

TECHNICAL DATA SHEET - INTERACTIVE PDF

Design data, metal framing channel system

Applications for use as beam or column supports

Superstrut®



Design data to help with beam or column support type applications, including channel accessories.

3-Part Specification: 26 05 29.12
[Tools & Calculators](#)

Beam loads:

Table 3A,B (single channel) and Table 4A,B (double channel) in this document contain simple beam, uniformly-distributed loads calculated at 25,000 psi fiber stress. Beam loads are based on channel being loaded across the x-x axis. Loads are also listed at reduced deflections for long spans.

- Yield strength factor of safety = 1.67

Maximum loads @ 25,000 psi stress:

Maximum allowable deflections and maximum uniform loads for all spans @ 25,000 psi fiber stress.

Reduced load for all 1/180 span deflection:

For modified deflections on the longer spans, reduced loads are listed which will produce a deflection equal to 1/180 of span. When maximum loads do not induce deflections exceeding 1/180 x the span length, reduced loads are not required.

Reduced load for 1/360 span deflection:

For modified deflections on the longer spans, reduced loads are listed which will produce a deflection equal to 1/360 of span. When maximum loads do not induce deflections exceeding 1/360 x the span length, reduced loads are not required.

Concentrated loads:

To obtain values for concentrated loads from Table 3B and Table 4B, multiply uniform load by .5 and deflection by .80

Slotted, punched or K.O. channel:

Reduced load rating 5%

Load span deep beams:

Support in manner to prevent rotation at supports and tie between supports to prevent twist.

Column loads:

Allowable column loads given are for uniform axial loading with pinned ends. For eccentric loading or other end conditions, reduce allowable loads according to standard engineering practice.

Dynamic loads:

Allowable dynamic loads may be calculated by dividing the static loads shown in Table 1, by 2.08.

Table data:

- Table 1A and 1B - Properties for design
- Table 2 - Load rating for $\frac{1}{2}$ " channel nuts
- Table 3A and 3B - Load and deflection, single channel
- Table 4A and 4B - Load and deflection, double channel
- Table 5 - Safe bearing loads for $\frac{1}{2}$ " channel
- Table 6 - Design load, typical channel combinations
- Table 7 - 10 - Load and deflection formulas
- Table 11 - Single span beams, load and support
- Table 12 and 13 - Pipe spacing
- Table 14 - 17 - Dimensions and weights of piping and conduit
- Table 18 - Rack construction and loads
- Table 19 - Strut accessories

Design data, metal framing channel system:

Properties for design

Nominal thickness (inches):

12 gage	= 0.105
14 gage	= 0.075
16 gage	= 0.060

Key:

I	= Moment of inertia
S	= Section of modulus
R	= Radius of Gyration
Z	= Nominal axis
A	= Area

Table 1A - Single channel

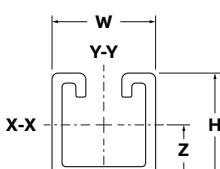
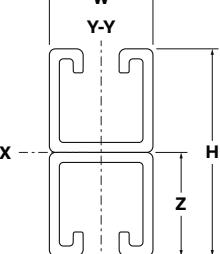
Drawing Elements of section	Part no. Channel	Dimensions						X-X axis			Nominal axis			Y-Y Axis		
		H in (mm)	W in (mm)	A in ² (cm ²)	I in ⁴ (cm ⁴)	S in ³ (cm ³)	R in (mm)	Z in (mm)	I in ⁴ (cm ⁴)	S in ³ (cm ³)	R in (mm)					
	A-1200	1.625 (41.28)	1.625 (41.28)	0.418 (2.69)	0.192 (8.0)	0.212 (3.5)	0.587 (14.9)	0.719 (18.3)	0.237 (9.9)	0.292 (4.8)	0.652 (16.6)					
	B-1200	0.813 (20.65)	1.625 (41.28)	0.381 (2.46)	0.031 (1.3)	0.063 (1.0)	0.283 (7.2)	0.331 (8.4)	0.137 (5.7)	0.168 (2.8)	0.600 (15.2)					
	C-1200	1.375 (34.93)	1.625 (41.28)	0.500 (3.23)	0.121 (5.0)	0.155 (2.5)	0.492 (12.5)	0.595 (15.1)	0.205 (8.5)	0.252 (4.1)	0.640 (16.3)					
	E-1200	2.438 (61.93)	1.625 (41.28)	0.726 (4.68)	0.529 (22.0)	0.339 (6.5)	0.853 (21.7)	1.112 (28.2)	0.335 (13.9)	0.413 (6.8)	0.679 (17.2)					
	H-1200	3.250 (82.55)	1.625 (41.28)	0.897 (5.79)	1.100 (45.8)	0.635 (10.4)	1.107 (28.1)	1.507 (38.3)	0.436 (18.1)	0.536 (8.8)	0.697 (17.7)					
	A-1400	1.625 (41.28)	1.625 (41.28)	0.401 (2.59)	0.134 (5.6)	0.146 (2.4)	0.577 (14.7)	0.707 (18.0)	0.184 (7.7)	0.226 (3.7)	0.677 (17.2)					
	B-1400	0.813 (20.65)	1.625 (41.28)	0.280 (1.81)	0.024 (1.0)	0.051 (0.8)	0.295 (7.5)	0.338 (8.6)	0.103 (4.3)	0.127 (2.1)	0.607 (15.4)					

Table 1B - Double channel

Drawing Elements of section	Part no. Channel	Dimensions						X-X axis			Nominal axis			Y-Y Axis		
		H in (mm)	W in (mm)	A in ² (cm ²)	I in ⁴ (cm ⁴)	S in ³ (cm ³)	R in (mm)	Z in (mm)	I in ⁴ (cm ⁴)	S in ³ (cm ³)	R in (mm)					
	A-1202	3.250 (82.55)	1.625 (41.28)	1.114 (7.19)	0.948 (39.5)	0.583 (9.6)	0.992 (25.2)	1.625 (41.3)	0.474 (19.7)	0.584 (9.6)	0.652 (16.6)					
	B-1202	0.813 (20.65)	1.625 (41.28)	0.381 (2.46)	0.031 (1.3)	0.063 (1.0)	0.283 (7.2)	0.331 (8.4)	0.137 (5.7)	0.168 (2.8)	0.600 (15.2)					
	C-1202	1.375 (34.93)	1.625 (41.28)	0.500 (3.23)	0.121 (5.0)	0.155 (2.5)	0.492 (12.5)	0.595 (15.1)	0.205 (8.5)	0.252 (4.1)	0.640 (16.3)					
	E-1202	2.438 (61.93)	1.625 (41.28)	0.726 (4.68)	0.529 (22.0)	0.339 (6.5)	0.853 (21.7)	1.112 (28.2)	0.335 (13.9)	0.413 (6.8)	0.679 (17.2)					
	H-1202	3.250 (82.55)	1.625 (41.28)	0.897 (5.79)	1.100 (45.8)	0.635 (10.4)	1.107 (28.1)	1.507 (38.3)	0.436 (18.1)	0.536 (8.8)	0.697 (17.7)					
	A-1402	1.625 (41.28)	1.625 (41.28)	0.401 (2.59)	0.134 (5.6)	0.146 (2.4)	0.577 (14.7)	0.707 (18.0)	0.184 (7.7)	0.226 (3.7)	0.677 (17.2)					
	B-1402	0.813 (20.65)	1.625 (41.28)	0.280 (1.81)	0.024 (1.0)	0.051 (0.8)	0.295 (7.5)	0.338 (8.6)	0.103 (4.3)	0.127 (2.1)	0.607 (15.4)					

Design data, metal framing channel system

Load rating for ½" channel nuts:

Table 2 - Load rating for ½" channel nuts, used with Superstrut® Metallic Channel

Part no. Channel	*Pull out strength		*Slip-resistance strength	
	lbs	kN	lbs	kN
A-1200	2,000	(8.84)	1,500	(6.63)
B-1200	1,400	(6.20)	1,400	(6.20)
C-1200	2,000	(8.84)	1,500	(6.63)
A-1400	1,400	(6.20)	1,000	(4.42)
B-1400	1,400	(6.20)	1,000	(4.42)

*Factor of safety of 3.

If connections will be subject to dynamic or seismic loading conditions, contact ABB technical services for design assistance. (Phone: 888-862-3289 or Email: us-ipTechSupport@abb.com)

Design data, metal framing channel system

Load and deflection, single channel:

Table 3A - Channel depth and gauge, single channel

Part no.	Channel depth		Gauge
	in	mm	
A-1200	1 ⁵ / ₈	(41.3)	12
B-1200	1 ³ / ₁₆	(20.6)	12
C-1200	1 ³ / ₈	(34.9)	12
E-1200	2 ⁷ / ₁₆	(61.9)	12
H-1200	3 ¹ / ₄	(82.6)	12
A-1400	1 ⁵ / ₈	(41.3)	14
B-1400	1 ³ / ₁₆	(20.6)	14

Table 3B - Single channel

Part no.	Maximum Uniform Load and Deflection				Uniform Load and Deflection at 1/180 Span				Uniform Load and Deflection at 1/360 Span				Column Load	
	Channel	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN	in	mm	lbs
12-in (305mm) Beam or Column span														
A-1200	3,534	(15.72)	.014	(0.35)	—	—	.067	(1.70)	—	—	.033	(0.84)	10,533	(46.85)
B-1200	1,050	(4.67)	.026	(0.66)	—	—	.067	(1.70)	—	—	.033	(0.84)	6,683	(29.73)
C-1200	2,584	(11.49)	.016	(0.41)	—	—	.067	(1.70)	—	—	.033	(0.84)	9,345	(41.57)
E-1200	6,650	(29.58)	.010	(0.25)	—	—	.067	(1.70)	—	—	.033	(0.84)	13,830	(61.52)
H-1200	10,583	(47.08)	.008	(0.20)	—	—	.067	(1.70)	—	—	.033	(0.84)	17,106	(76.09)
A-1400	2,434	(10.83)	.015	(0.38)	—	—	.067	(1.70)	—	—	.033	(0.84)	7,575	(33.70)
B-1400	850	(3.78)	.028	(0.71)	—	—	.067	(1.70)	—	—	.033	(0.84)	4,950	(22.02)
18-in (457mm) Beam or Column span														
A-1200	2,355	(10.48)	.033	(0.84)	—	—	.100	(2.54)	—	—	.050	(1.27)	10,210	(45.42)
B-1200	700	(3.11)	.059	(1.50)	—	—	.100	(2.54)	—	—	.050	(1.27)	6,058	(26.95)
C-1200	1,723	(7.66)	.038	(0.97)	—	—	.100	(2.54)	—	—	.050	(1.27)	8,970	(39.90)
E-1200	4,434	(19.72)	.023	(0.58)	—	—	.100	(2.54)	—	—	.050	(1.27)	13,482	(59.97)
H-1200	7,055	(31.38)	.016	(0.41)	—	—	.100	(2.54)	—	—	.050	(1.27)	16,693	(74.25)
A-1400	1,623	(7.22)	.031	(0.79)	—	—	.100	(2.54)	—	—	.050	(1.27)	7,334	(32.62)
B-1400	566	(2.52)	.063	(1.60)	—	—	.100	(2.54)	453	(2.02)	.050	(1.27)	4,150	(18.46)
24-in (610mm) Beam or Column span														
A-1200	1,766	(7.86)	.058	(1.47)	—	—	.133	(3.38)	—	—	.067	(1.70)	9,842	(43.78)
B-1200	525	(2.34)	.105	(2.67)	—	—	.133	(3.38)	333	(1.48)	.067	(1.70)	5,315	(23.64)
C-1200	1,291	(5.74)	.066	(1.68)	—	—	.133	(3.38)	—	—	.067	(1.70)	8,545	(38.01)
E-1200	3,325	(14.79)	.039	(0.99)	—	—	.133	(3.38)	—	—	.067	(1.70)	13,082	(58.19)
H-1200	5,291	(23.54)	.030	(0.76)	—	—	.133	(3.38)	—	—	.067	(1.70)	16,277	(72.40)
A-1400	1,216	(5.41)	.056	(1.42)	—	—	.133	(3.38)	—	—	.067	(1.70)	7,058	(31.40)
B-1400	425	(1.89)	.110	(2.79)	—	—	.133	(3.38)	258	(1.15)	.067	(1.70)	4,000	(17.79)
30-in (762mm) Beam or Column span														
A-1200	1,414	(6.29)	.089	(2.26)	—	—	.167	(4.24)	—	—	.083	(2.11)	9,419	(41.90)
B-1200	420	(1.87)	.164	(4.16)	—	—	.167	(4.24)	266	(1.18)	.083	(2.11)	4,465	(19.86)
C-1200	1,034	(4.60)	.104	(2.64)	—	—	.167	(4.24)	1,040	(4.63)	.083	(2.11)	8,060	(35.85)
E-1200	2,660	(11.83)	.063	(1.60)	—	—	.167	(4.24)	—	—	.083	(2.11)	12,640	(56.23)
H-1200	4,234	(18.83)	.046	(1.17)	—	—	.167	(4.24)	—	—	.083	(2.11)	15,698	(69.83)
A-1400	974	(4.33)	.088	(2.24)	—	—	.167	(4.24)	—	—	.083	(2.11)	6,753	(30.04)
B-1400	340	(1.52)	.172	(4.37)	—	—	.167	(4.24)	165	(0.73)	.083	(2.11)	3,420	(15.21)
36-in (914mm) Beam or Column span														
A-1200	1,178	(5.24)	.129	(3.28)	—	—	.200	(5.08)	917	(4.08)	.100	(2.54)	8,962	(39.86)
B-1200	350	(1.56)	.236	(5.99)	—	—	.200	(5.08)	148	(0.66)	.100	(2.54)	3,498	(15.56)
C-1200	861	(3.83)	.149	(3.78)	—	—	.200	(5.08)	578	(2.57)	.100	(2.54)	7,525	(33.47)
E-1200	2,216	(9.86)	.088	(2.23)	—	—	.200	(5.08)	—	—	.100	(2.54)	12,160	(54.09)
H-1200	3,528	(15.69)	.068	(1.73)	—	—	.200	(5.08)	—	—	.100	(2.54)	15,132	(67.31)
A-1400	811	(3.61)	.126	(3.20)	—	—	.200	(5.08)	640	(2.85)	.100	(2.54)	6,416	(28.54)
B-1400	284	(1.26)	.248	(6.30)	—	—	.200	(5.08)	115	(0.51)	.100	(2.54)	2,755	(12.25)

When no numbers are shown, use the maximum uniform load.



Table 3B - Single channel

Part no. Channel	Maximum Uniform Load and Deflection				Uniform Load and Deflection at 1/180 Span				Uniform Load and Deflection at 1/360 Span				Column Load	
	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN
42-in (1067mm) Beam or Column span														
A-1200	1,010	(4.49)	.175	(4.44)	—	—	.233	(5.92)	674	(3.00)	.117	(2.97)	8,466	(37.66)
B-1200	300	(1.33)	.323	(8.20)	217	(0.97)	.233	(5.92)	109	(0.48)	.117	(2.97)	2,579	(11.47)
C-1200	738	(3.28)	.203	(5.16)	—	—	.233	(5.92)	425	(1.89)	.117	(2.97)	6,945	(30.89)
E-1200	1,900	(8.45)	.120	(3.17)	—	—	.233	(5.92)	—	—	.117	(2.97)	11,698	(52.04)
H-1200	3,024	(13.45)	.091	(2.31)	—	—	.233	(5.92)	—	—	.117	(2.97)	14,514	(64.56)
A-1400	695	(3.09)	.160	(4.06)	—	—	.233	(5.94)	470	(2.09)	.117	(2.97)	6,051	(26.92)
B-1400	243	(1.08)	.336	(8.53)	168	(0.75)	.233	(5.94)	84	(0.37)	.117	(2.97)	2,060	(9.16)
48-in (1219mm) Beam or Column span														
A-1200	884	(3.93)	.228	(5.79)	—	—	.267	(6.78)	516	(2.30)	.133	(3.38)	7,943	(35.33)
B-1200	263	(1.17)	.420	(10.67)	167	(0.74)	.267	(6.78)	83	(0.37)	.133	(3.38)	1,981	(8.81)
C-1200	646	(2.87)	.265	(6.73)	—	—	.267	(6.78)	325	(1.45)	.133	(3.38)	6,325	(28.13)
E-1200	1,663	(7.40)	.156	(3.96)	—	—	.267	(6.78)	—	—	.133	(3.38)	11,092	(49.34)
H-1200	2,646	(11.77)	.120	(3.05)	—	—	.267	(6.78)	—	—	.133	(3.38)	13,850	(61.61)
A-1400	609	(2.71)	.120	(3.05)	—	—	.267	(6.78)	360	(1.60)	.133	(3.38)	5,658	(25.17)
B-1400	213	(0.95)	.440	(11.18)	129	(0.57)	.267	(6.78)	64	(0.28)	.133	(3.38)	1,580	(7.03)
54-in (1371mm) Beam or Column span														
A-1200	785	(3.49)	.289	(7.34)	—	—	.300	(7.62)	408	(1.81)	.150	(3.81)	7,369	(32.78)
B-1200	234	(1.04)	.533	(13.54)	132	(0.59)	.300	(7.62)	66	(0.29)	.150	(3.81)	1,555	(6.92)
C-1200	574	(2.55)	.335	(8.51)	—	—	.300	(7.62)	257	(1.14)	.150	(3.81)	5,650	(25.13)
E-1200	1,478	(6.57)	.198	(5.03)	—	—	.300	(7.62)	1,123	(5.00)	.150	(3.81)	10,505	(46.73)
H-1200	2,351	(10.46)	.151	(3.84)	—	—	.300	(7.62)	—	—	.150	(3.81)	13,150	(58.49)
A-1400	541	(2.41)	.286	(7.26)	—	—	.300	(7.62)	284	(1.26)	.150	(3.81)	5,241	(23.31)
B-1400	189	(0.84)	.556	(14.12)	102	(0.45)	.300	(7.62)	51	(0.23)	.150	(3.81)	1,250	(5.56)
60-in (1524mm) Beam or Column span														
A-1200	706	(3.14)	.358	(9.09)	—	—	.333	(8.46)	330	(1.47)	.167	(4.24)	6,762	(30.08)
B-1200	210	(0.93)	.658	(16.71)	107	(0.48)	.333	(8.46)	53	(0.24)	.167	(4.24)	—	—
C-1200	516	(2.30)	.414	(10.52)	—	—	.333	(8.46)	208	(0.93)	.167	(4.24)	4,920	(21.89)
E-1200	1,330	(5.92)	.244	(6.20)	—	—	.333	(8.46)	909	(4.04)	.167	(4.24)	9,874	(43.92)
H-1200	2,116	(9.41)	.186	(4.72)	—	—	.333	(8.46)	—	—	.167	(4.24)	12,406	(55.18)
A-1400	486	(2.16)	.353	(8.97)	—	—	.333	(8.46)	231	(1.03)	.167	(4.24)	4,792	(21.32)
B-1400	170	(0.76)	.687	(17.45)	82	(0.36)	.333	(8.46)	41	(0.18)	.167	(4.24)	—	—
66-in (1676mm) Beam or Column span														
A-1200	643	(2.86)	.423	(10.74)	—	—	.367	(9.32)	273	(1.21)	.183	(4.65)	6,127	(27.25)
B-1200	191	(0.85)	.795	(20.19)	88	(0.39)	.367	(9.32)	44	(0.20)	.183	(4.65)	—	—
C-1200	470	(2.09)	.501	(12.73)	344	(1.53)	.367	(9.32)	172	(0.77)	.183	(4.65)	3,485	(15.50)
E-1200	1,210	(5.38)	.295	(7.49)	—	—	.367	(9.32)	753	(3.35)	.183	(4.65)	8,509	(37.85)
H-1200	1,924	(8.56)	.226	(5.74)	—	—	.367	(9.32)	—	—	.183	(4.65)	10,782	(47.96)
A-1400	443	(1.97)	.426	(10.82)	—	—	.367	(9.32)	190	(0.85)	.183	(4.65)	3,809	(16.94)
B-1400	155	(0.69)	.831	(21.11)	68	(0.30)	.367	(9.32)	35	(0.16)	.183	(4.65)	—	—
72-in (1829mm) Beam or Column span														
A-1200	589	(2.62)	.514	(13.06)	459	(2.04)	.400	(10.16)	299	(1.33)	.200	(5.08)	5,436	(24.18)
B-1200	175	(0.78)	.946	(24.03)	74	(0.33)	.400	(10.16)	37	(0.16)	.200	(5.08)	—	—
C-1200	430	(1.91)	.595	(15.11)	289	(1.29)	.400	(10.16)	144	(0.64)	.200	(5.08)	3,485	(15.50)
E-1200	1,108	(4.93)	.351	(8.92)	—	—	.400	(10.16)	632	(2.81)	.200	(5.08)	8,509	(37.85)
H-1200	1,839	(8.18)	.269	(6.83)	—	—	.400	(10.16)	1,313	(5.84)	.200	(5.08)	10,782	(47.96)
A-1400	405	(1.80)	.506	(12.85)	320	(1.42)	.400	(10.16)	160	(0.71)	.200	(5.08)	3,809	(16.94)
B-1400	141	(0.63)	.989	(25.12)	57	(0.25)	.400	(10.16)	29	(0.13)	.200	(5.08)	—	—

When no numbers are shown, use the maximum uniform load.



Table 3B - Single channel

Part no. Channel	Maximum Uniform Load and Deflection				Uniform Load and Deflection at 1/180 Span				Uniform Load and Deflection at 1/360 Span				Column Load	
	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN
84-in (2134mm) Beam or Column span														
A-1200	505	(2.25)	.700	(17.78)	337	(1.50)	.467	(11.86)	168	(0.75)	.233	(5.92)	4,061	(18.06)
B-1200	—	—	—	—	54	(0.24)	.467	(11.86)	27	(0.12)	.233	(5.92)	—	—
C-1200	369	(1.64)	.811	(20.60)	212	(0.94)	.467	(11.86)	106	(0.47)	.233	(5.92)	2,565	(11.41)
E-1200	950	(4.23)	.479	(12.17)	—	—	.467	(11.86)	464	(2.06)	.233	(5.92)	6,991	(31.10)
H-1200	1,513	(6.73)	.366	(9.30)	—	—	.467	(11.86)	965	(4.29)	.233	(5.92)	8,988	(39.98)
A-1400	348	(1.55)	.691	(17.55)	235	(1.05)	.467	(11.86)	118	(0.52)	.233	(5.94)	2,827	(12.58)
B-1400	—	—	—	—	42	(0.19)	.467	(11.86)	21	(0.09)	.233	(5.94)	—	—
96-in (2438mm) Beam or Column span														
A-1200	441	(1.96)	.914	(23.22)	258	(1.15)	.533	(13.54)	129	(0.57)	.267	(6.78)	3,108	(13.83)
B-1200	—	—	—	—	42	(0.19)	.533	(13.54)	21	(0.09)	.267	(6.78)	—	—
C-1200	323	(1.44)	1.059	(26.90)	163	(0.73)	.533	(13.54)	81	(0.36)	.267	(6.78)	1,960	(8.72)
E-1200	831	(3.70)	.730	(18.54)	—	—	.533	(13.54)	355	(1.58)	.267	(6.78)	5,423	(24.12)
H-1200	1,323	(5.88)	.478	(12.14)	—	—	.533	(13.54)	739	(3.29)	.267	(6.78)	7,059	(31.40)
A-1400	304	(1.35)	.903	(22.94)	180	(0.80)	.533	(13.54)	90	(0.40)	.267	(6.78)	2,615	(11.63)
B-1400	—	—	—	—	32	(0.14)	.533	(13.54)	16	(0.07)	.267	(6.78)	—	—
108-in (2743mm) Beam or Column span														
A-1200	393	(1.75)	1.156	(29.36)	204	(0.91)	.600	(15.24)	102	(0.45)	.300	(7.62)	2,456	(10.92)
B-1200	—	—	—	—	33	(0.15)	.600	(15.24)	16	(0.07)	.300	(7.62)	—	—
C-1200	288	(1.28)	1.350	(34.29)	128	(0.57)	.600	(15.24)	64	(0.28)	.300	(7.62)	—	—
E-1200	739	(3.29)	.790	(20.07)	561	(2.50)	.600	(15.24)	281	(1.25)	.300	(7.62)	4,291	(19.09)
H-1200	1,176	(5.23)	.605	(15.37)	—	—	.600	(15.24)	584	(2.60)	.300	(7.62)	5,579	(24.82)
A-1400	270	(1.20)	1.141	(28.98)	142	(0.63)	.600	(15.24)	71	(0.32)	.300	(7.62)	1,708	(7.60)
B-1400	—	—	—	—	25	(0.11)	.600	(15.24)	13	(0.06)	.300	(7.62)	—	—
120-in (3048mm) Beam or Column span														
A-1200	354	(1.57)	1.425	(36.20)	165	(0.73)	.667	(16.94)	83	(0.37)	.333	(8.46)	—	—
B-1200	—	—	—	—	27	(0.12)	.667	(16.94)	13	(0.06)	.333	(8.46)	—	—
C-1200	259	(1.15)	1.663	(42.24)	104	(0.46)	.667	(16.94)	52	(0.23)	.333	(8.46)	—	—
E-1200	665	(2.96)	.976	(24.79)	455	(2.02)	.667	(16.94)	227	(1.01)	.333	(8.46)	3,478	(15.47)
H-1200	1,059	(4.71)	.746	(18.95)	—	—	.667	(16.94)	473	(2.10)	.333	(8.46)	4,521	(20.11)
A-1400	244	(1.09)	1.413	(35.89)	114	(0.51)	.667	(16.94)	57	(0.25)	.333	(8.46)	—	—
B-1400	—	—	—	—	21	(0.09)	.667	(16.94)	10	(0.04)	.333	(8.46)	—	—
144-in (3658mm) Beam or Column span														
A-1200	—	—	—	—	115	(0.51)	.800	(20.32)	57	(0.25)	.400	(10.16)	—	—
C-1200	—	—	—	—	72	(0.32)	.800	(20.32)	36	(0.16)	.400	(10.16)	—	—
E-1200	554	(2.46)	1.400	(35.56)	315	(1.40)	.800	(20.32)	158	(0.70)	.400	(10.16)	—	—
H-1200	883	(3.93)	1.075	(27.31)	657	(2.92)	.800	(20.32)	328	(1.46)	.400	(10.16)	—	—
A-1400	—	—	—	—	80	(0.36)	.800	(20.32)	40	(0.18)	.400	(10.16)	—	—
168-in (4267mm) Beam or Column span														
A-1200	—	—	—	—	84	(0.37)	.933	(23.70)	42	(0.19)	.467	(11.86)	—	—
C-1200	—	—	—	—	53	(0.24)	.933	(23.70)	27	(0.12)	.467	(11.86)	—	—
E-1200	475	(2.11)	1.912	(48.56)	233	(1.04)	.933	(23.70)	116	(0.52)	.467	(11.86)	—	—
H-1200	756	(3.36)	1.463	(37.16)	482	(2.14)	.933	(23.70)	241	(1.07)	.467	(11.86)	—	—
A-1400	—	—	—	—	60	(0.27)	.933	(23.70)	30	(0.13)	.467	(11.86)	—	—
192-in (4877mm) Beam or Column span														
E-1200	—	—	—	—	178	(0.79)	1.07	(27.18)	89	(0.40)	.533	(13.54)	—	—
H-1200	661	(2.94)	1.910	(48.51)	369	(1.64)	1.07	(27.18)	185	(0.82)	.533	(13.54)	—	—
216-in (5486mm) Beam or Column span														
E-1200	—	—	—	—	140	(0.62)	1.20	(30.48)	70	(0.31)	.600	(15.24)	—	—
H-1200	—	—	—	—	292	(1.30)	1.20	(30.48)	146	(0.65)	.600	(15.24)	—	—
240-in (6096mm) Beam or Column span														
E-1200	—	—	—	—	114	(0.51)	1.33	(33.78)	57	(0.25)	.667	(16.89)	—	—
H-1200	—	—	—	—	236	(1.05)	1.33	(33.78)	118	(0.52)	.667	(16.89)	—	—

When no numbers are shown, use the maximum uniform load.



Design data, metal framing channel system:

Load and deflection, double channel

Table 4A - Channel depth and gauge, double channel

Part no.	Channel depth		Gauge
	in	mm	
A-1202	3 1/4	(82.6)	12
B-1202	1 5/8	(41.3)	12
C-1202	2 3/4	(69.8)	12
E-1202	4 7/8	(123.8)	12
H-1202	6 1/2	(165.1)	12
A-1402	3 1/4	(82.6)	14
B-1402	1 5/8	(41.3)	14

Table 4B - Double channel

Part no.	Maximum Uniform Load and Deflection				Uniform Load and Deflection at 1/180 Span				Uniform Load and Deflection at 1/360 Span				Column Load	
	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN
12-in (305mm) Beam or Column span														
A-1202	—	—	.008	(0.20)	—	—	.067	(1.70)	—	—	.033	(0.84)	21,177	(94.20)
B-1202	3,016	(13.42)	.016	(0.41)	—	—	.067	(1.70)	—	—	.033	(0.84)	14,110	(62.76)
C-1202	—	—	.010	(0.25)	—	—	.067	(1.70)	—	—	.033	(0.84)	18,990	(84.87)
E-1202	—	—	.005	(0.13)	—	—	.067	(1.70)	—	—	.033	(0.84)	27,623	(122.87)
H-1202	—	—	.004	(0.10)	—	—	.067	(1.70)	—	—	.033	(0.84)	34,210	(152.17)
A-1402	—	—	.008	(0.20)	—	—	.067	(1.70)	—	—	.033	(0.84)	15,250	(67.84)
B-1402	2,300	(10.23)	.016	(0.41)	—	—	.067	(1.70)	—	—	.033	(0.84)	10,390	(46.22)
18-in (457mm) Beam or Column span														
A-1202	—	—	.018	(0.45)	—	—	.100	(2.54)	—	—	.050	(1.27)	20,609	(91.67)
B-1202	2,011	(8.95)	.036	(0.91)	—	—	.100	(2.54)	—	—	.050	(1.27)	13,440	(59.78)
C-1202	4,811	(21.40)	.021	(0.53)	—	—	.100	(2.54)	—	—	.050	(1.27)	18,470	(82.16)
E-1202	—	—	.013	(0.33)	—	—	.100	(2.54)	—	—	.050	(1.27)	16,926	(75.29)
H-1202	—	—	.009	(0.23)	—	—	.100	(2.54)	—	—	.050	(1.27)	33,390	(148.53)
A-1402	—	—	.018	(0.45)	—	—	.100	(2.54)	—	—	.050	(1.27)	14,467	(64.35)
B-1402	1,534	(6.82)	.036	(0.91)	—	—	.100	(2.54)	—	—	.050	(1.27)	9,910	(44.08)
24-in (610mm) Beam or Column span														
A-1202	4,858	(21.61)	.031	(0.79)	—	—	—	(3.38)	—	—	.067	(1.70)	19,974	(88.85)
B-1202	1,509	(6.71)	.064	(1.63)	—	—	.133	(3.38)	—	—	.067	(1.70)	12,670	(56.36)
C-1202	3,609	(16.05)	.038	(0.97)	—	—	.133	(3.38)	—	—	.067	(1.70)	17,890	(79.58)
E-1202	—	—	.021	(0.53)	—	—	.133	(3.38)	—	—	.067	(1.70)	26,143	(116.29)
H-1202	—	—	.016	(0.41)	—	—	.133	(3.38)	—	—	.067	(1.70)	32,435	(144.28)
A-1402	3,425	(15.24)	.033	(0.84)	—	—	.133	(3.38)	—	—	.067	(1.70)	14,426	(64.17)
B-1402	1,150	(5.12)	.064	(1.63)	—	—	.133	(3.38)	—	—	.067	(1.70)	9,350	(41.59)
30-in (762mm) Beam or Column span														
A-1202	3,886	(17.29)	.049	(1.24)	—	—	.167	(4.24)	—	—	.083	(2.11)	19,261	(85.68)
B-1202	1,206	(5.36)	.100	(2.54)	—	—	.167	(4.24)	—	—	.083	(2.11)	11,803	(52.50)
C-1202	2,886	(12.84)	.059	(1.50)	—	—	.167	(4.24)	—	—	.083	(2.11)	17,230	(76.64)
E-1202	7,806	(34.72)	.034	(0.86)	—	—	.167	(4.24)	—	—	.083	(2.11)	25,259	(112.36)
H-1202	—	—	.025	(0.64)	—	—	.167	(4.24)	—	—	.083	(2.11)	31,395	(139.65)
A-1402	2,740	(12.19)	.050	(1.27)	—	—	.167	(4.24)	—	—	.083	(2.11)	13,397	(59.59)
B-1402	920	(4.09)	.100	(2.54)	—	—	.167	(4.24)	—	—	.083	(2.11)	8,730	(38.83)
36-in (914mm) Beam or Column span														
A-1202	3,239	(14.11)	.071	(1.80)	—	—	.200	(5.08)	—	—	.100	(2.54)	18,470	(82.16)
B-1202	1,005	(4.47)	.144	(3.66)	—	—	.200	(5.08)	702	(3.12)	.100	(2.54)	10,840	(48.22)
C-1202	2,400	(10.68)	.085	(2.16)	—	—	.200	(5.08)	—	—	.100	(2.54)	16,500	(73.40)
E-1202	6,505	(28.94)	.048	(1.22)	—	—	.200	(5.08)	—	—	.100	(2.54)	24,316	(108.16)
H-1202	—	—	.036	(0.91)	—	—	.200	(5.08)	—	—	.100	(2.54)	30,265	(134.62)
A-1402	2,284	(10.16)	.071	(1.80)	—	—	.200	(5.08)	—	—	.100	(2.54)	13,416	(59.68)
B-1402	766	(3.41)	.144	(3.66)	—	—	.200	(5.08)	535	(2.38)	.100	(2.54)	8,050	(35.81)

When no numbers are shown, use the maximum uniform load.



Table 4B - Double channel

Part no. Channel	Maximum Uniform Load and Deflection				Uniform Load and Deflection at 1/180 Span				Uniform Load and Deflection at 1/360 Span				Column Load	
	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN
42-in (1067mm) Beam or Column span														
A-1202	2,776	(12.35)	.098	(2.49)	—	—	.233	(5.92)	—	—	.117	(2.97)	17,635	(78.44)
B-1202	863	(3.84)	.195	(4.95)	—	—	.233	(5.92)	516	(2.30)	.117	(2.97)	9,790	(43.55)
C-1202	2,063	(9.18)	.115	(2.92)	—	—	.233	(5.92)	—	—	.117	(2.97)	15,730	(69.97)
E-1202	5,576	24.80)	.065	(1.65)	—	—	.233	(5.92)	—	—	.117	(2.97)	23,272	(103.52)
H-1202	9,190	(40.88)	.049	(1.24)	—	—	.233	(5.92)	—	—	.117	(2.97)	29,025	(129.11)
A-1402	1,958	(8.71)	.225	(5.72)	—	—	.233	(5.94)	—	—	.117	(2.97)	12,832	(57.08)
B-1402	658	(2.93)	.195	(4.95)	—	—	.233	(5.94)	393	(1.75)	.117	(2.97)	7,300	(32.47)
48-in (1219mm) Beam or Column span														
A-1202	2,429	(10.80)	.128	(3.25)	—	—	.267	(6.78)	—	—	.133	(3.38)	16,730	(74.42)
B-1202	754	(3.35)	.255	(6.48)	—	—	.267	(6.78)	395	(1.76)	.133	(3.38)	8,640	(38.43)
C-1202	1,804	(8.02)	.151	(3.84)	—	—	.267	(6.78)	—	—	.133	(3.38)	14,890	(66.33)
E-1202	4,879	(21.70)	.085	(2.16)	—	—	.267	(6.78)	—	—	.133	(3.38)	22,170	(98.62)
H-1202	8,041	(35.77)	.064	(1.63)	—	—	.267	(6.78)	—	—	.133	(3.38)	27,700	(123.22)
A-1402	1,713	(7.62)	.128	(3.25)	—	—	.267	(6.78)	—	—	.133	(3.38)	12,223	(54.37)
B-1402	575	(2.56)	.255	(6.48)	—	—	.267	(6.78)	301	(1.34)	.133	(3.38)	6,480	(28.82)
54-in (1371mm) Beam or Column span														
A-1202	2,159	(9.60)	.161	(4.09)	—	—	.300	(7.62)	—	—	.150	(3.81)	15,763	(70.12)
B-1202	670	(2.98)	.323	(8.20)	—	—	.300	(7.62)	312	(1.39)	.150	(3.81)	7,405	(32.94)
C-1202	1,604	(7.13)	.190	(4.83)	—	—	.300	(7.62)	1,263	(5.62)	.150	(3.81)	13,990	(62.23)
E-1202	4,338	(19.30)	.108	(2.74)	—	—	.300	(7.62)	—	—	.150	(3.81)	20,980	(93.32)
H-1202	7,149	(31.80)	.081	(2.06)	—	—	.300	(7.62)	—	—	.150	(3.81)	16,280	(72.42)
A-1402	1,523	(6.77)	.161	(4.09)	—	—	.300	(7.62)	—	—	.150	(3.81)	11,566	(51.45)
B-1402	511	(2.27)	.323	(8.20)	—	—	.300	(7.62)	238	(1.06)	.150	(3.81)	5,580	(24.82)
60-in (1524mm) Beam or Column span														
A-1202	1,944	(8.65)	.199	(5.05)	—	—	.333	(8.46)	—	—	.167	(4.24)	14,738	(65.56)
B-1202	604	(2.69)	.398	(10.11)	—	—	.333	(8.46)	253	(1.13)	.167	(4.24)	6,100	(27.13)
C-1202	1,444	(6.42)	.235	(5.97)	—	—	.333	(8.46)	1,253	(5.57)	.167	(4.24)	13,050	(58.05)
E-1202	3,906	(17.37)	.133	(3.38)	—	—	.333	(8.46)	—	—	.167	(4.24)	19,734	(87.78)
H-1202	6,434	(28.62)	.100	(2.54)	—	—	.333	(8.46)	—	—	.167	(4.24)	24,810	(110.36)
A-1402	1,370	(6.09)	.199	(5.05)	—	—	.333	(8.46)	—	—	.167	(4.24)	10,878	(48.39)
B-1402	460	(2.05)	.399	(10.13)	—	—	.333	(8.46)	193	(0.86)	.167	(4.24)	4,640	(20.64)
66-in (1676mm) Beam or Column span														
A-1202	1,766	(7.86)	.240	(6.10)	—	—	.367	(9.32)	1,347	(5.99)	.183	(4.65)	13,646	(60.70)
B-1202	549	(2.44)	.481	(12.22)	418	(1.86)	.367	(9.32)	209	(0.93)	.183	(4.65)	5,055	(22.49)
C-1202	1,313	(5.84)	.285	(7.24)	—	—	.367	(9.32)	846	(3.76)	.183	(4.65)	12,030	(53.51)
E-1202	3,549	(15.79)	.180	(4.57)	—	—	.367	(9.32)	—	—	.183	(4.65)	18,415	(81.91)
H-1202	5,849	(26.02)	.120	(3.05)	—	—	.367	(9.32)	—	—	.183	(4.65)	23,230	(103.33)
A-1402	1,245	(5.54)	.241	(6.12)	—	—	.367	(9.32)	949	(4.22)	.183	(4.65)	10,133	(45.07)
B-1402	419	(1.86)	.483	(12.27)	318	(1.41)	.367	(9.32)	159	(0.71)	.183	(4.65)	3,840	(17.08)
72-in (1829mm) Beam or Column span														
A-1202	1,620	(7.21)	.286	(7.26)	—	—	.400	(10.16)	1,132	(5.04)	.200	(5.08)	12,500	(55.60)
B-1202	503	(2.24)	.574	(14.58)	351	(1.56)	.400	(10.16)	176	(0.78)	.200	(5.08)	4,230	(18.82)
C-1202	1,203	(5.35)	.339	(8.61)	—	—	.400	(10.16)	710	(3.16)	.200	(5.08)	10,980	(48.84)
E-1202	3,253	(14.47)	.191	(4.85)	—	—	.400	(10.16)	—	—	.200	(5.08)	17,023	(75.72)
H-1202	5,361	(23.85)	.143	(3.63)	—	—	.400	(10.16)	—	—	.200	(5.08)	21,560	(95.90)
A-1402	1,141	(5.08)	.286	(7.26)	—	—	.400	(10.16)	798	(3.55)	.200	(5.08)	9,340	(41.55)

When no numbers are shown, use the maximum uniform load.



Table 4B - Double channel

Part no. Channel	Maximum Uniform Load and Deflection				Uniform Load and Deflection at 1/180 Span				Uniform Load and Deflection at 1/360 Span				Column Load	
	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN
B-1402	384	(1.71)	.574	(14.58)	267	(1.19)	.400	(10.16)	134	(0.60)	.200	(5.08)	3,220	(14.32)
84-in (2134mm) Beam or Column span														
A-1202	1,388	(6.17)	.390	(9.91)	—	—	.467	(11.86)	832	(3.70)	.233	(5.92)	9,992	(44.45)
B-1202	431	(1.92)	.780	(19.81)	258	(1.15)	.467	(11.86)	129	(0.57)	.233	(5.92)	3,100	(13.79)
C-1202	1,031	(4.59)	.461	(11.71)	—	—	.467	(11.86)	522	(2.32)	.233	(5.92)	8,670	(38.57)
E-1202	2,788	(12.40)	.260	(6.60)	—	—	.467	(11.86)	—	—	.233	(5.92)	13,993	(62.24)
H-1202	4,595	(20.44)	.195	(4.95)	—	—	.467	(11.86)	—	—	.233	(5.92)	17,975	(79.96)
A-1402	979	(4.35)	.390	(9.91)	—	—	.467	(11.86)	586	(2.61)	.233	(5.94)	7,682	(34.17)
B-1402	329	(1.46)	.781	(19.84)	197	(0.88)	.467	(11.86)	98	(0.44)	.233	(5.94)	2,370	(10.54)
96-in (2438mm) Beam or Column span														
A-1202	1,215	(5.40)	.509	(12.93)	—	—	.533	(13.54)	637	(2.83)	.267	(6.78)	7,675	(34.14)
B-1202	378	(1.68)	1.019	(25.88)	197	(0.88)	.533	(13.54)	99	(0.44)	.267	(6.78)	—	—
C-1202	903	(4.03)	.603	(15.32)	—	—	.533	(13.54)	400	(1.78)	.267	(6.78)	6,640	(29.54)
E-1202	2,440	(10.85)	.340	(8.64)	—	—	.533	(13.54)	1,917	(8.53)	.267	(6.78)	10,875	(48.74)
H-1202	4,021	(17.89)	.255	(6.48)	—	—	.533	(13.54)	—	—	.267	(6.78)	14,120	(62.81)
A-1402	856	(3.81)	.509	(12.93)	—	—	.533	(13.54)	449	(2.00)	.267	(6.78)	5,951	(26.47)
B-1402	288	(1.28)	1.020	(25.91)	150	(0.67)	.533	(13.54)	75	(0.33)	.267	(6.78)	—	—
108-in (2743mm) Beam or Column span														
A-1202	1,080	(4.80)	.664	(16.87)	—	—	.600	(15.24)	503	(2.24)	.300	(7.62)	6,071	(27.01)
B-1202	355	(1.58)	1.290	(32.77)	156	(0.69)	.600	(15.24)	78	(0.35)	.300	(7.62)	---	---
C-1202	801	(3.56)	.763	(19.38)	632	(2.81)	.600	(15.24)	316	(1.41)	.300	(7.62)	5,250	(23.35)
E-1202	2,169	(9.65)	.430	(10.92)	—	—	.600	(15.24)	1,515	(6.74)	.300	(7.62)	8,599	(38.25)
H-1202	3,574	(15.90)	.323	(8.20)	—	—	.600	(15.24)	—	—	.300	(7.62)	11,160	(49.64)
A-1402	761	(3.39)	.644	(16.36)	—	—	.600	(15.24)	355	(1.58)	.300	(7.62)	4,702	(20.92)
B-1402	255	(1.13)	1.290	(32.77)	119	(0.53)	.600	(15.24)	59	(0.26)	.300	(7.62)	—	—
120-in (3048mm) Beam or Column span														
A-1202	971	(4.32)	.795	(20.19)	—	—	.667	(16.94)	408	(1.81)	.333	(8.46)	—	—
B-1202	301	(1.34)	1.588	(40.34)	126	(0.56)	.667	(16.94)	63	(0.28)	.333	(8.46)	—	—
C-1202	721	(3.21)	.941	(23.90)	512	(2.28)	.667	(16.94)	256	(1.14)	.333	(8.46)	4,250	(18.90)
E-1202	1,951	(8.68)	.31	(7.87)	—	—	.667	(16.94)	1,227	(5.46)	.333	(8.46)	6,946	(30.90)
H-1202	3,216	(14.31)	.398	(10.11)	—	—	.667	(16.94)	—	—	.333	(8.46)	9,040	(40.21)
A-1402	685	(3.05)	.796	(20.22)	—	—	.667	(16.94)	287	(1.28)	.333	(8.46)	3,805	(16.93)
B-1402	230	(1.02)	1.600	(40.64)	96	(0.43)	.667	(16.94)	48	(0.21)	.333	(8.46)	—	—
144-in (3658mm) Beam or Column span														
A-1202	810	(3.60)	1.145	(29.08)	556	(2.47)	.800	(20.32)	283	(1.26)	.400	(10.16)	—	—
B-1202	—	—	—	—	88	(0.39)	.800	(20.32)	44	(0.20)	.400	(10.16)	—	—
C-1202	601	(2.67)	1.350	(34.29)	355	(1.58)	.800	(20.32)	178	(0.79)	.400	(10.16)	—	—
E-1202	1,626	(7.23)	.764	(19.41)	—	—	.800	(20.32)	852	(3.79)	.400	(10.16)	—	—
H-1202	2,680	(11.92)	.573	(14.55)	—	—	.800	(20.32)	1,873	(8.33)	.400	(10.16)	—	—
A-1402	571	(2.54)	1.146	(29.11)	399	(1.77)	.800	(20.32)	199	(0.89)	.400	(10.16)	—	—
B-1402	—	—	—	—	67	(0.30)	.800	(20.32)	33	(0.15)	.400	(10.16)	—	—
168-in (4267mm) Beam or Column span														
A-1202	694	(3.09)	1.563	(39.70)	916	(4.07)	.933	(23.70)	208	(0.93)	.467	(11.86)	—	—
B-1202	—	—	—	—	64	(0.28)	.933	(23.70)	32	(0.14)	.467	(11.86)	—	—
C-1202	515	(2.29)	1.850	(46.99)	261	(1.16)	.933	(23.70)	130	(0.58)	.467	(11.86)	—	—
E-1202	1,394	(6.20)	1.040	(26.42)	1,255	(5.58)	.933	(23.70)	626	(2.78)	.467	(11.86)	—	—
H-1202	2,298	(10.22)	.780	(19.81)	—	—	.933	(23.70)	1,326	(5.90)	.467	(11.86)	—	—
A-1402	489	(2.18)	1.563	(39.70)	293	(1.30)	.933	(23.70)	147	(0.65)	.467	(11.86)	—	—

When no numbers are shown, use the maximum uniform load.



Table 4B - Double channel

Part no. Channel	Maximum Uniform Load and Deflection				Uniform Load and Deflection at 1/180 Span				Uniform Load and Deflection at 1/360 Span				Column Load	
	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN	in	mm	lbs	kN
B-1402	—	—	—	—	49	(0.22)	.933	(23.70)	25	(0.11)	.467	(11.86)	—	—
192-in (4877mm) Beam or Column span														
A-1202	—	—	—	—	318	(1.41)	1.07	(27.18)	159	(0.71)	.533	(13.54)	—	—
B-1202	—	—	—	—	—	—	1.07	(27.18)	—	—	.533	(13.54)	—	—
C-1202	—	—	—	—	200	(0.89)	1.07	(27.18)	100	(0.44)	.533	(13.54)	—	—
E-1202	1,220	(5.43)	1.363	(34.62)	958	(4.29)	1.07	(27.18)	479	(2.13)	.533	(13.54)	—	—
H-1202	2,010	(8.94)	1.019	(25.88)	—	—	1.07	(27.18)	1,053	(4.68)	.533	(13.54)	—	—
A-1402	—	—	—	—	224	(1.00)	1.07	(27.18)	112	(0.50)	.533	(13.54)	—	—
B-1402	—	—	—	—	—	—	1.07	(27.18)	—	—	.533	(13.54)	—	—
216-in (5486mm) Beam or Column span														
A-1202	—	—	—	—	252	(1.12)	1.20	(30.48)	126	(0.56)	.660	(15.24)	—	—
B-1202	—	—	—	—	—	—	1.20	(30.48)	—	—	.660	(15.24)	—	—
C-1202	—	—	—	—	158	(0.70)	1.20	(30.48)	79	(0.35)	.660	(15.24)	—	—
E-1202	1,084	(4.82)	1.725	(43.82)	757	(3.37)	1.20	(30.48)	379	(1.69)	.660	(15.24)	—	—
H-1202	1,788	(7.95)	1.288	(32.72)	—	—	1.20	(30.48)	832	(3.70)	.660	(15.24)	—	—
A-1402	—	—	—	—	177	(0.79)	1.20	(30.48)	89	(0.40)	.660	(15.24)	—	—
B-1402	—	—	—	—	—	—	1.20	(30.48)	—	—	.660	(15.24)	—	—
240-in (6096mm) Beam or Column span														
A-1202	—	—	—	—	204	(0.91)	1.33	(33.78)	102	(0.45)	.667	(16.89)	—	—
B-1202	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-1202	—	—	—	—	128	(0.57)	1.33	(33.78)	64	(0.28)	.667	(16.89)	—	—
E-1202	—	—	—	—	613	(2.73)	1.33	(33.78)	307	(1.37)	.667	(16.89)	—	—
H-1202	1,609	(7.16)	1.588	(40.33)	—	—	1.33	(33.78)	674	(3.00)	.667	(16.89)	—	—
A-1402	—	—	—	—	144	(0.64)	1.33	(33.78)	72	(0.32)	.667	(16.89)	—	—
B-1402	—	—	—	—	—	—	1.33	(33.78)	—	—	.667	(16.89)	—	—

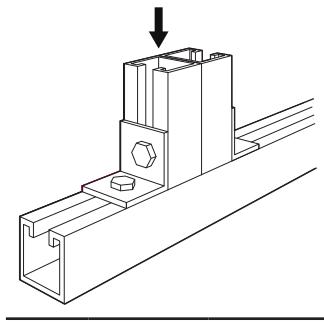
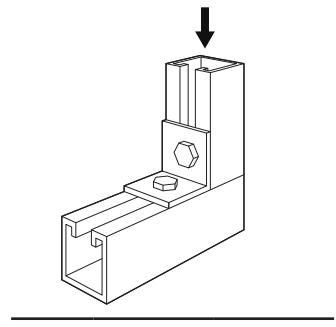
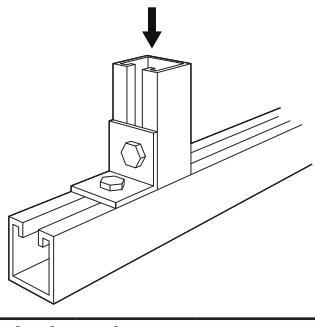
When no numbers are shown, use the maximum uniform load.

Design data, metal framing channel system:

Safe bearing loads for 1½ channel and combinations

Table 5 - Safe bearing loads

Part no.	Recommended load		Part no.	Recommended load		Part no.	Recommended load	
	lbs	(kN)		lbs	(kN)		lbs	(kN)
A-1200	5,000	(22.24)	A-1200	3,500	(15.57)	A-1200	8,000	(35.59)
A-1400	3,500	(15.57)	A-1400	2,500	(11.12)	A-1400	5,500	(24.47)
B-1200	6,000	(26.69)	B-1200	4,000	(17.79)	B-1200	9,000	(40.03)
B-1400	3,400	(15.12)	B-1400	2,600	(11.56)	B-1400	4,800	(21.35)
C-1200	5,000	(22.24)	C-1200	3,500	(15.57)	C-1200	8,000	(35.59)
E-1200	5,000	(22.24)	E-1200	3,500	(15.57)	E-1200	8,000	(35.59)
H-1200	4,000	(17.79)	H-1200	2,000	(8.90)	H-1200	5,500	(24.47)



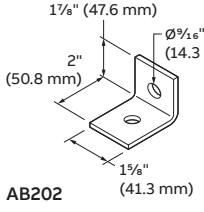
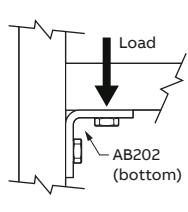
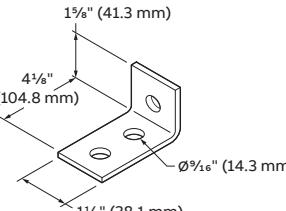
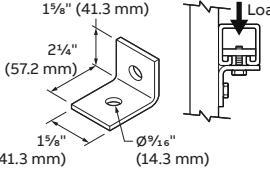
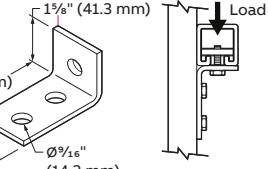
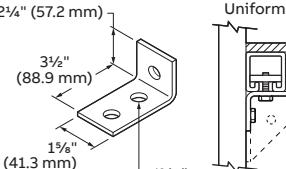
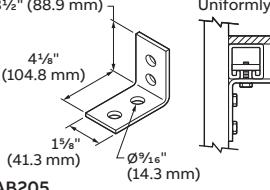
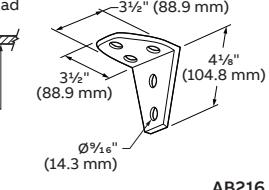
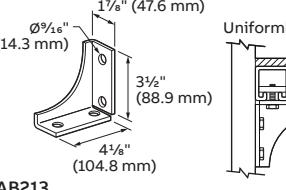
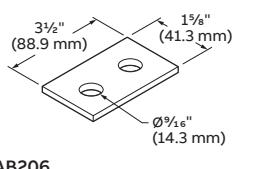
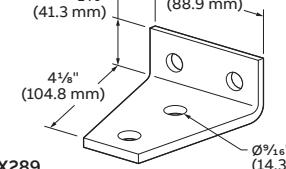
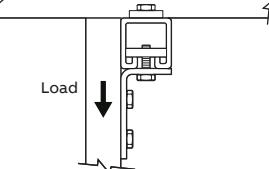
Safety factor of 2½



Design load, typical channel connections:
With 90° and flat plate fittings

- Safety factor of 2½ based on ultimate strength of connection.
- Load drawings indicate up to three design loads, for 12 gauge, 14 gauge and 16 gauge channel applications.

Table 6 - Design loads, both ends supported

Part nos. 90° Fitting	Part nos. Channel series	Load Lbs (kN) Both ends supported	Part nos. 90° Fitting	Part nos. Channel series	Load Lbs (kN) Both ends supported
AB202 (located - top)	A1200	1,000 (4.45)	AB203 (Located -bottom)	A1200	2,000 (8.90)
AB202 (Located -bottom)	A1200	1,500 (6.67)		A1400	1,500 (6.67)
	A1400	1,000 (4.45)			
					
AB201	A1200	700 (3.11)	AB204	A1200	1,500 (6.67)
	A1400	700 (3.11)		A1400	1,000 (4.45)
AB203	A1200	700 (3.11)	AB215	A1200	1,500 (6.67)
	A1400	700 (3.11)		A1400	1,000 (4.45)
					
AB205	A1200	2,000	AB213	A1200	3,000
	A1400	2,000		A1400	2,000
AB216	A1200	2,000	AB214	A1200	3,000
	A1400	2,000		A1400	2,000
					
AB206	A1200	1,000	X289	A1200	1,500
	A1400	800		A1400	1,500
					
AB206			X289		



Design applications:
Load and Deflection formulas

R – Reaction
M – Moment
P – Concentrated load

W – Total uniform
V – Shear

▲ – Deflection
E – Modulus of Elasticity
I – Moment of Inertia

Table 7 - Cantilever beams

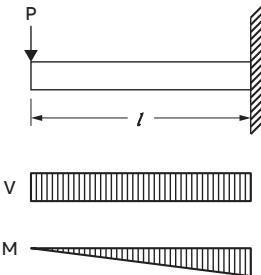
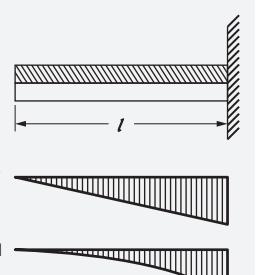
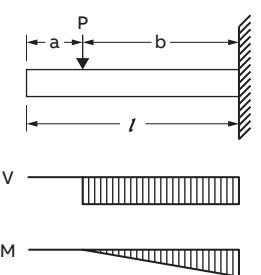
$V_{\max.} = P$ $M_{\max.} = pl$ $\Delta_{\max.} = \frac{pl^3}{3EI}$	 <p>$V_{\max.} = W$ $M_{\max.} = \frac{Wl}{2}$ $\Delta_{\max.} = \frac{Wl^3}{8EI}$</p>	 <p>$V_{\max.} = W$ $M_{\max.} = Pb$ $\Delta_{\max.} = \frac{pb^2(3l-b)}{6EI}$</p>	 <p>V M</p>
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Table 8 - Simple beams

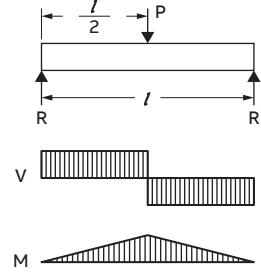
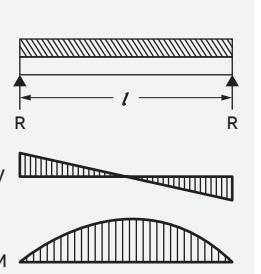
$R = \frac{P}{2}$ $V_{\max.} = \frac{P}{2}$ $M_{\max.} = \frac{Pl}{4}$ $\Delta_{\max.} = \frac{Pl^3}{48EI}$	 <p>$R = \frac{W}{2}$ $V_{\max.} = \frac{Wl}{2}$ $M_{\max.} = \frac{Wl}{8}$ $\Delta_{\max.} = \frac{5WI^3}{384EI}$</p>	 <p>$R_1 = \frac{Pb}{l}$ $R_2 = \frac{Pb}{l}$ $V_{\max.} = \frac{Pa}{l}$ $M_{\max.} = \frac{Pab}{l}$ $\Delta_{\max.} \text{ at } x = \sqrt{\frac{a(a+2b)}{3}}$ $\Delta_{\max.} = \frac{Pab(a+2b)\sqrt{3a(a+2b)}}{27EI/l}$</p>
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Table 9 - Beams fixed on one end, supported at other end

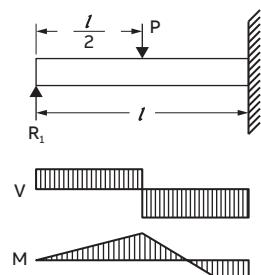
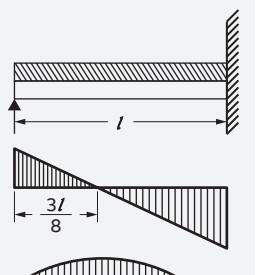
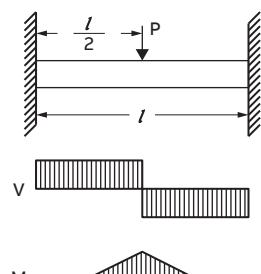
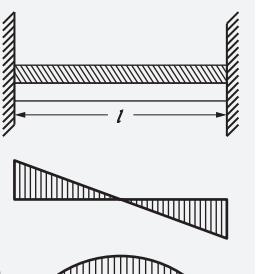
$R_1 = \frac{5b}{16}$ $V_{\max.} = \frac{11P}{16}$ $M_{\max.} = \frac{3Pl}{16}$ $M_{\max.} = \frac{Pab}{l}$ $\Delta_{\max.} \text{ at } x = 0.447l$ $\Delta_{\max.} = 0.009317 \frac{Pl^3}{EI}$	 <p>$R_1 = \frac{3W}{8}$ $V_{\max.} = \frac{5W}{8}$ $M_{\max.} = \frac{WI}{8}$ $\Delta_{\max.} \text{ at } x = 0.4215l$ $\Delta_{\max.} = \frac{WI^3}{185EI}$</p>	 <p>$R_1 = \frac{Pb^3}{2l^3}(a+2l)$ $R_2 = \frac{Pa}{2l^3}(3l^2+a^2)$ $M_{\max.} \text{ at point of load} = R_1^2a$ $M_{\max.} \text{ at fix end} = \frac{Pab}{2l^3}(a+l)$</p>
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Table 10 - Beams fixed at both ends

$V_{\max.} = \frac{P}{2}$ $M_{\max.} = \frac{Pl}{8}$ $\Delta_{\max.} = \frac{Pl^3}{192EI}$	 <p>$V_{\max.} = \frac{W}{2}$ $M_{\max.} = \frac{WI}{12}$ $\Delta_{\max.} = \frac{WI^3}{384EI}$</p>	 <p>$R_1 = \frac{Pb^2}{l^3}(3a+b)$ $R_2 = \frac{Pa^2}{l^3}(3a+b)$ $M_{\max.} = \frac{Pab^2}{l^3}$ $M_{\max.} = \frac{Pab^2}{l^2}$ M_1 M_2</p>
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Single span beams:

Table 6, design load for A,B,C,E and H series channel are for single span beams supported at the ends. These can be used in the majority of cases. Table 11 (below) shows other common load supporting conditions used in the industry.

Table 11 - Cantilever beams

Load and support conditions	Diagram	Load factor	Deflection factor
Simple beam — Uniform load		1.00	1.00
Simple beam — Concentrated load at center		0.50	0.80
Simple beam — Two equal concentrated loads at 1/4 points		1.00	1.10
Beam fixed at both ends — Uniform load		1.50	0.30
Beam fixed at both ends — Concentrated load at center		1.00	0.40
Cantilever beam — Uniform load		0.25	2.40
Cantilever beam — Concentrated load at end		0.12	3.20
Continuous beam — Two equal spans — Uniform load on one span		1.30	0.92
Continuous beam — Two equal spans		1.00	0.42
Continuous beam — Two equal spans — Concentrated at Center of one span		0.62	0.71
Continuous beam — Two equal spans — Concentrated at Center of both spans		0.67	0.48

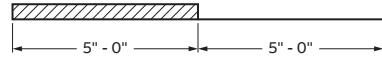
Example 1:

Problem:

Determine the load and deflection of an A-1200 beam continuous over on support and loaded uniformly on one span

Solution

- From load [Table 3B](#) for A-1200 the load for 5'0" span is 706 lbs. and deflection is 0.358"
- Multiply by factors from Table 11 above
 - Load = 706 lbs. \times 1.30 = 917.8 lbs.
 - Deflection = 0.358" \times 0.92 = 0.329"

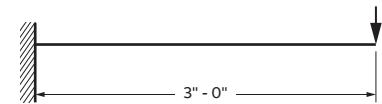


Example 2:

Problem:

Determine the load and deflection of an E-1200 cantilever beam with a concentrated load on the end.

- From load [Table 3B](#) for E-1200 the load for a 3'0" span is 2216 lbs. and deflection is 0.088".
- Multiply by factors from Table 11 above
 - Load = 2216 lbs. \times 0.12 = 265.9 lbs.
 - Deflection = 0.088" \times 3.20 = 0.282"

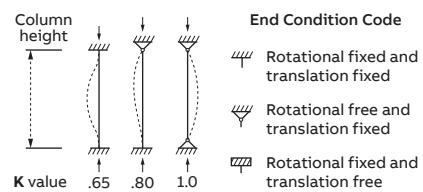


Column loading:

The load bearing capacity of column or compression members is a function of the inherent configurational strength, the unbraced length and design of the end connections.

Values of axial column loading given in [Table 3B](#) were calculated using a rotationally free and translation fixed correction at each end (see illustration on the right). This gives an end condition constant (K) of 1.

If other end conditions are used, axial loading should be calculated using procedures in the ASI specification for the design of cold formed steel structural members (SG671) and the engineering values for Superstrut channel given in [Table 1A](#).



Pipe support spacing:**Table 12 - Maximum spacing between pipe supports****Steel Pipe**

Nom. Pipe size in. (mm)	1/2 (12.7)	3/4 (19.1)	1 (25.4)	1 1/2 (38.1)	2 (50.8)	2 1/2 (63.5)	3 (76.2)	3 1/2 (88.9)	4 (101.6)	5 (127)	6 (152.4)	8 (203.2)	10 (254)	12 (304.8)	14 (355.6)	16 (406.4)	18 (457.2)	20 (508)	24 (609.6)
Max. Spacing ft. (M)	5 (1.52)	6 (1.83)	7 (2.13)	9 (2.74)	10 (3.05)	11 (3.35)	12 (3.66)	13 (3.96)	15 (4.57)	16 (4.88)	17 (5.18)	19 (5.79)	22 (6.71)	23 (7.01)	25 (8.23)	27 (8.23)	28 (8.53)	30 (9.14)	32 (9.75)

Copper size

Nom. Pipe size in. (mm)	1/2 (12.7)	3/4 (19.1)	1 (25.4)	1 1/4 (31.8)	1 1/2 (38.1)	2 (50.8)	2 1/2 (63.5)	3 (76.2)	3 1/2 (88.9)	4 (101.6)	—	—	—	—	—	—	—	—
Max. Spacing ft. (M)	5 (1.52)	6 (1.83)	6 (1.83)	7 (2.13)	8 (2.44)	9 (2.74)	10 (3.05)	10 (3.05)	11 (3.35)	12 (3.66)	—	—	—	—	—	—	—	—

Spacing between centers of standard pipe:**Table 13 - Minimum spacing between centers of standard pipe, when using Superstrut® #702 series pipe straps - in. (mm)**

Nom. Pipe Size	1/2 (12.7)	3/4 (19.1)	1 (25.4)	1 1/4 (31.8)	1 1/2 (31.8)	2 (50.8)	2 1/2 (63.5)	3 (76.2)	3 1/2 (88.9)	4 (101.6)	5 (127)	6 (154.2)	8 (203.2)
1/2" (12.7)	1 3/16 (30.2)	—	—	—	—	—	—	—	—	—	—	—	—
3/4" (19.1)	1 5/16 (33.3)	1 7/16 (36.5)	—	—	—	—	—	—	—	—	—	—	—
1" (25.4)	1 1/2 (38.1)	1 5/8 (41.3)	1 3/4 (44.5)	—	—	—	—	—	—	—	—	—	—
1 1/4" (31.8)	1 3/4 (44.5)	1 1/8 (47.6)	2 (50.8)	2 1/4 (57.2)	—	—	—	—	—	—	—	—	—
1 1/2" (38.1)	1 15/16 (49.2)	2 1/16 (52.4)	2 3/16 (55.6)	2 7/16 (61.9)	2 9/16 (65.1)	—	—	—	—	—	—	—	—
2" (50.8)	2 3/16 (55.6)	2 5/16 (58.7)	2 1/2 (63.5)	2 3/4 (70.0)	2 7/8 (73.0)	3 1/8 (79.4)	—	—	—	—	—	—	—
2 1/2" (63.5)	2 7/16 (61.9)	2 9/16 (65.1)	2 3/4 (70.0)	3 (76.2)	3 1/8 (79.4)	3 1/8 (79.4)	3 5/8 (92.1)	—	—	—	—	—	—
3" (76.2)	2 13/16 (71.4)	2 15/16 (74.6)	3 1/16 (77.8)	3 5/16 (84.1)	3 7/16 (87.3)	3 3/4 (95.3)	4 (101.6)	4 5/16 (109.5)	—	—	—	—	—
3 1/2" (88.9)	3 1/8 (71.4)	3 3/8 (79.4)	3 1/4 (82.6)	3 5/8 (92.1)	3 3/4 (95.3)	4 1/16 (103.2)	4 5/16 (109.5)	4 5/8 (117.5)	4 15/16 (125.4)	—	—	—	—
4" (101.6)	3 7/16 (87.3)	3 9/16 (90.5)	3 15/16 (100.0)	4 1/16 (103.2)	4 1/8 (104.8)	4 5/8 (117.5)	4 15/16 (125.4)	5 1/4 (133.4)	5 9/16 (141.3)	—	—	—	—
6" (154.2)	4 3/4 (120.6)	4 7/8 (123.8)	5 (127.0)	5 1/8 (130.2)	5 1/4 (133.4)	5 5/8 (142.9)	5 7/8 (149.9)	6 3/16 (157.2)	6 1/2 (165.1)	6 13/16 (173.0)	7 1/16 (179.4)	8 1/8 (206.4)	—
8" (203.2)	5 7/16 (138.1)	6 (152.4)	6 1/8 (155.6)	6 1/8 (155.6)	6 1/2 (165.1)	6 3/4 (171.5)	7 (177.8)	7 5/16 (185.7)	7 5/8 (193.7)	8 (203.2)	8 9/16 (217.5)	9 1/4 (235.0)	10 1/8 (257.2)



Standard dimensions and weights of piping and conduit:
Table 14 - Mechanical (Schedule 40)

Nominal STD. pipe size inch	Pipe O.D. inch (mm)	Coupling O.D. inch (mm)
½	0.84 (21.34)	1.06 (26.67)
¾	1.05 (26.67)	1.31 (33.27)
1	1.32 (33.53)	1.58 (40.13)
1½	1.66 (42.16)	1.90 (48.26)
2	1.90 (48.60)	2.20 (55.88)
2½	2.38 (60.45)	2.75 (69.85)
3	2.88 (73.15)	3.25 (82.55)
3½	3.50 (88.90)	4.00 (101.60)
4	4.00 (101.60)	4.63 (117.60)
5	4.50 (114.30)	5.00 (127.00)
6	5.56 (141.22)	6.30 (160.02)
7	6.63 (168.40)	7.39 (187.71)
8	8.63 (219.20)	9.23 (234.44)
10	10.75 (273.05)	—
12	12.75 (323.85)	—
14	14.00 (355.60)	—
16	16.00 (406.40)	—
18	18.00 (457.20)	—
20	20.00 (508.00)	—
22	22.00 (558.80)	—
24	24.00 (609.60)	—
26	26.00 (660.40)	—
28	28.00 (711.20)	—
30	30.00 (762.00)	—

Table 16 - Electrical conduit

Nominal conduit size inch	Rigid steel conduit O.D. inch (mm)	Thin wall (EMT) conduit O.D. inch (mm)
½	0.84 (21.34)	0.71 (18.03)
¾	1.05 (26.67)	0.92 (23.37)
1	1.32 (33.53)	1.16 (29.46)
1¼	1.66 (42.16)	1.51 (38.35)
2	2.38 (60.45)	2.20 (55.88)
2½	2.88 (73.15)	2.88 (73.15)
3	3.50 (88.90)	3.50 (88.90)
4	4.50 (114.30)	4.50 (114.30)

Table 17 - Pipe covering weights thickness (Intended as guide only) and weight of calcium silicate covering

Nominal pipe size inch	260° thick inch (mm)	360° thick inch (mm)	440° thick inch (mm)	525° thick inch (mm)	600° thick inch (mm)	700° thick inch (mm)	800° thick inch (mm)
1	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	1½ (38.10)	1½ (38.10)	1½ (38.10)
1¼	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	1½ (38.10)	1½ (38.10)	2 (50.80)
1½	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	1½ (38.10)	1½ (38.10)	2 (50.80)
2	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	1½ (38.10)	1½ (38.10)	2 (50.80)
2½	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	1½ (38.10)	1½ (38.10)	2 (50.80)
3	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	1½ (38.10)	1½ (38.10)	2 (50.80)
3½	1 (25.40)	1 (25.40)	1½ (38.10)	1½ (38.10)	2 (50.80)	2 (50.80)	2½ (63.50)
4	1 (25.40)	1 (25.40)	1½ (38.10)	1½ (38.10)	2 (50.80)	2 (50.80)	2½ (63.50)
5	1 (25.40)	1 (25.40)	1½ (38.10)	1½ (38.10)	2 (50.80)	2 (50.80)	2½ (63.50)
6	1½ (38.10)	1½ (38.10)	1½ (38.10)	1½ (38.10)	2 (50.80)	2 (50.80)	2½ (63.50)
8	1½ (38.10)	1½ (38.10)	1½ (38.10)	1½ (38.10)	2 (50.80)	2 (50.80)	2½ (63.50)

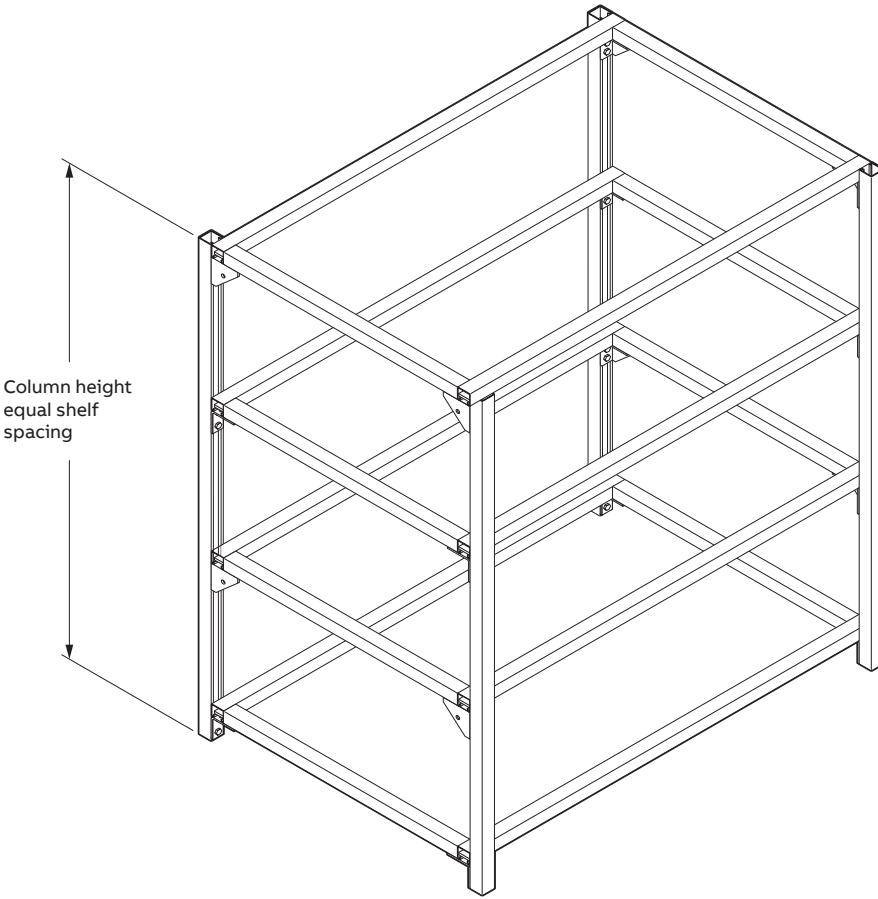


Rack construction and loads:

Allowable load in lbs (kN) per upright number of shelves per upright

Table 18 - Column loading for rack constructions

Column Height Feet (M)	Part nos.	2 shelves lbs (kN)	3 shelves lbs (kN)	4 shelves lbs (kN)	5 shelves lbs (kN)	6 shelves lbs (kN)	7 shelves lbs (kN)	8 shelves lbs (kN)	9 shelves lbs (kN)	10 shelves lbs (kN)
6 (1.829)	A-1200	2,237 (9.95)	1,925 (8.56)	1,650 (7.34)	1,437 (6.39)	1,290 (5.74)	—	—	—	—
	A-1202	4,170 (18.55)	3,580 (15.92)	3,100 (13.79)	2,730 (12.14)	2,450 (10.90)	—	—	—	—
	B-1400	800 (3.56)	820 (3.65)	790 (3.51)	700 (3.11)	630 (2.80)	—	—	—	—
	B-1402	1,930 (8.59)	1,700 (7.56)	1,500 (6.67)	1,300 (5.78)	1,190 (5.29)	—	—	—	—
7 (2.134)	A-1200	2,150 (9.56)	1,850 (8.23)	1,630 (7.25)	1,425 (6.34)	1,280 (5.69)	1,150 (5.12)	—	—	—
	A-1202	4,000 (17.79)	3,525 (16.68)	3,000 (13.34)	2,700 (12.01)	2,430 (10.81)	2,200 (9.79)	—	—	—
	B-1400	650 (2.89)	790 (3.51)	760 (3.38)	685 (3.05)	615 (2.74)	550 (2.45)	—	—	—
	B-1402	1,800 (8.01)	1,650 (7.34)	1,450 (6.45)	1,300 (5.78)	1,180 (5.25)	750 (3.34)	—	—	—
8 (2.438)	A-1200	2,000 (8.90)	1,820 (8.10)	1,600 (7.12)	1,400 (6.23)	1,250 (5.56)	1,150 (5.12)	1,050 (4.67)	—	—
	A-1202	3,900 (17.35)	3,475 (15.46)	3,000 (13.34)	2,700 (12.01)	2,400 (10.68)	2,185 (9.72)	2,000 (8.90)	—	—
	B-1400	580 (2.58)	750 (3.34)	730 (3.25)	660 (2.94)	610 (2.71)	540 (2.40)	510 (2.27)	—	—
	B-1402	1,650 (7.34)	1,610 (7.16)	1,450 (6.45)	1,300 (5.78)	1,160 (5.16)	940 (4.18)	970 (4.31)	—	—
9 (2.743)	A-1200	1,950 (8.67)	1,780 (7.92)	1,575 (7.01)	1,400 (6.23)	1,250 (5.56)	1,130 (5.03)	1,030 (4.58)	950 (4.23)	—
	A-1202	3,800 (16.90)	3,400 (15.12)	3,020 (13.43)	2,675 (11.90)	2,400 (10.68)	2,180 (9.70)	1,975 (8.79)	1,800 (6.67)	—
	B-1400	—	600 (2.67)	665 (2.96)	600 (2.67)	580 (2.58)	540 (2.40)	500 (2.22)	475 (2.11)	—
	B-1402	1,500 (6.67)	1,500 (6.67)	1,430 (6.36)	1,275 (5.67)	1,160 (5.16)	1,000 (4.45)	900 (4.00)	800 (3.56)	—
10 (3.048)	A-1200	1,870 (8.32)	1,700 (7.56)	1,500 (6.67)	1,300 (5.78)	1,200 (5.34)	1,100 (4.89)	1,000 (4.45)	900 (4.00)	800 (3.56)
	A-1202	3,600 (16.01)	3,300 (14.68)	3,000 (13.34)	2,650 (11.79)	2,350 (10.45)	2,000 (8.90)	1,975 (8.79)	1,800 (8.01)	1,650 (7.34)
	B-1400	—	550 (2.45)	650 (2.89)	625 (2.78)	580 (2.58)	535 (2.38)	490 (2.18)	450 (2.00)	425 (1.89)
	B-1402	1,450 (6.45)	1,400 (6.58)	1,400 (6.23)	1,250 (5.56)	1,140 (5.07)	1,040 (4.63)	960 (4.27)	885 (3.94)	825 (3.67)

Below - Typical general storage rack for use with plywood or other decking:See [Table 6](#) for typical channel connections**Typical Rack Types:**

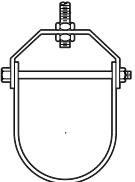
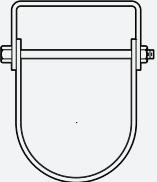
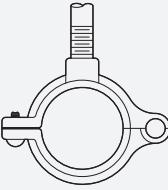
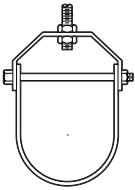
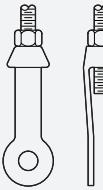
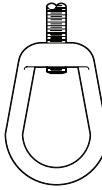
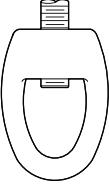
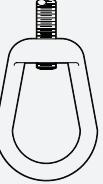
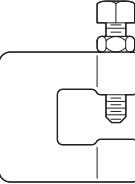
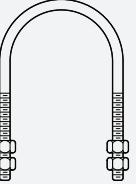
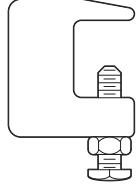
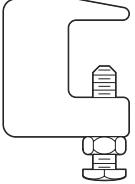
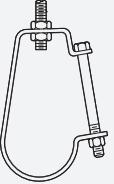
- General storage racks
- Pallet racks
- Barrel racks
- Bulk racks
- Bulk furniture racks
- Cable racks
- Bar stock racks
- Display racks
- Special purpose racks
- For uniform loads and horizontal members, see [Table 3B](#)



Federal specifications (WW-H-171)

Manufacturers Society Specifications (MSS SP69):

Table 19 - Strut accessories

Sereis: C710	Series C726	Series C725	Series CF710	Series C720 / CT720
				
Adjustable Steel Clevis Sizes: $\frac{3}{8}$ " through 20" Federal Type 1 SP69 Type 1	Steel Double Bolt Pipe Clamp Sizes: 1 $\frac{1}{2}$ " through 24" IPS Federal Type 3 SP69 Type 3	Steel Pipe Clamp Sizes: 1 $\frac{1}{2}$ " through 24" IPS Federal Type 4 SP69 Type 4	Adjustable Steel Band Hanger Sizes: $\frac{1}{2}$ " through 8" IPS 3/8" through 4" tube Federal Type 7	Extension Pipe or Riser Clamp Sizes: $\frac{3}{8}$ " through 20" IPS 1/2" through 6" tube Federal Type 8 SP69 Type 8
Sereis: C727 / CT727	Sereis: M718 / MT718	Sereis: CL710	Sereis: F111	Sereis: C727 / CT727
				
Adjustable Ring Hanger Sizes: $\frac{1}{2}$ " through 8" IPS $\frac{1}{2}$ " through 4" tube Federal Type 10 SP69 Type 10	MI Split Pipe Ring w/wo turnbuckle adj. Sizes: $\frac{1}{2}$ " through 8" IPS $\frac{1}{2}$ " through 4" tube Federal Type 12 SP69 Type 12	Light-Duty Steel Clevis Sizes: $\frac{1}{2}$ " through 4" Federal Type 12	Forged Steel Clevis Sizes: $\frac{3}{8}$ " through 1 $\frac{1}{2}$ " rod Federal Type 14 SP69 Type 13	Forge Steel Weldness Eye Nut Sizes: $\frac{3}{8}$ " through 1 $\frac{1}{2}$ " rod Federal Type 17 SP69 Type 17
Sereis: M117	Sereis: E120A	Series: M775L / C775L	Series: H115	Series: M778
				
MI Socket only for S Split Ring Hanger Sizes: 1/2" through 7/8" rod Federal Type 16 SP69 Type 16	Forge Steel Weldness Eye Nut Sizes: $\frac{3}{8}$ " through 1 $\frac{1}{2}$ " rod Federal Type 17 SP69 Type 17	MI or Steel C-Clamp Sizes: $\frac{3}{8}$ " through $\frac{1}{2}$ " rod Federal Type 23 SP69 Type 23	U-Bolt Sizes: $\frac{1}{2}$ " through 24" IPS Federal Type 24 SP69 Type 24	Top Beam C-Clamp Sizes: $\frac{3}{8}$ " through 7/8" rod SP69 Type 19
Sereis: M117	Sereis: C711			
				
Junior Top Beam C-Clamp Sizes: $\frac{3}{8}$ " through $\frac{1}{2}$ " rod SP69 Type 18	J Pipe Hanger Sizes: $\frac{1}{2}$ " through 8" pipe SP69 Type 5			