



# Technical Guide for Cold-Formed Steel Framing Products

Technical Data in this publication is applicable to the following SFIA Member Company:



STEEL FRAMING LLC

**BUILDSMART.**

The data in this guide is based upon the 2016 American Iron and Steel Institute's S100-16 /S2-20 "North American Specification for the Design of Cold-Formed Steel Structural Members", and meets the requirements of the IBC 2021 Building Code, as well as the 2022 California Building Code and 2020 Florida Building Code.

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**Complies with the 2021 IBC and AISI S100-16/S2-20**

# Introduction



The Steel Framing Industry Association (SFIA) was formed with the objective of assisting companies having interests in the cold-formed steel framing industry to be more successful by unifying the industry to expand the market for the use of cold formed steel systems through:

- (a) Quality Assurance
- (b) Promotion
- (c) Advocacy
- (d) Education
- (e) Innovation

The SFIA developed this Industry leading product technical guide to comply with the latest building codes and standards. The data in this catalog based on the American Iron and Steel Institute's AISI S100-16/S2-20 "North American Specification for the Design of Cold-Formed Steel Structural Members" and meets the requirements of the 2021 International Building Code (IBC). While building codes vary by jurisdiction, this program follows the most recent international standards published by the International Code Council.

## Material Specification

Products manufactured by SFIA members are formed from steel with a minimum yield stress of 33 or 50 kips per square inch (ksi). Unless noted otherwise, all products covered in this SFIA catalog are engineered to meet the 2016 edition of the American Iron and Steel Institute (AISI) S100-16/S2-20, "North American Specification of the Design of Cold-Formed Steel Structural Members" and other AISI standards referenced in Section 2210 of the 2021 International Building Code (IBC-2021). The structural properties in this SFIA catalog have been computed based on allowable stress design (ASD) which includes distortional buckling considerations for all Stud Sections. For fastener tables, screw sizes and head diameters do not refer to specific fasteners which may or may not be available from SFIA member companies. Shear and tension data for screws was developed using published manufacturer data and evaluation reports available at the time of publications.

## Disclaimer

*A concerted effort has been made to ensure the accuracy of the technical data represented in this catalog. The Steel Framing Industry Association makes no representation, warranty, or guarantee in connection with this technical data and expressly disclaims any liability or responsibility for failure resulting from the use or misapplication of computations, detail drawings and specifications contained herein. All data, specifications and details contained in this catalog publications are intended as a general guide for using SFIA member companies products. These products should not be used in design or construction without an independent evaluation by a qualified engineer or architect to verify the suitability of a particular product for use in a specific application. This publication contains the latest information available at the time of printing. The SFIA and its member companies reserve the right to make modifications and/or change materials of any of their products without prior notice or obligation. For the latest information regarding a particular manufacturer's products contact that manufacturer. All SFIA manufacturers may not produce all of the products listed in this catalog. Please contact manufacturer to verify product availability.*

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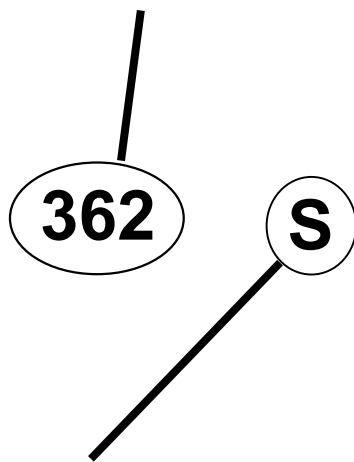
# General Product Information

The Steel Framing Industry Association (SFIA) supports the industry standard nomenclature published in the American Iron and Steel Institute's (AISI) General Provisions, S202, section E4, which references AISI S220 and S240, Section A5.5 and states that .."structural members and non-structural members shall use a four-part product designator that identifies the size (both web depth and flange width), style, and thickness." An example of this designator is shown below:

## EXAMPLE:

### MEMBER DEPTH:

(Example:  $3\text{-}5/8" = 3.625" \sim 362 \times 1/100$  inches)  
All member depths are taken in 1/100 inches.  
For all "T" Sections, member depth is the inside to inside dimension.

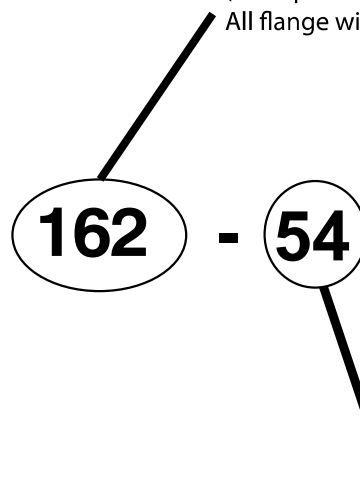


### STYLE:

(Example: Stud or Joist section = S)  
The five alpha characters utilized by the designator system are:  
S = Stud or Joist Sections  
T = Track Sections  
U = Channel Sections  
F = Furring Channel Sections  
L = Angle or L-header

### FLANGE WIDTH:

(Example:  $1\text{-}5/8" = 1.625" \sim 162 \times 1/100$  inches)  
All flange widths are taken in 1/100 inches.



### MATERIAL THICKNESS:

(Example: 0.054 in = 54 mils; 1 mil = 1/1000 in.)  
Material thickness is the minimum base metal thickness in mils. Minimum base metal thickness represents 95% of the design thickness.

NOTE: For Structural members 54 mil (16 gauge) and thicker, that have both 33 and 50 ksi yield strength options shown, the designer shall identify which yield strength he has specified and the manufacturer shall label the product with the yield strength.

Thickness Table

Designation Thickness (Mils)	Minimum Thickness <sup>1</sup> (in)	Design Thickness (in)	Design Inside Corner Radii <sup>2</sup> (in)	Reference Gauge No.
18	0.0179	0.0188	0.0844	25
27	0.0269	0.0283	0.0796	22
30	0.0296	0.0312	0.0782	20-Drywall
33	0.0329	0.0346	0.0765	20-Structural
43	0.0428	0.0451	0.0712	18
54	0.0538	0.0566	0.0849	16
68	0.0677	0.0713	0.1070	14
97	0.0966	0.1017	0.1526	12
118	0.1180	0.1242	0.1863	10

Stiffening Lip Length

Section	Flange Width	Design Stiffening Lip Length (in)
S125	1 1/4"	0.188
S137	1 3/8"	0.375
S162	1 5/8"	0.500
S200	2"	0.625
S250	2 1/2"	0.625
S300	3"	0.625
S350	3 1/2"	1.000

<sup>1</sup> Minimum Thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the jobsite based on section B7.1 of the AISI S100-16/S2

<sup>2</sup> The tables in this catalog are calculated based on inside corner radii listed in this table.

## General Notes for all Tables

- Where AISI S100-16/S2-20 is referenced, it is the "North American Specification for the Design of Cold-Formed Steel Structural Members", 2016 Edition, Supplement 2-20, with US provisions.
- The strength increase from cold work of forming has been incorporated for flexural strength per Section A3.3.2 of AISI S100-16/S2-20.
- 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 S100-16/S2-20 Specification Procedure 1 for serviceability determination has been used. Increases in the effective moment of Inertia (I<sub>xe</sub>) may be possible at lower stress levels. Any modified values would be required to be calculated by a qualified engineer.
- Various sections may be manufactured with yield points of 33 or 50 ksi. The yield point used for calculations are listed in the tables.
- For sections available in both 33 and 50 ksi, the specifier must be clearly indicate which yield point is required. For example: 362S162-68 (50ksi).
- When provided, factory punchouts will be located along the centerline of the webs of the members and will have a minimum center-to-center spacing of 24 inches. Punchouts for members greater than 2.5 inches deep are a maximum of 1.5 inches wide x 4 inches long.

Members with depths 2.5 inches and smaller are maximum of 3/4 inches wide x 4 inches long.

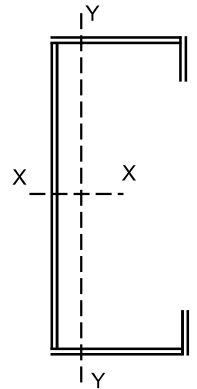
## Definitions of Structural Property Symbols

### Gross Properties

- I<sub>x</sub>: Moment of inertia of gross section about the X-X axis (strong axis).  
S<sub>x</sub>: Section modulus about the X-X axis (strong axis).  
R<sub>x</sub>: Radius of gyration of the gross section about the X-X axis.  
I<sub>y</sub>: Moment of inertia of gross section about the Y-Y axis (weak axis).  
R<sub>y</sub>: Radius of gyration of the gross section about the Y-Y axis.

### Effective Properties

- I<sub>xe</sub>: Effective moment of inertia about the X-axis.  
S<sub>xe</sub>: Effective section modulus about the X-X axis (strong axis) stress = F<sub>y</sub>.  
M<sub>a</sub>: Allowable Bending Moment - Based on the effective section modulus and the allowable stress including the strength increase from the cold-work of forming (Section A3.3.2) where applicable.  
M<sub>ad</sub>: Allowable Bending Moment - Based on Distortional Buckling Strength calculated per Sections F4, F4.1 of AISI S100-16/S2-20.  
V<sub>ag</sub>: Allowable strong axis shear away from punchout, calculated in accordance with Section G2 of AISI S100-16/S2-20.  
V<sub>anet</sub>: Allowable strong axis shear at punchout, calculated in accordance with Section G3 of AISI S100-16.



### Torsional and Other Properties

- J: St. Venant Torsional Constant.  
C<sub>w</sub>: Torsional warping constant.  
m: Distance from shear center to mid-plane of web.  
X<sub>o</sub>: Distance from the shear center to the centroid along the principal X-axis.  
R<sub>o</sub>: Polar radius of gyration about the centroidal principal axis.  
b:  $1-(X_o/R_o)^2$   
L<sub>u</sub>: The longest weak axis (L<sub>y</sub>) and torsional (L<sub>t</sub>) unbraced length at which lateral torsional buckling is restrained in accordance with Section F2.1 of AISI S100-16/S2-20.

## Section Properties Table Notes

1. Calculated properties are based on AISI S100-16 /S2-20 "North American Specification for the Design of Cold-Formed Steel Structural Members."
2. The centerline bend radius is based upon inside corner radii shown in Table as shown in the Thickness Table (page 3).
3. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A3.3.2.
4. Tabulated gross properties, including torsional properties, are based upon full-unreduced cross section of the studs, away from punchouts.
5. For deflection calculations, use the effective moment of inertia.
6. Allowable moment includes cold-work of forming.
7. For the steels that have both 33 and 50 ksi listing, if the design is based upon 50 ksi, the 50 ksi steel needs to be specified. (Example: 3625 S137 16-50 (50 ksi)).
8. Web depth for track sections is equal to the nominal stud width plus 2 times the design thickness plus the bend radius. Hems on nonstructural track sections are ignored.











# Section Properties

## Structural (S) Stud Section Properties

Member	Design Thickness (in)	F <sub>y</sub> (ksi)	Gross Properties						Effective Properties						Torsional Properties							
			Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	R <sub>x</sub> (in)	I <sub>y</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	M <sub>a</sub> (in-k)	M <sub>ed</sub> (in-k)	Va <sub>g</sub> (lb)	Va <sub>net</sub> (lb)	Jx1000 (in <sup>4</sup> )	C <sub>w</sub> (in <sup>6</sup> )	X <sub>o</sub> (in)	m (in)	R <sub>o</sub> (in)	β	L <sub>u</sub> (in)
1600S250-68 <sup>1</sup>	0.0713	50	1.549	5.27	49.832	6.229	5.673	0.889	0.758	45.619	4.020	100.50	84.94	2062	1649	2.624	46.230	-1.167	0.778	5.841	0.960	46.5
1600S250-97	0.1017	50	2.186	7.44	69.503	8.688	5.639	1.193	0.739	66.649	6.888	206.22	172.62	6042	6042	7.536	63.082	-1.138	0.762	5.800	0.962	45.9
1600S250-118	0.1242	50	2.649	9.01	83.459	10.432	5.613	1.390	0.724	81.961	9.167	274.47	231.24	11086	11086	13.620	74.524	-1.116	0.750	5.769	0.963	45.4
1600S300-68 <sup>1</sup>	0.0713	50	1.620	5.51	54.355	6.794	5.793	1.411	0.933	49.256	4.143	103.58	89.73	2062	1649	2.745	71.608	-1.494	0.981	6.055	0.939	55.8
1600S300-97	0.1017	50	2.288	7.78	75.929	9.491	5.761	1.910	0.914	72.942	7.291	218.29	182.59	6042	6042	7.887	98.275	-1.463	0.964	6.014	0.941	55.1
1600S300-118	0.1242	50	2.773	9.43	91.284	11.411	5.738	2.240	0.899	89.961	9.756	292.10	244.86	11086	11086	14.258	116.606	-1.439	0.951	5.983	0.942	54.7
1600S350-68 <sup>1</sup>	0.0713	50	1.745	5.94	61.641	7.705	5.944	2.490	1.195	57.601	5.104	127.59	112.58	2062	1649	2.957	127.370	-2.055	1.322	6.402	0.897	69.7
1600S350-97	0.1017	50	2.466	8.39	86.296	10.787	5.916	3.410	1.176	83.748	8.285	248.05	223.83	6042	6042	8.501	175.895	-2.022	1.304	6.362	0.899	69.1
1600S350-118	0.1242	50	2.990	10.17	103.924	12.990	5.895	4.039	1.162	102.57	11.236	336.42	296.35	11086	11086	15.376	209.692	-1.998	1.291	6.332	0.900	68.8

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

<sup>2</sup> When web height-to thickness ratio exceeds 260, or flange width-to-thickness ratio exceeds 60, effective properties are not calculated (limitations in AISI section B4.1).

See Section Properties Table Notes

(T) Track Section Properties

Table with columns: Design Thickness (in), Fy (ksi), Area (in²), Weight (lb/ft), Gross Properties (Ix, Sx, Rx, Iy, Ry), Effective Properties (Ix, Sx, Ma, Vag), Torsional Properties (Jx1000, Cw, Xo, m, Ro, beta). Rows include track sections like 162T125-18, 162T125-27, 162T125-30, 162T125-33, 250T125-18, 250T125-27, 250T125-30, 250T125-33, 250T125-43, 250T125-54, 250T125-68, 250T150-27, 250T150-30, 250T150-33, 250T150-43, 250T150-54, 250T150-68, 250T200-33, 250T200-43, 250T200-54, 250T200-68, 350T125-18, 350T125-27, 350T125-30, 350T125-33, 350T125-43, 350T125-54, 350T125-68, 350T125-97, 350T150-27, 350T150-30, 350T150-33, 350T150-43, 350T150-54, 350T150-68, 350T150-97, 350T200-33, 350T200-43, 350T200-54, 350T200-68, 362T125-18, 362T125-27, 362T125-30, 362T125-33, 362T125-43, 362T125-54.

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

See Section Properties Table Notes









## (T) Track Section Properties

Member	Design Thickness (in)	F <sub>y</sub> (ksi)	Gross Properties							Effective Properties				Torsional Properties					
			Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	R <sub>x</sub> (in)	I <sub>y</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	M <sub>a</sub> (in-k)	V <sub>a</sub> (lb)	Jx1000 (in <sup>4</sup> )	C <sub>w</sub> (in <sup>6</sup> )	X <sub>o</sub> (in)	m (in)	R <sub>o</sub> (in)	β
1400T150-97	0.1017	50	1.727	5.87	38.626	5.381	4.730	0.180	0.323	37.280	4.336	129.82	6759	5.9529	7.503	-0.399	0.275	4.757	0.993
1400T150-118	0.1242	33	2.108	7.17	47.269	6.549	4.735	0.215	0.319	47.252	6.292	124.34	12342	10.8394	9.048	-0.393	0.270	4.762	0.993
1400T150-118	0.1242	50	2.108	7.17	47.269	6.549	4.735	0.215	0.319	46.910	5.888	176.28	12342	10.8394	9.048	-0.393	0.270	4.762	0.993
1400T200-54 <sup>1</sup>	0.0566	33	1.018	3.46	24.232	3.413	4.879	0.242	0.487	20.099	1.870	30.85	1160	1.0872	9.520	-0.665	0.449	4.948	0.982
1400T200-54 <sup>1</sup>	0.0566	50	1.018	3.46	24.232	3.413	4.879	0.242	0.487	18.385	1.590	39.75	1160	1.0872	9.520	-0.665	0.449	4.948	0.982
1400T200-68	0.0713	33	1.282	4.36	30.583	4.293	4.884	0.301	0.485	27.708	2.833	55.97	2322	2.1729	11.942	-0.661	0.446	4.952	0.982
1400T200-68	0.0713	50	1.282	4.36	30.583	4.293	4.884	0.301	0.485	25.741	2.434	72.87	2322	2.1729	11.942	-0.661	0.446	4.952	0.982
1400T200-97	0.1017	33	1.828	6.22	43.791	6.101	4.894	0.420	0.479	43.676	5.179	102.34	6759	6.3035	16.883	-0.651	0.439	4.960	0.983
1400T200-97	0.1017	50	1.828	6.22	43.791	6.101	4.894	0.420	0.479	41.762	4.563	136.62	6759	6.3035	16.883	-0.651	0.439	4.960	0.983
1400T200-118	0.1242	33	2.232	7.59	53.628	7.430	4.901	0.505	0.476	53.611	7.069	139.69	12342	11.4780	20.479	-0.644	0.434	4.966	0.983
1400T200-118	0.1242	50	2.232	7.59	53.628	7.430	4.901	0.505	0.476	53.450	6.361	190.46	12342	11.4780	20.479	-0.644	0.434	4.966	0.983
1600T125-54 <sup>1</sup>	0.0566	33	1.046	3.56	28.500	3.519	5.219	0.062	0.243	24.283	2.043	33.71	1014	1.1174	3.432	-0.272	0.191	5.232	0.997
1600T125-54 <sup>1</sup>	0.0566	50	1.046	3.56	28.500	3.519	5.219	0.062	0.243	22.345	1.749	43.72	1014	1.1174	3.432	-0.272	0.191	5.232	0.997
1600T125-68 <sup>1</sup>	0.0713	33	1.318	4.48	35.935	4.423	5.222	0.077	0.241	32.434	3.059	50.48	2029	2.2333	4.273	-0.268	0.189	5.234	0.997
1600T125-68 <sup>1</sup>	0.0713	50	1.318	4.48	35.935	4.423	5.222	0.077	0.241	31.000	2.653	66.32	2029	2.2333	4.273	-0.268	0.189	5.234	0.997
1600T125-97	0.1017	33	1.879	6.39	51.349	6.279	5.227	0.105	0.237	49.840	5.274	104.22	5906	6.4788	5.945	-0.262	0.184	5.239	0.997
1600T125-97	0.1017	50	1.879	6.39	51.349	6.279	5.227	0.105	0.237	47.826	4.826	144.50	5906	6.4788	5.945	-0.262	0.184	5.239	0.997
1600T125-118	0.1242	33	2.294	7.81	62.789	7.641	5.231	0.125	0.234	62.761	6.966	137.65	10781	11.7973	7.126	-0.257	0.181	5.243	0.998
1600T125-118	0.1242	50	2.294	7.81	62.789	7.641	5.231	0.125	0.234	60.926	6.422	192.27	10781	11.7973	7.126	-0.257	0.181	5.243	0.998
1600T150-54 <sup>1</sup>	0.0566	33	1.075	3.66	30.343	3.747	5.314	0.106	0.314	25.443	2.091	34.50	1014	1.1476	5.757	-0.374	0.260	5.336	0.995
1600T150-54 <sup>1</sup>	0.0566	50	1.075	3.66	30.343	3.747	5.314	0.106	0.314	23.298	1.783	44.56	1014	1.1476	5.757	-0.374	0.260	5.336	0.995
1600T150-68 <sup>1</sup>	0.0713	33	1.354	4.60	38.268	4.710	5.317	0.132	0.312	34.941	3.154	52.03	2029	2.2938	7.188	-0.371	0.258	5.339	0.995
1600T150-68 <sup>1</sup>	0.0713	50	1.354	4.60	38.268	4.710	5.317	0.132	0.312	32.535	2.719	67.97	2029	2.2938	7.188	-0.371	0.258	5.339	0.995
1600T150-97	0.1017	33	1.930	6.57	54.708	6.690	5.324	0.183	0.308	53.168	5.676	112.15	5906	6.6541	10.066	-0.363	0.253	5.345	0.995
1600T150-97	0.1017	50	1.930	6.57	54.708	6.690	5.324	0.183	0.308	51.376	5.051	151.22	5906	6.6541	10.066	-0.363	0.253	5.345	0.995
1600T150-118	0.1242	33	2.356	8.02	66.919	8.144	5.329	0.218	0.304	66.892	7.461	147.44	10781	12.1166	12.124	-0.358	0.249	5.350	0.996
1600T150-118	0.1242	50	2.356	8.02	66.919	8.144	5.329	0.218	0.304	65.020	6.913	206.98	10781	12.1166	12.124	-0.358	0.249	5.350	0.996
1600T200-54 <sup>1</sup>	0.0566	33	1.131	3.85	34.030	4.202	5.485	0.246	0.467	27.332	2.156	35.57	1014	1.2081	12.864	-0.612	0.417	5.538	0.988
1600T200-54 <sup>1</sup>	0.0566	50	1.131	3.85	34.030	4.202	5.485	0.246	0.467	24.860	1.828	45.71	1014	1.2081	12.864	-0.612	0.417	5.538	0.988
1600T200-68 <sup>1</sup>	0.0713	33	1.425	4.85	42.933	5.284	5.489	0.307	0.464	37.905	3.280	54.11	2029	2.4146	16.123	-0.607	0.414	5.542	0.988
1600T200-68 <sup>1</sup>	0.0713	50	1.425	4.85	42.933	5.284	5.489	0.307	0.464	35.012	2.808	70.19	2029	2.4146	16.123	-0.607	0.414	5.542	0.988
1600T200-97	0.1017	33	2.032	6.91	61.425	7.511	5.498	0.428	0.459	60.192	6.058	119.71	5906	7.0047	22.755	-0.598	0.408	5.550	0.988
1600T200-97	0.1017	50	2.032	6.91	61.425	7.511	5.498	0.428	0.459	57.306	5.303	158.77	5906	7.0047	22.755	-0.598	0.408	5.550	0.988
1600T200-118	0.1242	33	2.481	8.44	75.179	9.149	5.505	0.515	0.455	75.152	8.338	164.77	10781	12.7552	27.568	-0.592	0.403	5.556	0.989
1600T200-118	0.1242	50	2.481	8.44	75.179	9.149	5.505	0.515	0.455	73.606	7.441	222.78	10781	12.7552	27.568	-0.592	0.403	5.556	0.989

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

See Section Properties Table Notes

# Section Properties

Web Depth-to-Thickness Ratios for Stud and Joist Members <sup>2,3</sup>										
Style	Web Depth (in)	18Mil 0.0188	27Mil 0.0283	30Mil 0.0312	33Mil 0.0346	43Mil 0.0451	54Mil 0.0566	68Mil 0.0713	97Mil 0.1017	118Mil 0.1242
162S	1.625	75	50	45	41	31	24	18	11	8
250S	2.500	122	81	73	66	50	39	30	20	15
350S	3.500	175	116	105	95	72	57	44	29	23
362S	3.625	182	120	109	98	75	59	46	31	24
400S	4.000	202 <sup>1</sup>	134	121	109	84	66	51	34	27
550S	5.500	-	187	169	153	117	92	72	49	39
600S	6.000	-	204 <sup>1</sup>	185	167	128	101	79	54	43
800S	8.000	-	-	249 <sup>1</sup>	225 <sup>1</sup>	172	136	107	74	59
1000S	10.000	-	-	-	-	217 <sup>1</sup>	172	135	93	76
1200S	12.000	-	-	-	-	-	207 <sup>1</sup>	163	113	92
1400S	14.000	-	-	-	-	-	242 <sup>1</sup>	191	133	108
1600S	16.000	-	-	-	-	-	-	219 <sup>1</sup>	152	124

<sup>1</sup> h/t exceeds 200

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

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

Members with h/t between 200 and 260			
Member	h/t	Member	h/t
400S__18	202	1000__43	217
600S__27	204	1200S__54	207
800S__30	249	1400S__54	242
800S__33	225	1600S__68	219

# Limiting Wall Height Tables - Non-Composite

## Interior Non-Structural Non-Composite Table Notes

1. 5 psf, 7.5 psf, and 10 psf loads have NOT been reduced for strength or deflection checks. Full lateral load is applied.
2. Calculated properties are based on AISI S100-16/S2-20, North American Specification for Cold-Formed Steel Structural Members.
3. Limiting heights are based on continuous support of each flange over the full length of the stud.
4. Limiting heights are based on steel properties only (non-composite).
5. Web crippling checks are based on end-one flange loading condition using 1-inch end bearing.
6. Limiting heights are based on continuous support of each flange over the full length of the stud.

## Interior Non-Structural Non-Composite

Stud Member	Spacing, in, oc	Fy, ksi	5 psf			7.5 psf			10 psf		
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162S125-18	12	33	9'-1"	7'-8"	6'-8"	7'-5"	6'-8"	5'-10"	6'-5"	6'-1"	5'-4"
	16		7'-10"	6'-11"	6'-1"	6'-5"	6'-1"	5'-4"	5'-7"	5'-6"	4'-10"
	24		6'-5"	6'-1"	5'-4"	5'-3"	5'-3"	4'-8"	4'-6"	4'-6"	4'-3"
162S125-27	12	33	11'-3"	8'-11"	7'-10"	9'-8"	7'-10"	6'-10"	8'-4"	7'-1"	6'-3"
	16		10'-3"	8'-2"	7'-1"	8'-4"	7'-1"	6'-3"	7'-3"	6'-6"	5'-8"
	24		8'-4"	7'-1"	6'-3"	6'-10"	6'-3"	5'-5"	5'-11"	5'-8"	4'-11"
162S125-30	12	33	11'-8"	9'-3"	8'-1"	10'-2"	8'-1"	7'-1"	8'-11"	7'-4"	6'-5"
	16		10'-7"	8'-5"	7'-4"	8'-11"	7'-4"	6'-5"	7'-9"	6'-8"	5'-10"
	24		8'-11"	7'-4"	6'-5"	7'-4"	6'-5"	5'-7"	6'-4"	5'-10"	5'-1"
162S125-33	12	33	12'-0"	9'-6"	8'-4"	10'-6"	8'-4"	7'-3"	9'-6"	7'-7"	6'-7"
	16		10'-11"	8'-8"	7'-7"	9'-6"	7'-7"	6'-7"	8'-4"	6'-11"	6'-0"
	24		9'-6"	7'-7"	6'-7"	7'-10"	6'-7"	5'-9"	6'-9"	6'-0"	5'-3"
250S125-18	12	33	12'-4"	10'-7"	9'-3"	10'-1"	9'-3"	8'-1"	8'-9"	8'-5"	7'-4"
	16		10'-8"	9'-7"	8'-5"	8'-9"	8'-5"	7'-4"	7'-7"	7'-7"	6'-8"
	24		8'-9"	8'-5"	7'-4"	7'-1"	7'-1"	6'-5"	6'-2"	6'-2"	5'-10"
250S125-27	12	33	15'-7"	12'-5"	10'-10"	12'-11"	10'-10"	9'-5"	11'-3"	9'-10"	8'-7"
	16		13'-9"	11'-3"	9'-10"	11'-3"	9'-10"	8'-7"	9'-9"	8'-11"	7'-10"
	24		11'-3"	9'-10"	8'-7"	9'-2"	8'-7"	7'-6"	7'-11"	7'-10"	6'-10"
250S125-30	12	33	16'-1"	12'-9"	11'-2"	13'-9"	11'-2"	9'-9"	11'-11"	10'-2"	8'-10"
	16		14'-7"	11'-7"	10'-2"	11'-11"	10'-2"	8'-10"	10'-4"	9'-2"	8'-1"
	24		11'-11"	10'-2"	8'-10"	9'-9"	8'-10"	7'-9"	8'-5"	8'-1"	7'-0"
250S125-33	12	33	16'-8"	13'-2"	11'-6"	14'-6"	11'-6"	10'-1"	12'-9"	10'-6"	9'-2"
	16		15'-1"	12'-0"	10'-6"	12'-9"	10'-6"	9'-2"	11'-1"	9'-6"	8'-4"
	24		12'-9"	10'-6"	9'-2"	10'-5"	9'-2"	8'-0"	9'-0"	8'-4"	7'-3"
250S125-43	12	33	18'-1"	14'-4"	12'-7"	15'-10"	12'-7"	10'-11"	14'-4"	11'-5"	9'-11"
	16		16'-5"	13'-1"	11'-5"	14'-4"	11'-5"	9'-11"	13'-1"	10'-4"	9'-1"
	24		14'-4"	11'-5"	9'-11"	12'-5"	9'-11"	8'-8"	10'-9"	9'-1"	7'-11"
250S125-54	12	33	19'-4"	15'-5"	13'-5"	16'-11"	13'-5"	11'-9"	15'-5"	12'-2"	10'-8"
	16		17'-7"	14'-0"	12'-2"	15'-5"	12'-2"	10'-8"	14'-0"	11'-1"	9'-8"
	24		15'-5"	12'-2"	10'-8"	13'-5"	10'-8"	9'-4"	11'-11"	9'-8"	8'-6"
350S125-18	12	33	14'-0"	13'-10"	12'-1"	11'-6"	11'-6"	10'-7"	9'-11"	9'-11"	9'-7"
	16		12'-2"	12'-2"	11'-0"	9'-11"	9'-11"	9'-7"	8'-7"	8'-7"	8'-7"
	24		9'-11"	9'-11"	9'-7"	8'-1"	8'-1"	8'-1"	7'-0"	7'-0"	7'-0"
350S125-27	12	33	18'-10"	16'-1"	14'-0"	15'-5"	14'-0"	12'-3"	13'-4"	12'-9"	11'-1"
	16		16'-4"	14'-7"	12'-9"	13'-4"	12'-9"	11'-1"	11'-7"	11'-7"	10'-1"
	24		13'-4"	12'-9"	11'-1"	10'-11"	10'-11"	9'-9"	9'-5"	9'-5"	8'-10"
350S125-30	12	33	20'-3"	16'-7"	14'-6"	16'-6"	14'-6"	12'-8"	14'-4"	13'-2"	11'-6"
	16		17'-6"	15'-0"	13'-2"	14'-4"	13'-2"	11'-6"	12'-5"	11'-11"	10'-5"
	24		14'-4"	13'-2"	11'-6"	11'-8"	11'-6"	10'-0"	10'-1"	10'-1"	9'-1"
350S125-33	12	33	21'-7"	17'-1"	14'-11"	17'-10"	14'-11"	13'-1"	15'-5"	13'-7"	11'-10"
	16		18'-11"	15'-7"	13'-7"	15'-5"	13'-7"	11'-10"	13'-4"	12'-4"	10'-9"
	24		15'-5"	13'-7"	11'-10"	12'-7"	11'-10"	10'-4"	10'-11"	10'-9"	9'-5"
350S125-43	12	33	23'-6"	18'-8"	16'-3"	20'-6"	16'-3"	14'-3"	18'-8"	14'-10"	12'-11"
	16		21'-4"	16'-11"	14'-10"	18'-8"	14'-10"	12'-11"	16'-2"	13'-5"	11'-9"
	24		18'-8"	14'-10"	12'-11"	15'-3"	12'-11"	11'-4"	13'-3"	11'-9"	10'-3"
350S125-54	12	33	25'-2"	20'-0"	17'-5"	22'-0"	17'-5"	15'-3"	20'-0"	15'-10"	13'-10"
	16		22'-10"	18'-2"	15'-10"	20'-0"	15'-10"	13'-10"	18'-1"	14'-5"	12'-7"
	24		20'-0"	15'-10"	13'-10"	17'-1"	13'-10"	12'-1"	14'-10"	12'-7"	11'-0"
362S125-18	12	33	14'-4"	14'-3"	12'-5"	11'-8"	11'-8"	10'-10"	10'-1"	10'-1"	9'-10"
	16		12'-5"	12'-5"	11'-4"	10'-1"	10'-1"	9'-10"	8'-9"	8'-9"	8'-9"
	24		10'-1"	10'-1"	9'-10"	8'-3"	8'-3"	8'-3"	7'-2"	7'-2"	7'-2"
362S125-27	12	33	19'-3"	16'-6"	14'-5"	15'-9"	14'-5"	12'-7"	13'-7"	13'-1"	11'-5"
	16		16'-8"	15'-0"	13'-1"	13'-7"	13'-1"	11'-5"	11'-9"	11'-9"	10'-5"
	24		13'-7"	13'-1"	11'-5"	11'-1"	11'-1"	10'-0"	9'-8"	9'-8"	9'-1"
362S125-30	12	33	20'-8"	17'-0"	14'-10"	16'-11"	14'-10"	13'-0"	14'-7"	13'-6"	11'-10"
	16		17'-11"	15'-5"	13'-6"	14'-7"	13'-6"	11'-10"	12'-8"	12'-8"	10'-9"
	24		14'-7"	13'-6"	11'-10"	11'-11"	11'-10"	10'-4"	10'-4"	10'-4"	9'-4"
362S125-33	12	33	22'-2"	17'-7"	15'-4"	18'-3"	15'-4"	13'-5"	15'-9"	14'-0"	12'-2"
	16		19'-4"	16'-0"	14'-0"	15'-9"	14'-0"	12'-2"	13'-8"	12'-8"	11'-1"
	24		15'-9"	14'-0"	12'-2"	12'-11"	12'-2"	10'-8"	11'-2"	11'-1"	9'-8"

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# Limiting Wall Height Tables - Non-Composite

## Interior Non-Structural Non-Composite

Stud Member	Spacing, in, oc	Fy, ksi	5 psf			7.5 psf			10 psf		
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
362S125-43	12	33	24'-2"	19'-2"	16'-9"	21'-1"	16'-9"	14'-8"	19'-1"	15'-3"	13'-3"
	16		21'-11"	17'-5"	15'-3"	19'-1"	15'-3"	13'-3"	16'-7"	13'-10"	12'-1"
	24		19'-1"	15'-3"	13'-3"	15'-7"	13'-3"	11'-7"	13'-6"	12'-1"	10'-7"
362S125-54	12	33	25'-11"	20'-7"	17'-11"	22'-7"	17'-11"	15'-8"	20'-7"	16'-4"	14'-3"
	16		23'-6"	18'-8"	16'-4"	20'-7"	16'-4"	14'-3"	18'-7"	14'-10"	12'-11"
	24		20'-7"	16'-4"	14'-3"	17'-6"	14'-3"	12'-5"	15'-2"	12'-11"	11'-4"
400S125-18 <sup>1</sup>	12	33	13'-10"	13'-10"	13'-5"	11'-3"	11'-3"	11'-3"	9'-9"	9'-9"	9'-9"
	16		12'-0"	12'-0"	12'-0"	9'-9"	9'-9"	9'-9"	8'-6"	8'-6"	8'-6"
	24		9'-9"	9'-9"	9'-9"	8'-0"	8'-0"	8'-0"	6'-11"	6'-11"	6'-11"
400S125-27	12	33	20'-5"	17'-10"	15'-7"	16'-8"	15'-7"	13'-7"	14'-5"	14'-2"	12'-4"
	16		17'-8"	16'-2"	14'-2"	14'-5"	14'-2"	12'-4"	12'-6"	12'-6"	11'-3"
	24		14'-5"	14'-2"	12'-4"	11'-9"	11'-9"	10'-9"	10'-2"	10'-2"	9'-10"
400S125-30	12	33	21'-11"	18'-5"	16'-1"	17'-11"	16'-1"	14'-0"	15'-6"	14'-7"	12'-9"
	16		19'-0"	16'-8"	14'-7"	15'-6"	14'-7"	12'-9"	13'-5"	13'-3"	11'-7"
	24		15'-6"	14'-7"	12'-9"	12'-8"	12'-8"	11'-2"	11'-0"	11'-0"	10'-1"
400S125-33	12	33	23'-8"	19'-0"	16'-7"	19'-4"	16'-7"	14'-6"	16'-9"	15'-1"	13'-2"
	16		20'-6"	17'-3"	15'-1"	16'-9"	15'-1"	13'-2"	14'-6"	13'-8"	12'-0"
	24		16'-9"	15'-1"	13'-2"	13'-8"	13'-2"	11'-6"	11'-10"	11'-10"	10'-6"
400S125-43	12	33	26'-1"	20'-9"	18'-1"	22'-10"	18'-1"	15'-10"	20'-4"	16'-5"	14'-4"
	16		23'-9"	18'-10"	16'-5"	20'-4"	16'-5"	14'-4"	17'-7"	14'-11"	13'-1"
	24		20'-4"	16'-5"	14'-4"	16'-7"	14'-4"	12'-7"	14'-5"	13'-1"	11'-5"
400S125-54	12	33	28'-0"	22'-3"	19'-5"	24'-5"	19'-5"	16'-11"	22'-3"	17'-8"	15'-5"
	16		25'-5"	20'-2"	17'-8"	22'-3"	17'-8"	15'-5"	19'-10"	16'-0"	14'-0"
	24		22'-3"	17'-8"	15'-5"	18'-9"	15'-5"	13'-5"	16'-3"	14'-0"	12'-3"
550S125-18 <sup>2</sup>	12	33	16'-11"	16'-11"	16'-9"	13'-9"	13'-9"	13'-9"	11'-11"	11'-11"	11'-11"
	16		14'-7"	14'-7"	14'-7"	11'-11"	11'-11"	11'-11"	10'-4"	10'-4"	10'-4"
	24		11'-11"	11'-11"	11'-11"	9'-9"	9'-9"	9'-9"	8'-5"	8'-5"	8'-5"
550S125-27	12	33	25'-0"	22'-9"	19'-11"	20'-5"	19'-11"	17'-5"	17'-8"	17'-8"	15'-9"
	16		21'-8"	20'-8"	18'-1"	17'-8"	17'-8"	15'-9"	15'-4"	15'-4"	14'-4"
	24		17'-8"	17'-8"	15'-9"	14'-5"	14'-5"	13'-9"	12'-6"	12'-6"	12'-6"
550S125-30	12	33	26'-11"	23'-7"	20'-7"	22'-0"	20'-7"	18'-0"	19'-0"	18'-9"	16'-4"
	16		23'-4"	21'-5"	18'-9"	19'-0"	18'-9"	16'-4"	16'-6"	16'-6"	14'-10"
	24		19'-0"	18'-9"	16'-4"	15'-7"	15'-7"	14'-3"	13'-6"	13'-6"	13'-0"
550S125-33	12	33	29'-1"	24'-5"	21'-4"	23'-9"	21'-4"	18'-8"	20'-7"	19'-5"	16'-11"
	16		25'-2"	22'-3"	19'-5"	20'-7"	19'-5"	16'-11"	17'-10"	17'-8"	15'-5"
	24		20'-7"	19'-5"	16'-11"	16'-10"	16'-10"	14'-10"	14'-7"	14'-7"	13'-5"
550S125-43	12	33	33'-8"	26'-9"	23'-4"	29'-5"	23'-4"	20'-5"	25'-5"	21'-3"	18'-7"
	16		30'-7"	24'-4"	21'-3"	25'-5"	21'-3"	18'-7"	22'-1"	19'-3"	16'-10"
	24		25'-5"	21'-3"	18'-7"	20'-9"	18'-7"	16'-2"	18'-0"	16'-10"	14'-9"
550S125-54	12	33	36'-2"	28'-9"	25'-1"	31'-7"	25'-1"	21'-11"	28'-9"	22'-9"	19'-11"
	16		32'-10"	26'-1"	22'-9"	28'-9"	22'-9"	19'-11"	25'-2"	20'-8"	18'-1"
	24		28'-9"	22'-9"	19'-11"	23'-9"	19'-11"	17'-5"	20'-7"	18'-1"	15'-10"
600S125-18 <sup>2</sup>	12	33	17'-8"	17'-8"	17'-8"	14'-5"	14'-5"	14'-5"	12'-6"	12'-6"	12'-6"
	16		15'-4"	15'-4"	15'-4"	12'-6"	12'-6"	12'-6"	10'-10"	10'-10"	10'-10"
	24		12'-6"	12'-6"	12'-6"	10'-3"	10'-3"	10'-3"	8'-2"	8'-2"	8'-2"
600S125-27 <sup>1</sup>	12	33	24'-0"	24'-0"	21'-3"	19'-7"	19'-7"	18'-7"	17'-0"	17'-0"	16'-11"
	16		20'-10"	20'-10"	19'-4"	17'-0"	17'-0"	16'-11"	14'-8"	14'-8"	14'-8"
	24		17'-0"	17'-0"	16'-11"	13'-10"	13'-10"	13'-10"	12'-0"	12'-0"	12'-0"
600S125-30	12	33	28'-3"	25'-3"	22'-0"	23'-1"	22'-0"	19'-3"	20'-0"	20'-0"	17'-6"
	16		24'-6"	22'-11"	20'-0"	20'-0"	20'-0"	17'-6"	17'-4"	17'-4"	15'-11"
	24		20'-0"	20'-0"	17'-6"	16'-4"	16'-4"	15'-3"	14'-2"	14'-2"	13'-10"
600S125-33	12	33	30'-7"	26'-2"	22'-10"	25'-0"	22'-10"	20'-0"	21'-7"	20'-9"	18'-2"
	16		26'-6"	23'-9"	20'-9"	21'-7"	20'-9"	18'-2"	18'-9"	18'-9"	16'-6"
	24		21'-7"	20'-9"	18'-2"	17'-8"	17'-8"	15'-10"	15'-3"	15'-3"	14'-5"
600S125-43	12	33	36'-2"	28'-9"	25'-1"	30'-11"	25'-1"	21'-11"	26'-9"	22'-10"	19'-11"
	16		32'-9"	26'-1"	22'-10"	26'-9"	22'-10"	19'-11"	23'-2"	20'-9"	18'-1"
	24		26'-9"	22'-10"	19'-11"	21'-10"	19'-11"	17'-5"	18'-11"	18'-1"	15'-10"
600S125-54	12	33	38'-10"	30'-10"	26'-11"	33'-11"	26'-11"	23'-6"	30'-10"	24'-6"	21'-5"
	16		35'-4"	28'-0"	24'-6"	30'-10"	24'-6"	21'-5"	26'-8"	22'-3"	19'-5"
	24		30'-10"	24'-6"	21'-5"	25'-2"	21'-5"	18'-8"	21'-9"	19'-5"	17'-0"
800S125-33 <sup>1</sup>	12	33	32'-11"	32'-8"	28'-7"	26'-10"	26'-10"	24'-11"	23'-3"	23'-3"	22'-8"
	16		28'-6"	28'-6"	25'-11"	23'-3"	23'-3"	22'-8"	20'-2"	20'-2"	20'-2"
	24		23'-3"	23'-3"	22'-8"	19'-0"	19'-0"	19'-0"	16'-5"	16'-5"	16'-5"
800S125-43	12	33	44'-5"	36'-2"	31'-7"	36'-4"	31'-7"	27'-7"	31'-5"	28'-8"	25'-1"
	16		38'-6"	32'-10"	28'-8"	31'-5"	28'-8"	25'-1"	27'-7"	27'-7"	22'-9"
	24		31'-5"	28'-8"	25'-1"	25'-8"	25'-1"	21'-11"	22'-3"	22'-3"	19'-11"
800S125-54	12	33	49'-4"	39'-2"	34'-2"	42'-3"	34'-2"	29'-10"	36'-7"	31'-1"	27'-2"
	16		44'-10"	35'-7"	31'-1"	36'-7"	31'-1"	27'-2"	31'-9"	28'-3"	24'-8"
	24		36'-7"	31'-1"	27'-2"	29'-11"	27'-2"	23'-8"	25'-11"	24'-8"	21'-6"

See Interior Non-Structural Non-Composite Table Notes

# Limiting Wall Height Tables - Composite

## Interior Non-Structural Composite Table Notes

1. Allowable composite limiting heights are tested/calculated using ICC-ES AC86.
2. Minimum safety factor for strength = 1.508 for 5 to 10 psf, and 2.327 for 15 psf.
3. The gypsum board must be applied full height to each stud flange and installed using minimum No. 6 Type S Drywall screws spaced a maximum of 12 in. on-center for studs at 24-in spacing, and 16 in. on-center for studs at 16 and 12 in. spacing. s d e t e s s t e t t e d t e t
4. No fasteners are required for attaching the stud to the track. 1.
5. Stud end bearing must be a minimum of 1 inch.
6. Minimum material yield strength equals 33 ksi.
7. 'f' adjacent to the height value indicates that flexural stress controls the allowable wall height.

Stud Member	Spacing, in. oc	Fy, ksi	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
162S125-18	12	33	13'-0" f	11'-1" f	9'-10" f	10'-8" f	9'-8" f	8'-7" f	9'-3" f	8'-9" f	7'-9" f	---	---	---
	16		11'-3" f	10'-1" f	8'-11" f	10'-3" f	9'-3" f	8'-9" f	8'-0" f	7'-11" f	---	---	---	---
	24		9'-3" f	8'-9" f	7'-9" f	---	---	---	---	---	---	---	---	---
162S125-27	12	33	14'-9" f	11'-8" f	10'-2" f	12'-10" f	10'-2" f	8'-7" f	11'-8" f	9'-1" f	7'-6" f	8'-6" f	---	---
	16		13'-4" f	10'-7" f	9'-1" f	11'-8" f	9'-1" f	7'-6" f	10'-7" f	7'-11" f	---	---	---	---
	24		11'-8" f	9'-1" f	---	10'-2" f	---	---	9'-1" f	---	---	---	---	---
162S125-30	12	33	14'-11" f	11'-10" f	10'-4" f	13'-1" f	10'-4" f	8'-11" f	11'-10" f	9'-4" f	7'-11" f	9'-10" f	7'-11" f	---
	16		13'-7" f	10'-9" f	9'-4" f	11'-10" f	9'-4" f	7'-11" f	10'-9" f	8'-3" f	---	8'-6" f	---	---
	24		11'-10" f	9'-4" f	7'-11" f	10'-4" f	7'-11" f	---	9'-4" f	---	---	---	---	---
250S125-18	12	33	16'-4" f	14'-2" f	12'-9" f	13'-4" f	12'-4" f	11'-2" f	11'-7" f	11'-3" f	10'-2" f	---	---	---
	16		14'-2" f	12'-10" f	11'-7" f	11'-7" f	11'-3" f	10'-2" f	10'-0" f	10'-0" f	9'-0" f	---	---	---
	24		11'-7" f	11'-3" f	10'-2" f	9'-5" f	9'-5" f	8'-6" f	8'-2" f	8'-2" f	---	---	---	---
250S125-27	12	33	18'-7" f	15'-4" f	13'-9" f	16'-3" f	13'-5" f	11'-12" f	14'-9" f	12'-2" f	10'-11" f	10'-6" f	10'-6" f	9'-4" f
	16		16'-10" f	13'-11" f	12'-5" f	14'-9" f	12'-2" f	10'-11" f	13'-5" f	11'-1" f	9'-11" f	9'-1" f	9'-1" f	8'-1" f
	24		14'-9" f	12'-2" f	10'-11" f	12'-11" f	10'-8" f	9'-4" f	11'-3" f	9'-8" f	8'-1" f	---	---	---
250S125-30	12	33	18'-5" f	15'-10" f	14'-1" f	16'-1" f	13'-10" f	12'-4" f	14'-7" f	12'-7" f	11'-2" f	11'-0" f	11'-0" f	9'-9" f
	16		16'-9" f	14'-5" f	12'-10" f	14'-7" f	12'-7" f	11'-2" f	13'-3" f	11'-5" f	10'-2" f	9'-6" f	9'-6" f	8'-8" f
	24		14'-7" f	12'-7" f	11'-2" f	14'-7" f	11'-0" f	9'-9" f	11'-7" f	10'-0" f	8'-8" f	7'-9" f	7'-9" f	---
250S125-33	12	33	19'-8" f	15'-8" f	13'-8" f	17'-3" f	13'-8" f	11'-11" f	15'-8" f	12'-5" f	10'-10" f	11'-5" f	10'-10" f	9'-5" f
	16		17'-11" f	14'-3" f	12'-5" f	15'-8" f	12'-5" f	10'-10" f	14'-3" f	11'-3" f	9'-10" f	9'-11" f	9'-10" f	8'-4" f
	24		15'-8" f	12'-5" f	10'-10" f	13'-8" f	10'-10" f	9'-5" f	12'-4" f	9'-10" f	8'-4" f	8'-1" f	8'-1" f	---
350S125-18	12	33	18'-3" f	16'-4" f	14'-4" f	14'-11" f	14'-4" f	12'-6" f	12'-11" f	12'-11" f	11'-4" f	8'-5" f	8'-5" f	8'-5" f
	16		15'-10" f	14'-10" f	13'-0" f	12'-11" f	12'-11" f	11'-4" f	11'-2" f	11'-2" f	10'-3" f	---	---	---
	24		12'-11" f	12'-11" f	11'-4" f	10'-7" f	10'-7" f	9'-11" f	9'-2" f	9'-2" f	9'-0" f	---	---	---
350S125-27	12	33	22'-6" f	17'-11" f	15'-7" f	19'-8" f	15'-7" f	13'-8" f	17'-11" f	14'-2" f	12'-4" f	12'-0" f	12'-0" f	10'-8" f
	16		20'-6" f	16'-3" f	14'-2" f	17'-11" f	14'-2" f	12'-4" f	15'-10" f	12'-11" f	11'-2" f	10'-5" f	10'-5" f	---
	24		17'-11" f	14'-2" f	12'-4" f	14'-11" f	12'-4" f	10'-8" f	12'-11" f	11'-2" f	---	---	---	---
350S125-30	12	33	22'-6" f	17'-11" f	15'-8" f	19'-8" f	15'-8" f	13'-8" f	17'-11" f	14'-2" f	12'-4" f	12'-10" f	12'-4" f	10'-7" f
	16		20'-6" f	16'-3" f	14'-2" f	17'-11" f	14'-2" f	12'-4" f	16'-3" f	12'-11" f	11'-1" f	11'-1" f	11'-1" f	---
	24		17'-11" f	14'-2" f	12'-4" f	15'-8" f	12'-4" f	10'-7" f	13'-9" f	11'-1" f	---	---	---	---
350S125-33	12	33	23'-0" f	18'-3" f	15'-11" f	20'-1" f	15'-11" f	13'-11" f	18'-3" f	14'-6" f	12'-8" f	13'-3" f	12'-8" f	10'-10" f
	16		20'-11" f	16'-7" f	14'-6" f	18'-3" f	14'-6" f	12'-8" f	16'-7" f	13'-2" f	11'-4" f	11'-6" f	11'-4" f	9'-8" f
	24		18'-3" f	14'-6" f	12'-8" f	15'-11" f	12'-8" f	10'-10" f	14'-4" f	11'-4" f	9'-8" f	---	---	---
362S125-18	12	33	18'-8" f	16'-8" f	14'-7" f	15'-3" f	14'-7" f	12'-9" f	13'-2" f	13'-2" f	11'-6" f	8'-8" f	8'-8" f	8'-8" f
	16		16'-2" f	15'-2" f	13'-3" f	13'-2" f	13'-2" f	11'-6" f	11'-5" f	11'-5" f	10'-4" f	---	---	---
	24		13'-2" f	13'-2" f	11'-6" f	10'-9" f	10'-9" f	9'-11" f	9'-4" f	9'-4" f	8'-11" f	---	---	---
362S125-27	12	33	22'-10" f	18'-2" f	15'-10" f	19'-11" f	15'-10" f	13'-10" f	18'-2" f	14'-5" f	12'-6" f	12'-0" f	12'-0" f	10'-7" f
	16		20'-9" f	16'-6" f	14'-5" f	18'-2" f	14'-5" f	12'-6" f	15'-9" f	13'-1" f	12'-2" f	10'-5" f	10'-5" f	---
	24		18'-2" f	14'-5" f	12'-6" f	14'-11" f	12'-6" f	10'-7" f	12'-11" f	11'-1" f	---	---	---	---
362S125-30	12	33	22'-10" f	18'-3" f	16'-4" f	19'-11" f	16'-0" f	14'-3" f	18'-1" f	14'-6" f	12'-11" f	12'-8" f	12'-8" f	10'-11" f
	16		20'-8" f	16'-7" f	14'-10" f	18'-1" f	14'-6" f	12'-11" f	16'-5" f	13'-2" f	11'-6" f	11'-0" f	11'-0" f	---
	24		18'-1" f	14'-6" f	12'-11" f	15'-9" f	12'-8" f	10'-11" f	13'-8" f	11'-4" f	---	---	---	---
362S125-33	12	33	24'-2" f	19'-2" f	16'-9" f	21'-1" f	16'-9" f	14'-8" f	19'-2" f	15'-3" f	13'-4" f	13'-5" f	13'-4" f	11'-4" f
	16		21'-11" f	17'-5" f	15'-3" f	19'-2" f	15'-3" f	13'-4" f	17'-5" f	13'-10" f	11'-11" f	11'-8" f	11'-8" f	10'-1" f
	24		19'-2" f	15'-3" f	13'-4" f	16'-8" f	13'-4" f	11'-4" f	14'-5" f	11'-11" f	10'-1" f	---	---	---
400S125-18	12	33	19'-3" f	17'-6" f	15'-4" f	15'-9" f	15'-4" f	13'-4" f	13'-8" f	13'-8" f	12'-2" f	8'-11" f	8'-11" f	8'-11" f
	16		16'-8" f	15'-11" f	13'-11" f	13'-8" f	13'-8" f	12'-2" f	11'-10" f	11'-10" f	11'-0" f	7'-9" f	7'-9" f	7'-9" f
	24		13'-8" f	13'-8" f	12'-2" f	11'-2" f	11'-2" f	10'-7" f	9'-8" f	9'-8" f	9'-7" f	---	---	---
400S125-27	12	33	24'-6" f	19'-5" f	17'-0" f	21'-5" f	17'-0" f	14'-10" f	18'-8" f	15'-5" f	13'-6" f	12'-3" f	12'-3" f	11'-8" f
	16		22'-3" f	17'-8" f	15'-5" f	18'-8" f	15'-5" f	13'-6" f	16'-2" f	14'-0" f	12'-2" f	10'-8" f	10'-8" f	10'-6" f
	24		18'-8" f	15'-5" f	13'-6" f	15'-3" f	13'-6" f	11'-8" f	13'-3" f	12'-2" f	10'-6" f	---	---	---

Interior Non-Structural Composite

Stud Member	Spacing, in, oc	Fy, ksi	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					
400S125-30	12	33	24'-6"	19'-5"	17'-0"	21'-5"	17'-0"	14'-10"	19'-5"	15'-5"	13'-6"	13'-2"	f	13'-2"	f	11'-7"			
	16		22'-3"	17'-8"	15'-5"	19'-5"	15'-5"	13'-6"	17'-5"	f	14'-0"	12'-2"	11'-5"	f	11'-5"	f	10'-4"		
	24		19'-5"	15'-5"	13'-6"	16'-5"	f	13'-6"	11'-7"	14'-2"	f	12'-2"	10'-4"	---	---	---			
400S125-33	12	33	25'-3"	20'-1"	17'-6"	22'-1"	17'-6"	20'-1"	20'-1"	15'-11"	13'-11"	13'-11"	f	13'-11"	12'-0"				
	16		22'-11"	18'-3"	15'-11"	20'-1"	15'-11"	18'-3"	18'-3"	14'-5"	12'-7"	12'-1"	f	12'-1"	f	10'-9"			
	24		20'-1"	15'-11"	13'-11"	17'-3"	f	13'-11"	15'-0"	f	12'-7"	10'-9"	9'-10"	f	9'-10"	f	---		
550S125-18	12	33	21'-11"	f	21'-11"	f	21'-10"	17'-10"	f	17'-10"	f	17'-0"	15'-6"	f	15'-6"	f	15'-6"	f	
	16		14'-6"	f	19'-0"	f	17'-9"	15'-6"	f	15'-6"	f	15'-6"	f	13'-5"	f	13'-5"	f	13'-5"	f
	24		11'-10"	f	15'-6"	f	15'-6"	f	12'-8"	f	12'-8"	f	12'-8"	f	---	---	---		
550S125-27	12	33	30'-4"	24'-8"	21'-10"	26'-9"	f	21'-10"	19'-4"	23'-2"	f	20'-0"	17'-8"	---	---	---			
	16		27'-11"	22'-8"	20'-0"	23'-2"	f	20'-0"	17'-8"	20'-1"	f	18'-4"	16'-0"	---	---	---			
	24		23'-2"	f	20'-0"	17'-8"	18'-11"	f	17'-8"	16'-5"	f	16'-0"	---	---	---				
550S125-30	12	33	30'-5"	24'-10"	22'-0"	27'-0"	22'-0"	19'-5"	24'-10"	20'-2"	17'-10"	16'-4"	f	16'-4"	f	15'-10"			
	16		28'-0"	22'-9"	20'-2"	24'-10"	f	20'-2"	17'-10"	21'-7"	f	18'-6"	16'-2"	---	---	---			
	24		24'-10"	20'-2"	17'-10"	20'-4"	f	17'-10"	15'-7"	17'-7"	f	16'-2"	---	---	---				
600S125-18	12	33	23'-2"	f	22'-9"	19'-11"	18'-11"	f	18'-11"	f	17'-5"	16'-4"	f	16'-4"	f	15'-10"			
	16		20'-1"	f	20'-1"	f	18'-1"	16'-4"	f	16'-4"	f	15'-10"	14'-2"	f	14'-2"	---			
	24		16'-4"	f	16'-4"	f	15'-10"	13'-4"	f	13'-4"	f	13'-4"	---	---	---				
600S125-27	12	33	32'-5"	f	26'-9"	23'-5"	26'-5"	f	23'-5"	20'-5"	22'-11"	f	21'-3"	16'-10"	---	---			
	16		28'-1"	f	24'-4"	21'-3"	22'-11"	f	21'-3"	18'-7"	19'-10"	f	19'-4"	14'-7"	---	---			
	24		22'-11"	f	21'-3"	18'-7"	18'-8"	f	18'-7"	16'-1"	16'-2"	f	16'-2"	---	---				
600S125-30	12	33	34'-2"	27'-1"	23'-8"	28'-11"	f	23'-8"	20'-8"	25'-0"	f	21'-6"	18'-9"	16'-5"	f	16'-5"	f		
	16		30'-8"	f	24'-7"	21'-6"	25'-0"	f	21'-6"	18'-9"	21'-8"	f	19'-6"	17'-1"	---	---			
	24		25'-0"	f	21'-6"	18'-9"	20'-5"	f	18'-9"	16'-5"	17'-8"	f	17'-1"	---	---				
600S125-33	12	33	35'-4"	28'-1"	24'-6"	30'-10"	24'-6"	21'-5"	27'-10"	f	22'-3"	19'-5"	18'-4"	f	18'-4"	f	16'-11"		
	16		32'-1"	f	25'-6"	22'-3"	27'-10"	f	22'-3"	19'-5"	24'-1"	f	20'-3"	17'-8"	15'-10"	f	15'-10"		
	24		27'-10"	f	22'-3"	19'-5"	22'-9"	f	19'-5"	16'-11"	19'-8"	f	17'-8"	---	---				

See Interior Non-Structural Composite Table Notes

## Wall Height Table Notes

1. Lateral loads have not been modified for strength checks: full loads are applied.
2. Calculated properties are based on AISI S100-16/S2-20, "North American Specification for Cold-Formed Steel Structural Members."
3. For 15 psf or higher wind pressure, read the note below.

IBC 2021/ASCE 7-16: Due to the change in the model building codes, design wind pressures determined using IBC 2021/ASCE 7-16 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2021/ASCE 7-16 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-16) prior to entering the load/span tables.

- Example:

  - \* ASCE 7-16 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
  - \* Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
  - \* Use 15 psf as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.
4. 15 psf and higher wind pressures have been multiplied by 0.7 x ASD loads, or 0.42 x Ultimate loads for deflection determination, in accordance with footnote "f" of IBC Table 1604.3. The 5 psf live load has not been reduced for deflection checks.
5. Limiting heights are based on continuous support of each flange over the full length of the stud.
6. Limiting heights are based on steel properties alone (non-composite).
7. Web crippling checks are based on end-one flange loading condition using 1-inch end bearing.
8. End shear and web crippling capacity have not been reduced for punchouts. Punchouts are assumed to be at least 10-inches to centered no less than 12 inches from the end of members, in accordance with AISI S240-20, Section A5.9.
9. Where limiting heights are followed by "e", web stiffeners are required.





# Limiting Wall Heights - Curtain Wall/Single Span

Stud Member	Spacing, in. oc	Fy, ksi	5 psf			15 psf			20 psf			25 psf			30 psf			35 psf			40 psf			
			L/120	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	
362S162-54	12	33	28'-5"	22'-6"	19'-8"	17'-7"	15'-4"	13'-0"	16'-0"	14'-0"	11'-9"	14'-10"	13'-0"	10'-11"	14'-0"	12'-2"	10'-4"	13'-3"	11'-7"	9'-9"	12'-8"	11'-1"	9'-4"	
			16	25'-10"	20'-6"	17'-11"	16'-0"	14'-0"	11'-9"	14'-6"	12'-8"	10'-8"	13'-6"	11'-9"	9'-11"	12'-8"	11'-1"	9'-4"	12'-1"	10'-6"	8'-11"	11'-4"	10'-1"	8'-6"
			24	22'-6"	17'-11"	15'-8"	14'-0"	12'-2"	10'-4"	12'-8"	11'-1"	9'-4"	11'-8"	10'-4"	8'-8"	10'-8"	9'-8"	8'-2"	9'-11"	9'-2"	7'-9"	9'-3"	8'-10"	7'-5"

See Curtain Wall Limiting Heights Table Notes.









## Combined Axial and Lateral Load Table Notes

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads determined in accordance with AISI S240-20, assuming that all axial loads pass through the geometric center of the section
3. Listed lateral pressures and axial loads have not been modified for load combinations or allowable stress increases 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. The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2021/ASCE 7-16: Due to the change in the model building codes, design wind pressures determined using IBC 2021/ASCE 7-16 are strength level loads (LRFD) in comparison to those determined in some earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2021/ASCE 7-16 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-16) prior to entering the load/span tables.

- Example:

\* ASCE 7-16 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)

\* Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf

\* Use 15 psf as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

6. Studs are assumed to be adequately braced at a maximum spacing of  $L_u$  to develop full allowable moment,  $M_u$ .
7. End supports have not been checked for web crippling. Refer to web crippling capacity tables.
8. All tables are based on simple (single) span.
9. Cells marked with an "\*" have  $h/t > 200$ , thus require bearing stiffeners. Cells are left blank when  $h/t > 260$ .
10. Cells marked with an a, b, c, d, e or f meets L/720, L/600, L/480, L/360, L/240, or L/120 respectively. Blank cells do not meet L/120.
11. Stud distortional buckling moment based on assumed  $K\phi = 0$
12. 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

# Combined Axial and Lateral Load Tables

## 5 psf Lateral Load (Interior Walls Only)

Wall Height (ft)	Spacing (in.) o.c.	362S137-(mils)			362S162-(mils)			362S200-(mils)			362S250-(mils)								
		33 ksi		50 ksi	33 ksi		50 ksi	33 ksi		50 ksi	33 ksi	50 ksi							
		33	43	54	68	33	43	54	68	97	33	43	54	68	97				
8	12	1.46 a	2.08 a	3.11 a	4.05 a	1.86 a	2.52 a	3.98 a	5.11 a	7.48 a	2.26 a	3.26 a	5.05 a	7.99 a	9.2 a	3.72 a	5.74 a	7.52 a	10.57 a
	16	1.4 a	2.02 a	3.07 a	4.01 a	1.8 a	2.46 a	3.93 a	5.07 a	7.43 a	2.2 a	3.2 a	5 a	7.92 a	9.15 a	3.65 a	5.68 a	7.46 a	10.51 a
	24	1.29 a	1.91 a	2.98 a	3.93 a	1.68 a	2.35 a	3.84 a	4.98 a	7.35 a	2.06 a	3.07 a	4.88 a	7.79 a	9.06 a	3.51 a	5.55 a	7.34 a	10.41 a
9	12	1.38 a	1.98 a	2.93 a	3.82 a	1.75 a	2.38 a	3.74 a	4.78 a	6.97 a	2.14 a	3.09 a	4.72 a	7.48 a	8.54 a	3.56 a	5.44 a	7 a	9.83 a
	16	1.31 a	1.91 a	2.88 a	3.78 a	1.68 a	2.31 a	3.68 a	4.73 a	6.92 a	2.06 a	3.01 a	4.65 a	7.4 a	8.49 a	3.47 a	5.36 a	6.93 a	9.77 a
	24	1.17 a	1.78 a	2.77 a	3.68 a	1.53 a	2.17 a	3.56 a	4.63 a	6.81 a	1.9 a	2.85 a	4.52 a	7.24 a	8.38 a	3.3 a	5.22 a	6.79 a	9.64 a
10	12	1.28 a	1.87 a	2.72 a	3.55 a	1.63 a	2.09 a	3.47 a	4.42 a	6.41 a	2.01 a	2.9 a	4.35 a	6.88 a	7.83 a	3.38 a	5.1 a	6.43 a	9.05 a
	16	1.2 a	1.79 a	2.66 a	3.5 a	1.54 a	2.02 a	3.4 a	4.36 a	6.35 a	1.91 a	2.81 a	4.27 a	6.79 a	7.77 a	3.28 a	5.01 a	6.35 a	8.97 a
	24	1.04 a	1.62 a	2.54 a	3.39 a	1.37 a	1.86 a	3.26 a	4.24 a	6.23 a	1.72 a	2.62 a	4.12 a	6.61 a	7.64 a	3.08 a	4.84 a	6.2 a	8.83 a
12	12	1.08 a	1.6 a	2.29 a	2.98 a	1.37 a	1.99 a	2.84 a	3.62 a	5.2 a	1.71 a	2.48 a	3.54 a	5.58 a	6.33 a	2.91 a	4.17 a	5.25 a	7.39 a
	16	0.97 b	1.5 a	2.21 a	2.91 a	1.25 a	1.88 a	2.76 a	3.55 a	5.13 a	1.59 a	2.36 a	3.45 a	5.48 a	6.26 a	2.78 a	4.07 a	5.16 a	7.3 a
	24	0.76 d	1.28 c	2.05 b	2.78 a	1.03 c	1.66 b	2.59 a	3.41 a	4.99 a	1.33 c	2.13 a	3.27 a	5.27 a	6.11 a	2.52 a	3.86 a	4.97 a	7.13 a
14	12	0.85 c	1.31 b	1.86 a	2.43 a	1.09 b	1.63 a	2.28 a	2.93 a	4.17 a	1.38 a	2.05 a	2.82 a	4.45 a	5.08 a	2.42 a	3.33 a	4.22 a	5.95 a
	16	0.72 d	1.18 c	1.77 b	2.36 a	0.95 d	1.5 b	2.19 a	2.85 a	4.09 a	1.23 c	1.91 b	2.72 a	4.33 a	4.99 a	2.26 a	3.22 a	4.11 a	5.86 a
	24	0.47 e	0.93 e	1.59 d	2.21 c	0.69 e	1.23 d	2 c	2.68 b	3.93 a	0.93 d	1.63 d	2.52 c	4.1 a	4.83 a	1.95 c	2.99 b	3.9 a	5.66 a
16	12	0.63 d	1.01 d	1.49 c	1.96 b	0.82 d	1.28 c	1.82 b	2.35 a	3.35 a	1.05 c	1.62 b	2.25 a	3.56 a	4.09 a	1.93 a	2.66 a	3.4 a	4.82 a
	16	0.49 e	0.87 e	1.39 d	1.88 c	0.67 e	1.13 d	1.72 c	2.27 b	3.26 a	0.88 d	1.47 c	2.14 c	3.43 a	4 a	1.76 c	2.54 b	3.28 a	4.72 a
	24	0.2 f	0.59 f	1.2 e	1.72 e	0.37 f	0.84 e	1.52 e	2.09 d	3.1 c	0.55 e	1.16 e	1.92 d	3.18 c	3.83 b	1.41 d	2.29 d	3.06 c	4.51 a

## 5 psf Lateral Load (Interior Walls Only)

Wall Height (ft)	Spacing (in.) o.c.	362S300-(mils)			600S137-(mils)			600S162-(mils)				600S200-(mils)					
		50 ksi			33 ksi		50 ksi			33 ksi		50 ksi		33 ksi			
		54	68	97	33	43	54	68	97	33	43	54	68	97	118	33	43
8	12	5.79 a	8.01 a	11.82 a	1.77 a	2.51 a	3.8 a	5.03 a	7.52 a	2.44 a	3.4 a	5.59 a	7.42 a	11.35 a	14.19 a	2.86 a	4.29 a
	16	5.73 a	7.95 a	11.76 a	1.74 a	2.47 a	3.77 a	5 a	7.5 a	2.4 a	3.37 a	5.56 a	7.39 a	11.32 a	14.16 a	2.82 a	4.25 a
	24	5.61 a	7.83 a	11.65 a	1.67 a	2.41 a	3.71 a	4.95 a	7.45 a	2.33 a	3.3 a	5.49 a	7.33 a	11.25 a	14.09 a	2.74 a	4.17 a
9	12	5.49 a	7.51 a	11.15 a	1.75 a	2.48 a	3.77 a	5 a	7.5 a	2.4 a	3.37 a	5.57 a	7.4 a	11.32 a	14.17 a	2.81 a	4.22 a
	16	5.42 a	7.44 a	11.09 a	1.7 a	2.44 a	3.74 a	4.97 a	7.47 a	2.35 a	3.33 a	5.52 a	7.36 a	11.28 a	14.13 a	2.76 a	4.17 a
	24	5.28 a	7.29 a	10.96 a	1.61 a	2.36 a	3.67 a	4.9 a	7.41 a	2.26 a	3.24 a	5.44 a	7.28 a	11.2 a	14.04 a	2.66 a	4.06 a
10	12	5.17 a	6.99 a	10.28 a	1.71 a	2.45 a	3.75 a	4.98 a	7.48 a	2.35 a	3.32 a	5.52 a	7.37 a	11.29 a	14.14 a	2.75 a	4.14 a
	16	5.09 a	6.9 a	10.21 a	1.66 a	2.4 a	3.71 a	4.94 a	7.44 a	2.29 a	3.27 a	5.47 a	7.32 a	11.24 a	14.09 a	2.69 a	4.07 a
	24	4.92 a	6.74 a	10.06 a	1.55 a	2.3 a	3.62 a	4.86 a	7.37 a	2.18 a	3.16 a	5.37 a	7.22 a	11.14 a	13.98 a	2.57 a	3.95 a
12	12	4.55 a	5.93 a	8.45 a	1.64 a	2.38 a	3.69 a	4.93 a	7.43 a	2.23 a	3.18 a	5.29 a	7.16 a	11.23 a	14.07 a	2.61 a	3.94 a
	16	4.44 a	5.83 a	8.36 a	1.57 a	2.31 a	3.63 a	4.87 a	7.38 a	2.15 a	3.11 a	5.22 a	7.09 a	11.15 a	13.99 a	2.53 a	3.85 a
	24	4.22 a	5.62 a	8.18 a	1.41 a	2.16 a	3.51 a	4.75 a	7.27 a	1.99 a	2.96 a	5.07 a	6.96 a	11.01 a	13.84 a	2.36 a	3.67 a
14	12	3.8 a	4.85 a	6.85 a	1.56 a	2.3 a	3.63 a	4.86 a	7.37 a	2.07 a	3 a	4.96 a	6.75 a	10.8 a	13.99 a	2.44 a	3.68 a
	16	3.68 a	4.73 a	6.75 a	1.45 a	2.2 a	3.55 a	4.78 a	7.3 a	1.97 a	2.9 a	4.87 a	6.66 a	10.7 a	13.89 a	2.32 a	3.57 a
	24	3.42 a	4.5 a	6.54 a	1.24 a	2 a	3.38 a	4.62 a	7.15 a	1.76 a	2.71 a	4.68 a	6.49 a	10.51 a	13.68 a	2.1 a	3.34 a
16	12	3.07 a	3.92 a	5.58 a	1.45 a	2.2 a	3.55 a	4.79 a	7.3 a	1.89 a	2.78 a	4.54 a	6.22 a	9.94 a	12.85 a	2.23 a	3.38 a
	16	2.93 a	3.79 a	5.47 a	1.31 a	2.07 a	3.44 a	4.68 a	7.21 a	1.76 a	2.66 a	4.43 a	6.11 a	9.82 a	12.72 a	2.09 a	3.24 a
	24	2.66 c	3.54 b	5.25 a	1.04 c	1.81 a	3.23 a	4.47 a	7.02 a	1.5 b	2.41 a	4.21 a	5.89 a	9.59 a	12.48 a	1.81 a	2.96 a

See Page 28 for Detailed Combined Axial and Lateral Load Table Notes





# Combined Axial and Lateral Load Tables

## 15 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	362S137-(mils)				362S162-(mils)					362S200-(mils)					362S250-(mils)			
		33 ksi		50 ksi		33 ksi		50 ksi			33 ksi		50 ksi			33 ksi		50 ksi	
		33	43	54	68	33	43	54	68	97	33	43	54	68	97	33	43	54	68
8	12	1.13 a	1.75 a	2.85 a	3.82 a	1.5 a	2.18 a	3.69 a	4.85 a	7.21 a	1.87 a	2.88 a	4.72 a	7.6 a	8.92 a	3.3 a	5.37 a	7.17 a	10.24 a
	16	0.96 a	1.58 a	2.71 a	3.7 a	1.32 a	2 a	3.54 a	4.72 a	7.08 a	1.67 a	2.69 a	4.55 a	7.4 a	8.78 a	3.09 a	5.19 a	6.99 a	10.08 a
	24	0.63 b	1.25 a	2.45 a	3.47 a	0.96 a	1.66 a	3.25 a	4.45 a	6.82 a	1.27 a	2.3 a	4.22 a	7.01 a	8.5 a	2.68 a	4.83 a	6.64 a	9.76 a
9	12	0.97 a	1.57 a	2.61 a	3.54 a	1.31 a	1.96 a	3.39 a	4.47 a	6.66 a	1.65 a	2.62 a	4.32 a	7.01 a	8.21 a	3.05 a	5 a	6.58 a	9.45 a
	16	0.77 a	1.37 a	2.45 a	3.4 a	1.09 a	1.75 a	3.21 a	4.31 a	6.5 a	1.41 a	2.39 a	4.12 a	6.78 a	8.05 a	2.79 a	4.78 a	6.37 a	9.26 a
	24	0.36 c	0.96 b	2.13 a	3.12 a	0.65 c	1.33 a	2.86 a	4 a	6.19 a	0.93 b	1.92 a	3.72 a	6.32 a	7.72 a	2.28 a	4.35 a	5.95 a	8.87 a
10	12	0.8 b	1.38 a	2.35 a	3.23 a	1.11 a	1.63 a	3.06 a	4.06 a	6.05 a	1.43 a	2.35 a	3.89 a	6.35 a	7.45 a	2.77 a	4.59 a	5.96 a	8.61 a
	16	0.56 c	1.13 b	2.17 a	3.07 a	0.85 b	1.4 a	2.86 a	3.88 a	5.87 a	1.14 a	2.07 a	3.67 a	6.08 a	7.27 a	2.47 a	4.33 a	5.72 a	8.39 a
	24	0.07 e	0.65 d	1.79 c	2.74 b	0.33 d	0.93 c	2.45 b	3.52 a	5.51 a	0.56 c	1.52 b	3.21 a	5.55 a	6.89 a	1.86 a	3.82 a	5.24 a	7.95 a
12	12	0.44 d	0.96 c	1.82 b	2.58 a	0.69 d	1.32 b	2.35 a	3.19 a	4.78 a	0.95 c	1.77 a	2.99 a	4.95 a	5.89 a	2.13 a	3.55 a	4.68 a	6.87 a
	16	0.12 e	0.64 d	1.59 c	2.38 b	0.35 e	0.99 d	2.1 c	2.98 b	4.57 a	0.57 d	1.42 c	2.72 b	4.63 a	5.67 a	1.73 b	3.25 a	4.4 a	6.61 a
	24			1.13 e	1.98 d		0.32 e	1.61 d	2.54 d	4.14 b	-0.18 e	0.7 d	2.17 d	4 c	5.23 a	0.94 d	2.63 c	3.82 b	6.09 a
14	12	0.08 e	0.54 e	1.33 d	1.98 c	0.28 e	0.84 d	1.73 d	2.44 c	3.7 a	0.47 e	1.2 d	2.21 c	3.75 b	4.59 a	1.48 c	2.64 b	3.58 a	5.37 a
	16		0.16 e	1.06 e	1.75 d		0.44 e	1.45 e	2.2 d	3.46 c	0.02 e	0.78 e	1.9 d	3.4 c	4.34 b	1.01 d	2.3 c	3.26 b	5.08 a
	24			0.53 f	1.3 e			0.9 f	1.71 e	3 d			1.29 e	2.7 e	3.86 d	0.08 e	1.61 e	2.63 d	4.51 c
16	12		0.16 f	0.91 e	1.47 e		0.4 e	1.22 e	1.83 d	2.85 c	0.05 f	0.69 e	1.59 d	2.81 d	3.57 b	0.89 e	1.92 d	2.71 c	4.2 a
	16			0.61 f	1.22 e			0.92 f	1.57 e	2.6 d		0.23 f	1.26 e	2.43 e	3.31 d	0.37 e	1.55 e	2.37 d	3.89 c
	24			0.03 f	0.73 f			0.32 f	1.04 f	2.09 e			0.6 f	1.69 f	2.79 e		0.81 f	1.68 e	3.27 d

## 15 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	362S300-(mils)			600S137-(mils)						600S162-(mils)					600S200-(mils)	
		50 ksi			33 ksi		50 ksi			33 ksi		50 ksi			33 ksi		
		54	68	97	33	43	54	68	97	33	43	54	68	97	118	33	43
8	12	5.26 a	7.47 a	11.32 a	1.46 a	2.21 a	3.55 a	4.79 a	7.3 a	2.11 a	3.09 a	5.3 a	7.14 a	11.06 a	13.89 a	2.51 a	3.92 a
	16	5.02 a	7.22 a	11.1 a	1.33 a	2.08 a	3.44 a	4.68 a	7.21 a	1.97 a	2.96 a	5.16 a	7.01 a	10.93 a	13.76 a	2.35 a	3.75 a
	24	4.55 a	6.74 a	10.66 a	1.05 a	1.81 a	3.23 a	4.47 a	7.02 a	1.68 a	2.68 a	4.9 a	6.76 a	10.67 a	13.49 a	2.03 a	3.42 a
9	12	4.85 a	6.86 a	10.56 a	1.35 a	2.1 a	3.47 a	4.7 a	7.23 a	1.99 a	2.98 a	5.19 a	7.04 a	10.95 a	13.79 a	2.36 a	3.75 a
	16	4.57 a	6.57 a	10.29 a	1.18 a	1.93 a	3.33 a	4.57 a	7.11 a	1.81 a	2.81 a	5.02 a	6.88 a	10.79 a	13.62 a	2.17 a	3.55 a
	24	3.99 a	6 a	9.77 a	0.83 a	1.6 a	3.05 a	4.3 a	6.86 a	1.45 a	2.46 a	4.69 a	6.56 a	10.46 a	13.28 a	1.77 a	3.14 a
10	12	4.42 a	6.24 a	9.6 a	1.23 a	1.98 a	3.37 a	4.61 a	7.14 a	1.85 a	2.84 a	5.06 a	6.93 a	10.84 a	13.67 a	2.21 a	3.57 a
	16	4.08 a	5.9 a	9.3 a	1.02 a	1.78 a	3.2 a	4.44 a	6.99 a	1.63 a	2.63 a	4.85 a	6.73 a	10.64 a	13.46 a	1.96 a	3.32 a
	24	3.41 a	5.24 a	8.7 a	0.59 a	1.36 a	2.86 a	4.11 a	6.69 a	1.18 a	2.2 a	4.44 a	6.34 a	10.23 a	13.04 a	1.48 a	2.81 a
12	12	3.57 a	5 a	7.64 a	0.95 a	1.71 a	3.15 a	4.39 a	6.94 a	1.52 a	2.51 a	4.64 a	6.54 a	10.57 a	13.39 a	1.84 a	3.14 a
	16	3.14 b	4.59 a	7.27 a	0.64 a	1.41 a	2.9 a	4.15 a	6.73 a	1.21 a	2.2 a	4.35 a	6.26 a	10.28 a	13.09 a	1.5 a	2.79 a
	24	2.27 d	3.76 c	6.55 a	0.02 c	0.81 b	2.41 a	3.67 a	6.29 a	0.58 c	1.6 a	3.78 a	5.71 a	9.69 a	12.49 a	0.81 b	2.09 a
14	12	2.66 c	3.79 b	5.94 a	0.61 b	1.39 a	2.88 a	4.13 a	6.71 a	1.15 a	2.11 a	4.13 a	5.95 a	9.93 a	13.07 a	1.42 a	2.65 a
	16	2.16 d	3.32 c	5.54 b	0.19 d	0.98 b	2.55 a	3.8 a	6.41 a	0.73 c	1.71 b	3.75 a	5.59 a	9.54 a	12.66 a	0.97 b	2.19 a
	24	1.14 e	2.39 e	4.73 d		0.17 d	1.89 c	3.15 b	5.82 a	-0.09 d	0.92 d	3.01 c	4.87 a	8.77 a	11.84 a	0.07 d	1.27 c
16	12	1.83 e	2.78 d	4.6 b	0.22 d	1.01 c	2.58 b	3.83 a	6.44 a	0.73 c	1.67 b	3.53 a	5.23 a	8.89 a	11.74 a	0.96 c	2.1 a
	16	1.28 e	2.27 e	4.16 d	-0.32 e	0.48 d	2.14 c	3.4 b	6.05 a	0.22 d	1.17 d	3.07 c	4.8 a	8.42 a	11.24 a	0.4 d	1.54 c
	24	0.18 f	1.26 f	3.29 e		-0.58 e	1.28 e	2.55 d	5.28 c	0.18 e		2.17 d	3.92 c	7.49 b	10.26 a	-0.73 e	0.4 d

## 15 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	600S200-(mils)				600S250-(mils)				600S300-(mils)				600S350-(mils)				
		50 ksi				33 ksi	50 ksi			50 ksi				50 ksi				
		54	68	97	118	43	54	68	97	118	54	68	97	118	54	68	97	118
8	12	7.11 a	9.54 a	15.01 a	19.3 a	4.39 a	7.36 a	10.67 a	17.63 a	22.51 a	7.67 a	10.85 a	18.94 a	24.61 a	9.96 a	14.45 a	23.56 a	31.11 a
	16	6.99 a	9.42 a	14.89 a	19.18 a	4.27 a	7.24 a	10.54 a	17.49 a	22.36 a	7.55 a	10.73 a	18.8 a	24.47 a	9.83 a	14.32 a	23.41 a	30.95 a
	24	6.76 a	9.18 a	14.66 a	18.94 a	4.01 a	7.01 a	10.28 a	17.21 a	22.07 a	7.31 a	10.48 a	18.53 a	24.18 a	9.58 a	14.04 a	23.11 a	30.65 a
9	12	6.93 a	9.32 a	14.72 a	18.95 a	4.26 a	7.18 a	10.42 a	17.23 a	22.03 a	7.48 a	10.61 a	18.52 a	24.11 a	9.71 a	14.14 a	23.07 a	30.33 a
	16	6.78 a	9.17 a	14.58 a	18.8 a	4.1 a	7.03 a	10.26 a	17.06 a	21.85 a	7.33 a	10.46 a	18.35 a	23.93 a	9.56 a	13.97 a	22.88 a	30.13 a
	24	6.48 a	8.87 a	14.29 a	18.5 a	3.78 a	6.74 a	9.94 a	16.71 a	21.49 a	7.04 a	10.14 a	18 a	23.57 a	9.24 a	13.63 a	22.51 a	29.75 a
10	12	6.71 a	9.07 a	14.38 a	18.53 a	4.11 a	6.98 a	10.14 a	16.77 a	21.46 a	7.27 a	10.34 a	18.03 a	23.53 a	9.44 a	13.78 a	22.52 a	29.44 a
	16	6.53 a	8.89 a	14.21 a	18.35 a	3.91 a	6.8 a	9.94 a	16.56 a	21.24 a	7.09 a	10.15 a	17.82 a	23.31 a	9.25 a	13.57 a	22.3 a	29.21 a
	24	6.17 a	8.52 a	13.86 a	17.98 a	3.52 a	6.44 a	9.55 a	16.14 a	20.81 a	6.73 a	9.76 a	17.4 a	22.88 a	8.87 a	13.16 a	21.85 a	28.75 a
12	12	6.19 a	8.44 a	13.52 a	17.45 a	3.76 a	6.49 a	9.47 a	15.66 a	20.07 a	6.77 a	9.74 a	16.88 a	22.19 a	8.8 a	12.95 a	21.3 a	27.39 a
	16	5.94 a	8.19 a	13.29 a	17.2 a	3.48 a	6.24 a	9.2 a	15.37 a	19.78 a	6.52 a	9.47 a	16.6 a	21.89 a	8.54 a	12.67 a	20.99 a	27.08 a
	24	5.44 a	7.69 a	12.81 a	16.69 a	2.93 a	5.75 a	8.66 a	14.79 a	19.18 a	6.02 a	8.94 a	16.02 a	21.3 a	8.01 a	12.1 a	20.37 a	26.46 a
14	12	5.55 a	7.66 a	12.43 a	16.05 a	3.35 a	5.95 a	8.69 a	14.31 a	18.39 a	6.19 a	9.05 a	15.55 a	20.71 a	8.07 a	11.99 a	19.72 a	25.05 a
	16	5.24 a	7.35 a	12.12 a	15.73 a	2.99 a	5.63 a	8.34 a	13.94 a	18.01 a	5.86 a	8.7 a	15.19 a	20.32 a	7.73 a	11.63 a	19.32 a	24.66 a
	24	4.6 a	6.71 a	11.51 a	15.09 a	2.26 a	4.99 a	7.64 a	13.21 a	17.26 a	5.22 a	8 a	14.46 a	19.55 a	7.05 a	10.89 a	18.53 a	23.88 a
16	12	4.84 a	6.78 a	11.15 a	14.42 a	2.89 a	5.41 a	7.85 a	12.81 a	16.5 a	5.55 a	8.28 a	14.13 a	18.67 a	7.27 a	10.94 a	17.69 a	22.54 a
	16	4.46 a	6.4 a	10.79 a	14.04 a	2.44 a	5 a	7.42 a	12.37 a	16.05 a	5.15 a	7.85 a	13.68 a	18.21 a	6.86 a	10.49 a	17.22 a	22.07 a
	24	3.7 b	5.64 a	10.06 a	13.27 a	1.53 c	4.2 b	6.57 a	11.49 a	15.15 a	4.35 a	6.99 a	12.8 a	17.29 a	6.03 a	9.59 a	16.27 a	21.14 a

See Combined Axial and Lateral Load Table Notes.

# Combined Axial and Lateral Load Tables

## 15 psf Lateral Load

Wall Height (ft)	Spacing (in.)	800S137-(mils)						800S162-(mils)						800S200-(mils)					
		33 ksi		50 ksi				33 ksi		50 ksi				33 ksi		50 ksi			
		33	43	54	68	97	118	33	43	54	68	97	118	33	43	54	68	97	118
8	12	1.53 a*	2.29 a	3.45 a	4.63 a	7.13 a	2.17 a*	3.19 a	5.28 a	7.09 a	11.12 a	14.18 a	2.73 a*	4.31 a	7.58 a	10.1 a	15.8 a	20.27 a	
	16	1.44 a*	2.22 a	3.39 a	4.57 a	7.09 a	2.07 a*	3.1 a	5.2 a	7.02 a	11.05 a	14.11 a	2.62 a*	4.23 a	7.49 a	10.02 a	15.72 a	20.18 a	
	24	1.27 a*	2.08 a	3.28 a	4.47 a	6.99 a	1.86 a*	2.94 a	5.06 a	6.88 a	10.92 a	13.98 a	2.39 a*	4.06 a	7.32 a	9.85 a	15.56 a	20.02 a	
9	12	1.46 a*	2.23 a	3.4 a	4.58 a	7.1 a	2.09 a*	3.12 a	5.22 a	7.03 a	11.06 a	14.13 a	2.64 a*	4.25 a	7.51 a	10.04 a	15.73 a	20.2 a	
	16	1.35 a*	2.15 a	3.34 a	4.52 a	7.04 a	1.96 a*	3.01 a	5.13 a	6.94 a	10.98 a	14.04 a	2.5 a*	4.14 a	7.4 a	9.93 a	15.63 a	20.09 a	
	24	1.14 a*	1.97 a	3.2 a	4.38 a	6.91 a	1.69 a*	2.8 a	4.94 a	6.76 a	10.81 a	13.88 a	2.21 a*	3.92 a	7.19 a	9.72 a	15.43 a	19.88 a	
10	12	1.38 a*	2.17 a	3.36 a	4.54 a	7.05 a	2 a*	3.05 a	5.15 a	6.97 a	11.01 a	14.07 a	2.54 a*	4.17 a	7.43 a	9.96 a	15.66 a	20.13 a	
	16	1.25 a*	2.06 a	3.27 a	4.46 a	6.98 a	1.83 a*	2.92 a	5.04 a	6.86 a	10.9 a	13.96 a	2.36 a*	4.03 a	7.3 a	9.83 a	15.54 a	20 a	
	24	0.98 a*	1.85 a	3.1 a	4.29 a	6.83 a	1.51 a*	2.66 a	4.81 a	6.64 a	10.7 a	13.76 a	2.01 a*	3.76 a	7.04 a	9.57 a	15.29 a	19.73 a	
12	12	1.21 a*	2.03 a	3.24 a	4.43 a	6.96 a	1.78 a*	2.87 a	5 a	6.82 a	10.87 a	13.93 a	2.3 a*	3.98 a	7.25 a	9.79 a	15.5 a	19.95 a	
	16	1.02 a*	1.87 a	3.12 a	4.31 a	6.85 a	1.55 a*	2.69 a	4.84 a	6.66 a	10.72 a	13.78 a	2.05 a*	3.79 a	7.06 a	9.6 a	15.32 a	19.76 a	
	24	0.63 a*	1.56 a	2.87 a	4.07 a	6.63 a	1.08 a*	2.31 a	4.51 a	6.34 a	10.43 a	13.49 a	1.54 a*	3.4 a	6.68 a	9.23 a	14.96 a	19.39 a	
14	12	1 a*	1.86 a	3.11 a	4.3 a	6.84 a	1.53 a*	2.67 a	4.82 a	6.65 a	10.71 a	13.77 a	2 a*	3.71 a	6.88 a	9.41 a	15.21 a	19.75 a	
	16	0.74 a*	1.65 a	2.94 a	4.14 a	6.69 a	1.21 a*	2.42 a	4.6 a	6.43 a	10.51 a	13.57 a	1.66 a*	3.45 a	6.63 a	9.16 a	14.97 a	19.49 a	
	24	0.21 a*	1.22 a	2.61 a	3.81 a	6.4 a	0.57 a*	1.9 a	4.15 a	6 a	10.11 a	13.17 a	0.98 a*	2.93 a	6.12 a	8.66 a	14.48 a	18.98 a	
16	12	0.76 a*	1.67 a	2.96 a	4.15 a	6.7 a	1.23 a*	2.44 a	4.62 a	6.45 a	10.53 a	13.59 a	1.66 a*	3.39 a	6.42 a	8.86 a	14.48 a	18.95 a	
	16	0.42 a*	1.39 a	2.74 a	3.94 a	6.51 a	0.82 a*	2.1 a	4.33 a	6.17 a	10.26 a	13.32 a	1.22 a*	3.06 a	6.1 a	8.54 a	14.17 a	18.63 a	
	24	0.84 a	2.3 a	3.52 a	6.13 a	1.44 a	3.74 a	5.6 a	9.74 a	12.8 a	0.35 a*	2.4 a	5.46 a	7.91 a	13.56 a	17.98 a			

## 15 psf Lateral Load

Wall Height (ft)	Spacing (in.)	800S250-(mils)					800S300-(mils)				800S350-(mils)			
		33 ksi		50 ksi			50 ksi				50 ksi			
		33	43	54	68	97	118	54	68	97	118	54	68	97
8	12	4.71 a	7.95 a	11.55 a	19.35 a	25.22 a	8.3 a	11.82 a	21.11 a	27.58 a	10.74 a	15.54 a	25.64 a	34.09 a
	16	4.61 a	7.86 a	11.46 a	19.24 a	25.11 a	8.2 a	11.73 a	21.01 a	27.47 a	10.64 a	15.44 a	25.53 a	33.97 a
	24	4.43 a	7.69 a	11.27 a	19.04 a	24.89 a	8.02 a	11.55 a	20.8 a	27.25 a	10.45 a	15.24 a	25.31 a	33.74 a
9	12	4.62 a	7.85 a	11.44 a	19.19 a	24.99 a	8.18 a	11.69 a	20.88 a	27.31 a	10.59 a	15.36 a	25.42 a	33.76 a
	16	4.5 a	7.74 a	11.32 a	19.06 a	24.86 a	8.06 a	11.57 a	20.75 a	27.17 a	10.47 a	15.24 a	25.28 a	33.62 a
	24	4.26 a	7.51 a	11.08 a	18.8 a	24.58 a	7.83 a	11.34 a	20.49 a	26.9 a	10.22 a	14.99 a	25 a	33.33 a
10	12	4.52 a	7.73 a	11.3 a	19 a	24.72 a	8.05 a	11.53 a	20.61 a	26.99 a	10.41 a	15.16 a	25.12 a	33.39 a
	16	4.37 a	7.59 a	11.16 a	18.84 a	24.55 a	7.9 a	11.39 a	20.45 a	26.82 a	10.26 a	15 a	24.95 a	33.21 a
	24	4.08 a	7.32 a	10.87 a	18.53 a	24.22 a	7.62 a	11.11 a	20.13 a	26.48 a	9.97 a	14.7 a	24.61 a	32.86 a
12	12	4.28 a	7.43 a	10.98 a	18.54 a	24 a	7.72 a	11.14 a	19.92 a	26.17 a	9.99 a	14.66 a	24.3 a	32.49 a
	16	4.08 a	7.24 a	10.77 a	18.31 a	23.77 a	7.52 a	10.94 a	19.69 a	25.93 a	9.78 a	14.45 a	24.06 a	32.24 a
	24	3.66 a	6.85 a	10.36 a	17.86 a	23.3 a	7.12 a	10.54 a	19.24 a	25.46 a	9.37 a	14.02 a	23.58 a	31.74 a
14	12	4 a	7.06 a	10.48 a	17.75 a	23.02 a	7.32 a	10.64 a	19.03 a	25.11 a	9.49 a	14.04 a	23.32 a	31.11 a
	16	3.72 a	6.8 a	10.2 a	17.45 a	22.71 a	7.05 a	10.38 a	18.74 a	24.8 a	9.21 a	13.75 a	23 a	30.78 a
	24	3.17 a	6.28 a	9.66 a	16.85 a	22.09 a	6.52 a	9.85 a	18.14 a	24.17 a	8.66 a	13.19 a	22.37 a	30.13 a
16	12	3.67 a	6.61 a	9.86 a	16.74 a	21.78 a	6.85 a	10.05 a	17.98 a	23.86 a	8.92 a	13.31 a	22.21 a	29.32 a
	16	3.31 a	6.28 a	9.52 a	16.36 a	21.39 a	6.51 a	9.72 a	17.61 a	23.47 a	8.57 a	12.95 a	21.82 a	28.91 a
	24	2.6 a	5.63 a	8.83 a	15.62 a	20.61 a	5.83 a	9.05 a	16.86 a	22.68 a	7.87 a	12.24 a	21.02 a	28.1 a

See Combined Axial and Lateral Load Table Notes.

# Combined Axial and Lateral Load Tables

## 20 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	362S137-(mils)												362S162-(mils)									362S200-(mils)									362S250-(mils)								
		33 ksi						50 ksi						33 ksi			50 ksi						33 ksi			50 ksi						33 ksi			50 ksi					
		33	43	54	68	81	97	33	43	54	68	97	33	43	54	33	43	68	97	33	43	54	33	43	68	97	33	43	54	33	43	68	97	33	43	54	33	43	68	97
8	12	0.96 a	1.58 a	2.71 a	3.7 a	1.32 a	2 a	3.54 a	4.72 a	7.08 a	1.67 a	2.69 a	4.55 a	7.4 a	8.78 a	3.09 a	5.19 a	6.99 a	10.08 a																					
	16	0.74 a	1.36 a	2.54 a	3.55 a	1.08 a	1.77 a	3.35 a	4.54 a	6.9 a	1.4 a	2.43 a	4.33 a	7.14 a	8.6 a	2.82 a	4.95 a	6.76 a	9.86 a																					
	24	0.31 c	0.92 b	2.18 a	3.24 a	0.6 b	1.31 a	2.96 a	4.19 a	6.55 a	0.87 b	1.92 a	3.88 a	6.62 a	8.22 a	2.26 a	4.47 a	6.29 a	9.43 a																					
9	12	0.77 a	1.37 a	2.45 a	3.4 a	1.09 a	1.75 a	3.21 a	4.31 a	6.5 a	1.41 a	2.39 a	4.12 a	6.78 a	8.05 a	2.79 a	4.78 a	6.37 a	9.26 a																					
	16	0.5 c	1.09 b	2.24 a	3.22 a	0.8 b	1.47 a	2.98 a	4.1 a	6.29 a	1.09 a	2.07 a	3.85 a	6.47 a	7.83 a	2.45 a	4.49 a	6.09 a	9 a																					
	24	0.55 d	0.81 b	1.81 c	2.84 b	0.21 d	0.91 c	2.51 b	3.69 a	5.87 a	0.44 c	1.45 b	3.32 a	5.85 a	7.39 a	1.77 a	3.91 a	5.53 a	8.49 a																					
10	12	0.56 c	1.13 b	2.17 a	3.07 a	0.85 b	1.4 a	2.86 a	3.88 a	5.87 a	1.14 a	2.07 a	3.67 a	6.08 a	7.27 a	2.47 a	4.33 a	5.72 a	8.39 a																					
	16	0.24 d	0.81 c	1.92 b	2.85 a	0.5 d	1.09 c	2.59 a	3.64 a	5.63 a	0.75 c	1.7 b	3.36 a	5.73 a	7.02 a	2.06 a	3.99 a	5.4 a	8.1 a																					
	24	0.16 e	0.59 d	1.42 d	2.42 c	0.47 d	0.47 d	2.05 c	3.16 b	5.15 a	0.96 d	0.96 d	2.75 c	5.02 b	6.52 a	1.25 c	3.31 b	4.76 a	7.51 a																					
12	12	0.12 e	0.64 d	1.59 c	2.38 b	0.35 e	0.99 d	2.1 c	2.98 b	4.57 a	0.57 d	1.42 c	2.72 b	4.63 a	5.67 a	1.73 b	3.25 a	4.4 a	6.61 a																					
	16	0.21 e	0.59 d	1.28 d	2.12 d	0.54 e	0.54 e	1.78 d	2.69 c	4.28 b	0.07 e	0.94 d	2.35 c	4.21 b	5.38 a	1.21 d	2.84 c	4.01 a	6.26 a																					
	24	0.16 e	0.47 d	0.66 e	1.58 e	0.44 e	0.44 e	1.12 e	2.11 e	3.72 d	0.23 f	0.23 f	1.62 e	3.37 d	4.79 c	0.16 e	2.02 d	3.25 c	5.56 b																					
14	12	0.16 e	0.59 d	1.06 e	1.75 d	0.44 e	0.44 e	1.45 e	2.2 d	3.46 c	0.02 e	0.78 e	1.9 d	3.4 c	4.34 b	1.01 d	2.3 c	3.26 b	5.08 a																					
	16	0.16 e	0.47 d	0.71 f	1.45 e	0.44 e	0.44 e	1.08 e	1.87 e	3.15 d	0.22 e	0.22 e	1.5 e	2.93 d	4.02 c	0.39 e	1.84 d	2.84 d	4.7 b																					
	24	0.16 e	0.47 d	0.84 f	1.45 e	0.44 e	0.44 e	0.35 f	1.22 f	2.53 e	0.22 e	0.22 e	0.68 f	2 e	3.37 e	0.39 e	0.93 e	1.99 e	3.93 d																					
16	12	0.16 e	0.47 d	0.61 f	1.22 e	0.44 e	0.44 e	0.92 f	1.57 e	2.6 d	0.23 f	0.23 f	1.26 e	2.43 e	3.31 d	0.37 e	1.55 e	2.37 d	3.89 c																					
	16	0.16 e	0.47 d	0.23 f	0.9 f	0.44 e	0.44 e	0.52 f	1.22 f	2.26 e	0.23 f	0.23 f	0.82 f	1.94 e	2.96 e	0.37 e	1.06 e	1.91 e	3.47 d																					
	24	0.16 e	0.47 d	0.24 f	0.9 f	0.44 e	0.44 e	0.52 f	1.22 f	2.26 e	0.23 f	0.23 f	0.82 f	1.94 e	2.96 e	0.37 e	1.06 e	1.91 e	3.47 d																					

## 20 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	362S300-(mils)						600S137-(mils)									600S162-(mils)												600S200-(mils)					
		50 ksi			33 ksi			33 ksi			50 ksi						33 ksi			50 ksi									33 ksi					
		54	68	97	33	43	54	33	43	54	33	43	68	97	33	43	54	33	43	68	97	33	43	54	33	43	68	97						
8	12	5.26 a	7.47 a	11.32 a	1.46 a	2.21 a	3.55 a	4.79 a	7.3 a	2.11 a	3.09 a	5.3 a	7.14 a	11.06 a	13.89 a	2.51 a	3.92 a																	
	16	5.02 a	7.22 a	11.1 a	1.33 a	2.08 a	3.44 a	4.68 a	7.21 a	1.97 a	2.96 a	5.16 a	7.01 a	10.93 a	13.76 a	2.35 a	3.75 a																	
	24	4.55 a	6.74 a	10.66 a	1.05 a	1.81 a	3.23 a	4.47 a	7.02 a	1.68 a	2.68 a	4.9 a	6.76 a	10.67 a	13.49 a	2.03 a	3.42 a																	
9	12	4.85 a	6.86 a	10.56 a	1.35 a	2.1 a	3.47 a	4.7 a	7.23 a	1.99 a	2.98 a	5.19 a	7.04 a	10.95 a	13.79 a	2.36 a	3.75 a																	
	16	4.57 a	6.57 a	10.29 a	1.18 a	1.93 a	3.33 a	4.57 a	7.11 a	1.81 a	2.81 a	5.02 a	6.88 a	10.79 a	13.62 a	2.17 a	3.55 a																	
	24	3.99 a	6 a	9.77 a	0.83 a	1.6 a	3.05 a	4.3 a	6.86 a	1.45 a	2.46 a	4.69 a	6.56 a	10.46 a	13.28 a	1.77 a	3.14 a																	
10	12	4.42 a	6.24 a	9.6 a	1.23 a	1.98 a	3.37 a	4.61 a	7.14 a	1.85 a	2.84 a	5.06 a	6.93 a	10.84 a	13.67 a	2.21 a	3.57 a																	
	16	4.08 a	5.9 a	9.3 a	1.02 a	1.78 a	3.2 a	4.44 a	6.99 a	1.63 a	2.63 a	4.85 a	6.73 a	10.64 a	13.46 a	1.96 a	3.32 a																	
	24	3.41 a	5.24 a	8.7 a	0.59 a	1.36 a	2.86 a	4.11 a	6.69 a	1.18 a	2.2 a	4.44 a	6.34 a	10.23 a	13.04 a	1.48 a	2.81 a																	
12	12	3.57 a	5 a	7.64 a	0.95 a	1.71 a	3.15 a	4.39 a	6.94 a	1.52 a	2.51 a	4.64 a	6.54 a	10.57 a	13.39 a	1.84 a	3.14 a																	
	16	3.14 b	4.59 a	7.27 a	0.64 a	1.41 a	2.9 a	4.15 a	6.73 a	1.21 a	2.2 a	4.35 a	6.26 a	10.28 a	13.09 a	1.5 a	2.79 a																	
	24	2.27 d	3.76 c	6.55 a	0.02 c	0.81 b	2.41 a	3.67 a	6.29 a	0.58 c	1.6 a	3.78 a	5.71 a	9.69 a	12.49 a	0.81 b	2.09 a																	
14	12	2.66 c	3.79 b	5.94 a	0.61 b	1.39 a	2.88 a	4.13 a	6.71 a	1.15 a	2.11 a	4.13 a	5.95 a	9.93 a	13.07 a	1.42 a	2.65 a																	
	16	2.16 d	3.32 c	5.54 b	0.19 d	0.98 b	2.55 a	3.8 a	6.41 a	0.73 c	1.71 b	3.75 a	5.59 a	9.54 a	12.66 a	0.97 b	2.19 a																	
	24	1.14 e	2.39 e	4.73 d	0.17 d	0.17 d	1.89 c	3.15 b	5.82 a	0.92 d	0.92 d	3.01 c	4.87 a	8.77 a	11.84 a	0.07 d	1.27 c																	
16	12	1.83 e	2.78 d	4.6 b	0.22 d	1.01 c	2.58 b	3.83 a	6.44 a	0.73 c	1.67 b	3.53 a	5.23 a	8.89 a	11.74 a	0.96 c	2.1 a																	
	16	1.28 e	2.27 e	4.16 d	0.48 d	0.48 d	2.14 c	3.4 b	6.05 a	0.22 d	1.17 d	3.07 c	4.8 a	8.42 a	11.24 a	0.4 d	1.54 c																	
	24	0.18 f	1.26 f	3.29 e	0.18 f	0.18 f	1.28 e	2.55 d	5.28 c	0.18 e	0.18 e	2.17 d	3.92 c	7.49 b	10.26 a	0.4 d	0.4 d																	

## 20 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	600S200-(mils)							600S250-(mils)							600S300-(mils)							600S350-(mils)						
		50 ksi				33 ksi			50 ksi				33 ksi			50 ksi				33 ksi			50 ksi				33 ksi		
		54	68	97	118	43	54	68	54	68	97	118	43	54	68	54	68	97	118	54	68	97	118	54	68	97	118	54	68
8	12	6.99 a	9.42 a	14.89 a	19.18 a	4.27 a	7.24 a	10.54 a	17.49 a	22.36 a	7.55 a	10.73 a	18.8 a	24.47 a	9.83 a	14.32 a	23.41 a	30.95 a											
	16	6.84 a	9.26 a	14.74 a	19.02 a	4.1 a	7.08 a	10.37 a	17.3 a	22.17 a	7.39 a	10.56 a	18.62 a	24.28 a	9.67 a	14.13 a	23.21 a	30.75 a											
	24	6.52 a	8.94 a	14.43 a	18.69 a	3.76 a	6.77 a	10.02 a	16.93 a	21.79 a	7.07 a	10.22 a	18.25 a	23.89 a	9.33 a	13.77 a	22.81 a	30.34 a											
9	12	6.78 a	9.17 a	14.58 a	18.8 a	4.1 a	7.03 a	10.26 a	17.06 a	21.85 a	7.33 a	10.46 a	18.35 a	23.93 a	9.56 a	13.97 a	22.88 a	30.13 a											
	16	6.58 a	8.97 a	14.39 a	18.6 a	3.89 a	6.84 a	10.04 a	16.83 a	21.61 a	7.13 a	10.25 a	18.12 a	23.69 a	9.35 a	13.74 a	22.63 a	29.88 a											
	24	6.19 a	8.58 a	14.01 a	18.2 a	3.46 a	6.45 a	9.61 a	16.36 a	21.13 a	6.74 a	9.82 a	17.66 a	23.21 a	8.93 a	13.29 a	22.14 a	29.37 a											
10	12	6.53 a	8.89 a	14.21 a	18.35 a	3.91 a	6.8 a	9.94 a	16.56 a	21.24 a	7.09 a	10.15 a	17.82 a	23.31 a	9.25 a	13.57 a	22.3 a	29.21 a											
	16	6.29 a	8.64 a	13.98 a	18.1 a	3.65 a	6.56 a	9.68 a	16.28 a	20.95 a	6.85 a	9.89 a	17.54 a	23.03 a	8.99 a	13.3 a	22 a	28.9 a											
	24	5.81 a	8.16 a	13.51 a	17.61 a	3.13 a	6.08 a	9.16 a	15.72 a	20.38 a	6.37 a	9.38 a	16.99 a	22.45 a	8.48 a	12.75 a	21.4 a	28.29 a											
12	12	5.94 a	8.19 a	13.29 a	17.2 a	3.48 a	6.24 a	9.2 a	15.37 a	19.78 a	6.52 a	9.47 a	16.6 a	21.89 a	8.54 a	12.67 a	20.99 a	27.08 a											
	16	5.61 a	7.86 a	12.97 a	16.86 a	3.12 a	5.91 a	8.84 a	14.98 a	19.38 a	6.19 a	9.12 a	16.21 a	21.49 a	8.19 a	12.29 a	20.57 a	26.66 a											
	24	4.95 a	7.2 a	12.33 a	16.19 a	2.38 a	5.25 a	8.12 a	14.22 a	18.59 a	5.52 a	8.41 a	15.45 a	20.7 a	7.49 a	11.53 a	19.75 a	25.84 a											
14	12	5.24 a	7.35 a	12.12 a	15.73 a	2.99 a	5.63 a	8.34 a	13.94 a	18.01 a	5.86 a	8.7 a	15.19 a	20.32 a	7.73 a	11.63 a	19.32 a	24.66 a											
	16	4.81 a	6.92 a	11.72 a	15.31 a	2.5 a	5.2 a	7.87 a	13.46 a	17.51 a	5.43 a	8.24 a	14.7 a	19.81 a	7.28 a	11.14 a	18.79 a	24.14 a											
	24	3.97 b	6.08 a	10.9 a	14.45 a	1.53 b	4.34 a	6.95 a	12.48 a	16.51 a	4.57 a	7.31 a	13.72 a	18.78 a	6.37 a	10.16 a	17.74 a	23.1 a											
16	12	4.46 a	6.4 a	10.79 a	14.04 a	2.44 a	5 a	7.42 a	12.37 a	16.05 a	5.15 a	7.85 a	13.68 a	18.21 a	6.86 a	10.49 a	17.22 a	22.07 a											
	16	3.95 b	5.89 a	10.3 a	13.53 a	1.83 b	4.47 a	6.86 a	11.79 a	15.45 a	4.62 a	7.27 a	13.09 a	17.59 a	6.3 a	9.89 a	16.59 a	21.45 a											
	24	2.94 d	4.87 c	9.32 a	12.51 a	0.62 d	3.39 c	5.72 b	10.62 a	14.26 a	3.56 c	6.12 b	11.91 a	16.36 a	5.2 b	8.7 a	15.32 a	20.21 a											

See Combined Axial and Lateral Load Table Notes.

# Combined Axial and Lateral Load Tables

## 20 psf Lateral Load

Wall Height (ft)	Spacing (in.)	800S137-(mils)						800S162-(mils)						800S200-(mils)					
		33 ksi		50 ksi				33 ksi		50 ksi				33 ksi		50 ksi			
		33	43	54	68	97	118	33	43	54	68	97	118	33	43	54	68	97	118
8	12	1.44 a*	2.22 a	3.39 a	4.57 a	7.09 a	2.07 a*	3.1 a	5.2 a	7.02 a	11.05 a	14.11 a	2.62 a*	4.23 a	7.49 a	10.02 a	15.72 a	20.18 a	
	16	1.33 a*	2.13 a	3.32 a	4.5 a	7.02 a	1.93 a*	2.99 a	5.11 a	6.92 a	10.96 a	14.02 a	2.47 a*	4.11 a	7.38 a	9.91 a	15.61 a	20.07 a	
	24	1.1 a*	1.94 a	3.17 a	4.36 a	6.9 a	1.65 a*	2.77 a	4.91 a	6.73 a	10.79 a	13.85 a	2.16 a*	3.88 a	7.15 a	9.69 a	15.4 a	19.85 a	
9	12	1.35 a*	2.15 a	3.34 a	4.52 a	7.04 a	1.96 a*	3.01 a	5.13 a	6.94 a	10.98 a	14.04 a	2.5 a*	4.14 a	7.4 a	9.93 a	15.63 a	20.09 a	
	16	1.21 a*	2.03 a	3.24 a	4.43 a	6.96 a	1.78 a*	2.87 a	5 a	6.82 a	10.87 a	13.93 a	2.31 a*	3.99 a	7.26 a	9.79 a	15.5 a	19.95 a	
	24	0.92 a*	1.8 a	3.06 a	4.25 a	6.79 a	1.43 a*	2.59 a	4.76 a	6.58 a	10.65 a	13.71 a	1.93 a*	3.7 a	6.97 a	9.51 a	15.23 a	19.67 a	
10	12	1.25 a*	2.06 a	3.27 a	4.46 a	6.98 a	1.83 a*	2.92 a	5.04 a	6.86 a	10.9 a	13.96 a	2.36 a*	4.03 a	7.3 a	9.83 a	15.54 a	20 a	
	16	1.07 a*	1.92 a	3.16 a	4.35 a	6.88 a	1.62 a*	2.74 a	4.89 a	6.71 a	10.77 a	13.83 a	2.13 a*	3.85 a	7.12 a	9.66 a	15.37 a	19.82 a	
	24	0.72 a*	1.63 a	2.93 a	4.12 a	6.68 a	1.18 a*	2.39 a	4.58 a	6.41 a	10.49 a	13.55 a	1.66 a*	3.49 a	6.77 a	9.31 a	15.04 a	19.47 a	
12	12	1.02 a*	1.87 a	3.12 a	4.31 a	6.85 a	1.55 a*	2.69 a	4.84 a	6.66 a	10.72 a	13.78 a	2.05 a*	3.79 a	7.06 a	9.6 a	15.32 a	19.76 a	
	16	0.76 a*	1.67 a	2.96 a	4.15 a	6.7 a	1.23 a*	2.44 a	4.62 a	6.45 a	10.53 a	13.59 a	1.71 a*	3.53 a	6.81 a	9.35 a	15.08 a	19.51 a	
	24	0.24 a*	1.25 a	2.63 a	3.83 a	6.42 a	0.61 a*	1.94 a	4.18 a	6.02 a	10.13 a	13.19 a	1.03 a*	3.01 a	6.3 a	8.85 a	14.6 a	19.01 a	
14	12	0.74 a*	1.65 a	2.94 a	4.14 a	6.69 a	1.21 a*	2.42 a	4.6 a	6.43 a	10.51 a	13.57 a	1.66 a*	3.45 a	6.63 a	9.16 a	14.97 a	19.49 a	
	16	0.39 a*	1.37 a	2.72 a	3.92 a	6.5 a	0.78 a*	2.07 a	4.3 a	6.14 a	10.24 a	13.3 a	1.21 a*	3.11 a	6.29 a	8.82 a	14.65 a	19.15 a	
	24		0.8 a	2.27 a	3.49 a	6.11 a		1.39 a	3.7 a	5.56 a	9.7 a	12.76 a	0.3 a*	2.42 a	5.62 a	8.15 a	14 a	18.47 a	
16	12	0.42 a*	1.39 a	2.74 a	3.94 a	6.51 a	0.82 a*	2.1 a	4.33 a	6.17 a	10.26 a	13.32 a	1.22 a*	3.06 a	6.1 a	8.54 a	14.17 a	18.63 a	
	16		1.02 a	2.44 a	3.66 a	6.26 a	0.26 b*	1.66 a	3.94 a	5.79 a	9.91 a	12.97 a	0.64 a*	2.62 a	5.67 a	8.12 a	13.76 a	18.19 a	
	24		0.28 c	1.86 b	3.09 a	5.75 a		0.77 b	3.16 a	5.03 a	9.21 a	12.27 a		1.74 a	4.82 a	7.28 a	12.94 a	17.33 a	

## 20 psf Lateral Load

Wall Height (ft)	Spacing (in.)	800S250-(mils)				800S300-(mils)				800S350-(mils)				
		33 ksi		50 ksi		50 ksi				50 ksi				
		43	54	68	97	118	54	68	97	118	54	68	97	118
8	12	4.61 a	7.86 a	11.46 a	19.24 a	25.11 a	8.2 a	11.73 a	21.01 a	27.47 a	10.64 a	15.44 a	25.53 a	33.97 a
	16	4.49 a	7.75 a	11.33 a	19.11 a	24.97 a	8.08 a	11.61 a	20.87 a	27.33 a	10.51 a	15.31 a	25.38 a	33.82 a
	24	4.24 a	7.51 a	11.09 a	18.83 a	24.68 a	7.83 a	11.37 a	20.59 a	27.03 a	10.26 a	15.05 a	25.09 a	33.51 a
9	12	4.5 a	7.74 a	11.32 a	19.06 a	24.86 a	8.06 a	11.57 a	20.75 a	27.17 a	10.47 a	15.24 a	25.28 a	33.62 a
	16	4.34 a	7.59 a	11.16 a	18.89 a	24.67 a	7.91 a	11.42 a	20.58 a	26.99 a	10.3 a	15.07 a	25.1 a	33.43 a
	24	4.03 a	7.29 a	10.85 a	18.54 a	24.31 a	7.6 a	11.11 a	20.23 a	26.62 a	9.98 a	14.74 a	24.73 a	33.04 a
10	12	4.37 a	7.59 a	11.16 a	18.84 a	24.55 a	7.9 a	11.39 a	20.45 a	26.82 a	10.26 a	15 a	24.95 a	33.21 a
	16	4.18 a	7.41 a	10.97 a	18.63 a	24.33 a	7.71 a	11.2 a	20.23 a	26.6 a	10.07 a	14.8 a	24.72 a	32.98 a
	24	3.79 a	7.04 a	10.59 a	18.21 a	23.88 a	7.33 a	10.82 a	19.81 a	26.15 a	9.67 a	14.4 a	24.27 a	32.5 a
12	12	4.08 a	7.24 a	10.77 a	18.31 a	23.77 a	7.52 a	10.94 a	19.69 a	25.93 a	9.78 a	14.45 a	24.06 a	32.24 a
	16	3.8 a	6.98 a	10.5 a	18.01 a	23.45 a	7.25 a	10.67 a	19.39 a	25.62 a	9.51 a	14.16 a	23.74 a	31.91 a
	24	3.25 a	6.46 a	9.96 a	17.41 a	22.82 a	6.71 a	10.14 a	18.79 a	24.99 a	8.95 a	13.59 a	23.11 a	31.24 a
14	12	3.72 a	6.8 a	10.2 a	17.45 a	22.71 a	7.05 a	10.38 a	18.74 a	24.8 a	9.21 a	13.75 a	23 a	30.78 a
	16	3.35 a	6.46 a	9.84 a	17.05 a	22.3 a	6.69 a	10.02 a	18.34 a	24.38 a	8.84 a	13.38 a	22.58 a	30.34 a
	24	2.61 a	5.77 a	9.12 a	16.25 a	21.47 a	5.98 a	9.32 a	17.55 a	23.55 a	8.1 a	12.62 a	21.74 a	29.47 a
16	12	3.31 a	6.28 a	9.52 a	16.36 a	21.39 a	6.51 a	9.72 a	17.61 a	23.47 a	8.57 a	12.95 a	21.82 a	28.91 a
	16	2.84 a	5.85 a	9.06 a	15.87 a	20.87 a	6.06 a	9.27 a	17.11 a	22.94 a	8.1 a	12.48 a	21.29 a	28.37 a
	24	1.89 a	4.98 a	8.15 a	14.87 a	19.84 a	5.15 a	8.38 a	16.12 a	21.9 a	7.17 a	11.52 a	20.23 a	27.28 a

See Combined Axial and Lateral Load Table Notes.

# Combined Axial and Lateral Load Tables

## 25 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	362S137-(mils)												362S162-(mils)									362S200-(mils)									362S250-(mils)								
		33 ksi				50 ksi				33 ksi				50 ksi					33 ksi			50 ksi						33 ksi			50 ksi			33 ksi			50 ksi			
		33	43	54	68	33	43	54	68	97	33	43	54	68	97	33	43	54	68	97	33	43	54	68	97	33	43	54	68	97										
8	12	0.8 a	1.41 a	2.58 a	3.58 a	1.14 a	1.83 a	3.4 a	4.58 a	6.95 a	1.47 a	2.49 a	4.38 a	7.21 a	8.64 a	2.89 a	5.01 a	6.81 a	9.92 a																					
	16	0.53 b	1.14 a	2.36 a	3.39 a	0.84 a	1.54 a	3.16 a	4.37 a	6.73 a	1.14 a	2.17 a	4.11 a	6.88 a	8.41 a	2.54 a	4.71 a	6.52 a	9.65 a																					
	24		0.58 c	1.92 b	3 a	0.24 c	0.97 b	2.67 a	3.93 a	6.28 a	0.48 c	1.53 a	3.55 a	6.23 a	7.94 a	1.85 a	4.11 a	5.93 a	9.11 a																					
9	12	0.57 c	1.16 a	2.29 a	3.26 a	0.87 b	1.54 a	3.04 a	4.16 a	6.34 a	1.17 a	2.15 a	3.92 a	6.55 a	7.88 a	2.54 a	4.56 a	6.16 a	9.06 a																					
	16	0.23 d	0.82 c	2.02 b	3.03 a	0.5 c	1.19 b	2.75 a	3.89 a	6.08 a	0.76 c	1.76 a	3.59 a	6.16 a	7.61 a	2.11 a	4.2 a	5.81 a	8.74 a																					
	24		0.14 d	1.49 d	2.56 c		0.49 d	2.16 c	3.37 b	5.56 a		0.98 c	2.93 b	5.39 a	7.06 a	1.26 b	3.47 a	5.11 a	8.1 a																					
10	12	0.32 d	0.89 c	1.98 b	2.9 a	0.59 c	1.16 b	2.66 a	3.7 a	5.69 a	0.85 c	1.79 a	3.44 a	5.82 a	7.08 a	2.16 a	4.08 a	5.48 a	8.17 a																					
	16		0.48 d	1.67 c	2.64 b	0.15 d	0.78 d	2.32 c	3.4 a	5.39 a	0.37 d	1.33 c	3.06 b	5.37 a	6.77 a	1.65 b	3.65 a	5.08 a	7.8 a																					
	24			1.05 e	2.1 d			1.65 d	2.8 c	4.8 b			2.29 d	4.49 c	6.14 a	0.64 d	2.8 c	4.28 b	7.07 a																					
12	12		0.32 e	1.36 d	2.18 c	0.01 e	0.65 d	1.86 d	2.76 c	4.35 a	0.2 e	1.06 d	2.44 c	4.32 b	5.45 a	1.34 c	2.94 b	4.11 a	6.35 a																					
	16			0.97 e	1.85 d		0.09 e	1.45 e	2.4 d	4 c		0.47 e	1.99 d	3.79 c	5.08 b	0.68 d	2.43 d	3.63 c	5.91 a																					
	24			0.2 f	1.19 e			0.63 f	1.68 e	3.29 d			1.07 e	2.74 e	4.35 d		1.4 e	2.68 d	5.04 c																					
14	12			0.79 e	1.52 e		0.04 f	1.17 e	1.95 e	3.23 d		0.36 e	1.6 e	3.05 d	4.1 c	0.55 e	1.96 d	2.95 c	4.8 b																					
	16			0.35 f	1.15 f			0.71 f	1.55 e	2.84 e			1.09 e	2.47 e	3.69 d		1.39 e	2.41 d	4.31 c																					
	24				0.39 f				0.74 f	2.06 f			0.07 f	1.3 f	2.88 e		0.24 f	1.35 e	3.35 e																					
16	12			0.32 f	0.98 f			0.62 f	1.31 f	2.34 e			0.93 f	2.06 e	3.05 d		1.18 e	2.03 e	3.58 d																					
	16				0.57 f			0.12 f	0.87 f	1.93 f			0.38 f	1.44 f	2.61 e		0.57 f	1.46 e	3.06 e																					
	24									1.09 f				0.19 f	1.74 f			0.31 f	2.02 f																					

## 25 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	362S300-(mils)			600S137-(mils)						600S162-(mils)							600S200-(mils)	
		50 ksi			33 ksi		50 ksi				33 ksi		50 ksi					33 ksi	
		54	68	97	33	43	54	68	97	33	43	54	68	97	118	33	43		
8	12	5.08 a	7.28 a	11.16 a	1.36 a	2.11 a	3.47 a	4.71 a	7.23 a	2.01 a	2.99 a	5.2 a	7.05 a	10.96 a	13.79 a	2.39 a	3.79 a		
	16	4.79 a	6.98 a	10.88 a	1.19 a	1.94 a	3.34 a	4.57 a	7.11 a	1.83 a	2.82 a	5.03 a	6.89 a	10.8 a	13.63 a	2.19 a	3.59 a		
	24	4.2 a	6.38 a	10.33 a	0.84 a	1.61 a	3.06 a	4.31 a	6.87 a	1.47 a	2.47 a	4.7 a	6.58 a	10.47 a	13.29 a	1.79 a	3.18 a		
9	12	4.64 a	6.64 a	10.36 a	1.22 a	1.98 a	3.36 a	4.6 a	7.14 a	1.85 a	2.85 a	5.06 a	6.92 a	10.83 a	13.66 a	2.22 a	3.6 a		
	16	4.28 a	6.29 a	10.03 a	1.01 a	1.77 a	3.19 a	4.43 a	6.98 a	1.63 a	2.63 a	4.86 a	6.72 a	10.63 a	13.45 a	1.97 a	3.34 a		
	24	3.56 a	5.57 a	9.37 a	0.57 a	1.35 a	2.85 a	4.09 a	6.68 a	1.17 a	2.2 a	4.44 a	6.33 a	10.21 a	13.03 a	1.47 a	2.83 a		
10	12	4.17 a	5.99 a	9.38 a	1.07 a	1.83 a	3.24 a	4.48 a	7.03 a	1.68 a	2.68 a	4.9 a	6.78 a	10.69 a	13.51 a	2.02 a	3.38 a		
	16	3.75 a	5.57 a	9 a	0.8 a	1.57 a	3.03 a	4.27 a	6.84 a	1.4 a	2.41 a	4.65 a	6.54 a	10.43 a	13.25 a	1.72 a	3.07 a		
	24	2.91 c	4.74 a	8.24 a	0.26 b	1.05 a	2.61 a	3.86 a	6.46 a	0.85 a	1.88 a	4.13 a	6.05 a	9.93 a	12.73 a	1.11 a	2.44 a		
12	12	3.25 b	4.69 a	7.36 a	0.72 a	1.49 a	2.96 a	4.21 a	6.78 a	1.29 a	2.28 a	4.43 a	6.33 a	10.35 a	13.17 a	1.58 a	2.88 a		
	16	2.71 c	4.18 b	6.91 a	0.33 b	1.11 a	2.66 a	3.91 a	6.51 a	0.9 b	1.9 a	4.07 a	5.99 a	9.99 a	12.79 a	1.16 a	2.44 a		
	24	1.62 e	3.14 d	6.01 b		0.36 c	2.05 b	3.31 a	5.97 a	0.12 d	1.15 b	3.35 a	5.3 a	9.26 a	12.04 a	0.3 c	1.56 b		
14	12	2.28 d	3.44 c	5.64 a	0.3 c	1.08 b	2.63 a	3.88 a	6.49 a	0.84 c	1.81 a	3.85 a	5.68 a	9.64 a	12.76 a	1.08 b	2.3 a		
	16	1.65 e	2.85 d	5.13 c		0.57 c	2.22 b	3.47 a	6.12 a	0.32 d	1.32 c	3.38 b	5.23 a	9.16 a	12.25 a	0.52 c	1.73 b		
	24	0.38 f	1.68 e	4.13 d			1.39 d	2.66 c	5.38 b		0.32 d	2.45 d	4.33 c	8.2 a	11.23 a		0.58 d		
16	12	1.42 e	2.4 d	4.27 c		0.61 d	2.25 c	3.51 b	6.15 a	0.35 d	1.29 c	3.19 b	4.91 a	8.54 a	11.37 a	0.54 d	1.68 c		
	16	0.73 f	1.77 e	3.73 d			1.71 d	2.97 c	5.67 b	0.67 d		2.62 d	4.36 c	7.96 a	10.75 a		0.97 d		
	24		0.5 f	2.64 e			0.63 e	1.91 e	4.71 d			1.49 e	3.27 d	6.79 c	9.52 b				

## 25 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	600S200-(mils)				600S250-(mils)							600S300-(mils)				600S350-(mils)			
		50 ksi				33 ksi	50 ksi				50 ksi				50 ksi					
		54	68	97	118	43	54	68	97	118	54	68	97	118	54	68	97	118		
8	12	6.88 a	9.3 a	14.78 a	19.06 a	4.14 a	7.12 a	10.41 a	17.35 a	22.22 a	7.43 a	10.6 a	18.67 a	24.32 a	9.71 a	14.18 a	23.26 a	30.8 a		
	16	6.68 a	9.1 a	14.59 a	18.86 a	3.93 a	6.93 a	10.19 a	17.11 a	21.98 a	7.23 a	10.39 a	18.43 a	24.08 a	9.5 a	13.95 a	23.01 a	30.54 a		
	24	6.28 a	8.7 a	14.2 a	18.45 a	3.5 a	6.54 a	9.76 a	16.65 a	21.5 a	6.84 a	9.97 a	17.97 a	23.6 a	9.08 a	13.5 a	22.51 a	30.03 a		
9	12	6.63 a	9.02 a	14.44 a	18.65 a	3.94 a	6.89 a	10.1 a	16.89 a	21.67 a	7.18 a	10.3 a	18.17 a	23.75 a	9.4 a	13.8 a	22.7 a	29.94 a		
	16	6.38 a	8.77 a	14.2 a	18.4 a	3.67 a	6.64 a	9.83 a	16.59 a	21.37 a	6.94 a	10.04 a	17.89 a	23.45 a	9.14 a	13.52 a	22.39 a	29.63 a		
	24	5.89 a	8.28 a	13.72 a	17.89 a	3.14 a	6.15 a	9.29 a	16.01 a	20.77 a	6.44 a	9.51 a	17.31 a	22.85 a	8.62 a	12.95 a	21.77 a	28.99 a		
10	12	6.35 a	8.7 a	14.04 a	18.16 a	3.72 a	6.62 a	9.75 a	16.35 a	21.03 a	6.91 a	9.96 a	17.61 a	23.1 a	9.06 a	13.37 a	22.07 a	28.98 a		
	16	6.05 a	8.4 a	13.75 a	17.86 a	3.39 a	6.32 a	9.42 a	16 a	20.67 a	6.61 a	9.64 a	17.27 a	22.74 a	8.74 a	13.03 a	21.7 a	28.6 a		
	24	5.45 a	7.8 a	13.17 a	17.25 a	2.74 a	5.73 a	8.77 a	15.3 a	19.94 a	6.01 a	9 a	16.57 a	22.01 a	8.1 a	12.34 a	20.95 a	27.83 a		
12	12	5.69 a	7.94 a	13.05 a	16.94 a	3.21 a	5.99 a	8.93 a	15.08 a	19.48 a	6.27 a	9.21 a	16.31 a	21.59 a	8.27 a	12.38 a	20.68 a	26.77 a		
	16	5.28 a	7.53 a	12.65 a	16.52 a	2.75 a	5.58 a	8.48 a	14.6 a	18.99 a	5.85 a	8.76 a	15.83 a	21.1 a	7.84 a	11.91 a	20.16 a	26.25 a		
	24	4.45 a	6.7 a	11.85 a	15.69 a	1.83 a	4.76 a	7.58 a	13.64 a	18 a	5.02 a	7.87 a	14.88 a	20.1 a	6.96 a	10.96 a	19.13 a	25.22 a		
14	12	4.92 a	7.03 a	11.82 a	15.41 a	2.62 a	5.31 a	7.99 a	13.58 a	17.64 a	5.54 a	8.35 a	14.82 a	19.94 a	7.39 a	11.26 a	18.93 a	24.27 a		
	16	4.39 a	6.5 a	11.31 a	14.88 a	2.02 a	4.77 a	7.41 a	12.97 a	17.01 a	5 a	7.77 a	14.21 a	19.3 a	6.83 a	10.65 a	18.27 a	23.62 a		
	24	3.33 c	5.44 b	10.29 a	13.81 a	0.81 c	3.7 b	6.25 a	11.75 a	15.76 a	3.92 b	6.61 a	12.99 a	18.01 a	5.7 a	9.43 a	16.94 a	22.32 a		
16	12	4.08 a	6.02 a	10.42 a	13.66 a	1.98 b	4.6 a	7 a	11.93 a	15.6 a	4.75 a	7.42 a	13.24 a	17.75 a	6.44 a	10.04 a	16.74 a	21.6 a		
	16	3.44 c	5.38 b	9.81 a	13.02 a	1.22 c	3.93 b	6.29 a	11.2 a	14.86 a	4.09 b	6.7 a	12.5 a	16.98 a	5.75 a	9.29 a	15.95 a	20.83 a		
	24	2.17 d	4.11 d	8.59 b	11.74 a		2.59 d	4.87 c	9.74 b	13.36 a	2.76 d	5.26 c	11.03 a	15.44 a	4.37 c	7.8 b	14.37 a	19.27 a		

See Combined Axial and Lateral Load Table Notes.

# Combined Axial and Lateral Load Tables

## 25 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	800S137-(mils)						800S162-(mils)						800S200-(mils)					
		33 ksi		50 ksi				33 ksi		50 ksi				33 ksi		50 ksi			
		33	43	54	68	97	118	33	43	54	68	97	118	33	43	54	68	97	118
8	12	1.36 a*	2.15 a	3.34 a	4.52 a	7.04 a	1.96 a*	3.02 a	5.13 a	6.95 a	10.98 a	14.05 a	2.5 a*	4.14 a	7.41 a	9.94 a	15.64 a	20.1 a	
	16	1.22 a*	2.03 a	3.25 a	4.43 a	6.96 a	1.79 a*	2.88 a	5.01 a	6.83 a	10.88 a	13.94 a	2.32 a*	4 a	7.26 a	9.8 a	15.5 a	19.96 a	
	24	0.93 a*	1.8 a	3.06 a	4.26 a	6.8 a	1.44 a*	2.6 a	4.76 a	6.59 a	10.66 a	13.72 a	1.94 a*	3.71 a	6.98 a	9.52 a	15.24 a	19.68 a	
9	12	1.24 a*	2.06 a	3.27 a	4.45 a	6.98 a	1.83 a*	2.91 a	5.03 a	6.85 a	10.9 a	13.96 a	2.35 a*	4.03 a	7.29 a	9.83 a	15.53 a	19.99 a	
	16	1.06 a*	1.91 a	3.15 a	4.34 a	6.87 a	1.61 a*	2.73 a	4.88 a	6.7 a	10.76 a	13.82 a	2.12 a*	3.85 a	7.12 a	9.65 a	15.36 a	19.81 a	
	24	0.7 a*	1.62 a	2.92 a	4.12 a	6.67 a	1.17 a*	2.38 a	4.57 a	6.4 a	10.48 a	13.54 a	1.64 a*	3.48 a	6.76 a	9.3 a	15.02 a	19.46 a	
10	12	1.12 a*	1.96 a	3.18 a	4.37 a	6.9 a	1.67 a*	2.79 a	4.92 a	6.75 a	10.8 a	13.86 a	2.19 a*	3.9 a	7.17 a	9.7 a	15.41 a	19.86 a	
	16	0.89 a*	1.78 a	3.04 a	4.23 a	6.78 a	1.4 a*	2.57 a	4.73 a	6.56 a	10.63 a	13.69 a	1.89 a*	3.67 a	6.95 a	9.48 a	15.2 a	19.65 a	
	24	0.45 a*	1.41 a	2.76 a	3.96 a	6.53 a	0.86 a*	2.13 a	4.35 a	6.19 a	10.29 a	13.35 a	1.31 a*	3.23 a	6.51 a	9.05 a	14.79 a	19.21 a	
12	12	0.82 a*	1.72 a	3 a	4.19 a	6.74 a	1.31 a*	2.5 a	4.67 a	6.5 a	10.57 a	13.64 a	1.79 a*	3.59 a	6.87 a	9.41 a	15.14 a	19.58 a	
	16	0.5 a*	1.46 a	2.79 a	3.99 a	6.56 a	0.92 a*	2.19 a	4.4 a	6.24 a	10.33 a	13.39 a	1.37 a*	3.27 a	6.55 a	9.1 a	14.84 a	19.26 a	
	24	0.94 a	1.72 a	2.38 a	3.6 a	6.2 a	0.14 a*	1.56 a	3.85 a	5.7 a	9.84 a	12.9 a	0.53 a*	2.63 a	5.92 a	8.48 a	14.24 a	18.64 a	
14	12	0.47 a*	1.44 a	2.77 a	3.98 a	6.55 a	0.89 a*	2.16 a	4.38 a	6.21 a	10.31 a	13.37 a	1.32 a*	3.19 a	6.38 a	8.91 a	14.73 a	19.24 a	
	16	0.04 a*	1.08 a	2.49 a	3.71 a	6.3 a	0.36 a*	1.73 a	4 a	5.85 a	9.97 a	13.03 a	0.75 a*	2.76 a	5.96 a	8.49 a	14.32 a	18.81 a	
	24	0.38 b	1.08 a	1.94 a	3.17 a	5.82 a	0.88 a	2.16 a	3.26 a	5.13 a	9.3 a	12.36 a	1.9 a	3.19 a	5.11 a	7.65 a	13.51 a	17.96 a	
16	12	0.07 b*	1.11 a	2.52 a	3.73 a	6.32 a	0.4 a*	1.77 a	4.03 a	5.88 a	10 a	13.06 a	0.79 a*	2.73 a	5.78 a	8.23 a	13.86 a	18.3 a	
	16	0.65 b	1.11 a	2.15 a	3.38 a	6.01 a	1.21 a	2.16 a	3.55 a	5.41 a	9.56 a	12.62 a	0.06 b*	2.18 a	5.25 a	7.7 a	13.35 a	17.76 a	
	24	1.42 c	2.67 b	5.37 a	6.01 a	6.01 a	0.1 c	2.57 b	4.46 a	8.69 a	11.75 a	13.06 a	1.08 c	2.18 a	4.18 a	6.65 a	12.33 a	16.68 a	

## 25 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	800S250-(mils)				800S300-(mils)				800S350-(mils)				
		33 ksi		50 ksi		50 ksi				50 ksi				
		43	54	68	97	118	54	68	97	118	54	68	97	118
8	12	4.52 a	7.78 a	11.36 a	19.14 a	25 a	8.11 a	11.64 a	20.9 a	27.36 a	10.55 a	15.34 a	25.42 a	33.86 a
	16	4.36 a	7.63 a	11.21 a	18.97 a	24.82 a	7.96 a	11.49 a	20.73 a	27.18 a	10.39 a	15.18 a	25.24 a	33.67 a
	24	4.05 a	7.33 a	10.9 a	18.63 a	24.46 a	7.65 a	11.18 a	20.38 a	26.82 a	10.06 a	14.85 a	24.87 a	33.28 a
9	12	4.38 a	7.63 a	11.2 a	18.93 a	24.72 a	7.95 a	11.46 a	20.62 a	27.04 a	10.34 a	15.11 a	25.14 a	33.48 a
	16	4.19 a	7.44 a	11.01 a	18.71 a	24.49 a	7.75 a	11.26 a	20.4 a	26.81 a	10.14 a	14.91 a	24.91 a	33.23 a
	24	3.79 a	7.07 a	10.62 a	18.28 a	24.04 a	7.36 a	10.88 a	19.96 a	26.35 a	9.74 a	14.49 a	24.45 a	32.75 a
10	12	4.23 a	7.45 a	11.02 a	18.69 a	24.38 a	7.76 a	11.25 a	20.29 a	26.65 a	10.12 a	14.85 a	24.78 a	33.03 a
	16	3.99 a	7.23 a	10.78 a	18.42 a	24.11 a	7.52 a	11.01 a	20.02 a	26.37 a	9.87 a	14.6 a	24.5 a	32.74 a
	24	3.5 a	6.77 a	10.3 a	17.89 a	23.55 a	7.05 a	10.54 a	19.49 a	25.81 a	9.37 a	14.1 a	23.93 a	32.15 a
12	12	3.87 a	7.05 a	10.57 a	18.09 a	23.53 a	7.32 a	10.74 a	19.47 a	25.69 a	9.57 a	14.23 a	23.82 a	31.99 a
	16	3.52 a	6.72 a	10.23 a	17.71 a	23.14 a	6.98 a	10.4 a	19.09 a	25.3 a	9.23 a	13.87 a	23.43 a	31.58 a
	24	2.83 a	6.07 a	9.55 a	16.96 a	22.35 a	6.31 a	9.74 a	18.34 a	24.51 a	8.53 a	13.16 a	22.63 a	30.74 a
14	12	3.44 a	6.54 a	9.93 a	17.15 a	22.4 a	6.78 a	10.11 a	18.44 a	24.49 a	8.94 a	13.47 a	22.69 a	30.45 a
	16	2.98 a	6.11 a	9.48 a	16.65 a	21.88 a	6.34 a	9.67 a	17.95 a	23.97 a	8.47 a	13 a	22.16 a	29.91 a
	24	2.05 a	5.25 a	8.58 a	15.66 a	20.85 a	5.44 a	8.79 a	16.96 a	22.93 a	7.55 a	12.05 a	21.11 a	28.81 a
16	12	2.96 a	5.96 a	9.18 a	15.99 a	21 a	6.17 a	9.39 a	17.24 a	23.07 a	8.22 a	12.6 a	21.42 a	28.5 a
	16	2.37 a	5.41 a	8.61 a	15.37 a	20.35 a	5.61 a	8.83 a	16.62 a	22.42 a	7.63 a	12 a	20.76 a	27.82 a
	24	1.18 b	4.32 a	7.47 a	14.12 a	19.06 a	4.47 a	7.72 a	15.38 a	21.12 a	6.47 a	10.81 a	19.43 a	26.47 a

See Combined Axial and Lateral Load Table Notes.

# Combined Axial and Lateral Load Tables

## 30 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	362S137-(mils)												362S162-(mils)									362S200-(mils)									362S250-(mils)					
		33 ksi				50 ksi				33 ksi				50 ksi					33 ksi			50 ksi			33 ksi		50 ksi										
		33	43	54	68	33	43	54	68	97	33	43	54	68	97	33	43	54	68	97	33	43	54	68	97												
8	12	0.63 b	1.25 a	2.45 a	3.47 a	0.96 a	1.66 a	3.25 a	4.45 a	6.82 a	1.27 a	2.3 a	4.22 a	7.01 a	8.5 a	2.68 a	4.83 a	6.64 a	9.76 a																		
	16	0.31 c	0.92 b	2.18 a	3.24 a	0.6 b	1.31 a	2.96 a	4.19 a	6.55 a	0.87 b	1.92 a	3.88 a	6.62 a	8.22 a	2.26 a	4.47 a	6.29 a	9.43 a																		
	24		0.25 d	1.65 c	2.77 b		0.63 c	2.38 b	3.67 a	6.02 a		0.08 d	1.15 b	3.22 a	5.84 a	7.66 a	1.43 b	3.75 a	5.58 a	8.78 a																	
9	12	0.36 c	0.96 b	2.13 a	3.12 a	0.65 c	1.33 a	2.86 a	4 a	6.19 a	0.93 b	1.92 a	3.72 a	6.32 a	7.72 a	2.28 a	4.35 a	5.95 a	8.87 a																		
	16		0.55 d	1.81 c	2.84 b	0.21 d	0.91 c	2.51 b	3.69 a	5.87 a	0.44 c	1.45 b	3.32 a	5.85 a	7.39 a	1.77 a	3.91 a	5.53 a	8.49 a																		
	24			1.17 d	2.29 d		0.07 d	1.82 d	3.06 c	5.24 a		0.51 d	2.53 c	4.92 b	6.73 a	0.75 c	3.04 b	4.7 a	7.72 a																		
10	12	0.07 e	0.65 d	1.79 c	2.74 b	0.33 d	0.93 c	2.45 b	3.52 a	5.51 a	0.56 c	1.52 b	3.21 a	5.55 a	6.89 a	1.86 a	3.82 a	5.24 a	7.95 a																		
	16		0.16 e	1.42 d	2.42 c		0.47 d	2.05 c	3.16 b	5.15 a		0.96 d	2.75 c	5.02 b	6.52 a	1.25 c	3.31 b	4.76 a	7.51 a																		
	24			0.68 e	1.77 e			1.24 e	2.44 d	4.44 c			1.84 d	3.96 d	5.77 b	0.03 d	2.29 d	3.81 c	6.64 a																		
12	12			1.13 e	1.98 d		0.32 e	1.61 d	2.54 d	4.14 b		0.7 d	2.17 d	4 c	5.23 a	0.94 d	2.63 c	3.82 b	6.09 a																		
	16			0.66 e	1.58 e			1.12 e	2.11 e	3.72 d			1.62 e	3.37 d	4.79 c	0.16 e	2.02 d	3.25 c	5.56 b																		
	24				0.79 f			0.14 f	1.24 f	2.87 e			0.53 f	2.11 e	3.9 d		0.79 e	2.11 e	4.52 d																		
14	12			0.53 f	1.3 e			0.9 f	1.71 e	3 d			1.29 e	2.7 e	3.86 d	0.08 e	1.61 e	2.63 d	4.51 c																		
	16				0.84 f			0.35 f	1.22 f	2.53 e			0.68 f	2 e	3.37 e		0.93 e	1.99 e	3.93 d																		
	24								0.25 f	1.59 f				0.6 f	2.39 f		-0.44 f	0.72 f	2.77 e																		
16	12			0.03 f	0.73 f			0.32 f	1.04 f	2.09 e			0.6 f	1.69 f	2.79 e		0.81 f	1.68 e	3.27 d																		
	16				0.24 f				0.52 f	1.59 f				0.94 f	2.27 f		0.07 f	1 f	2.65 e																		
	24									0.59 f				1.22 f					1.4 f																		

## 30 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	362S300-(mils)			600S137-(mils)						600S162-(mils)				600S200-(mils)			
		50 ksi			33 ksi		50 ksi				33 ksi		50 ksi			33 ksi		
		54	68	97	33	43	54	68	97	33	43	54	68	97	118	33	43	
8	12	4.9 a	7.1 a	10.99 a	1.26 a	2.01 a	3.39 a	4.63 a	7.16 a	1.9 a	2.89 a	5.1 a	6.95 a	10.86 a	13.69 a	2.27 a	3.67 a	
	16	4.55 a	6.74 a	10.66 a	1.05 a	1.81 a	3.23 a	4.47 a	7.02 a	1.68 a	2.68 a	4.9 a	6.76 a	10.67 a	13.49 a	2.03 a	3.42 a	
	24	3.84 a	6.02 a	10 a	0.64 a	1.41 a	2.9 a	4.15 a	6.73 a	1.25 a	2.27 a	4.5 a	6.39 a	10.28 a	13.09 a	1.56 a	2.93 a	
9	12	4.42 a	6.43 a	10.16 a	1.09 a	1.85 a	3.26 a	4.5 a	7.04 a	1.72 a	2.72 a	4.94 a	6.8 a	10.71 a	13.54 a	2.07 a	3.45 a	
	16	3.99 a	6 a	9.77 a	0.83 a	1.6 a	3.05 a	4.3 a	6.86 a	1.45 a	2.46 a	4.69 a	6.56 a	10.46 a	13.28 a	1.77 a	3.14 a	
	24	3.14 b	5.13 a	8.97 a	0.31 a	1.09 a	2.64 a	3.89 a	6.5 a	0.9 a	1.94 a	4.19 a	6.09 a	9.97 a	12.78 a	1.17 a	2.52 a	
10	12	3.91 a	5.74 a	9.15 a	0.91 a	1.67 a	3.12 a	4.36 a	6.92 a	1.52 a	2.52 a	4.75 a	6.63 a	10.53 a	13.36 a	1.84 a	3.19 a	
	16	3.41 a	5.24 a	8.7 a	0.59 a	1.36 a	2.86 a	4.11 a	6.69 a	1.18 a	2.2 a	4.44 a	6.34 a	10.23 a	13.04 a	1.48 a	2.81 a	
	24	2.41 c	4.24 b	7.79 a		0.74 a	2.35 a	3.61 a	6.24 a	0.52 b	1.56 a	3.82 a	5.75 a	9.62 a	12.42 a	0.74 a	2.06 a	
12	12	2.92 c	4.38 a	7.09 a	0.48 b	1.26 a	2.78 a	4.03 a	6.62 a	1.05 a	2.05 a	4.21 a	6.13 a	10.13 a	12.94 a	1.33 a	2.61 a	
	16	2.27 d	3.76 c	6.55 a	0.02 c	0.81 b	2.41 a	3.67 a	6.29 a	0.58 c	1.6 a	3.78 a	5.71 a	9.69 a	12.49 a	0.81 b	2.09 a	
	24	0.97 e	2.52 d	5.47 c			1.68 c	2.95 b	5.64 a		0.7 c	2.92 b	4.88 a	8.82 a	11.59 a		1.03 c	
14	12	1.9 e	3.09 d	5.34 b		0.78 c	2.38 b	3.64 a	6.27 a	0.53 c	1.51 b	3.57 a	5.41 a	9.35 a	12.46 a	0.75 c	1.96 a	
	16	1.14 e	2.39 e	4.73 d		0.17 d	1.89 c	3.15 b	5.82 a		0.92 d	3.01 c	4.87 a	8.77 a	11.84 a	0.07 d	1.27 c	
	24		0.98 f	3.52 e			0.89 e	2.17 d	4.94 c			1.89 d	3.79 c	7.62 b	10.62 a			
16	12		1 f	2.02 e	3.95 d		0.21 d	1.93 d	3.19 c	5.86 a		0.92 d	2.85 c	4.58 b	8.19 a	11 a	0.12 d	1.25 c
	16	0.18 f	1.26 f	3.29 e			1.28 e	2.55 d	5.28 c		0.18 e	2.17 d	3.92 c	7.49 b	10.26 a		0.4 d	
	24			1.99 f				1.27 e	4.13 d			0.81 e	2.61 e	6.09 d	8.78 c			

## 30 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	600S200-(mils)				600S250-(mils)				600S300-(mils)				600S350-(mils)				
		50 ksi				33 ksi	50 ksi			50 ksi				50 ksi				
		54	68	97	118	43	54	68	97	118	54	68	97	118	54	68	97	118
8	12	6.76 a	9.18 a	14.66 a	18.94 a	4.01 a	7.01 a	10.28 a	17.21 a	22.07 a	7.31 a	10.48 a	18.53 a	24.18 a	9.58 a	14.04 a	23.11 a	30.65 a
	16	6.52 a	8.94 a	14.43 a	18.69 a	3.76 a	6.77 a	10.02 a	16.93 a	21.79 a	7.07 a	10.22 a	18.25 a	23.89 a	9.33 a	13.77 a	22.81 a	30.34 a
	24	6.04 a	8.46 a	13.97 a	18.21 a	3.25 a	6.3 a	9.51 a	16.37 a	21.21 a	6.6 a	9.72 a	17.69 a	23.32 a	8.83 a	13.23 a	22.22 a	29.73 a
9	12	6.48 a	8.87 a	14.29 a	18.5 a	3.78 a	6.74 a	9.94 a	16.71 a	21.49 a	7.04 a	10.14 a	18 a	23.57 a	9.24 a	13.63 a	22.51 a	29.75 a
	16	6.19 a	8.58 a	14.01 a	18.2 a	3.46 a	6.45 a	9.61 a	16.36 a	21.13 a	6.74 a	9.82 a	17.66 a	23.21 a	8.93 a	13.29 a	22.14 a	29.37 a
	24	5.59 a	7.98 a	13.43 a	17.59 a	2.82 a	5.86 a	8.97 a	15.67 a	20.41 a	6.15 a	9.19 a	16.96 a	22.49 a	8.3 a	12.61 a	21.4 a	28.61 a
10	12	6.17 a	8.52 a	13.86 a	17.98 a	3.52 a	6.44 a	9.55 a	16.14 a	20.81 a	6.73 a	9.76 a	17.4 a	22.88 a	8.87 a	13.16 a	21.85 a	28.75 a
	16	5.81 a	8.16 a	13.51 a	17.61 a	3.13 a	6.08 a	9.16 a	15.72 a	20.38 a	6.37 a	9.38 a	16.99 a	22.45 a	8.48 a	12.75 a	21.4 a	28.29 a
	24	5.09 a	7.44 a	12.82 a	16.88 a	2.34 a	5.37 a	8.38 a	14.88 a	19.51 a	5.65 a	8.61 a	16.15 a	21.58 a	7.72 a	11.93 a	20.5 a	27.38 a
12	12	5.44 a	7.69 a	12.81 a	16.69 a	2.93 a	5.75 a	8.66 a	14.79 a	19.18 a	6.02 a	8.94 a	16.02 a	21.3 a	8.01 a	12.1 a	20.37 a	26.46 a
	16	4.95 a	7.2 a	12.33 a	16.19 a	2.38 a	5.25 a	8.12 a	14.22 a	18.59 a	5.52 a	8.41 a	15.45 a	20.7 a	7.49 a	11.53 a	19.75 a	25.84 a
	24	3.95 b	6.2 a	11.37 a	15.18 a	1.28 b	4.26 a	7.04 a	13.06 a	17.41 a	4.52 a	7.34 a	14.31 a	19.5 a	6.43 a	10.4 a	18.51 a	24.6 a
14	12	4.6 a	6.71 a	11.51 a	15.09 a	2.26 a	4.99 a	7.64 a	13.21 a	17.26 a	5.22 a	8 a	14.46 a	19.55 a	7.05 a	10.89 a	18.53 a	23.88 a
	16	3.97 b	6.08 a	10.9 a	14.45 a	1.53 b	4.34 a	6.95 a	12.48 a	16.51 a	4.57 a	7.31 a	13.72 a	18.78 a	6.37 a	10.16 a	17.74 a	23.1 a
	24	2.7 d	4.8 c	9.68 a	13.17 a	0.08 d	3.05 c	5.55 b	11.02 a	15.01 a	3.27 c	5.92 b	12.26 a	17.24 a	5.02 b	8.7 a	16.15 a	21.53 a
16	12	3.7 b	5.64 a	10.06 a	13.27 a	1.53 c	4.2 b	6.57 a	11.49 a	15.15 a	4.35 a	6.99 a	12.8 a	17.29 a	6.03 a	9.59 a	16.27 a	21.14 a
	16	2.94 d	4.87 c	9.32 a	12.51 a	0.62 d	3.39 c	5.72 b	10.62 a	14.26 a	3.56 c	6.12 b	11.91 a	16.36 a	5.2 b	8.7 a	15.32 a	20.21 a
	24	1.41 e	3.35 d	7.86 c	10.98 b		1.78 e	4.01 d	8.87 c	12.46 b	1.96 d	4.4 d	10.14 b	14.52 a	3.54 d	6.9 c	13.43 a	18.34 a

See Combined Axial and Lateral Load Table Notes.

# Combined Axial and Lateral Load Tables

30 psf Lateral Load																			
Wall Height (ft)	Spacing (in.) o.c.	800S137-(mils)						800S162-(mils)						800S200-(mils)					
		33 ksi		50 ksi				33 ksi		50 ksi				33 ksi		50 ksi			
		33	43	54	68	97	118	33	43	54	68	97	118	33	43	54	68	97	118
8	12	1.27 a*	2.08 a	3.28 a	4.47 a	6.99 a	1.86 a*	2.94 a	5.06 a	6.88 a	10.92 a	13.98 a	2.39 a*	4.06 a	7.32 a	9.85 a	15.56 a	20.02 a	
	16	1.1 a*	1.94 a	3.17 a	4.36 a	6.9 a	1.65 a*	2.77 a	4.91 a	6.73 a	10.79 a	13.85 a	2.16 a*	3.88 a	7.15 a	9.69 a	15.4 a	19.85 a	
	24	0.76 a*	1.67 a	2.96 a	4.15 a	6.7 a	1.23 a*	2.44 a	4.62 a	6.45 a	10.53 a	13.59 a	1.71 a*	3.54 a	6.81 a	9.35 a	15.08 a	19.51 a	
9	12	1.14 a*	1.97 a	3.2 a	4.38 a	6.91 a	1.69 a*	2.8 a	4.94 a	6.76 a	10.81 a	13.88 a	2.21 a*	3.92 a	7.19 a	9.72 a	15.43 a	19.88 a	
	16	0.92 a*	1.8 a	3.06 a	4.25 a	6.79 a	1.43 a*	2.59 a	4.76 a	6.58 a	10.65 a	13.71 a	1.93 a*	3.7 a	6.97 a	9.51 a	15.23 a	19.67 a	
	24	0.48 a*	1.45 a	2.78 a	3.98 a	6.55 a	0.9 a*	2.17 a	4.39 a	6.22 a	10.32 a	13.38 a	1.35 a*	3.26 a	6.54 a	9.09 a	14.82 a	19.25 a	
10	12	0.98 a*	1.85 a	3.1 a	4.29 a	6.83 a	1.51 a*	2.66 a	4.81 a	6.64 a	10.7 a	13.76 a	2.01 a*	3.76 a	7.04 a	9.57 a	15.29 a	19.73 a	
	16	0.72 a*	1.63 a	2.93 a	4.12 a	6.68 a	1.18 a*	2.39 a	4.58 a	6.41 a	10.49 a	13.55 a	1.66 a*	3.49 a	6.77 a	9.31 a	15.04 a	19.47 a	
	24	0.18 a*	1.2 a	2.59 a	3.79 a	6.38 a	0.53 a*	1.87 a	4.12 a	5.97 a	10.08 a	13.14 a	0.95 a*	2.96 a	6.24 a	8.79 a	14.54 a	18.95 a	
12	12	0.63 a*	1.56 a	2.87 a	4.07 a	6.63 a	1.08 a*	2.31 a	4.51 a	6.34 a	10.43 a	13.49 a	1.54 a*	3.4 a	6.68 a	9.23 a	14.96 a	19.39 a	
	16	0.24 a*	1.25 a	2.63 a	3.83 a	6.42 a	0.61 a*	1.94 a	4.18 a	6.02 a	10.13 a	13.19 a	1.03 a*	3.01 a	6.3 a	8.85 a	14.6 a	19.01 a	
	24	0.63 a	1.2 a	2.13 a	3.36 a	5.99 a	1.19 a	1.9 a	3.52 a	5.38 a	9.54 a	12.6 a	0.02 a*	2.24 a	5.54 a	8.1 a	13.88 a	18.26 a	
14	12	0.21 a*	1.22 a	2.61 a	3.81 a	6.4 a	0.57 a*	1.9 a	4.15 a	6 a	10.11 a	13.17 a	0.98 a*	2.93 a	6.12 a	8.66 a	14.48 a	18.98 a	
	16	0.8 a	1.2 a	2.27 a	3.49 a	6.11 a	1.39 a	1.9 a	3.7 a	5.56 a	9.7 a	12.76 a	0.3 a*	2.42 a	5.62 a	8.15 a	14 a	18.47 a	
	24	0.8 a	1.2 a	1.6 b	2.84 a	5.52 a	0.37 b	1.9 a	2.81 a	4.69 a	8.9 a	11.96 a	1.38 a	2.4 a	4.61 a	7.15 a	13.03 a	17.44 a	
16	12	0.84 a	1.2 a	2.3 a	3.52 a	6.13 a	1.44 a	1.9 a	3.74 a	5.6 a	9.74 a	12.8 a	0.35 a*	2.4 a	5.46 a	7.91 a	13.56 a	17.98 a	
	16	0.28 c	1.2 a	1.86 b	3.09 a	5.75 a	0.77 b	1.9 a	3.16 a	5.03 a	9.21 a	12.27 a	1.74 a	2.4 a	4.82 a	7.28 a	12.94 a	17.33 a	
	24	0.28 c	1.2 a	0.98 d	2.25 c	4.99 a	0.77 b	1.9 a	1.99 c	3.89 b	8.16 a	11.22 a	0.42 c	2.4 a	3.55 b	6.01 a	11.72 a	16.03 a	

30 psf Lateral Load																			
Wall Height (ft)	Spacing (in.) o.c.	800S250-(mils)						800S300-(mils)						800S350-(mils)					
		33 ksi		50 ksi				33 ksi		50 ksi				33 ksi		50 ksi			
		33	43	54	68	97	118	33	43	54	68	97	118	33	43	54	68	97	118
8	12	4.43 a	7.69 a	11.27 a	19.04 a	24.89 a	8.02 a	11.55 a	20.8 a	27.25 a	10.45 a	15.24 a	25.31 a	33.74 a					
	16	4.24 a	7.51 a	11.09 a	18.83 a	24.68 a	7.83 a	11.37 a	20.59 a	27.03 a	10.26 a	15.05 a	25.09 a	33.51 a					
	24	3.86 a	7.16 a	10.72 a	18.42 a	24.25 a	7.46 a	11 a	20.17 a	26.6 a	9.87 a	14.65 a	24.65 a	33.05 a					
9	12	4.26 a	7.51 a	11.08 a	18.8 a	24.58 a	7.83 a	11.34 a	20.49 a	26.9 a	10.22 a	14.99 a	25 a	33.33 a					
	16	4.03 a	7.29 a	10.85 a	18.54 a	24.31 a	7.6 a	11.11 a	20.23 a	26.62 a	9.98 a	14.74 a	24.73 a	33.04 a					
	24	3.55 a	6.85 a	10.38 a	18.02 a	23.77 a	7.13 a	10.65 a	19.7 a	26.08 a	9.49 a	14.25 a	24.17 a	32.46 a					
10	12	4.08 a	7.32 a	10.87 a	18.53 a	24.22 a	7.62 a	11.11 a	20.13 a	26.48 a	9.97 a	14.7 a	24.61 a	32.86 a					
	16	3.79 a	7.04 a	10.59 a	18.21 a	23.88 a	7.33 a	10.82 a	19.81 a	26.15 a	9.67 a	14.4 a	24.27 a	32.5 a					
	24	3.21 a	6.5 a	10.01 a	17.57 a	23.22 a	6.76 a	10.26 a	19.17 a	25.48 a	9.07 a	13.79 a	23.59 a	31.8 a					
12	12	3.66 a	6.85 a	10.36 a	17.86 a	23.3 a	7.12 a	10.54 a	19.24 a	25.46 a	9.37 a	14.02 a	23.58 a	31.74 a					
	16	3.25 a	6.46 a	9.96 a	17.41 a	22.82 a	6.71 a	10.14 a	18.79 a	24.99 a	8.95 a	13.59 a	23.11 a	31.24 a					
	24	2.42 a	5.69 a	9.14 a	16.51 a	21.88 a	5.9 a	9.34 a	17.89 a	24.04 a	8.11 a	12.73 a	22.15 a	30.24 a					
14	12	3.17 a	6.28 a	9.66 a	16.85 a	22.09 a	6.52 a	9.85 a	18.14 a	24.17 a	8.66 a	13.19 a	22.37 a	30.13 a					
	16	2.61 a	5.77 a	9.12 a	16.25 a	21.47 a	5.98 a	9.32 a	17.55 a	23.55 a	8.1 a	12.62 a	21.74 a	29.47 a					
	24	1.5 a	4.74 a	8.04 a	15.06 a	20.23 a	4.9 a	8.26 a	16.36 a	22.3 a	7 a	11.49 a	20.48 a	28.16 a					
16	12	2.6 a	5.63 a	8.83 a	15.62 a	20.61 a	5.83 a	9.05 a	16.86 a	22.68 a	7.87 a	12.24 a	21.02 a	28.1 a					
	16	1.89 a	4.98 a	8.15 a	14.87 a	19.84 a	5.15 a	8.38 a	16.12 a	21.9 a	7.17 a	11.52 a	20.23 a	27.28 a					
	24	0.47 c	3.67 b	6.79 a	13.38 a	18.28 a	3.79 a	7.05 a	14.63 a	20.34 a	5.77 a	10.09 a	18.64 a	25.65 a					

See Combined Axial and Lateral Load Table Notes.





# Combined Axial and Lateral Load Tables

## 35 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	800S137-(mils)						800S162-(mils)						800S200-(mils)					
		33 ksi		50 ksi				33 ksi		50 ksi				33 ksi		50 ksi			
		33	43	54	68	97		33	43	54	68	97	118	33	43	54	68	97	118
8	12	1.19 a*	2.01 a	3.23 a	4.42 a	6.94 a	1.76 a*	2.85 a	4.98 a	6.8 a	10.85 a	13.91 a	2.28 a*	3.97 a	7.24 a	9.77 a	15.48 a	19.93 a	
	16	0.99 a*	1.85 a	3.1 a	4.29 a	6.83 a	1.51 a*	2.66 a	4.81 a	6.64 a	10.7 a	13.76 a	2.01 a*	3.77 a	7.04 a	9.57 a	15.29 a	19.74 a	
	24	0.59 a*	1.53 a	2.85 a	4.05 a	6.61 a	1.03 a*	2.27 a	4.47 a	6.31 a	10.39 a	13.45 a	1.49 a*	3.37 a	6.64 a	9.19 a	14.92 a	19.35 a	
9	12	1.03 a*	1.88 a	3.13 a	4.32 a	6.85 a	1.56 a*	2.7 a	4.85 a	6.67 a	10.73 a	13.79 a	2.07 a*	3.81 a	7.08 a	9.61 a	15.33 a	19.78 a	
	16	0.77 a*	1.68 a	2.97 a	4.16 a	6.71 a	1.25 a*	2.45 a	4.63 a	6.46 a	10.54 a	13.6 a	1.74 a*	3.55 a	6.83 a	9.37 a	15.09 a	19.53 a	
	24	0.27 a*	1.27 a	2.64 a	3.85 a	6.43 a	0.64 a*	1.96 a	4.2 a	6.04 a	10.15 a	13.21 a	1.07 a*	3.04 a	6.33 a	8.88 a	14.62 a	19.04 a	
10	12	0.85 a*	1.74 a	3.01 a	4.21 a	6.76 a	1.35 a*	2.52 a	4.7 a	6.53 a	10.6 a	13.66 a	1.83 a*	3.63 a	6.9 a	9.44 a	15.16 a	19.6 a	
	16	0.54 a*	1.49 a	2.81 a	4.01 a	6.58 a	0.97 a*	2.22 a	4.43 a	6.27 a	10.36 a	13.42 a	1.42 a*	3.32 a	6.59 a	9.14 a	14.87 a	19.3 a	
	24	0.98 a	1.41 a	2.41 a	3.63 a	6.23 a	0.21 a*	1.61 a	3.9 a	5.75 a	9.88 a	12.94 a	0.6 a*	2.69 a	5.98 a	8.53 a	14.29 a	18.69 a	
12	12	0.44 a*	1.41 a	2.75 a	3.95 a	6.53 a	0.84 a*	2.12 a	4.34 a	6.18 a	10.28 a	13.34 a	1.29 a*	3.21 a	6.49 a	9.04 a	14.78 a	19.2 a	
	16	1.04 a	1.41 a	2.46 a	3.68 a	6.28 a	0.3 a*	1.69 a	3.96 a	5.81 a	9.93 a	12.99 a	0.7 a*	2.75 a	6.05 a	8.6 a	14.36 a	18.76 a	
	24	0.32 a	1.41 a	1.89 a	3.12 a	5.77 a	0.81 a	1.61 a	3.19 a	5.06 a	9.25 a	12.3 a	1.85 a	2.69 a	5.16 a	7.72 a	13.52 a	17.88 a	
14	12	1.01 a	1.41 a	2.44 a	3.65 a	6.25 a	0.25 a*	1.65 a	3.93 a	5.78 a	9.91 a	12.97 a	0.64 a*	2.67 a	5.87 a	8.41 a	14.24 a	18.72 a	
	16	0.52 b	1.41 a	2.05 a	3.27 a	5.91 a	1.05 a	1.65 a	3.41 a	5.27 a	9.44 a	12.5 a	2.07 a	2.67 a	5.28 a	7.82 a	13.67 a	18.13 a	
	24	0.56 b	1.41 a	1.26 c	2.52 a	5.23 a	1.1 b	1.65 a	2.36 b	4.26 a	8.5 a	11.56 a	0.86 b	2.67 a	4.1 a	6.65 a	12.54 a	16.93 a	
16	12	0.56 b	1.41 a	2.08 a	3.31 a	5.94 a	1.1 b	1.65 a	3.45 a	5.31 a	9.47 a	12.53 a	2.07 a	2.67 a	5.14 a	7.6 a	13.25 a	17.65 a	
	16	0.56 b	1.41 a	1.57 c	2.81 a	5.5 a	0.32 c	1.65 a	2.77 b	4.65 a	8.86 a	11.92 a	1.3 b	2.67 a	4.4 a	6.86 a	12.54 a	16.89 a	
	24	0.56 b	1.41 a	0.55 d	1.83 c	4.61 b	0.32 c	1.65 a	1.4 d	3.32 c	7.64 a	10.69 a	1.3 b	2.67 a	2.91 c	5.38 b	11.1 a	15.38 a	

## 35 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	800S250-(mils)					800S300-(mils)				800S350-(mils)				
		33 ksi		50 ksi			50 ksi				50 ksi				
		33	43	54	68	97	118	54	68	97	118	54	68	97	118
8	12	4.33 a	4.33 a	7.6 a	11.18 a	18.93 a	24.79 a	7.93 a	11.46 a	20.69 a	27.14 a	10.35 a	15.14 a	25.2 a	33.63 a
	16	4.11 a	4.11 a	7.39 a	10.96 a	18.7 a	24.53 a	7.71 a	11.24 a	20.45 a	26.89 a	10.13 a	14.91 a	24.94 a	33.36 a
	24	3.68 a	3.68 a	6.98 a	10.53 a	18.22 a	24.03 a	7.28 a	10.82 a	19.96 a	26.38 a	9.68 a	14.46 a	24.43 a	32.82 a
9	12	4.15 a	4.15 a	7.4 a	10.97 a	18.67 a	24.45 a	7.71 a	11.23 a	20.36 a	26.76 a	10.1 a	14.87 a	24.86 a	33.19 a
	16	3.87 a	3.87 a	7.14 a	10.7 a	18.37 a	24.13 a	7.44 a	10.96 a	20.05 a	26.44 a	9.82 a	14.58 a	24.54 a	32.85 a
	24	3.32 a	3.32 a	6.62 a	10.15 a	17.76 a	23.49 a	6.9 a	10.42 a	19.44 a	25.8 a	9.25 a	14 a	23.89 a	32.18 a
10	12	3.94 a	3.94 a	7.18 a	10.73 a	18.37 a	24.05 a	7.47 a	10.96 a	19.97 a	26.32 a	9.82 a	14.55 a	24.44 a	32.68 a
	16	3.6 a	3.6 a	6.86 a	10.39 a	18 a	23.66 a	7.14 a	10.64 a	19.59 a	25.92 a	9.47 a	14.2 a	24.04 a	32.27 a
	24	2.92 a	2.92 a	6.22 a	9.72 a	17.25 a	22.88 a	6.47 a	9.98 a	18.84 a	25.14 a	8.78 a	13.49 a	23.25 a	31.44 a
12	12	3.46 a	3.46 a	6.66 a	10.16 a	17.64 a	23.06 a	6.91 a	10.34 a	19.02 a	25.22 a	9.16 a	13.8 a	23.35 a	31.49 a
	16	2.97 a	2.97 a	6.2 a	9.68 a	17.11 a	22.51 a	6.44 a	9.87 a	18.49 a	24.67 a	8.67 a	13.3 a	22.79 a	30.91 a
	24	2 a	2 a	5.3 a	8.73 a	16.05 a	21.41 a	5.5 a	8.94 a	17.44 a	23.57 a	7.69 a	12.31 a	21.67 a	29.75 a
14	12	2.89 a	2.89 a	6.03 a	9.39 a	16.55 a	21.78 a	6.25 a	9.58 a	17.85 a	23.86 a	8.38 a	12.9 a	22.06 a	29.8 a
	16	2.24 a	2.24 a	5.42 a	8.76 a	15.86 a	21.05 a	5.62 a	8.97 a	17.15 a	23.14 a	7.73 a	12.24 a	21.32 a	29.03 a
	24	0.94 b	0.94 b	4.22 a	7.5 a	14.46 a	19.61 a	4.37 a	7.73 a	15.77 a	21.68 a	6.44 a	10.92 a	19.85 a	27.5 a
16	12	2.25 a	2.25 a	5.3 a	8.49 a	15.24 a	20.22 a	5.49 a	8.72 a	16.49 a	22.29 a	7.52 a	11.88 a	20.62 a	27.69 a
	16	1.42 b	1.42 b	4.54 a	7.7 a	14.37 a	19.32 a	4.7 a	7.94 a	15.63 a	21.38 a	6.7 a	11.05 a	19.7 a	26.74 a
	24	-0.24 d	-0.24 d	3.02 c	6.11 a	12.63 a	17.5 a	3.11 b	6.38 a	13.89 a	19.55 a	5.07 a	9.38 a	17.84 a	24.84 a

See Combined Axial and Lateral Load Table Notes.



# Combined Axial and Lateral Load Tables

## 40 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	800S137-(mils)						800S162-(mils)						800S200-(mils)					
		33 ksi		50 ksi				33 ksi		50 ksi				33 ksi		50 ksi			
		33	43	54	68	97	118	33	43	54	68	97	118	33	43	54	68	97	118
8	12	1.1 a*	1.94 a	3.17 a	4.36 a	6.9 a	1.65 a*	2.77 a	4.91 a	6.73 a	10.79 a	13.85 a	2.16 a*	3.88 a	7.15 a	9.69 a	15.4 a	19.85 a	
	16	0.87 a*	1.76 a	3.03 a	4.22 a	6.77 a	1.37 a*	2.55 a	4.72 a	6.54 a	10.61 a	13.67 a	1.86 a*	3.65 a	6.93 a	9.46 a	15.18 a	19.63 a	
	24	0.42 a*	1.39 a	2.74 a	3.94 a	6.51 a	0.82 a*	2.1 a	4.33 a	6.17 a	10.26 a	13.32 a	1.26 a*	3.19 a	6.48 a	9.02 a	14.76 a	19.18 a	
9	12	0.92 a*	1.8 a	3.06 a	4.25 a	6.79 a	1.43 a*	2.59 a	4.76 a	6.58 a	10.65 a	13.71 a	1.93 a*	3.7 a	6.97 a	9.51 a	15.23 a	19.67 a	
	16	0.63 a*	1.56 a	2.87 a	4.07 a	6.63 a	1.08 a*	2.31 a	4.51 a	6.34 a	10.43 a	13.49 a	1.55 a*	3.41 a	6.69 a	9.23 a	14.96 a	19.39 a	
	24	0.05 a*	1.09 a	2.5 a	3.72 a	6.31 a	0.38 a*	1.75 a	4.02 a	5.86 a	9.98 a	13.04 a	0.78 a*	2.83 a	6.12 a	8.66 a	14.42 a	18.82 a	
10	12	0.72 a*	1.63 a	2.93 a	4.12 a	6.68 a	1.18 a*	2.39 a	4.58 a	6.41 a	10.49 a	13.55 a	1.66 a*	3.49 a	6.77 a	9.31 a	15.04 a	19.47 a	
	16	0.36 a*	1.34 a	2.7 a	3.9 a	6.48 a	0.75 a*	2.05 a	4.28 a	6.12 a	10.22 a	13.28 a	1.19 a*	3.14 a	6.42 a	8.96 a	14.7 a	19.12 a	
	24		0.77 a	2.24 a	3.46 a	6.08 a		1.35 a	3.67 a	5.53 a	9.67 a	12.73 a	0.25 a*	2.42 a	5.71 a	8.27 a	14.04 a	18.43 a	
12	12	0.24 a*	1.25 a	2.63 a	3.83 a	6.42 a	0.61 a*	1.94 a	4.18 a	6.02 a	10.13 a	13.19 a	1.03 a*	3.01 a	6.3 a	8.85 a	14.6 a	19.01 a	
	16		0.84 a	2.3 a	3.52 a	6.13 a		1.44 a	3.74 a	5.6 a	9.74 a	12.8 a	0.36 a*	2.5 a	5.79 a	8.35 a	14.12 a	18.51 a	
	24		0.01 b	1.64 a	2.88 a	5.56 a		0.43 a	2.86 a	4.74 a	8.95 a	12.01 a		1.46 a	4.78 a	7.35 a	13.16 a	17.51 a	
14	12		0.8 a	2.27 a	3.49 a	6.11 a		1.39 a	3.7 a	5.56 a	9.7 a	12.76 a	0.3 a*	2.42 a	5.62 a	8.15 a	14 a	18.47 a	
	16		0.24 b	1.82 a	3.06 a	5.72 a		0.71 b	3.11 a	4.98 a	9.17 a	12.23 a		1.72 a	4.94 a	7.49 a	13.35 a	17.78 a	
	24			0.93 c	2.2 b	4.94 a			1.91 c	3.82 a	8.1 a	11.15 a		0.34 c	3.59 b	6.15 a	12.05 a	16.42 a	
16	12		0.28 c	1.86 b	3.09 a	5.75 a		0.77 b	3.16 a	5.03 a	9.21 a	12.27 a		1.74 a	4.82 a	7.28 a	12.94 a	17.33 a	
	16			1.28 c	2.53 b	5.24 a			2.38 c	4.27 a	8.51 a	11.57 a		0.86 c	3.97 b	6.44 a	12.13 a	16.46 a	
	24			0.11 e	1.4 d	4.22 c			0.82 d	2.75 c	7.11 b	10.17 a		2.27 d	4.75 c	10.49 a	14.73 a		

## 40 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	800S250-(mils)					800S300-(mils)				800S350-(mils)			
		33 ksi		50 ksi			50 ksi				50 ksi			
		33	43	54	68	97	118	54	68	97	118	54	68	97
8	12	4.24 a	7.51 a	11.09 a	18.83 a	24.68 a	7.83 a	11.37 a	20.59 a	27.03 a	10.26 a	15.05 a	25.09 a	33.51 a
	16	3.99 a	7.27 a	10.84 a	18.56 a	24.39 a	7.59 a	11.12 a	20.31 a	26.74 a	10 a	14.78 a	24.8 a	33.21 a
	24	3.49 a	6.8 a	10.34 a	18.01 a	23.81 a	7.09 a	10.63 a	19.75 a	26.16 a	9.48 a	14.26 a	24.21 a	32.59 a
9	12	4.03 a	7.29 a	10.85 a	18.54 a	24.31 a	7.6 a	11.11 a	20.23 a	26.62 a	9.98 a	14.74 a	24.73 a	33.04 a
	16	3.71 a	6.99 a	10.54 a	18.2 a	23.95 a	7.29 a	10.8 a	19.88 a	26.26 a	9.66 a	14.41 a	24.36 a	32.66 a
	24	3.08 a	6.4 a	9.92 a	17.5 a	23.22 a	6.67 a	10.19 a	19.18 a	25.53 a	9.01 a	13.75 a	23.62 a	31.89 a
10	12	3.79 a	7.04 a	10.59 a	18.21 a	23.88 a	7.33 a	10.82 a	19.81 a	26.15 a	9.67 a	14.4 a	24.27 a	32.5 a
	16	3.4 a	6.68 a	10.2 a	17.78 a	23.44 a	6.95 a	10.45 a	19.38 a	25.7 a	9.27 a	13.99 a	23.82 a	32.03 a
	24	2.63 a	5.95 a	9.44 a	16.94 a	22.55 a	6.19 a	9.7 a	18.52 a	24.81 a	8.48 a	13.19 a	22.91 a	31.09 a
12	12	3.25 a	6.46 a	9.96 a	17.41 a	22.82 a	6.71 a	10.14 a	18.79 a	24.99 a	8.95 a	13.59 a	23.11 a	31.24 a
	16	2.7 a	5.95 a	9.41 a	16.81 a	22.2 a	6.17 a	9.61 a	18.19 a	24.36 a	8.39 a	13.02 a	22.47 a	30.58 a
	24	1.59 a	4.91 a	8.32 a	15.6 a	20.94 a	5.09 a	8.54 a	16.99 a	23.1 a	7.27 a	11.88 a	21.2 a	29.25 a
14	12	2.61 a	5.77 a	9.12 a	16.25 a	21.47 a	5.98 a	9.32 a	17.55 a	23.55 a	8.1 a	12.62 a	21.74 a	29.47 a
	16	1.87 a	5.08 a	8.4 a	15.46 a	20.64 a	5.26 a	8.61 a	16.76 a	22.72 a	7.37 a	11.87 a	20.9 a	28.6 a
	24	0.39 b	3.7 a	6.96 a	13.87 a	18.98 a	3.83 a	7.2 a	15.17 a	21.06 a	5.89 a	10.35 a	19.22 a	26.85 a
16	12	1.89 a	4.98 a	8.15 a	14.87 a	19.84 a	5.15 a	8.38 a	16.12 a	21.9 a	7.17 a	11.52 a	20.23 a	27.28 a
	16	0.94 b	4.11 a	7.24 a	13.87 a	18.8 a	4.25 a	7.49 a	15.13 a	20.86 a	6.24 a	10.57 a	19.17 a	26.19 a
	24		2.36 c	5.43 b	11.88 a	16.73 a	2.44 c	5.71 b	13.15 a	18.77 a	4.37 b	8.66 a	17.05 a	24.02 a

See Combined Axial and Lateral Load Table Notes.



# Combined Axial and Lateral Load Tables

## 50 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	800S137-(mils)						800S162-(mils)						800S200-(mils)					
		33 ksi		50 ksi				33 ksi		50 ksi				33 ksi		50 ksi			
		33	43	54	68	97	118	33	43	54	68	97	118	33	43	54	68	97	118
8	12	0.93 a*	1.8 a	3.06 a	4.26 a	6.8 a	1.44 a*	2.6 a	4.76 a	6.59 a	10.66 a	13.72 a	1.94 a*	3.71 a	6.98 a	9.52 a	15.24 a	19.68 a	
	16	0.64 a*	1.57 a	2.88 a	4.08 a	6.64 a	1.1 a*	2.33 a	4.52 a	6.35 a	10.44 a	13.5 a	1.56 a*	3.42 a	6.7 a	9.24 a	14.97 a	19.4 a	
	24	0.07 a*	1.11 a	2.52 a	3.73 a	6.32 a	0.4 a*	1.77 a	4.03 a	5.88 a	10 a	13.06 a	0.81 a*	2.85 a	6.14 a	8.68 a	14.44 a	18.84 a	
9	12	0.7 a*	1.62 a	2.92 a	4.12 a	6.67 a	1.17 a*	2.38 a	4.57 a	6.4 a	10.48 a	13.54 a	1.64 a*	3.48 a	6.76 a	9.3 a	15.02 a	19.46 a	
	16	0.34 a*	1.33 a	2.69 a	3.89 a	6.47 a	0.73 a*	2.03 a	4.26 a	6.1 a	10.21 a	13.27 a	1.16 a*	3.12 a	6.4 a	8.95 a	14.69 a	19.11 a	
	24		0.74 a	2.23 a	3.45 a	6.07 a		1.33 a	3.64 a	5.5 a	9.65 a	12.71 a	0.21 a*	2.39 a	5.69 a	8.24 a	14.01 a	18.4 a	
10	12	0.45 a*	1.41 a	2.76 a	3.96 a	6.53 a	0.86 a*	2.13 a	4.35 a	6.19 a	10.29 a	13.35 a	1.31 a*	3.23 a	6.51 a	9.05 a	14.79 a	19.21 a	
	16		1.05 a	2.47 a	3.68 a	6.28 a	0.32 a*	1.7 a	3.97 a	5.82 a	9.95 a	13.01 a	0.72 a*	2.78 a	6.07 a	8.62 a	14.37 a	18.77 a	
	24		0.33 a	1.9 a	3.13 a	5.79 a		0.83 a	3.21 a	5.08 a	9.26 a	12.32 a		1.88 a	5.18 a	7.75 a	13.54 a	17.9 a	
12	12		0.94 a	2.38 a	3.6 a	6.2 a	0.14 a*	1.56 a	3.85 a	5.7 a	9.84 a	12.9 a	0.53 a*	2.63 a	5.92 a	8.48 a	14.24 a	18.64 a	
	16		0.42 a	1.97 a	3.2 a	5.85 a		0.93 a	3.3 a	5.17 a	9.34 a	12.4 a		1.98 a	5.29 a	7.85 a	13.64 a	18.01 a	
	24			1.15 b	2.41 a	5.13 a			2.21 a	4.1 a	8.36 a	11.42 a		0.69 b	4.02 a	6.6 a	12.44 a	16.75 a	
14	12		0.38 b	1.94 a	3.17 a	5.82 a		0.88 a	3.26 a	5.13 a	9.3 a	12.36 a		1.9 a	5.11 a	7.65 a	13.51 a	17.96 a	
	16			1.38 b	2.63 a	5.33 a		0.03 c	2.51 b	4.4 a	8.63 a	11.69 a		1.03 b	4.27 a	6.82 a	12.7 a	17.1 a	
	24			0.26 d	1.55 c	4.36 b			1.02 d	2.95 c	7.29 a	10.35 a			2.58 c	5.14 b	11.08 a	15.39 a	
16	12			1.42 c	2.67 b	5.37 a		0.1 c	2.57 b	4.46 a	8.69 a	11.75 a		1.08 c	4.18 a	6.65 a	12.33 a	16.68 a	
	16			0.69 d	1.97 c	4.73 b			1.6 d	3.51 c	7.81 a	10.87 a			3.12 c	5.59 b	11.31 a	15.59 a	
	24				0.56 e	3.46 d				1.62 d	6.06 c	9.12 b			1 d	3.48 d	9.26 b	13.43 a	

## 50 psf Lateral Load

Wall Height (ft)	Spacing (in.) o.c.	800S250-(mils)					800S300-(mils)				800S350-(mils)			
		33 ksi		50 ksi			50 ksi				50 ksi			
		33	43	54	68	97	118	54	68	97	118	54	68	97
8	12	4.05 a	7.33 a	10.9 a	18.63 a	24.46 a	7.65 a	11.18 a	20.38 a	26.82 a	10.06 a	14.85 a	24.87 a	33.28 a
	16	3.74 a	7.04 a	10.59 a	18.28 a	24.1 a	7.34 a	10.88 a	20.03 a	26.45 a	9.74 a	14.52 a	24.5 a	32.9 a
	24	3.11 a	6.45 a	9.97 a	17.6 a	23.38 a	6.72 a	10.27 a	19.34 a	25.73 a	9.1 a	13.87 a	23.77 a	32.13 a
9	12	3.79 a	7.07 a	10.62 a	18.28 a	24.04 a	7.36 a	10.88 a	19.96 a	26.35 a	9.74 a	14.49 a	24.45 a	32.75 a
	16	3.4 a	6.7 a	10.23 a	17.85 a	23.59 a	6.98 a	10.5 a	19.53 a	25.89 a	9.33 a	14.08 a	23.99 a	32.27 a
	24	2.61 a	5.95 a	9.45 a	16.99 a	22.68 a	6.2 a	9.73 a	18.65 a	24.98 a	8.52 a	13.26 a	23.06 a	31.31 a
10	12	3.5 a	6.77 a	10.3 a	17.89 a	23.55 a	7.05 a	10.54 a	19.49 a	25.81 a	9.37 a	14.1 a	23.93 a	32.15 a
	16	3.02 a	6.31 a	9.82 a	17.36 a	22.99 a	6.57 a	10.07 a	18.95 a	25.25 a	8.88 a	13.59 a	23.36 a	31.56 a
	24	2.05 a	5.4 a	8.86 a	16.3 a	21.88 a	5.62 a	9.13 a	17.88 a	24.13 a	7.88 a	12.58 a	22.23 a	30.38 a
12	12	2.83 a	6.07 a	9.55 a	16.96 a	22.35 a	6.31 a	9.74 a	18.34 a	24.51 a	8.53 a	13.16 a	22.63 a	30.74 a
	16	2.14 a	5.43 a	8.87 a	16.2 a	21.57 a	5.63 a	9.08 a	17.59 a	23.73 a	7.83 a	12.45 a	21.83 a	29.91 a
	24	0.76 a	4.13 a	7.5 a	14.7 a	20 a	4.28 a	7.75 a	16.09 a	22.15 a	6.43 a	11.02 a	20.24 a	28.25 a
14	12	2.05 a	5.25 a	8.58 a	15.66 a	20.85 a	5.44 a	8.79 a	16.96 a	22.93 a	7.55 a	12.05 a	21.11 a	28.81 a
	16	1.13 a	4.39 a	7.68 a	14.66 a	19.81 a	4.55 a	7.91 a	15.97 a	21.89 a	6.63 a	11.11 a	20.06 a	27.72 a
	24	-0.73 c	2.67 b	5.87 a	12.67 a	17.74 a	2.76 b	6.15 a	13.99 a	19.81 a	4.78 a	9.22 a	17.96 a	25.54 a
16	12	1.18 b	4.32 a	7.47 a	14.12 a	19.06 a	4.47 a	7.72 a	15.38 a	21.12 a	6.47 a	10.81 a	19.43 a	26.47 a
	16	-0.01 c	3.23 b	6.33 a	12.88 a	17.76 a	3.34 b	6.6 a	14.14 a	19.81 a	5.3 a	9.62 a	18.11 a	25.11 a
	24	-2.38 e	1.06 d	4.06 c	10.39 b	15.17 a	1.08 d	4.38 c	11.66 a	17.21 a	2.97 c	7.23 b	15.46 a	22.39 a

See Combined Axial and Lateral Load Table Notes.

## Allowable Floor and Roof Joist Span Table Notes

1. All loads are computed in accordance with AISI S100-16/S2-20, NAS for Design of Cold-Formed Steel Structural Members with Supplement 2.
2. Total loads shown are for single span condition and are limited by allowable bending stress or allowable end shear. Live loads shown are limited by allowable bending stress, allowable end shear, or by deflection on  $1/360$  of span.
3. Total load values in table are based on maximum allowable stress only. To limit total load deflection to  $1/240$  of span, multiply live load value shown by 1.5.
4. For two equal continuous spans, the total load shown in these tables will not change. The live load shown may be increased by a factor of 2.4 to maintain the  $L/360$  live load deflection limit, however live load, in any case, cannot exceed the total load shown. Combined bending and shear stresses should be investigated by the designer.
5. Joists must be braced against rotation at all supports.
6. End web crippling check is based on 3.5 inch end bearing. Joist flanges must be fastened to the support.
7. Spans are based on continuous support of compression flange over the full length of the joist.
8. End shear and web crippling capacity have not been reduced for punchouts.
9. "a" indicates that web stiffeners are required at all supports.
10. Allowable flexural strength values in the tables are based on the minimum of local, distortional, and lateral-torsional buckling. Distortional buckling strength is based on a  $k\phi = 0$ . Higher values may be obtained when sheathing is applied to the walls resulting in a higher  $k\phi$  value.

# Floor and Roof Joist Span Tables

## Allowable Uniform Load Table (plf) - Simple Span Joists

BLACK numbers = Total Load; RED numbers = Live Load (See Note 3)

Member	Fy (ksi)	Span (ft)																
		6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	22'-0"	24'-0"
600S162-33	33	168	124	95	75	61	50	42	36	31	27	24	21	19	17	15	13	11
600S200-33	33	193	142	109	86	70	57	48	41	35	31	27	24	21	19	17	14	12
600S162-43	33	252	185	142	112	91	75	63	54	46	40	35	31	28	25	23	19	16
600S200-43	33	276	203	155	123	99	82	69	59	51	44	39	34	31	27	25	21	17
600S250-43	33	291	214	164	129	105	87	73	62	53	47	41	36	32	29	26	22	18
600S162-54	50	426	313	240	189	153	127	107	91	78	68	60	53	47	43	38	32	27
600S200-54	50	487	358	274	217	175	145	122	104	90	78	69	61	54	49	44	36	30
600S250-54	50	513	377	289	228	185	153	128	109	94	82	72	64	57	51	46	38	32
600S162-68	50	612	450	344	272	220	182	153	130	112	98	86	76	68	61	55	46	38
600S200-68	50	657	483	370	292	237	195	164	140	121	105	92	82	73	66	59	49	41
600S250-68	50	697	512	392	310	251	207	174	148	128	111	98	87	77	69	63	52	44
600S162-97	50	1005	738	565	447	362	299	251	214	185	161	141	125	112	100	90	75	63
600S200-97	50	1127	828	634	501	406	335	282	240	207	180	158	140	125	112	101	84	70
600S250-97	50	1096	805	616	487	395	326	274	233	201	175	154	137	122	109	99	82	68
600S162-118	50	1207	933	714	564	457	378	317	271	233	203	179	158	141	127	114	94	79
600S200-118	50	1207	933	714	564	457	378	317	271	233	203	179	158	141	127	114	94	79
600S250-118	50	1207	933	714	564	457	378	317	271	233	203	179	158	141	127	114	94	79
800S162-33 <sup>1</sup>	33	126	108	95	84	68	56	47	40	35	30	26	23	21	19	17	14	12
800S200-33 <sup>1</sup>	33	126	108	95	84	68	56	47	40	35	30	26	23	21	19	17	14	12
800S162-43	33	326	240	184	145	117	97	82	70	60	52	46	41	36	33	29	24	20
800S200-43	33	350	277	212	167	136	112	94	80	69	60	53	47	42	38	34	28	24
800S250-43	33	350	277	212	167	136	112	94	80	69	60	53	47	42	38	34	29	22
800S162-54	50	580	426	326	258	209	173	145	124	107	93	82	72	64	58	52	43	36
800S200-54	50	667	490	375	296	240	198	167	142	122	107	94	83	74	67	60	50	42
800S250-54	50	697	515	394	311	252	208	175	149	129	112	99	87	78	70	63	52	44

t ds s e s e s dt d e ted e e d stess e e d s e e ds s e ted e e d stess e e d s e  
de et 1/360 s . tt t dde et t 1/240 s t e d es 1.5 t e t d e e e s s s.

See Allowable Floor Joist Span Table Notes



# Floor and Roof Joist Span Tables

## Allowable Uniform Load Table (plf) - Simple Span Joists @ 24" o.c. Spacing

BLACK numbers = Total Load; RED numbers = Live Load (See Note 3)

Member	Fy (ksi)	Span (ft)																
		6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	22'-0"	24'-0"
800S162-68	50	794	584	447	353	286	236	199	169	146	127	112	99	88	79	71	59	50
		<b>794</b>	<b>584</b>	<b>447</b>	<b>353</b>	<b>286</b>	<b>232</b>	<b>179</b>	<b>141</b>	<b>113</b>	<b>92</b>	<b>75</b>	<b>63</b>	<b>53</b>	<b>45</b>	<b>39</b>	<b>29</b>	<b>22</b>
800S200-68	50	910	668	512	404	328	271	227	194	167	146	128	113	101	91	82	68	57
		<b>910</b>	<b>668</b>	<b>512</b>	<b>404</b>	<b>328</b>	<b>267</b>	<b>206</b>	<b>162</b>	<b>130</b>	<b>105</b>	<b>87</b>	<b>72</b>	<b>61</b>	<b>52</b>	<b>44</b>	<b>33</b>	<b>26</b>
800S250-68	50	960	705	540	427	346	286	240	205	176	154	135	120	107	96	86	71	60
		<b>960</b>	<b>705</b>	<b>540</b>	<b>427</b>	<b>346</b>	<b>286</b>	<b>234</b>	<b>184</b>	<b>147</b>	<b>120</b>	<b>99</b>	<b>82</b>	<b>69</b>	<b>59</b>	<b>51</b>	<b>38</b>	<b>29</b>
800S162-97	50	1385	1017	779	615	498	412	346	295	254	222	195	172	154	138	125	103	87
		<b>1385</b>	<b>1017</b>	<b>779</b>	<b>583</b>	<b>425</b>	<b>319</b>	<b>246</b>	<b>193</b>	<b>155</b>	<b>126</b>	<b>104</b>	<b>86</b>	<b>73</b>	<b>62</b>	<b>53</b>	<b>40</b>	<b>31</b>
800S200-97	50	1589	1168	894	706	572	473	397	339	292	254	224	198	177	159	143	118	99
		<b>1589</b>	<b>1168</b>	<b>894</b>	<b>672</b>	<b>490</b>	<b>368</b>	<b>283</b>	<b>223</b>	<b>178</b>	<b>145</b>	<b>120</b>	<b>100</b>	<b>84</b>	<b>71</b>	<b>61</b>	<b>46</b>	<b>35</b>
800S250-97	50	1537	1129	865	683	553	457	384	327	282	246	216	192	171	153	138	114	96
		<b>1537</b>	<b>1129</b>	<b>865</b>	<b>683</b>	<b>553</b>	<b>420</b>	<b>324</b>	<b>254</b>	<b>204</b>	<b>166</b>	<b>136</b>	<b>114</b>	<b>96</b>	<b>82</b>	<b>70</b>	<b>53</b>	<b>40</b>
800S162-118	50	1868	1372	1051	830	672	556	467	398	343	299	263	233	208	186	168	139	117
		<b>1868</b>	<b>1372</b>	<b>983</b>	<b>690</b>	<b>503</b>	<b>378</b>	<b>291</b>	<b>229</b>	<b>183</b>	<b>149</b>	<b>123</b>	<b>102</b>	<b>86</b>	<b>73</b>	<b>63</b>	<b>47</b>	<b>36</b>
800S200-118	50	2080	1528	1170	925	749	619	520	443	382	333	293	259	231	207	187	155	130
		<b>2080</b>	<b>1528</b>	<b>1137</b>	<b>799</b>	<b>582</b>	<b>437</b>	<b>337</b>	<b>265</b>	<b>212</b>	<b>173</b>	<b>142</b>	<b>119</b>	<b>100</b>	<b>85</b>	<b>73</b>	<b>55</b>	<b>42</b>
800S250-118	50	1982	1456	1115	881	714	590	496	422	364	317	279	247	220	198	178	147	124
		<b>1982</b>	<b>1456</b>	<b>1115</b>	<b>881</b>	<b>666</b>	<b>501</b>	<b>386</b>	<b>303</b>	<b>243</b>	<b>197</b>	<b>163</b>	<b>136</b>	<b>114</b>	<b>97</b>	<b>83</b>	<b>63</b>	<b>48</b>
Member	Fy (ksi)	Span (ft)																
		11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	22'-0"	24'-0"	26'-0"	28'-0"	30'-0"	32'-0"	34'-0"
1000S162-43 <sup>1</sup>	33	100	84	71	62	54	47	42	37	33	30	25	21	18	15	13	12	10
		<b>100</b>	<b>84</b>	<b>71</b>	<b>62</b>	<b>54</b>	<b>47</b>	<b>42</b>	<b>37</b>	<b>33</b>	<b>30</b>	<b>25</b>	<b>21</b>	<b>18</b>	<b>15</b>	<b>12</b>	<b>10</b>	<b>8</b>
1000S200-43 <sup>1</sup>	33	117	98	84	72	63	55	49	44	39	35	29	25	21	18	16	14	12
		<b>117</b>	<b>98</b>	<b>84</b>	<b>72</b>	<b>63</b>	<b>55</b>	<b>49</b>	<b>44</b>	<b>39</b>	<b>35</b>	<b>29</b>	<b>25</b>	<b>21</b>	<b>17</b>	<b>14</b>	<b>11</b>	<b>10</b>
1000S250-43 <sup>1</sup>	33	122	<sup>a</sup> 104	88	76	66	58	52	46	41	37	31	26	22	19	17	15	13
		<b>122</b>	<b>104</b>	<b>88</b>	<b>76</b>	<b>66</b>	<b>58</b>	<b>52</b>	<b>46</b>	<b>41</b>	<b>37</b>	<b>31</b>	<b>26</b>	<b>22</b>	<b>19</b>	<b>17</b>	<b>14</b>	<b>11</b>
1000S162-54	50	213	179	153	132	115	101	89	80	71	64	53	45	38	33	29	25	22
		<b>213</b>	<b>179</b>	<b>153</b>	<b>132</b>	<b>115</b>	<b>100</b>	<b>84</b>	<b>71</b>	<b>60</b>	<b>51</b>	<b>39</b>	<b>30</b>	<b>23</b>	<b>19</b>	<b>15</b>	<b>13</b>	<b>10</b>
1000S200-54	50	248	209	178	153	134	117	104	93	83	75	62	52	44	38	33	29	26
		<b>248</b>	<b>209</b>	<b>178</b>	<b>153</b>	<b>134</b>	<b>115</b>	<b>96</b>	<b>81</b>	<b>69</b>	<b>59</b>	<b>44</b>	<b>34</b>	<b>27</b>	<b>21</b>	<b>17</b>	<b>14</b>	<b>12</b>
1000S250-54	50	263	221	188	162	141	124	110	98	88	79	66	55	47	41	35	31	27
		<b>263</b>	<b>221</b>	<b>188</b>	<b>162</b>	<b>141</b>	<b>124</b>	<b>110</b>	<b>95</b>	<b>81</b>	<b>69</b>	<b>52</b>	<b>40</b>	<b>32</b>	<b>25</b>	<b>21</b>	<b>17</b>	<b>14</b>
1000S162-68	50	296	249	212	183	159	140	124	111	99	90	74	62	53	46	40	35	31
		<b>296</b>	<b>249</b>	<b>212</b>	<b>183</b>	<b>155</b>	<b>128</b>	<b>107</b>	<b>90</b>	<b>76</b>	<b>65</b>	<b>49</b>	<b>38</b>	<b>30</b>	<b>24</b>	<b>19</b>	<b>16</b>	<b>13</b>
1000S200-68	50	342	288	245	211	184	162	143	128	115	104	86	72	61	53	46	40	36
		<b>342</b>	<b>288</b>	<b>245</b>	<b>211</b>	<b>177</b>	<b>146</b>	<b>122</b>	<b>102</b>	<b>87</b>	<b>75</b>	<b>56</b>	<b>43</b>	<b>34</b>	<b>27</b>	<b>22</b>	<b>18</b>	<b>15</b>
1000S250-68	50	363	305	260	224	195	172	152	136	122	110	91	76	65	56	49	43	38
		<b>363</b>	<b>305</b>	<b>260</b>	<b>224</b>	<b>195</b>	<b>168</b>	<b>140</b>	<b>118</b>	<b>100</b>	<b>86</b>	<b>65</b>	<b>50</b>	<b>39</b>	<b>31</b>	<b>25</b>	<b>21</b>	<b>18</b>
1000S162-97	50	483	406	346	298	260	228	202	180	162	146	121	102	86	75	65	57	51
		<b>483</b>	<b>406</b>	<b>338</b>	<b>270</b>	<b>220</b>	<b>181</b>	<b>151</b>	<b>127</b>	<b>108</b>	<b>93</b>	<b>70</b>	<b>54</b>	<b>42</b>	<b>34</b>	<b>27</b>	<b>23</b>	<b>19</b>
1000S200-97	50	554	465	396	342	298	262	232	207	186	167	138	116	99	85	74	65	58
		<b>554</b>	<b>465</b>	<b>385</b>	<b>308</b>	<b>250</b>	<b>206</b>	<b>172</b>	<b>145</b>	<b>123</b>	<b>106</b>	<b>79</b>	<b>61</b>	<b>48</b>	<b>39</b>	<b>31</b>	<b>26</b>	<b>22</b>
1000S250-97	50	590	496	423	364	317	279	247	220	198	179	148	124	106	91	79	70	62
		<b>590</b>	<b>496</b>	<b>423</b>	<b>348</b>	<b>283</b>	<b>233</b>	<b>194</b>	<b>164</b>	<b>139</b>	<b>119</b>	<b>90</b>	<b>69</b>	<b>54</b>	<b>43</b>	<b>35</b>	<b>29</b>	<b>24</b>
1000S162-118	50	664	558	476	410	357	314	278	248	223	201	166	140	119	103	89	78	70
		<b>663</b>	<b>510</b>	<b>401</b>	<b>321</b>	<b>261</b>	<b>215</b>	<b>179</b>	<b>151</b>	<b>129</b>	<b>110</b>	<b>83</b>	<b>64</b>	<b>50</b>	<b>40</b>	<b>33</b>	<b>27</b>	<b>22</b>
1000S200-118	50	759	638	543	469	408	359	318	283	254	230	190	159	136	117	102	90	79
		<b>757</b>	<b>583</b>	<b>459</b>	<b>367</b>	<b>299</b>	<b>246</b>	<b>205</b>	<b>173</b>	<b>147</b>	<b>126</b>	<b>95</b>	<b>73</b>	<b>57</b>	<b>46</b>	<b>37</b>	<b>31</b>	<b>26</b>
1000S250-118	50	769	646	551	475	414	364	322	287	258	233	192	162	138	119	103	91	81
		<b>769</b>	<b>646</b>	<b>519</b>	<b>416</b>	<b>338</b>	<b>278</b>	<b>232</b>	<b>195</b>	<b>166</b>	<b>143</b>	<b>107</b>	<b>82</b>	<b>65</b>	<b>52</b>	<b>42</b>	<b>35</b>	<b>29</b>
1200S162-54 <sup>1</sup>	50	200	<sup>a</sup> 174	148	128	111	98	87	77	69	63	52	43	37	32	28	24	22
		<b>200</b>	<b>174</b>	<b>148</b>	<b>128</b>	<b>111</b>	<b>98</b>	<b>87</b>	<b>77</b>	<b>69</b>	<b>63</b>	<b>52</b>	<b>43</b>	<b>36</b>	<b>29</b>	<b>23</b>	<b>19</b>	<b>16</b>
1200S200-54 <sup>1</sup>	50	200	<sup>a</sup> 184	<sup>a</sup> 170	<sup>a</sup> 151	131	115	102	91	82	74	61	51	44	38	33	29	26
		<b>200</b>	<b>184</b>	<b>170</b>	<b>151</b>	<b>131</b>	<b>115</b>	<b>102</b>	<b>91</b>	<b>82</b>	<b>74</b>	<b>61</b>	<b>51</b>	<b>41</b>	<b>33</b>	<b>26</b>	<b>22</b>	<b>18</b>
1200S250-54 <sup>1</sup>	50	200	<sup>a</sup> 184	<sup>a</sup> 170	<sup>a</sup> 157	<sup>a</sup> 140	123	109	97	87	79	65	55	47	40	35	31	27
		<b>200</b>	<b>184</b>	<b>170</b>	<b>157</b>	<b>140</b>	<b>123</b>	<b>109</b>	<b>97</b>	<b>87</b>	<b>79</b>	<b>65</b>	<b>55</b>	<b>46</b>	<b>37</b>	<b>30</b>	<b>25</b>	<b>21</b>
1200S162-68	50	348	293	249	215	187	165	146	130	117	105	87	73	62	54	47	41	36
		<b>348</b>	<b>293</b>	<b>249</b>	<b>215</b>	<b>187</b>	<b>165</b>	<b>146</b>	<b>130</b>	<b>117</b>	<b>101</b>	<b>76</b>	<b>58</b>	<b>46</b>	<b>37</b>	<b>30</b>	<b>25</b>	<b>20</b>
1200S200-68	50	407	342	292	251	219	193	171	152	137	123	102	86	73	63	55	48	43
		<b>407</b>	<b>342</b>	<b>292</b>	<b>251</b>	<b>219</b>	<b>193</b>	<b>171</b>	<b>152</b>	<b>133</b>	<b>114</b>	<b>86</b>	<b>66</b>	<b>52</b>	<b>42</b>	<b>34</b>	<b>28</b>	<b>23</b>
1200S250-68	50	436	366	312	269	234	206	182	163	146	132	109	91	78	67	59	51	46
		<b>436</b>	<b>366</b>	<b>312</b>	<b>269</b>	<b>234</b>	<b>206</b>	<b>182</b>	<b>163</b>	<b>146</b>	<b>129</b>	<b>97</b>	<b>75</b>	<b>59</b>	<b>47</b>	<b>38</b>	<b>31</b>	<b>26</b>

t ds s e s es dt d e ted e ed stress e ed se . e ds s e ted e e d stess e ed se  
de et 1/360 s . t t t d de et t 1/240 s t e d es 1.5 t e t d e e e s s s .

See Allowable Floor Joist Span Table Notes

# Floor and Roof Joist Span Tables

Allowable Uniform Load Table (plf) - Simple Span Joists @ 24" o.c. Spacing

BLACK numbers = Total Load; RED numbers = Live Load (See Note 3)

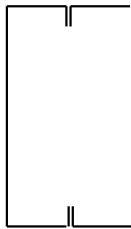
Member	Fy (ksi)	Span (ft)																
		11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	22'-0"	24'-0"	26'-0"	28'-0"	30'-0"	32'-0"	34'-0"
1200S162-97	50	581	488	416	358	312	274	243	217	195	176	145	122	104	90	78	69	61
1200S200-97	50	581	488	416	358	312	274	238	200	170	146	110	85	67	53	43	36	30
1200S250-97	50	671	564	481	414	361	317	281	251	225	203	168	141	120	104	90	79	70
1200S162-118	50	671	564	481	414	361	317	269	226	192	165	124	95	75	60	49	40	34
1200S200-118	50	719	604	515	444	387	340	301	269	241	218	180	151	129	111	97	85	75
1200S250-118	50	719	604	515	444	387	340	301	254	216	185	139	107	84	67	55	45	38
1200S300-118	50	765	643	548	472	411	362	320	286	256	231	191	161	137	118	103	90	80
1200S350-118	50	765	643	548	472	411	343	286	241	205	176	132	102	80	64	52	43	36
1400S200-54 <sub>1</sub>	50	881	740	631	544	474	416	369	329	295	266	220	185	158	136	118	104	92
1400S250-54 <sub>1</sub>	50	881	740	631	544	471	388	323	272	232	199	149	115	90	72	59	48	40
1400S300-54 <sub>1</sub>	50	947	796	678	585	509	448	396	354	317	286	237	199	169	146	127	112	99
1400S350-54 <sub>1</sub>	50	947	796	678	585	509	435	362	305	260	223	167	129	101	81	66	54	45
1400S200-68	50	993	834	711	613	534	469	416	371	333	300	248	209	178	153	134	117	104
1400S250-68	50	993	834	711	613	534	469	401	338	287	246	185	143	112	90	73	60	50
1400S300-68	50	1197	1006	857	739	644	566	501	447	401	362	299	252	214	185	161	141	125
1400S350-68	50	1197	1006	857	739	644	555	463	390	331	284	213	164	129	104	84	69	58
1400S200-97	50	171	a 157	a 145	a 134	a 125	a 118	a 111	a 103	92	83	69	58	49	43	37	33	29
1400S250-97	50	171	a 157	a 145	a 134	a 125	a 118	a 111	a 103	92	83	69	58	49	43	37	31	26
1400S300-97	50	171	a 157	a 145	a 134	a 125	a 118	a 111	a 105	a 99	a 90	74	63	53	46	40	35	31
1400S350-97	50	171	a 157	a 145	a 134	a 125	a 118	a 111	a 105	a 99	a 94	a 78	65	56	48	42	37	33
1400S200-118	50	171	a 157	a 145	a 134	a 125	a 118	a 111	a 105	a 99	a 94	a 78	65	56	48	42	36	30
1400S250-118	50	430	a 390	a 332	a 287	250	219	194	173	156	140	116	98	83	72	62	55	49
1400S300-118	50	430	a 390	a 332	a 287	250	219	194	173	156	140	116	94	74	59	48	40	33
1400S350-118	50	430	a 394	a 359	310	270	237	210	187	168	152	125	105	90	77	67	59	53
1400S200-141	50	430	a 394	a 359	310	270	237	210	187	168	152	125	105	84	67	54	45	37
1400S250-141	50	430	a 394	a 364	a 325	283	249	220	196	176	159	131	110	94	81	71	62	55
1400S300-141	50	430	a 394	a 364	a 325	283	249	220	196	176	159	131	110	91	73	59	49	41
1400S350-141	50	778	a 654	a 557	a 480	419	368	326	291	261	235	195	163	139	120	105	92	81
1400S200-164	50	778	a 654	a 557	a 480	419	368	326	291	261	235	179	138	109	87	71	58	49
1400S250-164	50	840	a 706	a 602	a 519	452	397	352	314	282	254	210	177	150	130	113	99	88
1400S300-164	50	840	a 706	a 602	a 519	452	397	352	314	282	254	200	154	121	97	79	65	54
1400S350-164	50	883	a 742	a 632	a 545	475	417	370	330	296	267	221	185	158	136	119	104	92
1400S200-197	50	883	a 742	a 632	a 545	475	417	370	330	296	267	219	169	133	106	86	71	59
1400S250-197	50	1032	a 867	a 739	a 637	555	488	432	385	346	312	258	217	185	159	139	122	108
1400S300-197	50	1032	a 867	a 739	a 637	555	488	432	385	341	293	220	169	133	107	87	71	60
1400S350-197	50	1116	a 938	a 799	a 689	600	528	467	417	374	338	279	235	200	172	150	132	117
1400S200-230	50	1116	a 938	a 799	a 689	600	528	467	417	374	325	244	188	148	119	96	79	66
1400S250-230	50	1175	a 988	a 842	a 726	632	556	492	439	394	356	294	247	210	181	158	139	123
1400S300-230	50	1175	a 988	a 842	a 726	632	556	492	439	394	356	269	207	163	131	106	87	73
1600S200-68 <sub>1</sub>	50	300	a 275	a 254	a 236	a 220	a 203	180	160	144	130	107	90	77	66	58	51	45
1600S250-68 <sub>1</sub>	50	300	a 275	a 254	a 236	a 220	a 203	180	160	144	130	107	90	77	66	58	51	45
1600S300-68 <sub>1</sub>	50	300	a 275	a 254	a 236	a 220	a 206	a 194	a 175	157	142	117	98	84	72	63	55	49
1600S350-68 <sub>1</sub>	50	300	a 275	a 254	a 236	a 220	a 206	a 194	a 183	a 166	150	124	104	88	76	66	58	52
1600S200-97	50	300	a 275	a 254	a 236	a 220	a 206	a 194	a 183	a 166	150	124	104	88	76	66	58	52
1600S250-97	50	300	a 275	a 254	a 236	a 220	a 206	a 194	a 183	a 174	a 165	a 150	a 130	111	96	83	73	64
1600S300-97	50	874	a 734	a 626	a 539	470	413	366	326	293	264	218	184	156	135	117	103	91
1600S350-97	50	874	a 734	a 626	a 539	470	413	366	326	293	264	218	184	149	119	97	80	67
1600S200-120	50	951	a 799	a 681	a 587	511	450	398	355	319	288	238	200	170	147	128	112	100
1600S250-120	50	951	a 799	a 681	a 587	511	450	398	355	319	288	238	200	166	133	108	89	74
1600S300-120	50	1006	a 845	a 720	a 621	541	475	421	376	337	304	251	211	180	155	135	119	105
1600S350-120	50	1006	a 845	a 720	a 621	541	475	421	376	337	304	251	211	180	145	118	97	81
1600S200-153	50	1099	a 1007	a 883	a 761	663	583	516	461	413	373	308	259	221	190	166	146	129
1600S250-153	50	1099	a 1007	a 883	a 761	663	583	516	461	413	373	308	259	208	167	136	112	93
1600S300-153	50	1170	a 983	a 837	a 722	629	553	490	437	392	354	292	246	209	181	157	138	122
1600S350-153	50	1170	a 983	a 837	a 722	629	553	490	437	392	354	292	234	184	148	120	99	82
1600S200-197	50	1274	a 1071	a 912	a 787	685	602	533	476	427	385	319	268	228	197	171	151	133
1600S250-197	50	1274	a 1071	a 912	a 787	685	602	533	476	427	385	319	259	204	163	133	109	91
1600S300-197	50	1349	a 1134	a 966	a 833	726	638	565	504	452	408	337	283	241	208	181	159	141
1600S350-197	50	1349	a 1134	a 966	a 833	726	638	565	504	452	408	337	283	224	179	146	120	100
1600S200-230	50	1633	a 1372	a 1169	a 1008	878	772	684	610	547	494	408	343	292	252	220	193	171
1600S250-230	50	1633	a 1372	a 1169	a 1008	878	772	684	610	547	494	408	324	255	204	166	137	114

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de et 1/360 s . tt t d de et t 1/240 s t e d es 1.5 t e t d e e e s s .

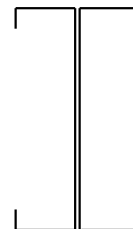
See Allowable Floor Joist Span Table Notes

## Header Load Table Notes

1. Calculated properties are based on AISI S100-16/S2-20, "North American Specification for Design of Cold-Formed Steel Structural Members."
2. Allowable deflection limit is  $L/360$ .
3. Allowable capacities have not been modified for wind or earthquake loading.
4. Headers are made from two "boxed" or back-to-back members.
4. Allowable moment, shear, and web crippling capacities are based on twice the capacity of a single member. The moment of inertia is based on twice the value of the single member.
5. Minimum bearing length for web crippling = 1-inch
6. Capacities are calculated for unpunched members only.
7. Members are assumed adequately braced for bending.
8. Allowable loads are for simply supported headers with uniform bending loads only.
9. "e" Web stiffeners are required at each support.



Boxed Header



Back-to-Back "I" Header

# Header Load Tables

## Header Allowable Uniform Loads (lb/ft)

Section	Yield, F <sub>y</sub> , ksi	SPAN						
		3 (ft)	4 (ft)	5 (ft)	6 (ft)	8 (ft)	10 (ft)	12 (ft)
550S162-33	33	931 e	698 e	535 e	371 e	209 e	127 e	74 e
550S162-43	33	2066 e	1203 e	770 e	535 e	301 e	165 e	95 e
550S162-54	33	2761 e	1553 e	994 e	690 e	388 e	203 e	118
550S162-54	50	3617 e	2034 e	1302 e	904 e	397 e	203 e	118
550S162-68	50	5032 e	2831 e	1812 e	1158 e	489 e	250 e	145
600S137-33	33	850 e	638 e	465 e	323 e	182 e	116 e	78 e
600S162-33	33	851 e	638 e	510 e	420 e	236 e	151 e	91 e
600S200-33	33	851 e	638 e	510 e	425 e	251 e	161 e	104 e
600S137-43	33	1860 e	1046 e	670 e	465 e	262 e	167 e	103 e
600S162-43	33	1887 e	1357 e	869 e	603 e	339 e	202 e	117 e
600S200-43	33	1887 e	1415 e	915 e	636 e	358 e	229 e	136 e
600S250-43	33	1887 e	1415 e	958 e	665 e	374 e	240 e	156 e
600S137-54	33	2419 e	1361 e	871 e	605 e	340 e	218 e	127
600S137-54	50	3393 e	1909 e	1222 e	848 e	430 e	220 e	127
600S162-54	33	3119 e	1754 e	1123 e	780 e	439 e	250 e	145 e
600S162-54	50	3763 e	2299 e	1472 e	1022 e	488 e	250 e	145 e
600S200-54	33	3550 e	1997 e	1278 e	887 e	499 e	290 e	168 e
600S200-54	50	3763 e	2514 e	1609 e	1117 e	567 e	290 e	168 e
600S250-54	33	3364 e	1892 e	1211 e	841 e	473 e	303 e	193 e
600S250-54	50	3763 e	2630 e	1683 e	1169 e	644 e	330 e	191 e
600S137-68	50	4540 e	2554 e	1635 e	1135 e	528 e	271 e	157
600S162-68	50	5685 e	3198 e	2046 e	1421 e	602 e	308 e	178
600S200-68	50	5906 e	3322 e	2126 e	1476 e	700 e	358 e	207 e
600S250-68	50	6089 e	3425 e	2192 e	1522 e	807 e	413 e	239 e
600S137-97	50	7480 e	4208 e	2693 e	1696 e	715	366	212
600S162-97	50	8358 e	4702 e	3009 e	1942 e	819	420	243
600S200-97	50	9517 e	5353 e	3426 e	2272 e	959 e	491	284
600S250-97	50	9174 e	5160 e	3303 e	2293 e	1110 e	568	329
600S162-118	50	10159 e	5715 e	3657 e	2289 e	966	495	286
600S200-118	50	11568 e	6507 e	4165 e	2690 e	1135	581	336
600S250-118	50	11321 e	6368 e	4076 e	2830 e	1318 e	675	390
800S137-33 <sup>1</sup>	33	632 e	474 e	379 e	316 e	208 e	133 e	93 e
800S162-33 <sup>1</sup>	33	632 e	474 e	379 e	316 e	237 e	153 e	106 e
800S200-33 <sup>1</sup>	33	632 e	474 e	379 e	316 e	237 e	174 e	121 e
800S137-43	33	1401 e	1051 e	841 e	641 e	361 e	231 e	160 e
800S162-43	33	1401 e	1051 e	841 e	701 e	412 e	264 e	183 e
800S200-43	33	1401 e	1051 e	841 e	701 e	526 e	339 e	236 e
800S250-43	33	1401 e	1051 e	841 e	701 e	526 e	341 e	237 e

ee e de d e tes.

## Header Allowable Uniform Loads (lb/ft)

Section	Yield, F <sub>y</sub> , ksi	SPAN						
		3 (ft)	4 (ft)	5 (ft)	6 (ft)	8 (ft)	10 (ft)	12 (ft)
800S137-54	33	2788 e	1916 e	1226 e	852 e	479 e	307 e	213 e
800S137-54	50	2788 e	2091 e	1673 e	1173 e	660 e	422 e	252 e
800S162-54	33	2788 e	2091 e	1391 e	966 e	543 e	348 e	241 e
800S162-54	50	2788 e	2091 e	1673 e	1336 e	752 e	481 e	284 e
800S200-54	33	2788 e	2091 e	1673 e	1321 e	743 e	476 e	330 e
800S200-54	50	2788 e	2091 e	1673 e	1394 e	925 e	575 e	332 e
800S250-54	33	2788 e	2091 e	1673 e	1246 e	701 e	449 e	312 e
800S250-54	50	2788 e	2091 e	1673 e	1394 e	929 e	595 e	374 e
800S137-68	50	5627 e	3621 e	2318 e	1610 e	905 e	550 e	318 e
800S162-68	50	5627 e	4110 e	2631 e	1827 e	1028 e	618 e	358 e
800S200-68	50	5627 e	4220 e	3176 e	2205 e	1240 e	712 e	412 e
800S250-68	50	5627 e	4220 e	3268 e	2270 e	1277 e	809 e	468 e
800S137-97	50	10850 e	6103 e	3906 e	2712 e	1468 e	752 e	435 e
800S162-97	50	12255 e	6894 e	4412 e	3064 e	1659 e	849 e	491 e
800S200-97	50	14283 e	8034 e	5142 e	3571 e	1913 e	980 e	567 e
800S250-97	50	13603 e	7652 e	4897 e	3401 e	1913 e	1118 e	647 e
800S162-118	50	15551 e	8748 e	5598 e	3888 e	1965 e	1006 e	582 e
800S200-118	50	17437 e	9808 e	6277 e	4359 e	2274 e	1164 e	674 e
800S250-118	50	16794 e	9447 e	6046 e	4199 e	2362 e	1333 e	771 e
1000S162-43 <sup>1</sup>	33	1115 e	836 e	669 e	557 e	418 e	280 e	194 e
1000S200-43 <sup>1</sup>	33	1115 e	836 e	669 e	557 e	418 e	317 e	220 e
1000S250-43 <sup>1</sup>	33	1115 e	836 e	669 e	557 e	418 e	334 e	241 e
1000S162-54	33	2213 e	1660 e	1328 e	1107 e	697 e	446 e	310 e
1000S162-54	50	2213 e	1660 e	1328 e	1107 e	830 e	611 e	424 e
1000S200-54	33	2213 e	1660 e	1328 e	1107 e	806 e	516 e	358 e
1000S200-54	50	2213 e	1660 e	1328 e	1107 e	830 e	663 e	460 e
1000S250-54	33	2213 e	1660 e	1328 e	1107 e	830 e	594 e	412 e
1000S250-54	50	2213 e	1660 e	1328 e	1107 e	830 e	664 e	505 e
1000S162-68	50	4460 e	3345 e	2676 e	2230 e	1323 e	847 e	588 e
1000S200-68	50	4460 e	3345 e	2676 e	2230 e	1490 e	954 e	662 e
1000S250-68	50	4460 e	3345 e	2676 e	2230 e	1673 e	1092 e	759 e
1000S162-97	50	13149 e	8120 e	5197 e	3609 e	2030 e	1299 e	858 e
1000S200-97	50	13149 e	9298 e	5950 e	4132 e	2324 e	1488 e	978 e
1000S250-97	50	13149 e	9862 e	6709 e	4659 e	2621 e	1677 e	1104 e
1000S162-118	50	19372 e	10897 e	6974 e	4843 e	2724 e	1743 e	1021 e
1000S200-118	50	21652 e	12453 e	7970 e	5534 e	3113 e	1992 e	1166 e
1000S250-118	50	21652 e	12938 e	8280 e	5750 e	3234 e	2070 e	1320 e
1200S162-54 <sup>1</sup>	33	1836 e	1377 e	1102 e	918 e	689 e	454 e	315 e
1200S162-54 <sup>1</sup>	50	1836 e	1377 e	1102 e	918 e	689 e	551 e	433 e
1200S200-54 <sup>1</sup>	33	1836 e	1377 e	1102 e	918 e	689 e	524 e	364 e
1200S200-54 <sup>1</sup>	50	1836 e	1377 e	1102 e	918 e	689 e	551 e	459 e
1200S250-54 <sup>1</sup>	33	1836 e	1377 e	1102 e	918 e	689 e	534 e	371 e
1200S250-54 <sup>1</sup>	50	1836 e	1377 e	1102 e	918 e	689 e	551 e	459 e
1200S162-68	50	3693 e	2770 e	2216 e	1847 e	1385 e	1034 e	718 e
1200S200-68	50	3693 e	2770 e	2216 e	1847 e	1385 e	1108 e	807 e
1200S250-68	50	3693 e	2770 e	2216 e	1847 e	1385 e	1108 e	814 e
1200S162-97	50	10860 e	8145 e	6476 e	4497 e	2530 e	1619 e	1124 e
1200S200-97	50	10860 e	8145 e	6516 e	5130 e	2886 e	1847 e	1283 e
1200S250-97	50	10860 e	8145 e	6516 e	5430 e	3117 e	1995 e	1385 e
1200S162-118	50	19976 e	12852 e	8225 e	5712 e	3213 e	2056 e	1428 e
1200S200-118	50	19976 e	14591 e	9338 e	6485 e	3648 e	2335 e	1621 e
1200S250-118	50	19976 e	14982 e	10438 e	7249 e	4077 e	2609 e	1812 e
1200S300-118	50	19976 e	14982 e	11551 e	8022 e	4512 e	2888 e	2005 e
1200S350-118	50	19976 e	14982 e	11986 e	9241 e	5198 e	3327 e	2310 e
1400S200-54 <sup>1</sup>	33	1568 e	1176 e	941 e	784 e	588 e	470 e	392 e
1400S200-54 <sup>1</sup>	50	1568 e	1176 e	941 e	784 e	588 e	470 e	392 e
1400S250-54 <sup>1</sup>	33	1568 e	1176 e	941 e	784 e	588 e	470 e	392 e
1400S250-54 <sup>1</sup>	50	1568 e	1176 e	941 e	784 e	588 e	470 e	392 e
1400S300-54 <sup>1</sup>	33	1568 e	1176 e	941 e	784 e	588 e	470 e	392 e
1400S300-54 <sup>1</sup>	50	1568 e	1176 e	941 e	784 e	588 e	470 e	392 e
1400S200-68	50	3152 e	2364 e	1891 e	1576 e	1182 e	946 e	788 e
1400S250-68	50	3152 e	2364 e	1891 e	1576 e	1182 e	946 e	788 e
1400S300-68	50	3152 e	2364 e	1891 e	1576 e	1182 e	946 e	788 e
1400S200-97	50	9251 e	6938 e	5550 e	4625 e	3444 e	2204 e	1531 e
1400S250-97	50	9251 e	6938 e	5550 e	4625 e	3469 e	2373 e	1648 e
1400S300-97	50	9251 e	6938 e	5550 e	4625 e	3469 e	2516 e	1747 e

See Header Load Table Notes

## Header Allowable Uniform Loads (lb/ft)

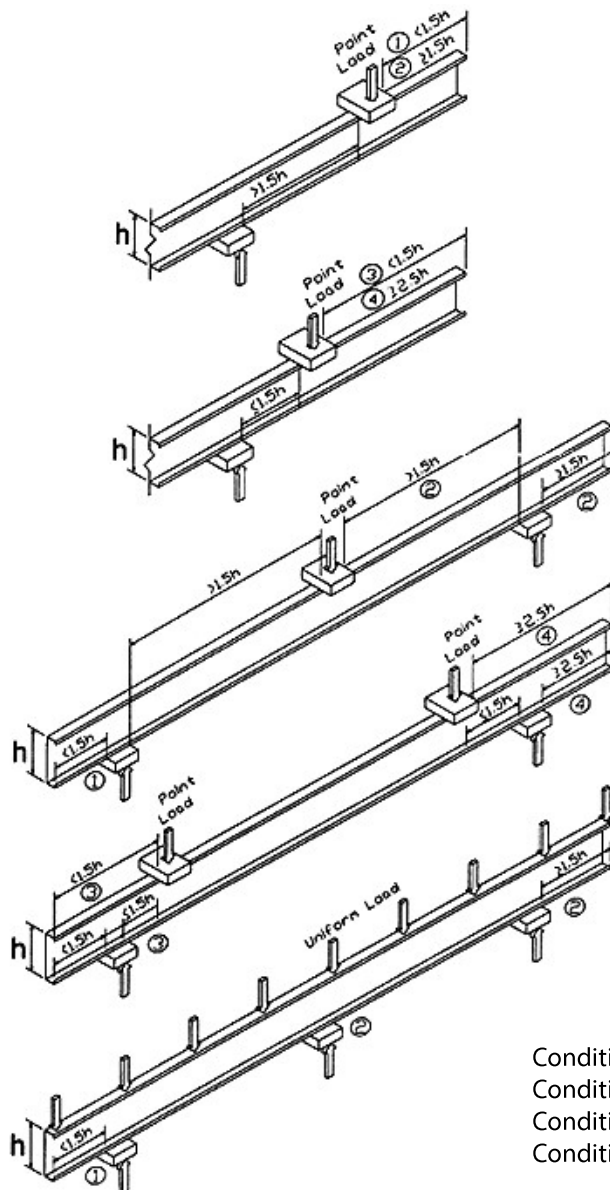
Section	Yield, F <sub>y</sub> , ksi	SPAN						
		3 (ft)	4 (ft)	5 (ft)	6 (ft)	8 (ft)	10 (ft)	12 (ft)
1400S200-118	50	16991 e	12743 e	10194 e	7825 e	4401 e	2817 e	1956 e
1400S250-118	50	16991 e	12743 e	10194 e	8495 e	4899 e	3135 e	2177 e
1400S300-118	50	16991 e	12743 e	10194 e	8495 e	5224 e	3344 e	2322 e
1600S200-68 <sup>1</sup>	50	2749 e	2062 e	1650 e	1375 e	1031 e	825 e	687 e
1600S250-68 <sup>1</sup>	50	2749 e	2062 e	1650 e	1375 e	1031 e	825 e	687 e
1600S300-68 <sup>1</sup>	50	2749 e	2062 e	1650 e	1375 e	1031 e	825 e	687 e
1600S350-68 <sup>1</sup>	50	2749 e	2062 e	1650 e	1375 e	1031 e	825 e	687 e
1600S200-97	50	8056 e	6042 e	4834 e	4028 e	3021 e	2417 e	1778 e
1600S250-97	50	8056 e	6042 e	4834 e	4028 e	3021 e	2417 e	1909 e
1600S300-97	50	8056 e	6042 e	4834 e	4028 e	3021 e	2417 e	2014 e
1600S350-97	50	8056 e	6042 e	4834 e	4028 e	3021 e	2417 e	2014 e
1600S200-118	50	14781 e	11086 e	8869 e	7391 e	5153 e	3298 e	2290 e
1600S250-118	50	14781 e	11086 e	8869 e	7391 e	5543 e	3660 e	2541 e
1600S300-118	50	14781 e	11086 e	8869 e	7391 e	5543 e	3895 e	2705 e
1600S350-118	50	14781 e	11086 e	8869 e	7391 e	5543 e	4434 e	3115 e

See Header Load Table Notes

## Web Crippling Load Table Notes

1. All capacities listed are calculated using AISI S100-16/S2-20.
2. Web crippling capacities calculated are for studs with stiffened or partially stiffened flanges.
3. Tabulated web crippling capacities are for single members only. For multiple members, multiply the tabulated values by number of members in the assembly.
4. Listed allowable capacities are based on members 'fastened to supports', except back-to-back members under two-flange loading (condition 3 and 4) for which data for 'fastened to support' is unavailable in the AISI S100-16/S2-20.
5. Listed allowable capacities are for unpunched webs. Capacity reduction for end and interior one flange loading (conditions 1 and 2) near punchouts may be required per Section G6 of S100.

## Web Crippling Conditions



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

# Web Crippling Load Tables

## Allowable Web Crippling Loads (lbs) - Single Members

Member	Design Thickness	Inside Radius	Yield Str	Condition 1				Condition 2				Condition 3				Condition 4			
				1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	1	3.5	4	6
162S-18	0.0188	0.0843	33	55	90	95	112	87	125	131	151	45	64	67	76	122	161	166	187
162S-27	0.0283	0.0796	33	122	194	205	242	218	304	317	361	111	151	157	178	290	371	383	425
162S-30	0.0312	0.0781	33	148	233	246	290	269	373	388	442	137	185	192	217	356	452	466	516
162S-33	0.0346	0.0764	33	180	282	297	350	336	462	481	546	170	229	237	267	441	557	574	634
162S-43	0.0451	0.0712	33	298	459	483	566	589	793	823	929	297	390	404	452	764	946	973	1067
162S-54	0.0566	0.0849	33	447	678	712	832	904	1196	1239	1390	471	609	629	700	1203	1466	1506	1642
162S-54	0.0566	0.0849	50	677	1027	1079	1260	1370	1812	1877	2105	714	922	953	1061	1823	2222	2281	2487
162S-68	0.0713	0.1069	33	672	1004	1054	1225	1386	1802	1863	2077	750	952	982	1087	1901	2282	2339	2536
162S-68	0.0713	0.1069	50	1019	1522	1596	1856	2100	2730	2823	3148	1136	1443	1488	1646	2880	3458	3544	3842
250S-18	0.0188	0.0843	33	52	84	89	106	85	122	128	147	37	51	54	61	109	145	150	168
250S-27	0.0283	0.0796	33	117	186	196	231	213	298	310	354	96	130	135	153	268	343	354	393
250S-30	0.0312	0.0781	33	141	223	235	277	264	366	381	433	119	161	167	189	330	420	433	479
250S-33	0.0346	0.0764	33	173	271	285	336	330	453	472	535	150	201	209	235	411	519	535	591
250S-43	0.0451	0.0712	33	287	443	466	547	580	780	810	913	267	351	364	407	720	892	918	1006
250S-54	0.0566	0.0849	33	433	657	690	806	891	1178	1221	1369	430	556	574	639	1142	1392	1429	1558
250S-54	0.0566	0.0849	50	656	996	1046	1222	1350	1785	1850	2075	652	842	870	968	1730	2109	2165	2361
250S-68	0.0713	0.1069	33	654	977	1024	1191	1368	1778	1839	2050	693	880	907	1004	1815	2179	2233	2421
250S-68	0.0713	0.1069	50	990	1480	1552	1805	2073	2694	2786	3106	1049	1333	1375	1521	2750	3302	3384	3669
350S-18	0.0188	0.0843	33	49	80	84	100	83	119	124	143	28	40	42	48	98	130	134	151
350S-27	0.0283	0.0796	33	112	177	187	221	209	292	304	347	81	111	115	130	247	316	327	362
350S-30	0.0312	0.0781	33	135	214	226	266	259	359	374	425	103	139	144	163	306	389	402	445
350S-33	0.0346	0.0764	33	166	260	274	323	324	445	463	526	131	175	182	205	384	484	499	551
350S-43	0.0451	0.0712	33	278	428	451	528	571	768	798	900	240	315	326	365	680	842	866	949
350S-54	0.0566	0.0849	33	420	638	670	783	879	1162	1204	1351	392	507	524	583	1086	1324	1359	1482
350S-54	0.0566	0.0849	50	637	967	1016	1186	1331	1761	1825	2046	594	768	794	883	1645	2005	2059	2245
350S-68	0.0713	0.1069	33	637	951	998	1160	1351	1756	1816	2025	640	813	839	928	1737	2085	2137	2317
350S-68	0.0713	0.1069	50	965	1441	1512	1758	2047	2661	2752	3068	970	1232	1271	1406	2631	3159	3238	3510
350S-97	0.1017	0.1525	33	1209	1760	1841	2126	2629	3328	3431	3792	1343	1663	1710	1876	3562	4184	4276	4597
350S-97	0.1017	0.1525	50	1831	2666	2790	3221	3983	5042	5199	5745	2035	2520	2592	2842	5397	6339	6479	6966
362S-18	0.0188	0.0843	33	49	79	84	99	82	119	124	143	27	39	40	46	97	128	133	149
362S-27	0.0283	0.0796	33	111	177	186	220	209	291	303	346	80	108	113	127	245	313	324	359
362S-30	0.0312	0.0781	33	135	213	224	265	258	358	373	424	101	136	141	160	304	386	398	441
362S-33	0.0346	0.0764	33	165	259	273	322	323	444	462	525	129	173	179	202	381	480	495	547
362S-43	0.0451	0.0712	33	277	427	449	526	570	767	796	898	236	311	322	360	675	836	860	943
362S-54	0.0566	0.0849	33	419	636	668	780	877	1160	1202	1348	388	501	518	577	1079	1316	1351	1473
362S-54	0.0566	0.0849	50	634	963	1012	1182	1329	1758	1822	2043	588	760	785	874	1635	1994	2047	2232
362S-68	0.0713	0.1069	33	635	948	995	1157	1349	1754	1813	2022	635	806	831	920	1728	2074	2126	2305
362S-68	0.0713	0.1069	50	962	1437	1507	1753	2044	2657	2748	3064	961	1221	1259	1393	2618	3143	3221	3492
362S-97	0.1017	0.1525	33	1206	1755	1837	2120	2626	3324	3427	3787	1333	1651	1698	1862	3547	4166	4258	4578
362S-97	0.1017	0.1525	50	1827	2659	2783	3212	3979	5036	5192	5738	2020	2501	2573	2821	5374	6313	6452	6937
400S-27	0.0283	0.0796	33	109	174	183	217	207	289	301	344	75	102	106	120	238	305	315	349
400S-30	0.0312	0.0781	33	133	210	221	261	257	356	370	421	95	129	134	151	296	376	388	429
400S-33	0.0346	0.0764	33	163	256	269	317	322	442	460	522	122	164	170	192	372	469	483	534
400S-43	0.0451	0.0712	33	274	422	444	520	567	763	792	893	227	299	309	346	662	819	843	924
400S-54	0.0566	0.0849	33	415	629	661	772	873	1155	1197	1342	376	485	502	558	1061	1293	1328	1448
400S-54	0.0566	0.0849	50	628	954	1002	1170	1323	1750	1813	2034	569	735	760	846	1607	1960	2012	2194
400S-68	0.0713	0.1069	33	629	940	986	1147	1344	1746	1806	2014	617	784	809	895	1702	2044	2094	2271
400S-68	0.0713	0.1069	50	953	1424	1494	1737	2036	2646	2737	3051	936	1188	1226	1356	2579	3097	3173	3441
400S-97	0.1017	0.1525	33	1197	1742	1823	2105	2617	3312	3415	3774	1305	1616	1662	1823	3504	4116	4207	4523
400S-97	0.1017	0.1525	50	1814	2640	2762	3189	3965	5018	5175	5718	1978	2449	2518	2761	5309	6236	6374	6853
550S-27	0.0283	0.0796	33	103	164	173	205	202	282	294	336	58	79	82	93	214	274	283	314
550S-30	0.0312	0.0781	33	126	199	210	248	251	348	362	412	76	103	107	120	268	341	351	389
550S-33	0.0346	0.0764	33	155	243	256	302	315	432	450	511	100	134	139	157	339	428	441	487
550S-43	0.0451	0.0712	33	262	405	426	499	556	749	778	877	195	256	265	297	614	760	782	858
550S-54	0.0566	0.0849	33	400	607	638	745	859	1136	1177	1320	331	428	443	493	995	1213	1246	1358
550S-54	0.0566	0.0849	50	606	920	966	1128	1302	1722	1784	2001	502	649	671	746	1508	1838	1887	2058
550S-68	0.0713	0.1069	33	609	911	955	1111	1324	1721	1780	1985	557	707	729	807	1611	1934	1982	2149
550S-68	0.0713	0.1069	50	923	1380	1447	1683	2007	2608	2697	3007	844	1071	1105	1223	2441	2931	3003	3256
550S-97	0.1017	0.1525	33	1166	1697	1776	2050	2585	3272	3374	3728	1205	1492	1535	1683	3352	3937	4024	4326
550S-97	0.1017	0.1525	50	1766	2571	2691	3106	3917	4957	5112	5649	1826	2261	2326	2550	5079	5966	6097	6555
600S-30	0.0312	0.0781	33	124	196	206	244	249	345	360	409	70	95	98	111	260	330	340	377
600S-33	0.0346	0.0764	33	153	240	253	297	313	430	447	507	93	125	130	146	330	416	429	473
600S-43	0.0451	0.0712	33	259	400	420	493	553	745	773	872	185	243	252	282	600	743	764	838
600S-54	0.0566	0.0849	33	395	600	631	736	855	1131	1172	1314	318	411	425	473	975	1189	1221	1331
600S-54	0.0566	0.0849	50	599	909	956	1116	1295	1713	1775	1991	482	623	644	716	1478	1802	1850	2017
600S-68	0.0713	0.1069	33	604	902	946	1100	1319	1714	1772	1976	539	684	706	781	1584	1901	1949	2113
600S-68	0.0713	0.1069	50	914	1366	1433	1666	1998	2596	2685	2994	816	1036	1069	1183	2399	2881	2952	3201



# Web Crippling Load Tables

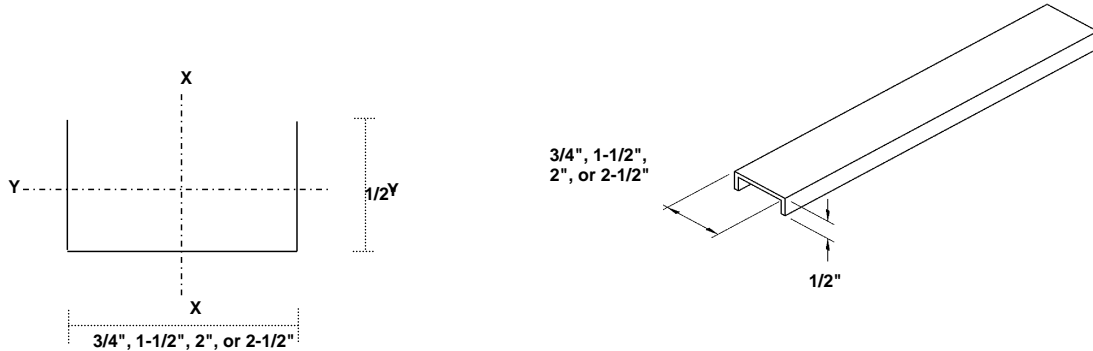
## Allowable Web Crippling Loads (lbs) - Back-to-Back Members

Member	Design Thickness	Inside Radius	Yield Str	Condition 1				Condition 2				Condition 3				Condition 4			
				1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	1	3.5	4	6
162S - 18	0.0188	0.0843	33	124	196	207	244	156	217	226	257	76	100	103	116	153	202	209	234
162S - 27	0.0283	0.0796	33	268	413	435	510	363	489	507	572	184	236	244	270	386	494	510	566
162S - 30	0.0312	0.0781	33	321	493	518	606	443	592	614	690	227	288	298	329	478	608	628	695
162S - 33	0.0346	0.0764	33	389	593	623	729	547	724	750	842	283	357	368	406	600	757	781	862
162S - 43	0.0451	0.0712	33	638	953	1000	1163	933	1211	1252	1395	494	612	629	690	1066	1320	1358	1489
162S - 54	0.0566	0.0849	33	949	1395	1462	1692	1427	1820	1878	2081	784	956	982	1071	1696	2068	2123	2315
162S - 54	0.0566	0.0849	50	1438	2114	2215	2564	2162	2757	2846	3153	1188	1449	1488	1622	2570	3134	3217	3508
162S - 68	0.0713	0.1069	33	1418	2050	2144	2470	2188	2744	2826	3113	1250	1501	1538	1667	2703	3246	3326	3606
162S - 68	0.0713	0.1069	50	2148	3106	3248	3742	3315	4157	4282	4717	1894	2274	2330	2526	4096	4918	5040	5464
250S - 18	0.0188	0.0843	33	123	196	206	244	156	216	225	256	65	85	88	99	131	172	179	200
250S - 27	0.0283	0.0796	33	267	412	434	509	363	488	506	571	164	211	217	241	344	441	455	505
250S - 30	0.0312	0.0781	33	320	492	517	605	443	590	612	689	204	260	268	296	430	547	564	625
250S - 33	0.0346	0.0764	33	389	592	622	727	546	723	749	840	256	323	333	368	544	686	708	781
250S - 43	0.0451	0.0712	33	637	952	999	1162	932	1209	1250	1393	455	563	580	636	982	1216	1251	1371
250S - 54	0.0566	0.0849	33	947	1393	1460	1690	1425	1817	1876	2078	730	890	914	997	1579	1925	1977	2155
250S - 54	0.0566	0.0849	50	1435	2111	2212	2560	2159	2753	2842	3149	1106	1349	1385	1510	2393	2917	2995	3266
250S - 68	0.0713	0.1069	33	1416	2047	2141	2467	2185	2740	2823	3109	1174	1409	1444	1566	2539	3048	3124	3387
250S - 68	0.0713	0.1069	50	2145	3102	3244	3737	3311	4152	4277	4711	1778	2135	2188	2373	3846	4618	4733	5132
350S - 18	0.0188	0.0843	33	123	195	206	243	156	216	225	256	55	72	75	84	110	145	151	169
350S - 27	0.0283	0.0796	33	267	412	433	508	362	487	505	570	146	187	193	214	306	391	404	448
350S - 30	0.0312	0.0781	33	320	491	516	604	442	589	611	688	183	233	240	266	386	490	506	560
350S - 33	0.0346	0.0764	33	388	591	621	726	545	721	748	839	232	292	301	333	492	621	640	706
350S - 43	0.0451	0.0712	33	636	951	997	1160	931	1207	1248	1391	419	519	534	585	904	1119	1151	1263
350S - 54	0.0566	0.0849	33	946	1392	1458	1688	1423	1815	1873	2075	680	829	852	929	1471	1794	1842	2008
350S - 54	0.0566	0.0849	50	1434	2109	2209	2557	2156	2750	2838	3144	1031	1257	1290	1407	2229	2718	2791	3043
350S - 68	0.0713	0.1069	33	1414	2045	2138	2464	2183	2737	2819	3106	1104	1326	1359	1473	2388	2867	2939	3186
350S - 68	0.0713	0.1069	50	2143	3098	3240	3733	3307	4147	4272	4706	1673	2009	2059	2232	3618	4345	4452	4827
350S - 97	0.1017	0.1525	33	2641	3716	3876	4431	4235	5181	5321	5809	2305	2708	2768	2976	4986	5857	5986	6435
350S - 97	0.1017	0.1525	50	4002	5631	5873	6713	6416	7850	8062	8802	3493	4103	4194	4508	7555	8874	9070	9751
362S - 18	0.0188	0.0843	33	123	195	206	243	155	216	225	256	53	70	73	82	108	142	147	165
362S - 27	0.0283	0.0796	33	266	411	433	508	362	487	505	570	144	184	190	211	301	386	398	442
362S - 30	0.0312	0.0781	33	320	491	516	604	442	589	611	687	181	230	237	262	381	484	499	553
362S - 33	0.0346	0.0764	33	388	591	621	726	545	721	747	839	229	289	298	329	486	613	632	698
362S - 43	0.0451	0.0712	33	636	950	997	1160	930	1207	1248	1391	415	514	528	579	895	1109	1140	1250
362S - 54	0.0566	0.0849	33	946	1391	1458	1687	1423	1815	1873	2075	675	823	845	921	1459	1779	1826	1992
362S - 54	0.0566	0.0849	50	1433	2108	2208	2557	2156	2750	2838	3144	1022	1246	1280	1395	2211	2695	2767	3017
362S - 68	0.0713	0.1069	33	1414	2045	2138	2463	2182	2737	2819	3105	1096	1316	1349	1463	2371	2847	2918	3163
362S - 68	0.0713	0.1069	50	2143	3098	3239	3732	3307	4147	4271	4705	1661	1995	2044	2216	3592	4314	4421	4793
362S - 97	0.1017	0.1525	33	2641	3716	3875	4430	4234	5180	5320	5809	2292	2693	2752	2959	4957	5823	5952	6399
362S - 97	0.1017	0.1525	50	4001	5630	5872	6713	6416	7849	8061	8801	3473	4080	4170	4483	7511	8823	9018	9695
400S - 27	0.0283	0.0796	33	266	411	433	507	362	486	505	569	138	177	182	202	289	370	382	424
400S - 30	0.0312	0.0781	33	320	490	516	604	441	589	611	687	174	221	228	252	366	465	480	531
400S - 33	0.0346	0.0764	33	388	591	621	726	545	721	747	838	221	279	287	317	469	592	610	673
400S - 43	0.0451	0.0712	33	635	950	997	1159	930	1206	1247	1390	403	499	513	563	870	1077	1108	1215
400S - 54	0.0566	0.0849	33	946	1391	1457	1687	1422	1814	1872	2074	658	803	824	899	1424	1736	1782	1943
400S - 54	0.0566	0.0849	50	1433	2107	2207	2556	2155	2748	2836	3143	998	1216	1249	1361	2157	2630	2700	2944
400S - 68	0.0713	0.1069	33	1414	2044	2137	2462	2181	2736	2818	3104	1074	1289	1321	1432	2322	2788	2857	3098
400S - 68	0.0713	0.1069	50	2142	3097	3238	3731	3305	4145	4270	4703	1627	1953	2002	2170	3518	4224	4329	4694
400S - 97	0.1017	0.1525	33	2640	3715	3874	4429	4233	5178	5319	5807	2254	2648	2706	2909	4875	5726	5853	6292
400S - 97	0.1017	0.1525	50	4000	5628	5870	6711	6414	7846	8059	8798	3415	4012	4100	4408	7386	8676	8868	9534
550S - 27	0.0283	0.0796	33	266	410	432	506	361	485	504	568	116	149	154	171	244	312	322	357
550S - 30	0.0312	0.0781	33	319	489	515	603	441	588	610	686	149	189	195	216	314	399	411	455
550S - 33	0.0346	0.0764	33	387	590	620	724	544	720	746	836	192	242	250	276	408	514	530	585
550S - 43	0.0451	0.0712	33	634	948	995	1157	928	1204	1245	1388	361	447	459	504	778	964	991	1087
550S - 54	0.0566	0.0849	33	944	1389	1455	1684	1420	1811	1869	2071	600	732	751	819	1298	1582	1624	1771
550S - 54	0.0566	0.0849	50	1431	2104	2204	2552	2152	2744	2832	3138	909	1108	1138	1241	1966	2397	2461	2683
550S - 68	0.0713	0.1069	33	1412	2041	2134	2459	2179	2732	2814	3100	993	1192	1222	1324	2147	2578	2642	2864
550S - 68	0.0713	0.1069	50	2139	3092	3234	3726	3301	4139	4264	4697	1504	1806	1851	2007	3253	3906	4003	4340
550S - 97	0.1017	0.1525	33	2637	3710	3870	4424	4228	5172	5313	5800	2219	2489	2544	2735	4583	5383	5502	5915
550S - 97	0.1017	0.1525	50	3995	5622	5863	6703	6406	7837	8049	8788	3211	3771	3855	4144	6944	8157	8337	8963
600S - 30	0.0312	0.0781	33	319	489	514	602	440	587	609	685	141	180	185	205	298	379	391	433
600S - 33	0.0346	0.0764	33	387	589	619	724	543	719	745	836	183	231	238	263	389	491	506	559
600S - 43	0.0451	0.0712	33	634	948	995	1157	928	1204	1245	1387	348	431	443	486	751	930	956	1048
600S - 54	0.0566	0.0849	33	944	1388	1454	1683	1420	1810	1868	2070	583	710	729	795	1260	1536	1577	1719
600S - 54	0.0566	0.0849	50	1430	2103	2203	2551	2151	2743	2831	3136	883	1076	1105	1205	1909	2327	2389	2605
600S - 68	0.0713	0.1069	33	1411	2040	2133	2458	2178	2731	2									

## U-Channel Section Properties

Section	Design Thickness (in)	Yield Strength, F <sub>y</sub> (ksi)	Gross Properties						Effective Properties			
			Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>x</sub> (in <sup>4</sup> )	R <sub>x</sub> (in)	I <sub>y</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	Ma (in-k)	Va (lb)
075U050-54	0.0566	33	0.087	0.296	0.007	0.289	0.002	0.156	0.007	0.019	0.459	327
150U050-54	0.0566	33	0.130	0.441	0.039	0.549	0.003	0.146	0.039	0.052	1.230	852
200U050-54	0.0566	33	0.158	0.537	0.080	0.711	0.003	0.137	0.080	0.080	1.883	1203
250U050-54	0.0566	33	0.186	0.633	0.140	0.868	0.003	0.130	0.140	0.112	2.648	1553

1. Calculated properties are based on AISI S100-16/S2-20, North American Specification for Design of Cold-Formed Steel Structural Members.
2. Minimum base metal thickness is 95% of design thickness.
3. Effective properties are based on F<sub>y</sub>=33ksi.



## U-Channel Allowable Ceiling Spans L/360

Section	Spans	4 psf Channel Spacing (in) o.c.					6 psf Channel Spacing (in) o.c.					13 psf Channel Spacing (in) o.c.					15 psf Channel Spacing (in) o.c.				
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
075U050-54	Single	3' 5"	3' 0"	2' 9"	2' 6"	2' 4"	3' 0"	2' 7"	2' 4"	2' 2"	2' 1"	2' 4"	2' 0"	1' 10"	1' 8"	1' 7"	2' 2"	1' 11"	1' 9"	1' 7"	1' 6"
	Multiple	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	3' 8"	3' 2"	2' 11"	2' 8"	2' 7"	2' 10"	2' 6"	2' 3"	2' 1"	1' 11"	2' 8"	2' 4"	2' 2"	2' 0"	1' 9"
150U050-54	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 4"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"
200U050-54	Single	5' 10"	5' 1"	4' 8"	4' 4"	4' 1"	5' 1"	4' 6"	4' 1"	3' 10"	3' 7"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"	3' 10"	3' 4"	3' 1"	2' 10"	2' 8"
	Multiple	7' 5"	6' 6"	5' 11"	5' 6"	5' 2"	6' 6"	5' 8"	5' 2"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"	4' 10"	4' 3"	3' 10"	3' 7"	3' 2"
250U050-54	Single	6' 1"	5' 4"	4' 10"	4' 6"	4' 3"	5' 4"	4' 8"	4' 3"	4' 0"	3' 9"	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"
	Multiple	7' 9"	6' 9"	6' 2"	5' 9"	5' 5"	6' 9"	5' 11"	5' 5"	5' 0"	4' 9"	5' 3"	4' 7"	4' 3"	3' 11"	3' 9"	5' 0"	4' 5"	4' 0"	3' 9"	3' 7"

## U-Channel Allowable Ceiling Spans L/240

Section	Spans	4 psf Channel Spacing (in) o.c.					6 psf Channel Spacing (in) o.c.					13 psf Channel Spacing (in) o.c.					15 psf Channel Spacing (in) o.c.				
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
075U050-54	Single	3' 11"	3' 5"	3' 1"	2' 11"	2' 9"	3' 5"	3' 0"	2' 9"	2' 6"	2' 4"	2' 8"	2' 4"	2' 1"	1' 11"	1' 9"	2' 6"	2' 2"	2' 0"	1' 10"	1' 8"
	Multiple	4' 10"	4' 2"	3' 10"	3' 7"	3' 4"	4' 2"	3' 8"	3' 4"	3' 1"	2' 10"	3' 3"	2' 9"	2' 4"	2' 1"	1' 11"	3' 1"	2' 7"	2' 2"	2' 0"	1' 9"
150U050-54	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 4"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"
200U050-54	Single	5' 10"	5' 1"	4' 8"	4' 4"	4' 1"	5' 1"	4' 6"	4' 1"	3' 10"	3' 7"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"	3' 10"	3' 4"	3' 1"	2' 10"	2' 8"
	Multiple	7' 5"	6' 6"	5' 11"	5' 6"	5' 2"	6' 6"	5' 8"	5' 2"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"	4' 10"	4' 3"	3' 10"	3' 7"	3' 2"
250U050-54	Single	6' 1"	5' 4"	4' 10"	4' 6"	4' 3"	5' 4"	4' 8"	4' 3"	4' 0"	3' 9"	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"
	Multiple	7' 9"	6' 9"	6' 2"	5' 9"	5' 5"	6' 9"	5' 11"	5' 5"	5' 0"	4' 9"	5' 3"	4' 7"	4' 3"	3' 11"	3' 9"	5' 0"	4' 5"	4' 0"	3' 9"	3' 7"

## U-Channel Allowable Ceiling Spans L/120

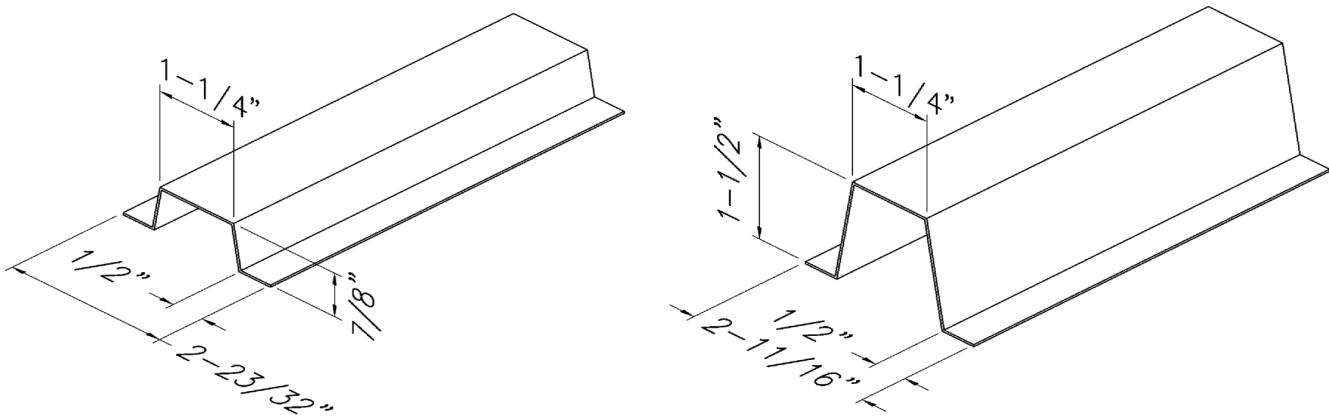
Section	Spans	4 psf Channel Spacing (in) o.c.					6 psf Channel Spacing (in) o.c.					13 psf Channel Spacing (in) o.c.					15 psf Channel Spacing (in) o.c.					
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	
075U050-54	Single	4' 10"	4' 1"	3' 7"	3' 3"	3' 0"	4' 1"	3' 5"	3' 0"	2' 9"	2' 6"	2' 11"	2' 5"	2' 2"	2' 2"	1' 11"	1' 9"	2' 9"	2' 4"	2' 0"	1' 10"	1' 8"
	Multiple	5' 5"	4' 6"	4' 2"	3' 10"	3' 5"	4' 6"	3' 11"	3' 5"	3' 2"	2' 11"	3' 5"	2' 9"	2' 4"	2' 1"	1' 11"	3' 1"	2' 7"	2' 2"	2' 0"	1' 9"	
150U050-54	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 4"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"	
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"	
200U050-54	Single	5' 10"	5' 1"	4' 8"	4' 4"	4' 1"	5' 1"	4' 6"	4' 1"	3' 10"	3' 7"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"	3' 10"	3' 4"	3' 1"	2' 10"	2' 8"	
	Multiple	7' 5"	6' 6"	5' 11"	5' 6"	5' 2"	6' 6"	5' 8"	5' 2"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"	4' 10"	4' 3"	3' 10"	3' 7"	3' 2"	
250U050-54	Single	6' 1"	5' 4"	4' 10"	4' 6"	4' 3"	5' 4"	4' 8"	4' 3"	4' 0"	3' 9"	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"	
	Multiple	7' 9"	6' 9"	6' 2"	5' 9"	5' 5"	6' 9"	5' 11"	5' 5"	5' 0"	4' 9"	5' 3"	4' 7"	4' 3"	3' 11"	3' 9"	5' 0"	4' 5"	4' 0"	3' 9"	3' 7"	

1. Allowable ceiling spans are based on effective properties.
2. Multiple span indicates two or more equal spans with channel continuous over center support.
3. Bearing length = 0.75-inches.
4. Table values are based on the compression flange laterally unsupported.

## (Hat) Furring (F) Channel Section Properties

Section	Design Thickness (in)	Yield Strength, Fy (ksi)	Gross Properties						Effective Properties			
			Area (in <sup>2</sup> )	Weight (lb/ft)	Ix (in <sup>4</sup> )	Rx (in)	Iy (in <sup>4</sup> )	Ry (in)	Ix (in <sup>4</sup> )	Sx (in <sup>3</sup> )	Ma (ft-lb)	Va (lb)
087F125-18	0.0188	33	0.072	0.244	0.009	0.354	0.035	0.698	0.008	0.016	26.61	255
087F125-27	0.0283	33	0.107	0.365	0.013	0.351	0.051	0.693	0.013	0.027	45.20	381
087F125-30	0.0312	33	0.118	0.401	0.014	0.350	0.056	0.691	0.014	0.031	50.98	420
087F125-33	0.0346	33	0.130	0.443	0.016	0.349	0.062	0.689	0.016	0.034	56.23	464
087F125-43	0.0451	33	0.168	0.572	0.020	0.345	0.079	0.684	0.020	0.043	71.00	599
150F125-18	0.0188	33	0.095	0.324	0.031	0.572	0.052	0.742	0.029	0.034	56.73	261
150F125-27	0.0283	33	0.143	0.485	0.046	0.569	0.077	0.737	0.046	0.057	94.22	390
150F125-30	0.0312	33	0.157	0.534	0.051	0.568	0.085	0.735	0.050	0.064	105.92	429
150F125-33	0.0346	33	0.174	0.590	0.056	0.566	0.093	0.733	0.056	0.071	117.31	474
150F125-43	0.0451	33	0.225	0.764	0.071	0.563	0.119	0.728	0.071	0.091	149.70	613

1. Calculated properties are based on AISI S100-16/S2-20, North American Specification for Design of Cold-Formed Steel Structural Members.
2. Minimum base metal thickness is 95% of design thickness. Design thickness used for determination of properties.
3. Effective properties are based on Fy=33ksi. For deflection calculations, use effective Ix. Effective Ix is based on Procedure 1 of -100/ 2-20.
4. Effective properties are given as the minimum value for positive or negative bending.



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

Section	Yield Strength, 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
			087F125-18	33	Single	4' 5"	4' 0"	3' 6"	3' 10"	3' 6"	3' 1"
		Multiple	5' 6"	5' 0"	4' 4"	4' 9"	4' 4"	3' 10"	3' 8"	3' 4"	2' 10"
087F125-27	33	Single	5' 3"	4' 9"	4' 2"	4' 7"	4' 2"	3' 8"	3' 6"	3' 3"	2' 10"
		Multiple	6' 6"	5' 11"	5' 2"	5' 8"	5' 2"	4' 6"	4' 4"	4' 0"	3' 6"
087F125-30	33	Single	5' 5"	4' 11"	4' 3"	4' 9"	4' 3"	3' 9"	3' 8"	3' 4"	2' 11"
		Multiple	6' 8"	6' 1"	5' 3"	5' 10"	5' 3"	4' 7"	4' 6"	4' 1"	3' 7"
087F125-33	33	Single	5' 7"	5' 1"	4' 5"	4' 10"	4' 5"	3' 10"	3' 9"	3' 5"	3' 0"
		Multiple	6' 11"	6' 3"	5' 6"	6' 0"	5' 6"	4' 9"	4' 8"	4' 3"	3' 8"
087F125-43	33	Single	6' 0"	5' 6"	4' 9"	5' 3"	4' 9"	4' 2"	4' 1"	3' 8"	3' 3"
		Multiple	7' 5"	6' 9"	5' 11"	6' 6"	5' 11"	5' 2"	5' 0"	4' 7"	4' 0"
150F125-18	33	Single	6' 10"	6' 2"	5' 5"	5' 11"	5' 5"	4' 9"	4' 7"	4' 2"	3' 8"
		Multiple	8' 5"	7' 8"	6' 8"	7' 4"	6' 8"	5' 10"	5' 8"	4' 9"	3' 8"
150F125-27	33	Single	7' 11"	7' 3"	6' 4"	6' 11"	6' 4"	5' 6"	5' 4"	4' 11"	4' 3"
		Multiple	9' 10"	8' 11"	7' 10"	8' 7"	7' 10"	6' 10"	6' 8"	6' 0"	5' 3"
150F125-30	33	Single	8' 2"	7' 5"	6' 6"	7' 2"	6' 6"	5' 8"	5' 6"	5' 0"	4' 5"
		Multiple	10' 1"	9' 2"	8' 0"	8' 10"	8' 0"	7' 0"	6' 10"	6' 3"	5' 5"
150F125-33	33	Single	8' 6"	7' 8"	6' 9"	7' 5"	6' 9"	5' 10"	5' 9"	5' 2"	4' 6"
		Multiple	10' 6"	9' 6"	8' 4"	9' 2"	8' 4"	7' 3"	7' 1"	6' 5"	5' 7"
150F125-43	33	Single	9' 2"	8' 4"	7' 4"	8' 0"	7' 4"	6' 4"	6' 2"	5' 8"	4' 11"
		Multiple	11' 4"	10' 4"	9' 0"	9' 11"	9' 0"	7' 11"	7' 8"	7' 0"	6' 1"

1. Allowable ceiling spans are based on effective properties.
2. Multiple span indicates two or more equal spans with channel continuous over center support.
3. Bearing length = 0.75-inches.

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

Section	Yield Strength, 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
			087F125-18	33	Single Multiple	5' 1" 6' 3"	4' 7" 5' 8"	4' 0" 5' 0"	4' 5" 5' 6"	4' 0" 5' 0"	3' 6" 4' 3"
087F125-27	33	Single Multiple	6' 0" 7' 5"	5' 5" 6' 9"	4' 9" 5' 11"	5' 3" 6' 6"	4' 9" 5' 11"	4' 2" 5' 2"	4' 1" 5' 0"	3' 8" 4' 7"	3' 3" 3' 9"
087F125-30	33	Single Multiple	6' 2" 7' 8"	5' 7" 6' 11"	4' 11" 6' 1"	5' 5" 6' 8"	4' 11" 6' 1"	4' 3" 5' 3"	4' 2" 5' 2"	3' 9" 4' 8"	3' 4" 4' 0"
087F125-33	33	Single Multiple	6' 5" 7' 11"	5' 10" 7' 2"	5' 1" 6' 3"	5' 7" 6' 11"	5' 1" 6' 3"	4' 5" 5' 6"	4' 4" 5' 4"	3' 11" 4' 10"	3' 5" 4' 2"
087F125-43	33	Single Multiple	6' 11" 8' 6"	6' 3" 7' 9"	5' 6" 6' 9"	6' 0" 7' 5"	5' 6" 6' 9"	4' 9" 5' 11"	4' 8" 5' 9"	4' 3" 5' 11"	3' 8" 4' 7"
150F125-18	33	Single Multiple	7' 10" 9' 8"	7' 1" 8' 9"	6' 2" 7' 6"	6' 10" 8' 5"	6' 2" 7' 6"	5' 5" 6' 2"	5' 3" 5' 10"	4' 9" 4' 9"	4' 2" 3' 8"
150F125-27	33	Single Multiple	9' 1" 11' 3"	8' 3" 10' 3"	7' 3" 8' 11"	7' 11" 9' 10"	7' 3" 8' 11"	6' 4" 7' 10"	6' 2" 7' 7"	5' 7" 6' 7"	4' 11" 5' 5"
150F125-30	33	Single Multiple	9' 5" 11' 7"	8' 6" 10' 6"	7' 5" 9' 2"	8' 2" 10' 1"	7' 5" 9' 2"	6' 6" 8' 0"	6' 4" 7' 10"	5' 9" 7' 0"	5' 0" 5' 9"
150F125-33	33	Single Multiple	9' 8" 12' 0"	8' 10" 10' 11"	7' 8" 9' 6"	8' 6" 10' 6"	7' 8" 9' 6"	6' 9" 8' 4"	6' 7" 8' 1"	5' 11" 7' 4"	5' 2" 6' 0"
150F125-43	33	Single Multiple	10' 6" 13' 0"	9' 7" 11' 10"	8' 4" 10' 4"	9' 2" 11' 4"	8' 4" 10' 4"	7' 4" 9' 0"	7' 1" 8' 9"	6' 5" 8' 0"	5' 8" 6' 9"

## (Hat) Furring (F) Channel Allowable Ceiling Spans L/120

Section	Yield Strength, 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
			087F125-18	33	Single Multiple	6' 5" 7' 4"	5' 10" 6' 4"	5' 1" 5' 1"	5' 7" 5' 11"	5' 1" 5' 2"	4' 5" 4' 2"
087F125-27	33	Single Multiple	7' 7" 9' 4"	6' 10" 8' 3"	6' 0" 6' 8"	6' 7" 7' 9"	6' 0" 6' 9"	5' 3" 5' 5"	5' 1" 5' 3"	4' 8" 4' 7"	4' 1" 3' 8"
087F125-30	33	Single Multiple	7' 9" 9' 7"	7' 1" 8' 9"	6' 2" 7' 1"	6' 10" 8' 3"	6' 2" 7' 2"	5' 5" 5' 9"	5' 3" 5' 7"	4' 9" 4' 10"	4' 2" 3' 11"
087F125-33	33	Single Multiple	8' 0" 9' 11"	7' 4" 9' 0"	6' 5" 7' 5"	7' 0" 8' 8"	6' 5" 7' 6"	5' 7" 6' 1"	5' 5" 5' 11"	4' 11" 5' 1"	4' 4" 4' 1"
087F125-43	33	Single Multiple	8' 8" 10' 9"	7' 11" 9' 9"	6' 11" 8' 5"	7' 7" 9' 5"	6' 11" 8' 5"	6' 0" 6' 10"	5' 10" 6' 7"	5' 4" 5' 9"	4' 8" 4' 8"
150F125-18	33	Single Multiple	9' 10" 10' 8"	8' 11" 9' 3"	7' 10" 7' 6"	8' 7" 8' 8"	7' 10" 7' 6"	6' 10" 6' 1"	6' 8" 5' 10"	6' 0" 4' 5"	5' 3" 2' 11"
150F125-27	33	Single Multiple	11' 6" 13' 9"	10' 5" 11' 11"	9' 1" 9' 8"	10' 0" 11' 2"	9' 1" 9' 8"	7' 11" 7' 11"	7' 9" 7' 7"	7' 0" 6' 7"	6' 2" 5' 4"
150F125-30	33	Single Multiple	11' 10" 14' 7"	10' 9" 12' 7"	9' 5" 10' 3"	10' 4" 11' 11"	9' 5" 10' 3"	8' 2" 8' 4"	8' 0" 8' 1"	7' 3" 7' 0"	6' 4" 5' 8"
150F125-33	33	Single Multiple	12' 3" 15' 1"	11' 1" 13' 3"	9' 8" 10' 9"	10' 8" 12' 6"	9' 8" 10' 10"	8' 6" 8' 10"	8' 3" 8' 6"	7' 6" 7' 4"	6' 7" 6' 0"
150F125-43	33	Single Multiple	13' 3" 16' 5"	12' 1" 14' 11"	10' 6" 12' 2"	11' 7" 14' 2"	10' 6" 12' 3"	9' 2" 9' 11"	8' 11" 9' 7"	8' 2" 8' 4"	7' 1" 6' 9"

1. Single spans taken as the minimum span based on moment, shear, web crippling or deflection.
2. Multiple span indicates two or more equal, continuous spans with span length measured support to support.
3. Multiple spans taken as 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-inch bearing at end and interior supports.

## Screw Table Notes

1. Allowable screw connection capacities are based on Section J4 of the AISI S100-16/S2-20.
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. Screw shear and tension capacities were developed using published screw manufacturer data and evaluation reports available at the time of publications.
4. A nominal shear stress of 42.85ksi and a nominal tension stress of 40.84ksi was used for calculations based on screw manufacturer data.
5. Screw capacities are based on Allowable Strength Design (ASD) and include a safety factor of 3.0.
6. When multiple fasteners are used, screws are assumed to have a center-to-center spacing of at least 3 times the nominal diameter (d).
7. Screws are assumed to have a center-of-screw to edge-of-steel dimension of at least 1.5 times the nominal diameter (d) of the screw.
8. 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 (using head diameter).
9. Note that for all tension values calculated in screw table, pullover values have been reduced by 50% assuming eccentrically loaded connections that produce a non-uniform pullover force of the fastener.
10. Screw capacities are governed by a conservative estimate of screw capacity, not by sheet steel failure.
11. For higher screw capacities, especially for screw strength, use specific screws from specific manufacturer. See manufacturer's data for specific allowable values and installation instructions.

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

Thickness (Mils)	Yield Strength, Fy (ksi)	Tensile Strength, Fu (ksi)	# 6 Screw		# 8 Screw		# 10 Screw		# 12 Screw		1/4" Screw	
			(0.138" Dia, 1/4" Head)		(0.164" Dia, 5/16" Head)		(0.190" Dia, 3/8" Head)		(0.216" Dia, 3/8" Head)		(0.250" Dia, 1/2" Head)	
			Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	Tension
18	33	33	44	24	48	29	52	33	55	38	60	44
27	33	33	82	37	89	43	96	50	102	57	110	66
30	33	33	95	40	103	48	111	55	118	63	127	73
33	33	45	151	61	164	72	177	84	188	95	203	110
43	33	45	214	79	244	94	263	109	280	124	302	144
54	33	45	214	100	303	118	370	137	394	156	424	180
54	50	65	214	123	303	171	406	198	525	225	613	261
68	33	45	214	123	303	149	406	173	525	196	600	227
68	50	65	214	123	303	173	406	232	525	284	704	328
97	33	45	214	123	303	173	406	232	525	280	704	324
97	50	65	214	123	303	173	406	232	525	300	704	403
118	33	45	214	123	303	173	406	232	525	300	704	396
118	50	65	214	123	303	173	406	232	525	300	704	403

## Weld Table Notes

1. Allowable weld capacities are based on Section J2.5 (for fillet welds) and J2.6 (for flare groove welds) of the AISI S100-16/S2-20
2. When connecting materials of different steel thicknesses or tensile strengths, use the lowest values.
3. Weld capacities are based on Allowable Strength Design (ASD) and include appropriate safety factors.
4. Weld capacities are based on either 3/32" or 1/8" diameter E60 or E70 Electrodes. For thinner materials, 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 weld.
6. For flare groove welds, the effective throat of weld is conservatively assumed to be less than 2t.

**Allowable Weld Capacity (Pounds) for 1-inch of Weld**

Thickness (Mils)	Design Thickness	Fy: Yield (ksi)	Fu: Tensile (ksi)	Fillet Welds		Flare Groove Welds	
				Parallel	Perpendicular	Parallel	Perpendicular
				43	0.0451	33	45
54	0.0566	33	45	822	1084	682	832
54	0.0566	50	65	1188	1566	985	1202
68	0.0713	33	45	1082	1365	859	1048
68	0.0713	50	65	1563	1972	1241	1514
97	0.1017	33	45	1618	1947	1226	1495
97	0.1017	50	65	2337	2813	1771	2159
118	0.1242	33	45	Note-1	Note-1	Note-2	Note-2
118	0.1242	50	65	Note-1	Note-1	Note-2	Note-2

Note-1: For fillet welds, AISI S100 Equation E2.5-4 must be checked for 118 mil material, or whenever the thickness of thinnest part is greater than 0.10-inch.

Note-2: For flare groove welds, AISI S100 Equation E2.6-4 must be checked for 118 mil material, or whenever the thickness of thinnest part is greater than 0.10-inch.

**BLOCKING NOTE:**  
 PLACE SOLID BLOCKING AT ENDS OF FLOOR SYSTEM, ADJACENT TO ALL OPENINGS, AND AT 10'-0" o.c. MAX.

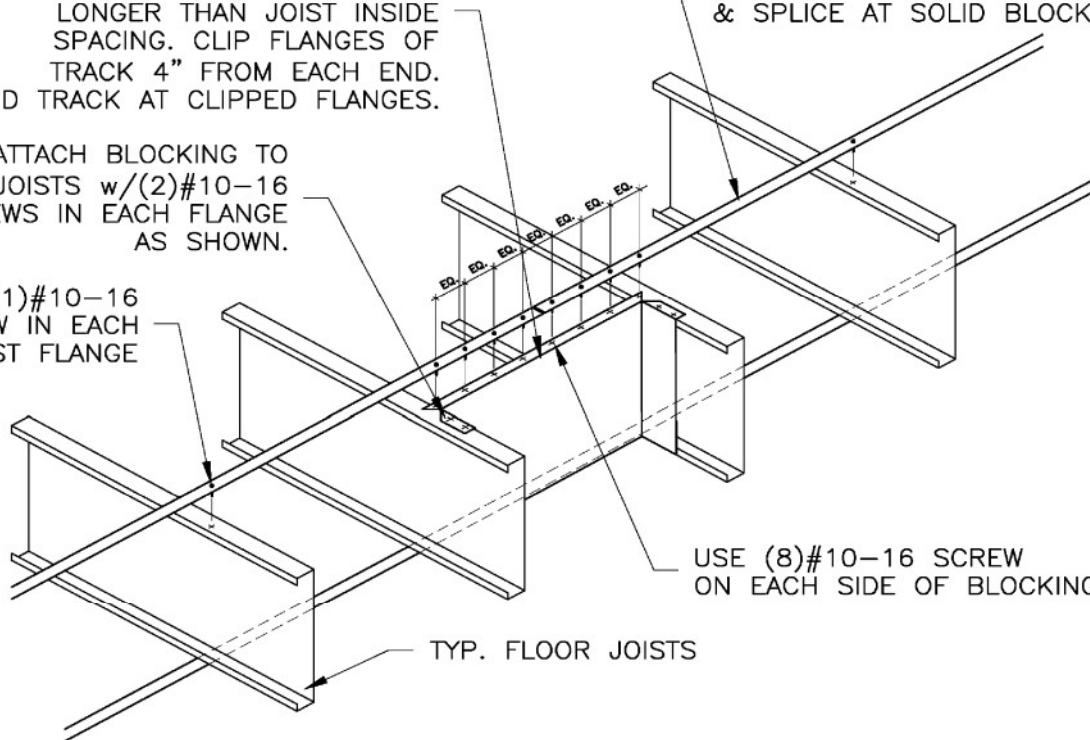
**STRAP NOTE:**  
 TOP STRAP NOT REQ'D. IF CONTINUOUSLY ATTACHED RIGID SHEATHING IS USED. TEMPORARY BRACING OF TOP FLANGE DURING CONSTRUCTION MAY BE REQ'D.

MIN. 18 GA RUNNER TRACK  
 SOLID BLOCKING @ 10'-0" o.c.  
 MAX. MAKE RUNNER TRACK 8" LONGER THAN JOIST INSIDE SPACING. CLIP FLANGES OF TRACK 4" FROM EACH END. BEND TRACK AT CLIPPED FLANGES.

1-1/2" x 20 GA. STRAPPING ON TOP & BOTTOM OF JOISTS. (STRAPPING TO START, END, & SPLICE AT SOLID BLOCKING)

ATTACH BLOCKING TO JOISTS w/(2)#10-16 SCREWS IN EACH FLANGE AS SHOWN.

(1)#10-16 SCREW IN EACH JOIST FLANGE



BRIDGING RECOMMENDATIONS	
SPANS	ROWS REQUIRED
UP TO 14'	ONE ROW @ MID-SPAN
14' TO 20'	TWO ROWS @ THIRD POINTS
20' TO 26'	THREE ROWS @ QUARTER POINTS

## JOIST BRIDGING

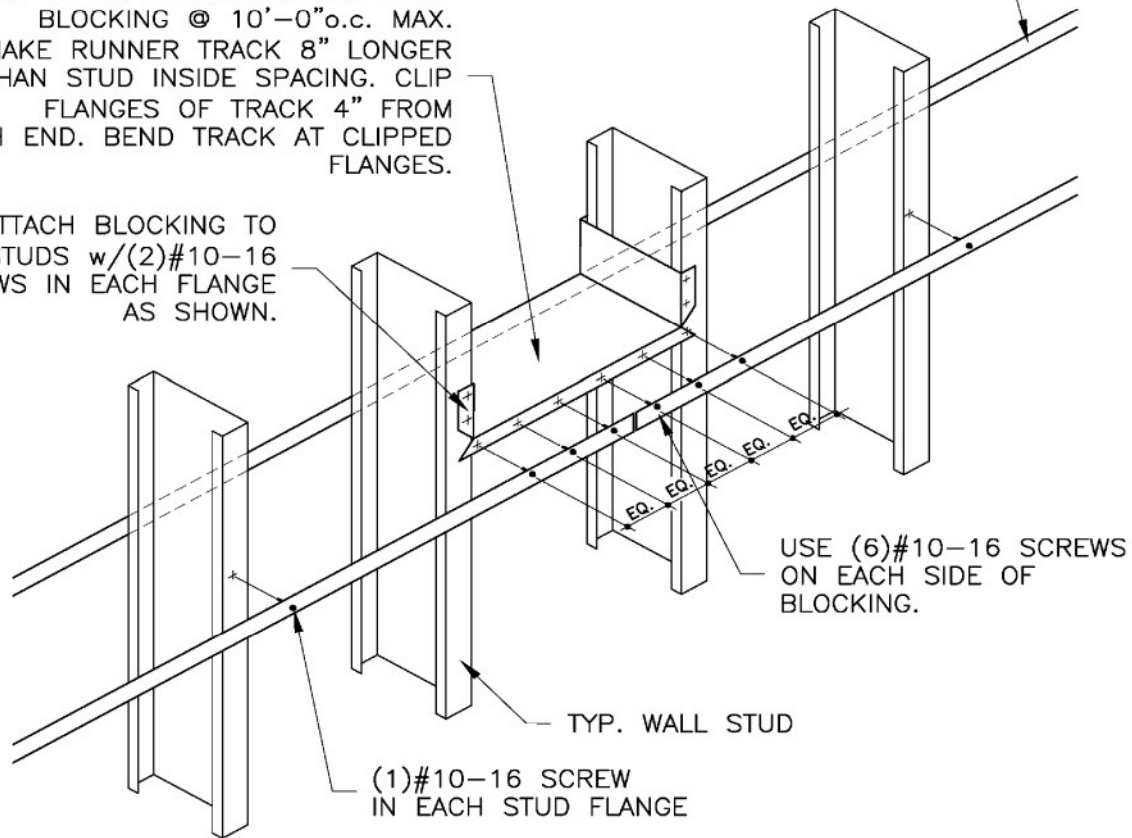
1-1/2" x 20GA. STRAP WITH RUNNER TRACK BLOCKING

**BLOCKING NOTE**  
PLACE SOLID BLOCKING AT ENDS OF WALL SYSTEM, ADJACENT TO ALL OPENINGS, AND AT 10'-0" O.C. MAX

1-1/2" x 20 GA. STRAPPING ON EACH SIDE OF WALL STUDS. (STRAPPING TO START, END, & SPLICE AT SOLID BLOCKING)

MIN. 18 GA RUNNER TRACK SOLID BLOCKING @ 10'-0" o.c. MAX. MAKE RUNNER TRACK 8" LONGER THAN STUD INSIDE SPACING. CLIP FLANGES OF TRACK 4" FROM EACH END. BEND TRACK AT CLIPPED FLANGES.

ATTACH BLOCKING TO WALL STUDS w/(2)#10-16 SCREWS IN EACH FLANGE AS SHOWN.



## STRAPPING LATERAL BRACING

1-1/2" x 20GA. STRAP WITH  
RUNNER TRACK BLOCKING



As the use of cold-formed steel has grown over the past 60 years, so has the number of resources available to engineers, architects, contractors, and suppliers. The **Resource Center** of the Steel Framing Industry Association web site ([www.CFSteel.org/resources](http://www.CFSteel.org/resources)) is intended to help the design and construction professional cut through the clutter to find needed resource and contains a number of downloadable publications and links to other technical resources.

## Technical Guide for Cold-Formed Steel Framing.

A downloadable version of this publication is available here. The current edition of the SFIA Product Technical Guide does not include tables for Ceiling Span conditions that may only be occasionally needed by the designer. These are available in a separate document which can also be downloaded in this section of the Resource Center.

## Code Compliance Research Report, CCRR-0224.

The SFIA Code Compliance Research Report (CCRR), issued by Architectural Testing Inc., provides the evidence, technical information, and professional evaluation that standard cold-formed steel framing stud and track manufactured by SFIA members comply with the 2021 International Building Code, 2021 International Residential Code, 2020 Florida Building Code including High Velocity Hurricane Zone (HVHZ), and the 2022 California Building Code.

## ICC-Evaluation Service Report, ICC-ES 4205.

Evaluation reports from ICC Evaluation Service® may be used by code officials to verify that building products manufactured by SFIA members comply with code requirements. The evaluation reports provide information about what code requirements or acceptance criteria were used to evaluate the product, how the product should be installed to meet the requirements, how to identify the product, and much more. ES Reports are divided into eleven major areas.

## Guide Specifications

### *Section 05400 - Cold-Formed Metal Framing*

For use in the preparation of a project specification section covering cold-formed steel exterior wall studs, floor joists, trusses, ceiling and roof joists, and rafters. Materials may be field installed or shop fabricated and field erected. Studs may be either axially-load bearing or non-axially load bearing.

### *Section 092216 - Nonstructural Metal Framing*

For use in the preparation of a project specification section covering metal framing systems for interior non-load bearing walls, interior ceilings and exterior soffits.

## LEED and Sustainability

*LEED®ing with Cold-Formed Steel:* Cold-formed steel products manufactured by Steel Framing Industry Association members help your project qualify for up to 7 points under LEED® v4 for BD+C

## Environmental Product Declaration (EPD) for Cold-Formed Steel Framing

EPDs are developed from a Life Cycle Assessment and can help designers earn credits under LEED v4. This EPD represents cold-formed steel (CFS) studs and track made from hot-dip galvanized steel, produced and manufactured in U.S. and Canada. The steel in the studs and track is produced at a mix of steel mill types in the U.S. and Canada, which use both the BOF (basic oxygen furnace) and EAF (electric arc furnace) route for steelmaking

## Apparent Sound Insulation in Cold-Formed Steel Buildings

This report provides the Design Professional with information that maybe needed for enhanced sound control in buildings using ASTC rather than STC.

## Typical Construction Details

They are intended to provide designers and contractors with guidance on design, detailing, and construction of buildings that utilize cold-formed steel framing members. These products should not be used in design or construction without an independent evaluation by a qualified engineer or architect to verify the suitability of a particular product for use in a specific application.

## Directory of Fire and Acoustic Rated Assemblies.

This searchable directory provides the user with the ability to search a comprehensive range of fire and sound-rated cold-formed steel floor, wall and roof assemblies as listed by the major recognized testing agencies.

## Wall System Design Center.

An online resource that provides architects, owners, developers, and contractors with needed information about integrated wall and ceiling solutions, including how to assess the performance attributes of the various system components, and to help determine how these various components can impact the overall performance of the system.

February 2023

**Question:** Can standard products manufactured by SFIA members be used in the Fire Rated assemblies published by the recognized testing agencies?

**Answer:** Except where the word “proprietary” appears in system or element descriptions, all systems contained within the major fire rated directories (published by the Gypsum Association, UL, Factory Mutual, etc.) are considered generic assemblies utilizing any product of any manufacturer provided that the products meet the appropriate standards.

The steel framing members included in the SFIA Product Technical Guide are considered “generic”, and have been reviewed for compliance with the governing standards, including AISI 2012, the International Building Code (2021), California Building Code (2022) and Florida Building Code (2020), including (HPVZ), and therefore may be used in any rated assemblies published by the GA, UL, FM, or other recognized testing agency. In addition, steel framing members produced by SFIA member companies participate in a code compliance certification program administered by an independent third-party.

SFIA generic framing members that meet the minimum requirements for web depth, thickness, and other characteristics and therefore may be used in the generic published rated assemblies.

## Underwriters Laboratories Rated Designs

The individual listings of UL rated designs identify the main elements of an assembly as numbers in a series (for U465: 1. Floor and Ceiling Runners, 2. Steel Studs, 3. Batts and Blankets, 4 Gypsum Board, 5. Joint Tape and Compound, 6. Resilient Channel, 8. Mineral and Fiber Board (optional), etc.). Unless a proprietary product is identified as being the component in the description, that element is generic and any standard product that meets this description is permitted for use in this design.

Alternative products may also be used in place of the standard or generic, and the permitted products identified in three ways, as a second level in the numerical series (i.e., 1A., 1B., 1C., etc.), with an asterisk (\*), and with the wording “as an alternate to....” or “in lieu of...”. The products that have been approved for use in lieu of the standard products are then listed in the UL Design.

Submitted by:



Patrick Ford, P.E.  
Technical Director





STEEL FRAMING INDUSTRY ASSOCIATION

## CODE COMPLIANCE CERTIFICATION PROGRAM

SFIA developed, an industry supported Code Compliance Certification Program endorsed by the Association of the Wall and Ceiling Industry. The program is accessible to all manufacturers to certify that structural and nonstructural cold-formed steel framing they produce complies with the IBC 2021 code requirements.

Structural and nonstructural cold-formed steel framing certification is administered and audited by an independent third Administrator meeting IAS AC98 requirements and demonstrating compliance with ISO/IEC Standard 17020.

The validation process includes a minimum of two unannounced manufacturing audits per year of each facility operated by a manufacturer, as well as on-going random selection and independent testing of certified structural and nonstructural cold-formed steel framing products.



Manufacturing facilities that satisfy the requirements for certification are authorized to label structural and nonstructural cold-formed steel framing members they produce as "certified code compliant." The list of manufacturing facilities with certification authorization stays current by being updated as changes occur and can be found at [http://www.archtest.com/certification/SFIA\\_SteelFraming\\_Intertek.aspx](http://www.archtest.com/certification/SFIA_SteelFraming_Intertek.aspx).



The Steel Framing Industry Association is dedicated to expanding the market for cold-formed steel in construction through programs and initiatives that Promote the use of cold formed steel framing as a sustainable and cost-effective solution, Advocate the development and acceptance of favorable code provisions, Educate members with reliable data and other critical information that is essential to effective business planning, and create a positive environment for Innovation.

The SFIA is the only organization where members come from virtually every facet of the construction industry, including steel mills, coil coaters, stud and connector manufacturers, component fabricators, engineers, researchers, suppliers/distributors, and builders and framing contractors. This uniquely broad membership enables us to identify issues and opportunities, along with programs and solutions that can be effectively implemented across the industry.

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Version 2024.1