

# Technical Data Sheet

## P1000

### Product Description:

Atkore Unistrut P1000 Channel is our most popular product dating back to 1924. The original Unistrut Metal Framing System requires no welding and no drilling - a wrench is the only tool you'll need.

### Features:

- Engineered to support heavy loads, making them suitable for various support and framing needs.
- Compatible with a variety of accessories and fittings, such as brackets, hangers, clamps, and beam clamps, enhancing its adaptability to different project requirements.
- The ease of installation and adaptability can contribute to cost savings in both labor and material expenses.
- Allows for easy modifications and adjustments during installation or future changes to the configuration, providing flexibility in design.



### Standards:

- Mild Steel (PL)& Hot Dip Galvanised (HG) to AS/NZS1365, AS1594, AS/NZS4680, ISO1461
- Pre-Galvanised (GB)(TG) to AS1397
- Stainless Steel (SS) to AS1449, AS2837

### Finishes:

- TrueGalv [TG]
- Galvabond [GB]
- 316 Stainless Steel [SS]
- Hot-Dip Galvanised [HG]
- Plain [PL]

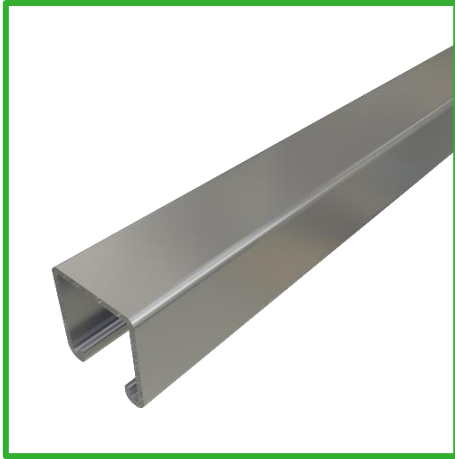
### Applications:

- Data Centers
- Renewables
- Infrastructure
- Commercial buildings
- Shopping Centers
- Warehouse & distribution

Note: Before using Atkore Unistrut Strut, it's essential to consult the manufacturer's specifications and guidelines to ensure proper installation and performance in your specific application.

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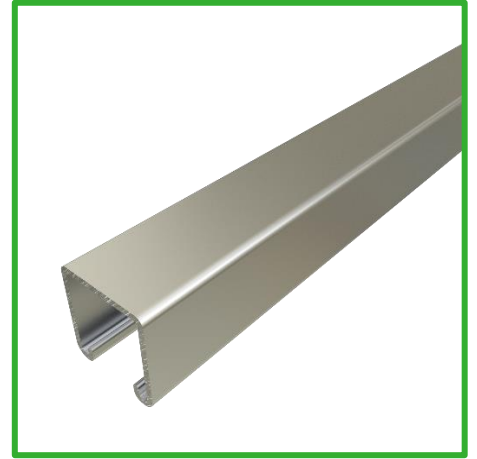
### Finishes:



TrueGalv  
(TG)



Galvabond  
(GB)



Stainless Steel  
(SS)



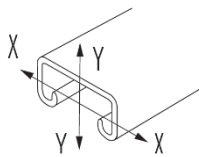
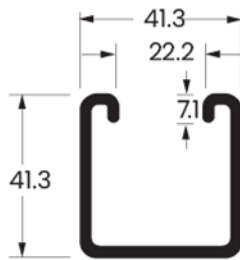
Hot Dip Galvanised  
(HG)



Plain  
(PL)

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### Dimensions:



A - 330mm<sup>2</sup>  
 kg/m - 2.59kg/m  
 I<sub>x-x</sub> = 0.069 10<sup>6</sup>mm<sup>4</sup>  
 Z<sub>x-x</sub> = 2.920 10<sup>3</sup>mm<sup>3</sup>  
 r<sub>x-x</sub> = 14.5mm  
 I<sub>y-y</sub> = 0.092 10<sup>6</sup>mm<sup>4</sup>  
 Z<sub>y-y</sub> = 4.451 10<sup>3</sup>mm<sup>3</sup>  
 r<sub>y-y</sub> = 16.7mm

Note: All dimensions shown are in millimeters.

Australia		New Zealand		Description	Material thickness	Weight
Cat No	Mat No	Cat No	Mat No			
P1000-PL	3000059	P1000P	2075637	P1000 PLAIN 6M LENGTH	2.5MM	2.59kg/m
P1000-GB	3000058	P1000G	2092511	P1000 GALVABOND 6M LENGTH	2.5MM	2.59kg/m
P1000-TG	4039613	NA		P1000 TRUEGALVE 6M LENGTH	2.5MM	2.59kg/m
P1000-HG	4000841	P1000H	2090063	P1000 HOT DIP GALVANISED 6M LENGTH	2.5MM	2.59kg/m
P1000-SS	3000060	P1000SS 316	2082032	P1000 STAINLESS STEEL 316 6M LENGTH	2.5MM	2.76kg/m

### Load Rating & Deflection:

Length (mm)	Max. Allowable Load (kg)	Deflection at Allowable Load (mm)	Max. Allowable Column Load (kg)
250	1513	0.22	4640.73
500	757	0.87	3756.63
750	504	1.97	2877.64
1000	379	3.5	2186.27
1250	303	5.46	1674.37
1500	252	7.87	1346.03
1750	216	10.71	1121.69
2000	189	13.99	953.43
2250	168	17.7	820.87
2500	151	21.85	714.82
2750	138	26.44	626.11
3000	127	31.47	-




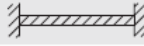

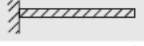


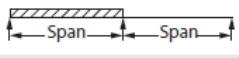
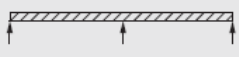
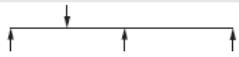
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## Conversion factors

### Design Load Data - Typical Strut Connection

Load tables in this catalogue for 41mm Strut width series are for single span beams supported at the ends. These can be used in the majority of cases. There are times when it is necessary to know what happens with other loading and support conditions. Some common arrangements are shown in Table 1. Simply multiply the loads from the Beam Load Tables by the load factors given in Table 1. Similarly, multiply the deflections from the Beam Load Tables by the deflection factor given in Table 1.

**Table 1**

Load and Support Condition			Load Factor	Deflection Factor
1	Simple Beam - Uniform Load		1.00	1.00
2	Simple Beam Concentrated Load at Centre		0.50	0.80
3	Simple Beam - Two Equal Concentrated Loads at 1/4 Points		1.00	1.10
4	Beam Fixed at Both Ends - Uniform Load		1.50	0.30
5	Beam Fixed at Both Ends - Concentrated Load at Centre		1.00	0.40
6	Cantilever Beam - Uniform Load		0.25	2.40
7	Cantilever Beam - Concentrated Load at End		0.12	3.20
8	Continuous Beam - Two Equal Spans - Uniform Load on One Span		1.30	0.92
9	Continuous Beam - Two Equal Spans - Uniform Load on Both Ends		1.00	0.42
10	Continuous Beam - Two Equal Spans - Concentrated Load at Centre of One Span		0.62	0.71
11	Continuous Beam - Two Equal Spans - Concentrated Load at Centre of Both Spans		0.67	0.48

### Unistrut® Column Loading

The strength of axially loaded columns or compression members is, in part, dependent on the end conditions, that is, the degree of end fixity or restraint. A column with both ends fixed will support more load than one with both ends free or pin-ended.

Column loads published for UNISTRUT® sections in this catalogue are offered as a guide and assume a partially fixed end condition as usually found in flat ended columns that are laterally tied and braced, i.e.  $K = 1.0$ .

Assumed K values (effective length factors) for columns with varying end restraints are as follows:

