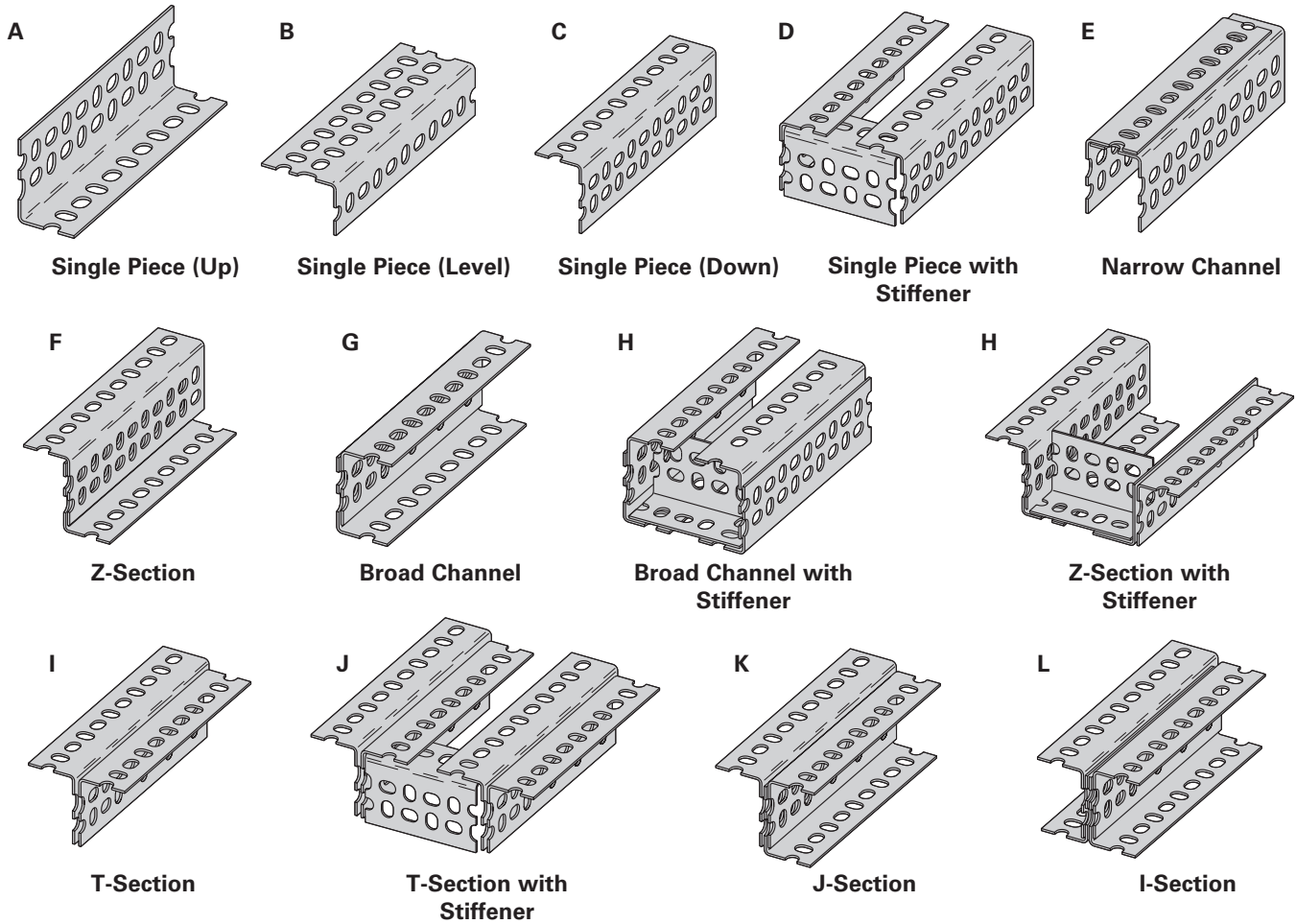


Slotted angle beam loading and combinations

Beam Sections



For greater strength required in some applications, Slotted angle may be fastened together to create combination shapes. A number of these combinations are illustrated above. Refer to the following table for load capacities of these combinations.

Beam Sections illustrated are single sections, except J, N, and P.

Beam Loading

SA158-1⁵/₈" (41.3) x 1⁵/₈" (41.3) x 14 Gauge (1.9)

	Beam Span													
	24" (609 mm)		36" (914 mm)		48" (1219 mm)		60" (1524 mm)		72" (1829 mm)		84" (2133 mm)		96" (2438 mm)	
	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN
A	825	(3.67)	525	(2.33)	340	(1.51)	230	(1.02)	180	(0.80)	-	-	-	-
B	1100	(4.89)	800	(3.56)	540	(2.40)	370	(1.64)	250	(1.11)	-	-	-	-
C	1100	(4.89)	800	(3.56)	540	(2.40)	370	(1.64)	250	(1.11)	-	-	-	-
D	1300	(5.78)	900	(4.00)	625	(2.78)	450	(2.00)	330	(1.47)	275	(1.22)	200	(0.89)
G	1900	(8.45)	1360	(6.05)	1050	(4.67)	825	(3.67)	660	(2.93)	530	(2.36)	400	(1.78)
H	2300	(10.23)	1850	(8.23)	1450	(6.45)	1100	(4.89)	950	(4.22)	800	(3.56)	700	(3.11)
I	2200	(9.78)	1650	(7.34)	1225	(5.45)	930	(4.14)	700	(3.11)	550	(2.44)	450	(2.00)

Based on simple beam condition with uniform loads on parallel beams. To determine concentrated load capacity at mid-span, multiply uniform load by 0.5.

Reference page 264 for general fitting and standard finish specifications.

Slotted angle beam loading

Beam Loading

SA276-1⁵/₈" (41.3) x 2³/₈" (60.3) x 14 Gauge (1.9)

	Beam Span																	
	24" (609 mm)		36" (914 mm)		48" (1219 mm)		60" (1524 mm)		72" (1829 mm)		84" (2133 mm)		96" (2438 mm)		108" (2743 mm)		120" (3048 mm)	
	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN
A	-	-	680	(3.02)	450	(2.00)	340	(1.51)	-	-	-	-	-	-	-	-	-	-
B	-	-	830	(3.69)	550	(2.44)	360	(1.60)	210	(0.93)	150	(0.67)	-	-	-	-	-	-
C	-	-	1540	(6.85)	1060	(4.71)	800	(3.56)	610	(2.71)	480	(2.13)	340	(1.51)	250	(1.11)	-	-
D	-	-	1880	(8.36)	1280	(5.69)	970	(4.31)	820	(3.65)	650	(2.89)	550	(2.44)	420	(1.87)	340	(1.51)
E	-	-	2110	(9.38)	1730	(7.69)	1460	(5.77)	1250	(5.56)	1090	(4.85)	920	(4.09)	820	(3.65)	680	(3.02)
F	4290	(19.08)	2510	(11.16)	1790	(7.96)	1330	(5.91)	980	(4.36)	710	(3.16)	550	(2.44)	420	(1.87)	320	(1.42)
G	4320	(19.21)	3000	(13.34)	2140	(9.52)	1600	(7.12)	1290	(5.74)	1040	(4.62)	820	(3.65)	640	(2.85)	490	(2.18)
H	-	-	3480	(15.48)	2430	(10.81)	1890	(8.41)	1620	(7.20)	1430	(6.36)	1270	(5.65)	1160	(5.16)	1030	(4.58)
I	5780	(25.71)	3640	(16.19)	2820	(12.54)	2200	(9.78)	1700	(7.56)	1350	(6.00)	1060	(4.71)	850	(3.78)	680	(3.02)
J	-	-	3660	(16.28)	2840	(12.63)	2230	(9.92)	1720	(7.65)	1360	(6.05)	1090	(4.85)	874	(3.89)	700	(3.11)
K	-	-	4910	(21.84)	3830	(17.03)	3000	(13.34)	2550	(11.34)	2190	(9.74)	1880	(8.36)	1640	(7.29)	1430	(6.36)
L	-	-	6360	(28.29)	4590	(20.42)	3470	(15.43)	2910	(12.94)	2550	(11.34)	2240	(9.96)	2010	(8.94)	1840	(8.18)

Based on simple beam condition with uniform loads on parallel beams. To determine concentrated load capacity at mid-span, multiply uniform load by 0.5.

Beam Loading

SA318-1⁵/₈" (41.3) x 3¹/₈" (79.4) x 12 Gauge (2.6)

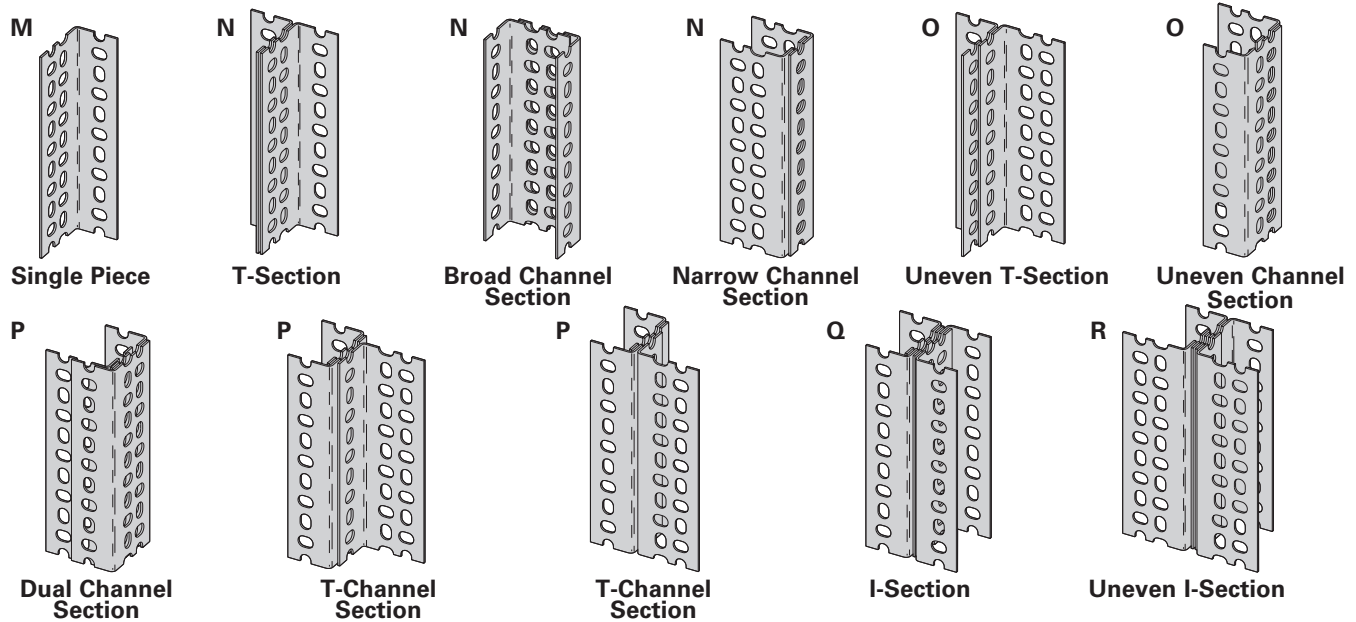
	Beam Span																	
	24" (609 mm)		36" (914 mm)		48" (1219 mm)		60" (1524 mm)		72" (1829 mm)		84" (2133 mm)		96" (2438 mm)		108" (2743 mm)		120" (3048 mm)	
	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN	Lbs.	kN
A	-	-	1140	(5.07)	850	(3.78)	690	(3.07)	-	-	-	-	-	-	-	-	-	-
B	-	-	1250	(5.56)	850	(3.78)	600	(2.67)	400	(1.78)	-	-	-	-	-	-	-	-
C	4800	(21.35)	2750	(12.23)	1800	(8.01)	1280	(5.69)	1000	(4.45)	790	(3.51)	610	(2.71)	-	-	-	-
D	-	-	3900	(17.35)	2690	(11.96)	2050	(9.12)	1700	(7.56)	1480	(6.58)	1280	(5.69)	1100	(4.89)	960	(4.27)
E	-	-	4160	(18.50)	3560	(15.83)	3130	(13.92)	2750	(12.23)	2400	(10.67)	2170	(9.65)	1950	(8.67)	1780	(7.92)
F	8180	(36.38)	5000	(22.24)	3650	(16.23)	2750	(12.23)	2200	(9.78)	1750	(7.78)	1350	(6.00)	1020	(4.54)	700	(3.11)
G	10600	(47.15)	6050	(26.91)	4440	(19.75)	3330	(14.81)	2670	(11.88)	2120	(9.43)	1660	(7.38)	1210	(5.38)	1000	(4.45)
H	-	-	6100	(27.13)	4620	(20.55)	3670	(16.32)	3110	(13.83)	2680	(11.92)	2380	(10.59)	2100	(9.34)	1950	(8.67)
I	13700	(60.94)	7800	(34.69)	5900	(26.24)	4600	(20.46)	3800	(16.90)	3190	(14.19)	2630	(11.70)	2170	(9.65)	1810	(8.05)
J	-	-	7900	(35.14)	6300	(28.02)	5050	(22.46)	4070	(18.10)	3240	(14.41)	2630	(11.70)	2170	(9.65)	1810	(8.05)
K	-	-	10050	(44.70)	8000	(35.58)	6320	(28.11)	5350	(23.80)	4650	(20.68)	4040	(17.97)	3520	(15.66)	3120	(13.88)
L	-	-	12700	(56.49)	9550	(42.48)	7540	(33.54)	6540	(29.09)	5730	(25.49)	5030	(22.37)	4520	(20.10)	4000	(17.79)

Based on simple beam condition with uniform loads on parallel beams. To determine concentrated load capacity at mid-span, multiply uniform load by 0.5.

Reference page 264 for general fitting and standard finish specifications.

Slotted angle beam loading and combinations

Column Sections



For greater strength required in some applications, Slotted Angle may be fastened together to create combination shapes. A number of these combinations are illustrated above. Refer to the following table for load capacities of these combinations.

Column Loading - SA158-1⁵/₈" (41.3) x 1⁵/₈" (41.3) x 14 Gauge (1.9)

Column Height

	36" (914 mm) Lbs. kN	48" (1219 mm) Lbs. kN	60" (1524 mm) Lbs. kN	72" (1829 mm) Lbs. kN
M	1450 (6.45)	1150 (5.11)	950 (4.22)	750 (3.33)
N	3850 (17.12)	3500 (15.57)	3000 (13.34)	2500 (11.12)

Column Loading - SA276-1⁵/₈" (41.3) x 2³/₈" (60.3) x 14 Gauge (1.9)

Column Height

	36" (914 mm) Lbs. kN	48" (1219 mm) Lbs. kN	60" (1524 mm) Lbs. kN	72" (1829 mm) Lbs. kN	84" (2133 mm) Lbs. kN	96" (2438 mm) Lbs. kN	108" (2743 mm) Lbs. kN	120" (3048 mm) Lbs. kN
M	2280 (10.14)	1970 (8.76)	1520 (6.76)	1070 (4.760)	660 (2.93)	- -	- -	- -
N	4760 (21.17)	4490 (19.97)	3995 (17.77)	3140 (13.97)	2340 (10.41)	1750 (7.78)	- -	- -
O	4940 (21.97)	4680 (20.82)	4310 (19.17)	3870 (17.21)	3665 (16.30)	2700 (12.01)	2060 (9.16)	1610 (7.16)
P	7270 (32.34)	6920 (30.78)	6370 (28.33)	5840 (25.98)	4930 (21.93)	3850 (17.12)	2870 (12.76)	2060 (9.16)
Q	9520 (42.35)	8970 (39.90)	7990 (35.54)	6280 (27.93)	4660 (20.73)	3500 (15.57)	- -	- -
R	9865 (43.88)	9330 (41.50)	8620 (38.34)	7715 (34.32)	6740 (29.98)	5365 (23.86)	4115 (18.30)	3210 (14.28)

Column Loads assume no lateral support.

Column Loading - SA318-1⁵/₈" (41.3) x 3¹/₈" (79.4) x 12 Gauge (2.6)

Column Height

	36" (914 mm) Lbs. kN	48" (1219 mm) Lbs. kN	60" (1524 mm) Lbs. kN	72" (1829 mm) Lbs. kN	84" (2133 mm) Lbs. kN	96" (2438 mm) Lbs. kN	108" (2743 mm) Lbs. kN	120" (3048 mm) Lbs. kN
M	3470 (15.43)	2870 (12.76)	1970 (8.76)	1280 (5.69)	- -	- -	- -	- -
N	7970 (35.45)	7360 (32.74)	6570 (29.22)	5270 (23.44)	3670 (16.32)	2580 (11.47)	- -	- -
O	8770 (39.01)	8580 (38.16)	8180 (36.38)	7690 (34.21)	6970 (31.00)	6260 (27.84)	5460 (24.29)	4460 (19.84)
P	12560 (55.87)	11970 (53.24)	11360 (50.53)	10480 (46.62)	9470 (42.12)	8370 (37.23)	6880 (30.60)	5370 (23.89)
Q	15940 (70.90)	14750 (65.61)	13160 (58.54)	10560 (46.97)	7370 (32.78)	5170 (23.00)	- -	- -
R	17550 (78.06)	17150 (76.29)	16360 (72.77)	15360 (68.32)	13970 (62.14)	12570 (55.91)	10970 (48.80)	8960 (39.85)

Column Loads assume no lateral support.

Reference page 264 for general fitting and standard finish specifications.