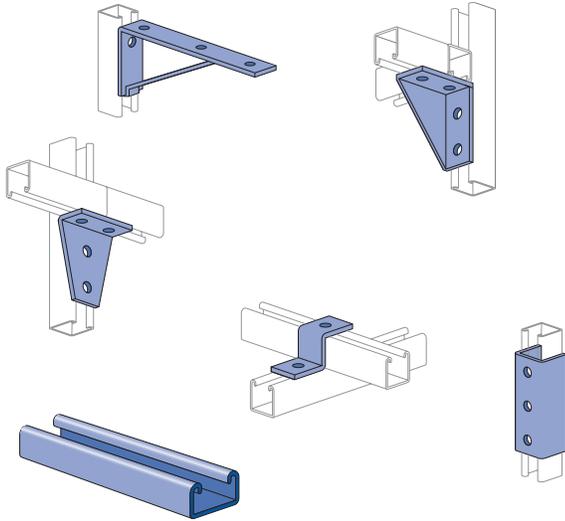


1³/₁₆" FRAMING SYSTEM



P6000 (19 Gauge)	179-181
P7000 (19 Gauge)	182-183
Channel Nuts, End Caps, and Closure Strips	184
Flat Plate Fittings	184-185
Ninety Degree Fittings.....	185
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"Z" Shape Fittings.....	186
"U" Shape Fittings	186-187
Special Application Fittings.....	187
Beam Clamps.....	187
Tubing Clips.....	187

MATERIAL

Channels are accurately and carefully cold formed to size from low-carbon strip steel.

STEEL: PLAIN

19 Gauge (1.0 mm) ASTM A1008

STEEL: PRE-GALVANIZED

19 Gauge (1.0 mm) ASTM A653 GR 33

All nuts are manufactured from mild steel bars conforming to ASTM A1011 SS Grade 33.

Fittings are made from hot rolled, pickled and oiled steel plate or strip and conform to ASTM A1011 SS GR 33.

FINISHES

Channels are available in: Perma-Green III (GR), electro-galvanized (EG), Pre-galvanized (PG), conforming to ASTM A653 GR 33 and plain (PL).

Nuts are available in plain or electro-galvanized (EG) finish.

Fittings are available in Perma-Green III, electrogalvanized (EG) with zinc electrolytically to commercial standards ASTM B653-G90 Type III SC1; or plain (PL).

STANDARD LENGTHS

P-6000 – 16 Feet (4.88m)

P-7000 – 10 Feet (3.05m)

Tolerances are +¹/₈" (3.2 mm) to +¹/₂" (12.7 mm) to allow for cutting. Special lengths are available for a small cutting charge with a tolerance of ±¹/₈" (3.2mm).

APPLICATION

A unique half-size reduction of the 1⁵/₈" channel width series, this smaller channel size can be used to carry light loads economically in applications such as instrumentation, retail displays and light-duty laboratory supports. It also provides the flexibility found in all Unistrut® framing systems.

DESIGN BOLT TORQUE

BOLT SIZE	1/4"-20	Rec. Torque Ft/Lbs (N•m)	6 (8)	Max Torque Ft/Lbs (N•m)	7 (9)
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DIMENSIONS

Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

LOAD DATA

All beam and column load data pertains to carbon steel and stainless steel channels. Load tables and charts are constructed to be in accordance with the SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS 2007 EDITION published by the AMERICAN IRON AND STEEL INSTITUTE USING ASD METHOD. Loads are based on 33 ksi steel cold formed to 42 ksi.

Type of Load	Safety Factor to Yield Strength	Safety Factor to Ultimate Strength
Beam Loads	1.67	2.0
Column Load	1.80	2.2

P6000 & P6001 Channel

P6000 - BEAM LOADING (METRIC)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection		
			Span/180 kN	Span/240 kN	Span/360 kN
300	1.5	1	1.5	1.5	1.5
450	1.0	2	1.0	1.0	0.8
600	0.8	3	0.8	0.7	0.5
750	0.6	4	0.6	0.4	0.3
1,000	0.4	7	0.4	0.3	0.2
1,250	0.4	11	0.2	0.2	0.1
1,500	0.3	17	0.1	0.1	0.1
1,750	0.3	24	0.1	0.1	0.0

P6001 - BEAM LOADING (METRIC)

Span mm	Max Allowable Uniform Load kN	Defl. at Uniform Load mm	Uniform Loading at Deflection		
			Span/180 kN	Span/240 kN	Span/360 kN
300	2.9*	0	2.9*	2.9*	2.9*
450	2.8	1	2.8	2.8	2.8
600	2.1	2	2.1	2.1	2.1
750	1.7	2	1.7	1.7	1.5
1,000	1.2	4	1.2	1.2	0.8
1,250	1.0	7	1.0	0.8	0.5
1,500	0.8	10	0.7	0.5	0.4
1,750	0.7	13	0.5	0.4	0.3
2,000	0.6	17	0.4	0.3	0.2

P6000 - COLUMN LOADING (METRIC)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G.			
		K = 0.65 kN	K = 0.80 kN	K = 1.0 kN	K = 1.2 kN
300	3.1	9.2	8.4	7.3	6.3
450	2.7	7.5	6.3	5.0	3.9
600	2.2	5.9	4.6	3.4	2.7
750	1.8	4.5	3.4	2.5	2.0
1,000	1.4	3.0	2.4	1.8	1.5
1,250	1.1	2.3	1.8	1.4	1.2
1,500	0.9	1.9	1.5	1.2	**
1,750	0.8	1.6	1.2	**	**

P6001 - COLUMN LOADING (METRIC)

Unbraced Height mm	Maximum Allowable Load at Slot Face kN	Maximum Column Load Applied at C.G.			
		K = 0.65 kN	K = 0.80 kN	K = 1.0 kN	K = 1.2 kN
300	5.5	20.7	20.1	19.2	18.2
450	5.4	19.3	18.2	16.9	15.7
600	5.2	17.8	16.5	14.9	13.7
750	5.0	16.4	14.9	13.5	11.2
1,000	4.6	14.4	12.9	9.5	6.7
1,250	3.9	12.7	9.5	6.2	4.3
1,500	3.2	9.9	6.7	4.3	**
1,750	2.6	7.5	4.9	**	**
2,000	2.2	5.7	3.8	**	**

P6000 & P6001 - ELEMENTS OF SECTION (METRIC)

Parameter	P6000	P6001
Area of Section	0.69 cm ²	1.38 cm ²
Axis 1-1		
Moment of Inertia (I)	0.39 cm ⁴	1.88 cm ⁴
Section Modulus (S)	0.33 cm ³	0.91 cm ³
Radius of Gyration (r)	0.75 cm	1.17 cm
Axis 2-2		
Moment of Inertia (I)	0.49 cm ⁴	0.99 cm ⁴
Section Modulus (S)	0.48 cm ³	0.96 cm ³
Radius of Gyration (r)	0.85 cm	0.85 cm

Notes:

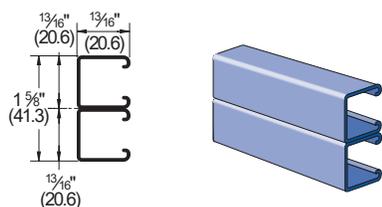
* Load limited by spot weld shear.

** KL/r > 200

NR = Not Recommended.

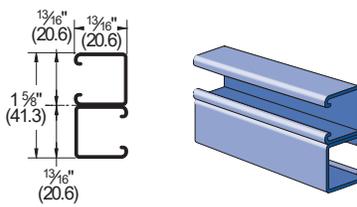
1. Beam loads are given in total uniform load (Wlbs) not uniform load (w lbs/ft or w lbs/in).
2. Beam loads are based on a simple span and assumed to be adequately laterally braced. Unbraced spans can reduce beam load carrying capacity. Refer to Page 186 for reduction factors for unbraced lengths.
3. Deduct channel weight from the beam loads.
4. For concentrated midspan point loads, multiply beam loads by 50% and the corresponding deflection by 80%. For other load conditions refer to page 18.
5. All beam loads are for bending about Axis 1-1.

P6001A



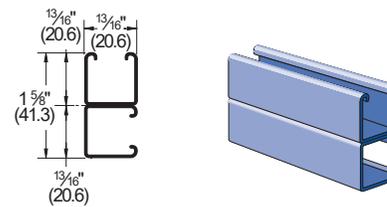
W/100 Ft: 73 Lbs (108 kg/100 m)
Allowable Moment 1,820 In-Lbs (210 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)

P6001B



W/100 Ft: 73 Lbs (108 kg/100 m)
Allowable Moment 1,820 In-Lbs (210 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)

P6001C



W/100 Ft: 73 Lbs (108 kg/100 m)
Allowable Moment 1,550 In-Lbs (180 N•m)
19 Gauge Nominal Thickness .040" (1.0 mm)