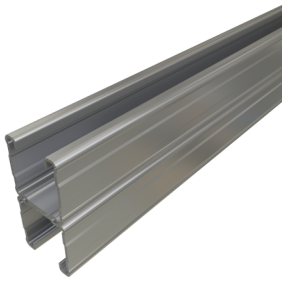

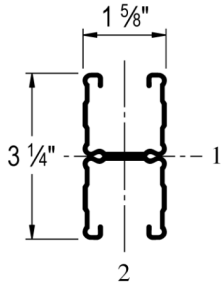

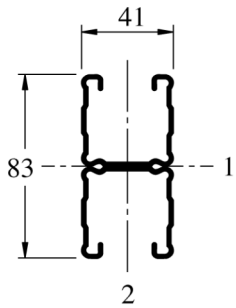

P1101 - 1-5/8" x 3-1/4", 14 Gauge, Back-to-Back, Solid

14 Gauge Solid Strut Channel, Back-to-Back Welded P1101 (back-to-back solid) channel is our 14 gauge channel that is commonly used for trapeze supports, seismic bracing, ceiling grids, pipe, conduit, duct and cable tray supports, racks, and other general framing. For application examples, refer to our Application Showcase.

Features

- 2-sided attachment
- High capacity for heavy load requirements
- Product dimensions are 1 5/8" wide x 3 1/4" tall x 14 ga. thick, solid
- Punched holes are also available for ease of installation
- Made in the USA

Standard Lengths:
- **10 feet:** 10' or 10' $^{1}/_{8}$" (3.05m) ± $^{1}/_{8}$" (3 mm)
- **20 feet:** 20' or 20' $^{3}/_{8}$" (6.11m) ± $^{1}/_{8}$" (3 mm)

Special Lengths:

- Available with a tolerance of ±$^{1}/_{8}$" (3 mm). Request quote.

Curved Channel:

- Many Unistrut channel sections can be supplied with a curve. Click here for our ordering form, specifications, and instructions.

Load Data:

- All beam and column load data pertains to carbon steel and stainless steel channels.
- Load tables apply only to UNISTRUT brand channel. Look for "UNISTRUT" on the product.
- 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.
- Safety Factor to Yield Strength is 1.67 for Beam Loads and 1.80 for Column Loads.
- Beam loads are based on a simple beam and are given as a total uniform load (W) in pounds. For proper calculation procedures, refer to our Beam Load Calculation Guide under Resources.
- For bearing loads, reference our bearing loads page.

Welds:

- Welded channels are spot welded 2" (51 mm) or 3" (76 mm) on-center.

Materials & Finishes - Standard:
- **Pregalvanized (PG):** Conforms to ASTM A653 SS GR 33, G90.
- **Unistrut Defender (DF):** Conforms to ASTM A1046 SS GR 33
- **Hot Dip Galvanized (HG):** Steel conforms to ASTM A1011 SS GR 33, Finish conforms to ASTM A123
- **Perma-Green (GR):** Steel conforms to ASTM A1011 SS GR 33, E-Coat finish
- **Perma-Gold (ZD):** Steel conforms to ASTM A1011 SS GR 33, Finish conforms to ASTM B633, Type II SC3
- **Plain (PL):** Conforms to ASTM A1011 SS GR 33

Materials & Finishes – Special Metals:

· **Stainless Steel, Type 304 (SS):** ASTM A240, Type 304 *
· **Stainless Steel, Type 316 (ST):** ASTM A240, Type 316 *
· **Aluminum (EA):** ASTM B221, Type 6063-T6 (Extruded) *

* These materials have different physical properties and performance characteristics. Please contact us for design support.

Catalog Number	Length (ft)	Gauge	Material Type	Surface Finish	Part Weight (lb/ft)	Standard Package Qty (ft)	Standard Package Weight (lb)
P1101 10GR	10	14	Steel	Green E-Coat	2.84	250	710
P1101 10HG	10	14	Steel	Hot-Dip Galvanized	2.84	250	710
P1101 10PG	10	14	Steel	Pre-Galvanized	2.84	250	710
P1101 10PL	10	14	Steel	Plain/Oil	2.84	250	710
P1101 10SS	10	14	Stainless Steel - 304		2.84	250	710
P1101 20GR	20	14	Steel	Green E-Coat	2.84	500	1420
P1101 20PG	20	14	Steel	Pre-Galvanized	2.84	500	1420

Beam Loading - P1101						
Span (in)	Max Allowable Uniform Load (lbs)	Deflection at Uniform Load (in)	Uniform Loading at Deflection			Lateral Bracing Reduction Factor
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)	
24	*2,180	0.02	*2,180	*2,180	*2,180	1.00
36	*2,180	0.06	*2,180	*2,180	*2,180	1.00
48	1,890	0.13	1,890	1,890	1,890	0.98
60	1,510	0.20	1,510	1,510	1,280	0.93
72	1,260	0.28	1,260	1,260	890	0.87
84	1,080	0.39	1,080	980	650	0.82
96	950	0.51	950	750	500	0.76
108	840	0.64	790	590	400	0.70
120	760	0.79	640	480	320	0.65
144	630	1.13	440	330	220	0.54
168	540	1.54	330	250	160	0.45
192	470	2.00	250	190	130	0.39
216	420	2.55	200	150	100	0.34
240	380	3.16	160	120	80	0.31
Note	*Load limited by weld shear					

Refer to the General Specifications for loading information.

Column Loading - P1101					
Unbraced Height (in)	Allowable Load at Slot Face (lbs)	Max Column Load Applied at C.G.			
		K=0.65 (lbs)	K=0.80 (lbs)	K=1.0 (lbs)	K=1.2 (lbs)
24	5,010	18,250	17,700	16,880	16,030
36	4,860	16,990	16,030	14,770	13,620
48	4,700	15,610	14,380	12,930	11,750
60	4,480	14,280	12,930	11,490	9,290
72	4,210	13,100	11,750	9,290	6,700
84	3,880	12,090	10,220	7,090	4,930
96	3,480	11,170	8,390	5,430	3,770
108	3,060	9,640	6,700	4,290	2,980
120	2,680	8,170	5,430	3,480	KL/r>200
144	2,090	5,710	3,770	KL/r>200	KL/r>200

Refer to the General Specifications for loading information.

Elements of Section - P1101		
Area of Section	0.835 in^2 (5.4 cm^2)	
	Axis 1-1	Axis 2-2
Moment of Inertia (I)	0.733 in^4 (30.5 cm^4)	0.353 in^4 (14.7 cm^4)
Section Modulus (S)	0.451 in^3 (7.4 cm^3)	0.434 in^3 (7.1 cm^3)
Radius of Gyration (r)	0.937 in (2.4 cm)	0.65 in (1.7 cm)