 ³	1.260 ⁴	1.988
	24	-	-	-	-	-	-	0.498 ³	1.208 ⁴	

Wall Height (ft)	Spacing (in) o.c.	25 psf Lateral Load								
		250SFS162-(Mils)		362SFS162-(Mils)		400SFS162-(Mils)		600SFS162-(Mils)		800SFS162-(Mils)
		33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS
8	12	0.484 ³	0.927 ⁴	1.118	2.003	1.319	2.342	2.018	3.432	3.403
	16	0.292 ³	0.711 ³	0.867 ⁵	1.725	1.068	2.062	1.845	3.252	3.272
	24	-	0.326 ²	0.405 ⁴	1.209 ⁴	0.599 ⁴	1.535 ⁵	1.505	2.897	3.011
9	12	0.291 ²	0.660 ³	0.849 ⁴	1.640	1.053 ⁵	1.986	1.867	3.270	3.292
	16	0.094 ²	0.437 ³	0.568 ⁴	1.326 ⁴	0.763 ⁴	1.660	1.648	3.040	3.125
	24	-	0.046 ²	0.061 ³	0.754 ⁴	0.234 ³	1.061 ⁴	1.224	2.591	2.794
10	12	0.132 ²	0.437 ³	0.593 ⁴	1.285 ⁴	0.789 ⁴	1.624 ⁵	1.695	3.083	3.166
	16	-	0.214 ²	0.293 ³	0.948 ⁴	0.470 ⁴	1.264 ⁴	1.428	2.799	2.959
	24	-	-	-	0.350 ³	-	0.615 ³	0.919 ⁵	2.252	2.550
12	12	-	0.113 ²	0.165 ³	0.685 ³	0.314 ³	0.953 ⁴	1.269	2.566	2.866
	16	-	-	-	0.335 ³	-	0.567 ³	0.917 ⁴	2.180	2.568
	24	-	-	-	-	-	-	0.267 ⁴	1.462 ⁴	1.987
14	12	-	-	-	0.248 ²	-	0.437 ³	0.817 ⁴	1.961 ⁵	2.505
	16	-	-	-	-	-	0.054 ²	0.403 ⁴	1.502 ⁴	2.106
	24	-	-	-	-	-	-	0.670 ³	1.345 ⁵	
16	12	-	-	-	-	-	0.068 ²	0.389 ³	1.364 ⁴	2.091
	16	-	-	-	-	-	-	0.866 ³	1.590 ⁵	
	24	-	-	-	-	-	-	-	0.662 ⁴	

Wall Height (ft)	Spacing (in) o.c.	30 psf Lateral Load								
		250SFS162-(Mils)		362SFS162-(Mils)		400SFS162-(Mils)		600SFS162-(Mils)		800SFS162-(Mils)
		33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS
8	12	0.367 ³	0.795 ⁴	0.965 ⁵	1.834	1.167	3.247	1.914	3.324	3.325
	16	0.152 ²	0.550 ³	0.676 ⁴	1.513 ⁵	0.876 ⁵	3.012	1.708	3.109	3.168
	24	-	0.118 ²	0.148 ³	0.920 ⁴	0.336 ⁴	2.553	1.305	2.687	2.856
9	12	0.170 ²	0.523 ³	0.678 ⁴	1.449 ⁵	0.877 ⁴	2.998	1.735	3.131	3.192
	16	-	0.272 ²	0.357 ³	1.089 ⁴	0.545 ⁴	2.705	1.476	2.859	2.992
	24	-	-	-	0.441 ³	-	2.139	0.977	2.329	2.597
10	12	0.011 ²	0.300 ²	0.409 ³	1.079 ⁴	0.594 ⁴	2.708	1.534	2.911	3.042
	16	-	0.051 ²	0.072 ³	0.698 ³	0.233 ³	2.356	1.221	2.577	2.794
	24	-	-	-	0.026 ²	-	1.692 ⁵	0.627 ⁴	1.936	2.308
12	12	-	-	-	0.470 ³	0.104 ³	2.060	1.055 ⁵	2.332	2.687
	16	-	-	-	0.082 ²	-	1.611 ⁴	0.649 ⁴	1.885 ⁵	2.333
	24	-	-	-	-	-	0.791 ⁴	-	1.058 ⁴	1.649
14	12	-	-	-	0.042 ²	-	1.397 ⁴	0.564 ⁴	1.681 ⁴	2.264
	16	-	-	-	-	-	0.890 ³	0.094 ³	1.156 ⁴	1.796
	24	-	-	-	-	-	-	-	0.216 ³	0.910 ⁴
16	12	-	-	-	-	-	0.803 ³	0.117 ³	1.058 ⁴	1.787 ⁵
	16	-	-	-	-	-	0.280 ²	-	0.498 ³	1.208 ⁴
	24	-	-	-	-	-	-	-	-	0.142 ³

1. Deflection exceeds L/120
 2. Deflection exceeds L/240
 See page 12 for table notes.

3. Deflection exceeds L/360
 4. Deflection exceeds L/600

5. Deflection exceeds L/720
 If not noted, deflection is less than L/720

33EQS & 43EQS Structural Studs & Track Combined Axial & Lateral Loads

Wall Height (ft)	Spacing (in) o.c.	35 psf Lateral Load								
		250SFS162-(Mils)		362SFS162-(Mils)		400SFS162-(Mils)		600SFS162-(Mils)		800SFS162-(Mils)
		33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS
8	12	0.257 ³	0.670 ³	0.818 ⁴	1.671	1.019	2.007	1.810	3.216	3.246
	16	0.018 ²	0.399 ³	0.494 ⁴	1.308 ⁴	0.690 ⁴	1.638	1.572	2.967	3.063
	24	-	-	-	0.644 ⁴	0.083 ⁴	0.952 ⁴	1.108	2.480	2.701
9	12	0.057 ²	0.395 ²	0.514 ⁴	1.265 ⁴	0.708 ⁴	1.597 ⁵	1.605	2.994	3.092
	16	-	0.119 ²	0.157 ³	0.863 ⁴	0.335 ⁴	1.176 ⁴	1.307	2.680	2.860
	24	-	-	-	0.146 ³	-	0.411 ³	0.736 ⁵	2.072	2.402
10	12	-	0.172 ²	0.236 ³	0.884 ⁴	0.410 ⁴	1.196 ⁴	1.376	2.743	2.918
	16	-	-	-	0.463 ³	0.010 ³	0.738 ⁴	1.018	2.359	2.631
	24	-	-	-	-	-	-	0.344 ⁴	1.628 ⁵	2.069
12	12	-	-	-	0.271 ²	-	0.493 ³	0.849 ⁴	2.105	2.509
	16	-	-	-	-	-	0.017 ²	0.392 ⁴	1.601 ⁴	2.102
	24	-	-	-	-	-	-	-	0.673 ⁴	1.317 ⁵
14	12	-	-	-	-	-	-	0.324 ³	1.414 ⁴	2.027
	16	-	-	-	-	-	-	-	0.828 ⁴	1.493 ⁵
	24	-	-	-	-	-	-	-	-	0.490 ⁴
16	12	-	-	-	-	-	-	-	0.771 ³	1.493 ⁵
	16	-	-	-	-	-	-	-	0.152 ³	0.841 ⁴
	24	-	-	-	-	-	-	-	-	-

Wall Height (ft)	Spacing (in) o.c.	40 psf Lateral Load								
		250SFS162-(Mils)		362SFS162-(Mils)		400SFS162-(Mils)		600SFS162-(Mils)		800SFS162-(Mils)
		33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS
8	12	0.152 ²	0.550 ³	0.676 ⁴	1.513 ⁵	0.876 ⁵	1.846	1.708	3.109	3.168
	16	-	0.256 ²	0.317 ⁴	1.111 ⁴	0.510 ⁴	1.435 ⁵	1.438	2.826	2.959
	24	-	-	-	0.379 ³	-	0.676 ⁴	0.914	2.275	2.546
9	12	-	0.272 ²	0.357 ³	1.089 ⁴	0.545 ⁴	1.413 ⁵	1.476	2.859	2.992
	16	-	-	-	0.648 ⁴	0.135 ³	0.948 ⁴	1.141	2.504	2.728
	24	-	-	-	-	-	0.110 ³	0.500 ⁴	1.819	2.208
10	12	-	0.051 ²	0.072 ³	0.698 ³	0.233 ³	0.994 ⁴	1.221	2.577	2.794
	16	-	-	-	0.240 ³	-	0.495 ³	0.820 ⁵	2.146	2.469
	24	-	-	-	-	-	-	0.069 ⁴	1.329 ⁴	1.832
12	12	-	-	-	0.082 ²	-	0.282 ³	0.649 ⁴	1.885 ⁵	2.333
	16	-	-	-	-	-	-	0.144 ⁴	1.325 ⁴	1.874
	24	-	-	-	-	-	-	-	0.301 ³	0.992 ⁵
14	12	-	-	-	-	-	-	0.094 ³	1.156 ⁴	1.796
	16	-	-	-	-	-	-	-	0.515 ³	1.198 ⁴
	24	-	-	-	-	-	-	-	-	0.083 ⁴
16	12	-	-	-	-	-	-	-	0.498 ³	1.208 ⁴
	16	-	-	-	-	-	-	-	-	0.486 ⁴
	24	-	-	-	-	-	-	-	-	-

Wall Height (ft)	Spacing (in) o.c.	50 psf Lateral Load								
		250SFS162-(Mils)		362SFS162-(Mils)		400SFS162-(Mils)		600SFS162-(Mils)		800SFS162-(Mils)
		33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	33EQS	43EQS	43EQS
8	12	-	0.326 ²	0.405 ⁴	1.209 ⁴	0.599 ⁴	1.535 ⁵	1.505	2.897	3.011
	16	-	-	-	0.735 ⁴	0.166 ⁴	1.046 ⁴	1.173	2.549	2.752
	24	-	-	-	-	-	0.150 ³	0.533 ⁵	1.873	2.240
9	12	-	0.046 ²	0.061 ³	0.754 ⁴	0.234 ³	1.061 ⁴	1.224	2.591	2.794
	16	-	-	-	0.243 ³	-	0.515 ⁴	0.816 ⁵	2.157	2.467
	24	-	-	-	-	-	-	0.042 ⁴	1.326 ⁵	1.823
10	12	-	-	-	0.350 ³	-	0.615 ³	0.919 ⁵	2.252	2.550
	16	-	-	-	-	-	0.039 ³	0.437 ⁴	1.730 ⁵	2.149
	24	-	-	-	-	-	-	0.751 ⁴	1.366	1.366
12	12	-	-	-	-	-	-	0.267 ⁴	1.462 ⁴	1.987
	16	-	-	-	-	-	-	-	0.799 ⁴	1.427
	24	-	-	-	-	-	-	-	-	0.359 ⁴
14	12	-	-	-	-	-	-	-	0.670 ³	1.345 ⁵
	16	-	-	-	-	-	-	-	-	0.629 ⁴
	24	-	-	-	-	-	-	-	-	-
16	12	-	-	-	-	-	-	-	-	0.662 ⁴
	16	-	-	-	-	-	-	-	-	-
	24	-	-	-	-	-	-	-	-	-

1. Deflection exceeds L/120
 2. Deflection exceeds L/240
 See page 12 for table notes.

3. Deflection exceeds L/360
 4. Deflection exceeds L/600

5. Deflection exceeds L/720
 If not noted, deflection is less than L/720