



FLAT STEEL PRODUCTS

TECHNICAL GUIDE



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1. The values in this catalog are based on the North American Specification for the Design of Cold-Formed Steel Structural Members, ASI S100-07 as referenced by 2009 International Building Code (IC), AISI S100-07 with Supplement S2-10 as referenced by 2012 IBC and AISI S100-12 as referenced by 2015 BC. 2. Where AISI S100 is referenced, it is the North American Specification for the Design of Cold-Formed Steel Structural Members, ASI S100-07 with Supplement S2-10 and AISI S10012, as applicable with U.S. provisions. 3. The structural properties included in this catalog have been computed based on allowable strength design (AD) method. 4. Distortional buckling calculations are based on $K_0 = 0$. 5. The effective moment of inertia for deflection is calculated at a stress that results in a section modulus such that the stress times the section modulus at that stress is equal to the allowable moment. ASI S100 Procedure I for serviceability determination has been used.



SECTION PROPERTIES

Non-Structural (S) Stud Section Properties

Member	Design Thickness (in)	F _y (ksi)	Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	Gross Properties S _x			R _x (in)	I _y (in ⁴)	S _y (in ³)	Effective Properties M _{ad}		V _a (lb)	V _a _{net} (lb)	J x 1000 (in ⁴)	C _x (in ⁶)	Torsional Properties X _m		R _y (in)	β	L (in)
						R _x (in ³)	I _y (in)	I _x (in ⁴)				M _{ad}	M _{ad}					(in)	(in)			
162S125-18	0.0188	33	0.080	0.27	0.038	0.046	0.686	0.016	0.447	0.030	0.031	0.62	0.58	302	100	0.009	0.009	-1.029	0.594	1.315	0.388	29.0
162S125-27	0.0283	33	0.120	0.41	0.056	0.069	0.682	0.023	0.443	0.048	0.053	1.05	0.99	494	106	0.032	0.013	-1.018	0.587	1.303	0.390	29.1
162S125-30	0.0312	33	0.132	0.45	0.061	0.075	0.681	0.026	0.441	0.054	0.061	1.20	1.13	543	106	0.043	0.014	-1.014	0.585	1.299	0.390	29.2
162S125-33	0.0346	33	0.145	0.49	0.067	0.083	0.679	0.028	0.440	0.061	0.070	1.38	1.28	601	105	0.058	0.016	-1.010	0.583	1.294	0.391	29.3
250S125-18	0.0188	33	0.097	0.33	0.099	0.079	1.014	0.019	0.439	0.082	0.058	1.14	0.93	258	196	0.011	0.023	-0.904	0.543	1.428	0.599	29.0
250S125-27	0.0283	33	0.144	0.49	0.147	0.118	1.009	0.027	0.434	0.130	0.096	1.89	1.61	685	354	0.039	0.034	-0.893	0.537	1.416	0.602	28.9
250S125-30	0.0312	33	0.159	0.54	0.161	0.129	1.008	0.030	0.433	0.145	0.108	2.14	1.84	833	378	0.052	0.037	-0.890	0.535	1.413	0.603	28.9
350S125-18	0.0188	33	0.115	0.39	0.215	0.123	1.366	0.021	0.423	0.160	0.075	1.48	1.34	180	159	0.014	0.050	-0.798	0.495	1.638	0.763	28.8
350S125-27	0.0283	33	0.173	0.59	0.320	0.183	1.361	0.030	0.419	0.268	0.135	2.67	2.37	614	359	0.046	0.073	-0.788	0.489	1.627	0.766	28.7
350S125-30	0.0312	33	0.190	0.65	0.351	0.201	1.360	0.033	0.417	0.303	0.156	3.08	2.71	824	435	0.062	0.079	-0.784	0.488	1.624	0.767	28.6
362S125-18	0.0188	33	0.118	0.40	0.234	0.129	1.409	0.021	0.421	0.173	0.078	1.54	1.39	173	163	0.014	0.054	-0.786	0.490	1.667	0.778	28.8
362S125-27	0.0283	33	0.176	0.60	0.347	0.192	1.404	0.031	0.416	0.290	0.141	2.78	2.47	592	370	0.047	0.079	-0.776	0.484	1.657	0.781	28.6
362S125-30	0.0312	33	0.194	0.66	0.381	0.210	1.402	0.033	0.415	0.328	0.162	3.21	2.83	793	449	0.063	0.086	-0.773	0.482	1.654	0.782	28.6
400S125-18 ¹	0.0188	33	0.125	0.42	0.294	0.147	1.536	0.021	0.415	0.215	0.087	1.43	1.29	156	125	0.015	0.068	-0.755	0.475	1.761	0.816	28.7
400S125-27	0.0283	33	0.187	0.64	0.438	0.219	1.531	0.031	0.410	0.363	0.158	3.12	2.76	533	398	0.050	0.098	-0.745	0.469	1.751	0.819	28.5
400S125-30	0.0312	33	0.206	0.70	0.481	0.240	1.529	0.034	0.409	0.411	0.182	3.60	3.16	715	484	0.067	0.108	-0.742	0.467	1.748	0.820	28.5
550S125-18 ²	0.0188	33	0.153	0.52	0.630	0.229	2.029	0.023	0.390	0.449	0.130	2.14	1.77	112	89	0.018	0.141	-0.651	0.423	2.166	0.910	28.2
550S125-27	0.0283	33	0.229	0.78	0.939	0.341	2.023	0.034	0.385	0.767	0.238	4.70	3.89	382	382	0.061	0.205	-0.642	0.417	2.158	0.912	27.9
550S125-30	0.0312	33	0.252	0.86	1.032	0.375	2.022	0.037	0.384	0.870	0.275	5.44	4.49	512	512	0.082	0.224	-0.639	0.416	2.155	0.912	27.9
600S125-18 ²	0.0188	33	0.162	0.55	0.779	0.260	2.190	0.024	0.382	0.543	0.142	2.35	1.92	102	82	0.019	0.172	-0.623	0.408	2.308	0.927	28.0
600S125-27 ¹	0.0283	33	0.243	0.83	1.161	0.387	2.184	0.035	0.378	0.932	0.262	4.33	3.54	349	279	0.065	0.251	-0.614	0.403	2.300	0.929	27.7
600S125-30	0.0312	33	0.268	0.91	1.276	0.425	2.182	0.038	0.376	1.059	0.304	6.00	4.91	468	468	0.087	0.274	-0.611	0.401	2.297	0.929	27.7

1. Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.
2. 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).

SECTION PROPERTIES

(T) Track Section Properties

Member	Design Thickness (in)	Fy (ksi)	Area (in ²)	Weight (lb/ft)	Gross Properties			I _y (in ⁴)	R _y (in)	I _x (in ⁴)	Effective Properties S. M.		V _a (lb)	J x 1000 (in ⁴)	C _w (in ⁶)	Torsional Properties X _m		R _x (in)	β
					I _y (in ⁴)	S _y (in ³)	R _y (in)				(in ³)	(in-k)				(in)	(in)		
162T125-18	0.0188	33	0.078	0.26	0.042	0.048	0.733	0.013	0.411	0.030	0.025	0.42	302	0.009	0.007	-0.876	0.503	1.215	0.479
162T125-27	0.0283	33	0.117	0.40	0.063	0.072	0.735	0.020	0.410	0.051	0.044	0.87	541	0.031	0.010	-0.872	0.501	1.211	0.482
162T125-30	0.0312	33	0.129	0.44	0.070	0.079	0.735	0.022	0.409	0.058	0.051	1.00	597	0.042	0.012	-0.870	0.500	1.210	0.483
250T125-18	0.0188	33	0.094	0.32	0.104	0.079	1.052	0.015	0.400	0.078	0.044	0.73	245	0.011	0.018	-0.767	0.460	1.362	0.682
250T125-27	0.0283	33	0.141	0.48	0.157	0.119	1.053	0.022	0.398	0.129	0.079	1.56	685	0.038	0.027	-0.763	0.457	1.360	0.685
250T125-30	0.0312	33	0.156	0.53	0.173	0.131	1.053	0.025	0.397	0.146	0.090	1.77	833	0.051	0.030	-0.762	0.456	1.359	0.686
250T150-27	0.0283	33	0.156	0.53	0.181	0.137	1.078	0.037	0.486	0.139	0.082	1.61	685	0.042	0.044	-0.976	0.575	1.534	0.595
250T150-30	0.0312	33	0.172	0.58	0.200	0.151	1.078	0.040	0.486	0.157	0.093	1.84	833	0.056	0.049	-0.975	0.574	1.533	0.595
350T125-18	0.0188	33	0.113	0.38	0.220	0.121	1.395	0.017	0.382	0.174	0.062	1.02	173	0.013	0.038	-0.675	0.418	1.596	0.821
350T125-27	0.0283	33	0.170	0.58	0.331	0.182	1.396	0.025	0.381	0.278	0.128	2.53	590	0.045	0.057	-0.670	0.416	1.595	0.823
350T125-30	0.0312	33	0.187	0.64	0.365	0.200	1.396	0.027	0.380	0.313	0.145	2.87	790	0.061	0.063	-0.669	0.415	1.594	0.824
350T150-27	0.0283	33	0.184	0.63	0.377	0.207	1.432	0.041	0.470	0.298	0.133	2.62	590	0.049	0.094	-0.869	0.529	1.739	0.751
350T150-30	0.0312	33	0.203	0.69	0.416	0.228	1.432	0.045	0.470	0.336	0.150	2.97	790	0.066	0.103	-0.867	0.528	1.739	0.751
362T125-18	0.0188	33	0.115	0.39	0.238	0.127	1.437	0.017	0.380	0.189	0.064	1.05	167	0.014	0.042	-0.665	0.413	1.628	0.833
362T125-27	0.0283	33	0.173	0.59	0.358	0.191	1.438	0.025	0.378	0.301	0.135	2.67	569	0.046	0.062	-0.661	0.411	1.627	0.835
362T125-30	0.0312	33	0.191	0.65	0.395	0.210	1.438	0.027	0.378	0.339	0.153	3.02	762	0.062	0.068	-0.659	0.410	1.627	0.836

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

SECTION PROPERTIES

(T) Track Section Properties

Member	Design Thickness (in)	Fy (ksi)	Area (in ²)	Weight (lb/ft)	Gross Properties			I _x (in ⁴)	R _x (in)	I _y (in ⁴)	Effective Properties		V _a (lb)	J x 1000 (in ⁴)	C _w (in ⁶)	Torsional Properties		R _y (in)	β
					I _x (in ⁴)	S _x (in ³)	R _x (in)				S _y (in ³)	M _y (in-k)				X _y (in)	m (in)		
600T125-27 ¹	0.0283	33	0.241	0.82	1.169	0.381	2.204	0.028	0.340	0.958	0.211	3.48	341	0.064	0.196	-0.519	0.339	2.290	0.949
600T125-30	0.0312	33	0.265	0.90	1.288	0.420	2.204	0.031	0.340	1.095	0.249	4.92	456	0.086	0.215	-0.518	0.338	2.290	0.949
600T150-27 ¹	0.0283	33	0.255	0.87	1.301	0.424	2.260	0.047	0.427	1.012	0.214	3.53	341	0.068	0.320	-0.686	0.441	2.400	0.918
600T150-30	0.0312	33	0.281	0.96	1.434	0.467	2.260	0.051	0.427	1.159	0.254	5.01	456	0.091	0.352	-0.685	0.440	2.400	0.918
400T125-181	0.0188	33	0.122	0.42	0.298	0.145	1.562	0.017	0.374	0.241	0.07	1.16	151	0.0144	0.052	-0.637	0.4	1.727	0.864
400T125-27	0.0283	33	0.184	0.63	0.449	0.217	1.562	0.025	0.372	0.38	0.156	3.08	515	0.0491	0.078	-0.633	0.398	1.726	0.866
400T125-30	0.0312	33	0.203	0.69	0.495	0.239	1.563	0.028	0.371	0.427	0.177	3.49	689	0.0658	0.085	-0.632	0.397	1.726	0.866
400T150-27	0.0283	33	0.198	0.67	0.509	0.246	1.602	0.042	0.461	0.409	0.154	3.05	515	0.0529	0.127	-0.824	0.509	1.86	0.804
400T150-30	0.0312	33	0.218	0.74	0.561	0.271	1.603	0.046	0.461	0.458	0.183	3.61	689	0.0708	0.14	-0.823	0.508	1.86	0.804
550T125-27	0.0283	33	0.226	0.77	0.948	0.336	2.046	0.027	0.348	0.786	0.192	3.79	372	0.0604	0.16	-0.543	0.352	2.146	0.936
550T125-30	0.0312	33	0.25	0.85	1.045	0.371	2.047	0.03	0.347	0.897	0.227	4.48	499	0.081	0.176	-0.542	0.351	2.145	0.936

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

LIMITING WALL HEIGHTS - COMPOSITE

Interior Nonstructural Composite

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

INTERIOR NONSTRUCTURAL COMPOSITE TABLE NOTE

- Allowable composite limiting heights are calculated using ICC-ES AC86-2012.
- Minimum safety factor for strength = 1.508 for 5 to 10 ps, and 2.327 for 15 psf.
- The gypsum board must be applied vertically 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. Gypsum board (one or two layers) must be attached to each top and bottom track flange using minimum No. 6 drywall screws at a maximum 16 in. on-center.
- No fasteners are required for attaching the stud to the track, except as required by ASTM C754, subsection 5.3.2.1.
- Stud end bearing must be a minimum of 1 inch.
- Minimum material yield strength equals 33 ksi.
- 'f' adjacent to the height value indicates that flexural stress controls the allowable wall height.

LIMITING WALL HEIGHTS - COMPOSITE

Interior Nonstructural Composite

Stud Member	Spacing (in, o.c.)	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
400S125-18	12	33	19'-3" f	17'-6"	15'-4"	15'-9" f	15'-4"	13'-4"	13'-8" f	13'-8" f	12'-2"	8'-11" f	8'-11" f	8'-11" f
	16		16'-8" f	15'-11"	13'-11"	13'-8" f	13'-8" f	12'-2"	11'-10" f	11'-10" f	11'-0"	7'-9" f	7'-9" f	7'-9" f
	24		13'-8" f	13'-8" f	12'-2"	11'-2" f	11'-2" f	10'-7"	9'-8" f	9'-8" f	9'-7"	---	---	---
400S125-27	12	33	24'-6"	19'-5"	17'-0"	21'-5"	17'-0"	14'-10"	18'-8" f	15'-5"	13'-6"	12'-3" f	12'-3" f	11'-8"
	16		22'-3"	17'-8"	15'-5"	18'-8" f	15'-5"	13'-6"	16'-2" f	14'-0"	12'-2"	10'-8" f	10'-8" f	10'-6"
	24		18'-8" f	15'-5"	13'-6"	15'-3" f	13'-6"	11'-8"	13'-3" f	12'-2"	10'-6"	---	---	---
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	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"	15'-5"	16'-5" f	16'-0"	---	---	---	---
550S125-30	12	33	30'-5"	24'-10"	22'-0"	27'-0"	22'-0"	19'-5"	24'-10" f	20'-2"	17'-10"	16'-4" f	16'-4" f	15'-7" f
	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"	17'-5"	16'-4" f	16'-4" f	15'-10"	---	---	---
	16		20'-1" f	20'-1" f	18'-1"	16'-4" f	16'-4"	15'-10"	14'-2" f	14'-2" f	14'-2"	---	---	---
	24		16'-4" f	16'-4" f	15'-10"	13'-4" f	13'-4"	13'-4" f	---	---	---	---	---	---
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" f	---	---	---	---
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'-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"	---	---	---	---

See Interior Nonstructural Composite Table Notes*

LIMITING WALL HEIGHTS - NON-COMPOSITE

Interior Nonstructural 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	8'-4"	7'-8"	6'-8"	6'-10"	6'-8"	5'-10"	5'-11"	5'-11"	5'-4"
	16		7'-3"	6'-11"	6'-1"	5'-11"	5'-11"	5'-4"	5'-1"	5'-1"	4'-10"
	24		5'-11"	5'-11"	5'-4"	4'-10"	4'-10"	4'-8"	4'-2"	4'-2"	4'-2"
162S125-27	12	33	10'-11"	8'-11"	7'-10"	8'-11"	7'-10"	6'-10"	7'-9"	7'-1"	6'-3"
	16		9'-6"	8'-2"	7'-1"	7'-9"	7'-1"	6'-3"	6'-9"	6'-6"	5'-8"
	24		7'-9"	7'-1"	6'-3"	6'-4"	6'-3"	5'-5"	5'-6"	5'-6"	4'-11"
162S125-30	12	33	11'-8"	9'-3"	8'-1"	9'-7"	8'-1"	7'-1"	8'-4"	7'-4"	6'-5"
	16		10'-2"	8'-5"	7'-4"	8'-4"	7'-4"	6'-5"	7'-2"	6'-8"	5'-10"
	24		8'-4"	7'-4"	6'-5"	6'-9"	6'-5"	5'-7"	5'-10"	5'-10"	5'-1"
162S125-33	12	33	12'-0"	9'-6"	8'-4"	10'-4"	8'-4"	7'-3"	8'-11"	7'-7"	6'-7"
	16		10'-11"	8'-8"	7'-7"	8'-11"	7'-7"	6'-7"	7'-9"	6'-11"	6'-0"
	24		8'-11"	7'-7"	6'-7"	7'-4"	6'-7"	5'-9"	6'-4"	6'-0"	5'-3"
250S125-18	12	33	11'-1"	10'-7"	9'-3"	9'-1"	9'-1"	8'-1"	7'-10"	7'-10"	7'-4"
	16		9'-7"	9'-7"	8'-5"	7'-10"	7'-10"	7'-4"	6'-10"	6'-10"	6'-8"
	24		7'-10"	7'-10"	7'-4"	6'-5"	6'-5"	6'-5"	5'-7"	5'-7"	5'-7"
250S125-27	12	33	14'-7"	12'-5"	10'-10"	11'-10"	10'-10"	9'-5"	10'-3"	9'-10"	8'-7"
	16		12'-7"	11'-3"	9'-10"	10'-3"	9'-10"	8'-7"	8'-11"	8'-11"	7'-10"
	24		10'-3"	9'-10"	8'-7"	8'-5"	8'-5"	7'-6"	7'-3"	7'-3"	6'-10"
250S125-30	12	33	15'-6"	12'-9"	11'-2"	12'-8"	11'-2"	9'-9"	11'-0"	10'-2"	8'-10"
	16		13'-5"	11'-7"	10'-2"	11'-0"	10'-2"	8'-10"	9'-6"	9'-2"	8'-1"
	24		11'-0"	10'-2"	8'-10"	9'-0"	8'-10"	7'-9"	7'-9"	7'-9"	7'-0"
250S125-33	12	33	16'-8"	13'-2"	11'-6"	13'-7"	11'-6"	10'-1"	11'-9"	10'-6"	9'-2"
	16		14'-5"	12'-0"	10'-6"	11'-9"	10'-6"	9'-2"	10'-2"	9'-6"	8'-4"
	24		11'-9"	10'-6"	9'-2"	9'-7"	9'-2"	8'-0"	8'-4"	8'-4"	7'-3"
250S125-43	12	33	18'-1"	14'-4"	12'-7"	15'-10"	12'-7"	10'-11"	13'-8"	11'-5"	9'-11"
	16		16'-5"	13'-1"	11'-5"	13'-8"	11'-5"	9'-11"	11'-10"	10'-4"	9'-1"
	24		13'-8"	11'-5"	9'-11"	11'-2"	9'-11"	8'-8"	9'-8"	9'-1"	7'-11"
250S125-54	12	33	19'-4"	15'-5"	13'-5"	16'-11"	13'-5"	11'-9"	15'-4"	12'-2"	10'-8"
	16		17'-7"	14'-0"	12'-2"	15'-4"	12'-2"	10'-8"	13'-3"	11'-1"	9'-8"
	24		15'-4"	12'-2"	10'-8"	12'-6"	10'-8"	9'-4"	10'-10"	9'-8"	8'-6"
350S125-18	12	33	12'-11"	12'-11"	12'-1"	10'-7"	10'-7"	10'-7"	9'-2"	9'-2"	9'-2"
	16		11'-2"	11'-2"	11'-0"	9'-2"	9'-2"	9'-2"	7'-11"	7'-11"	7'-11"
	24		9'-2"	9'-2"	9'-2"	7'-5"	7'-5"	7'-5"	6'-6"	6'-6"	6'-6"
350S125-27	12	33	17'-4"	16'-1"	14'-0"	14'-2"	14'-0"	12'-3"	12'-3"	12'-3"	11'-1"
	16		15'-0"	14'-7"	12'-9"	12'-3"	12'-3"	11'-1"	10'-8"	10'-8"	10'-1"
	24		12'-3"	12'-3"	11'-1"	10'-0"	10'-0"	9'-9"	8'-8"	8'-8"	8'-8"
350S125-30	12	33	18'-8"	16'-7"	14'-6"	15'-3"	14'-6"	12'-8"	13'-2"	13'-2"	11'-6"
	16		16'-2"	15'-0"	13'-2"	13'-2"	13'-2"	11'-6"	11'-5"	11'-5"	10'-5"
	24		13'-2"	13'-2"	11'-6"	10'-9"	10'-9"	10'-0"	9'-4"	9'-4"	9'-1"

INTERIOR NONSTRUCTURAL 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 ASI 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. Allowable Flexural Strength is based on lateral and torsional bracing at a maximum spacing of 4 feet on center.

LIMITING WALL HEIGHTS - NON-COMPOSITE

Interior Nonstructural 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
362S125-18	12	33	13'-2"	13'-2"	12'-5"	10'-9"	10'-9"	10'-9"	9'-4"	9'-4"	9'-4"
	16		11'-5"	11'-5"	11'-4"	9'-4"	9'-4"	9'-4"	8'-1"	8'-1"	8'-1"
	24		9'-4"	9'-4"	9'-4"	7'-7"	7'-7"	7'-7"	6'-7"	6'-7"	6'-7"
362S125-27	12	33	17'-9"	16'-6"	14'-5"	14'-6"	14'-5"	12'-7"	12'-6"	12'-6"	11'-5"
	16		15'-4"	15'-0"	13'-1"	12'-6"	12'-6"	11'-5"	10'-10"	10'-10"	10'-5"
	24		12'-6"	12'-6"	11'-5"	10'-3"	10'-3"	10'-0"	8'-10"	8'-10"	8'-10"
362S125-30	12	33	19'-1"	17'-0"	14'-10"	15'-7"	14'-10"	13'-0"	13'-6"	13'-6"	11'-10"
	16		16'-6"	15'-5"	13'-6"	13'-6"	13'-6"	11'-10"	11'-8"	11'-8"	10'-9"
	24		13'-6"	13'-6"	11'-10"	11'-0"	11'-0"	10'-4"	9'-6"	9'-6"	9'-4"
400S125-18 ¹	12	33	12'-9"	12'-9"	12'-9"	10'-5"	10'-5"	10'-5"	9'-0"	9'-0"	9'-0"
	16		11'-0"	11'-0"	11'-0"	9'-0"	9'-0"	9'-0"	7'-9"	7'-9"	7'-9"
	24		9'-0"	9'-0"	9'-0"	7'-4"	7'-4"	7'-4"	6'-4"	6'-4"	6'-4"
400S125-27	12	33	18'-9"	17'-10"	15'-7"	15'-4"	15'-4"	13'-7"	13'-3"	13'-3"	12'-4"
	16		16'-3"	16'-2"	14'-2"	13'-3"	13'-3"	12'-4"	11'-6"	11'-6"	11'-3"
	24		13'-3"	13'-3"	12'-4"	10'-10"	10'-10"	10'-9"	9'-5"	9'-5"	9'-5"
400S125-30	12	33	20'-2"	18'-5"	16'-1"	16'-6"	16'-1"	14'-0"	14'-3"	14'-3"	12'-9"
	16		17'-6"	16'-8"	14'-7"	14'-3"	14'-3"	12'-9"	12'-4"	12'-4"	11'-7"
	24		14'-3"	14'-3"	12'-9"	11'-8"	11'-8"	11'-2"	10'-1"	10'-1"	10'-1"
550S125-18 ²	12	33	15'-4"	15'-4"	15'-4"	12'-7"	12'-7"	12'-7"	10'-10"	10'-10"	10'-10"
	16		13'-4"	13'-4"	13'-4"	10'-10"	10'-10"	10'-10"	9'-5"	9'-5"	9'-5"
	24		10'-10"	10'-10"	10'-10"	8'-10"	8'-10"	8'-10"	7'-8"	7'-8"	7'-8"
550S125-27	12	33	22'-9"	22'-9"	19'-11"	18'-7"	18'-7"	17'-5"	16'-1"	16'-1"	15'-9"
	16		19'-9"	19'-9"	18'-1"	16'-1"	16'-1"	15'-9"	13'-11"	13'-11"	13'-11"
	24		16'-1"	16'-1"	15'-9"	13'-2"	13'-2"	13'-2"	11'-5"	11'-5"	11'-5"
550S125-30	12	33	24'-6"	23'-7"	20'-7"	20'-0"	20'-0"	18'-0"	17'-4"	17'-4"	16'-4"
	16		21'-2"	21'-2"	18'-9"	17'-4"	17'-4"	16'-4"	15'-0"	15'-0"	14'-10"
	24		17'-4"	17'-4"	16'-4"	14'-2"	14'-2"	14'-2"	12'-3"	12'-3"	12'-3"
550S125-33	12	33	26'-5"	24'-5"	21'-4"	21'-7"	21'-4"	18'-8"	18'-8"	18'-8"	16'-11"
	16		22'-10"	22'-3"	19'-5"	18'-8"	18'-8"	16'-11"	16'-2"	16'-2"	15'-5"
	24		18'-8"	18'-8"	16'-11"	15'-3"	15'-3"	14'-10"	13'-2"	13'-2"	13'-2"
550S125-30	12	33	24'-6"	23'-7"	20'-7"	20'-0"	20'-0"	18'-0"	17'-4"	17'-4"	16'-4"
	16		21'-2"	21'-2"	18'-9"	17'-4"	17'-4"	16'-4"	15'-0"	15'-0"	14'-10"
	24		17'-4"	17'-4"	16'-4"	14'-2"	14'-2"	14'-2"	12'-3"	12'-3"	12'-3"
550S125-43	12	33	32'-1"	26'-9"	23'-4"	26'-2"	23'-4"	20'-5"	22'-8"	21'-3"	18'-7"
	16		27'-9"	24'-4"	21'-3"	22'-8"	21'-3"	18'-7"	19'-8"	19'-3"	16'-10"
	24		22'-8"	21'-3"	18'-7"	18'-6"	18'-6"	16'-2"	16'-0"	16'-0"	14'-9"

See Interior Nonstructural Non-Composite Table Notes*

LIMITING WALL HEIGHTS - NON-COMPOSITE

Interior Nonstructural 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
600S125-18 ²	12	33	16'-0"	16'-0"	16'-0"	13'-1"	13'-1"	13'-1"	11'-4"	11'-4"	11'-4"
	16		13'-10"	13'-10"	13'-10"	11'-4"	11'-4"	11'-4"	9'-10"	9'-10"	9'-10"
	24		11'-4"	11'-4"	11'-4"	9'-3"	9'-3"	9'-3"	8'-0"	8'-0"	8'-0"
600S125-27 ¹	12	33	21'-9"	21'-9"	21'-3"	17'-9"	17'-9"	17'-9"	15'-4"	15'-4"	15'-4"
	16		18'-10"	18'-10"	18'-10"	15'-4"	15'-4"	15'-4"	13'-4"	13'-4"	13'-4"
	24		15'-4"	15'-4"	15'-4"	12'-7"	12'-7"	12'-7"	10'-10"	10'-10"	10'-10"
600S125-30	12	33	25'-7"	25'-3"	22'-0"	20'-11"	20'-11"	19'-3"	18'-1"	18'-1"	17'-6"
	16		22'-2"	22'-2"	20'-0"	18'-1"	18'-1"	17'-6"	15'-8"	15'-8"	15'-8"
	24		18'-1"	18'-1"	17'-6"	14'-9"	14'-9"	14'-9"	12'-9"	12'-9"	12'-9"

See Interior Nonstructural Non-Composite Table Notes*

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