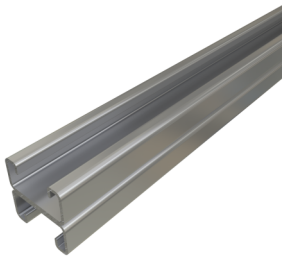

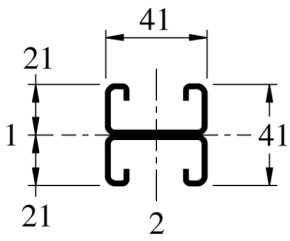

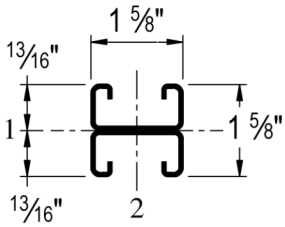

P4101 - 1-5/8" x 1-5/8", 14 Gauge, Back-to-Back, Solid

Atkore's 14 Gauge Welded Strut Channel P4101 (back-to-back solid) 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

- Product dimensions are 1 5/8" wide x 1 5/8" tall x 14 ga. thick, solid.
- Punched holes are also available for ease of installation
- 2-sided attachment
- Our P4101 is available in the following finishes: Pre-Galvanized (PG), Atkore Defender (DF), Hot-Dip Galvanized (HG), Plain (PL), Green (GR), Zinc Dichromate (ZD), Stainless Steel (SS or ST).
- 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

P4101

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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)
P4101 10GR	10	14	Steel	Green E-Coat	1.94	250	485
P4101 10HG	10	14	Steel	Hot-Dip Galvanized	1.94	250	485
P4101 10PG	10	14	Steel	Pre-Galvanized	1.94	250	485
P4101 10PL	10	14	Steel	Plain/Oil	1.94	250	485
P4101 10ZD	10	14	Steel	Zinc Dichromate	1.94	250	485
P4101 20GR	20	14	Steel	Green E-Coat	1.94	500	970
P4101 20HG	20	14	Steel	Hot-Dip Galvanized	1.94	500	970
P4101 20PG	20	14	Steel	Pre-Galvanized	1.94	500	970
P4101 20PL	20	14	Steel	Plain/Oil	1.94	500	970
P4101 20ZD	20	14	Steel	Zinc Dichromate	1.94	500	970

Beam Loading - P4101						
Span (in)	Max Allow. 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	*1,090	0.06	*1,090	*1,090	*1,090	1.00
36	800	0.14	800	800	570	1.00
48	600	0.25	600	480	320	1.00
60	480	0.39	410	310	200	0.96
72	400	0.57	280	210	140	0.92
84	340	0.76	210	160	100	0.89
96	300	1.00	160	120	80	0.85
108	270	1.29	130	90	60	0.81
120	240	1.57	100	80	50	0.78
144	200	2.26	70	50	40	0.71
168	170	3.05	50	40	30	0.64
192	150	4.02	40	NR	NR	0.57
216	130	4.96	NR	NR	NR	0.50
240	120	6.28	NR	NR	NR	0.45
Note	NR - Not Recommended					
Note	*Load limited by weld shear					

Refer to the General Specifications for loading information.

Column Loading - P4101					
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	3,240	12,370	11,950	11,370	10,540
36	3,120	11,470	10,540	9,160	7,720
48	2,940	10,090	8,680	6,770	4,980
60	2,680	8,560	6,770	4,590	3,190
72	2,310	7,010	4,980	3,190	2,220
84	1,950	5,530	3,660	2,340	KL/r>200
96	1,650	4,250	2,800	KL/r>200	KL/r>200
108	1,410	3,360	2,220	KL/r>200	KL/r>200

Refer to the General Specifications for loading information.

Elements of Section - P4101		
Area of Section	0.579 in^2 (3.7 cm^2)	
	Axis 1-1	Axis 2-2
Moment of Inertia (I)	0.117 in^4 (4.9 cm^4)	0.214 in^4 (8.9 cm^4)
Section Modulus (S)	0.143 in^3 (2.3 cm^3)	0.264 in^3 (4.3 cm^3)
Radius of Gyration (r)	0.449 in (1.1 cm)	0.608 in (1.5 cm)