

Technical Data Sheet

P1001

Product Description:

Atkore Unistrut P1001 back-to-back Channel. Its back-to-back design offers users to attach to both sides of the channel length. Part of the original Unistrut Metal Framing System, which is 100% reusable due to its flexibility, adaptability, and versatility.

Features:

- The channel's edges and the tapered grooves of the nut serve as alignment guides, ensuring a secure connection.
- The teeth of the nut grasp the inturned edges of the channel, creating a robust "box" configuration that enhances strength by uniting the channel sides.
- The nut's longitudinal movement is impeded as its hardened teeth firmly engage with the inturned edges.



Standards:

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

Applications:

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

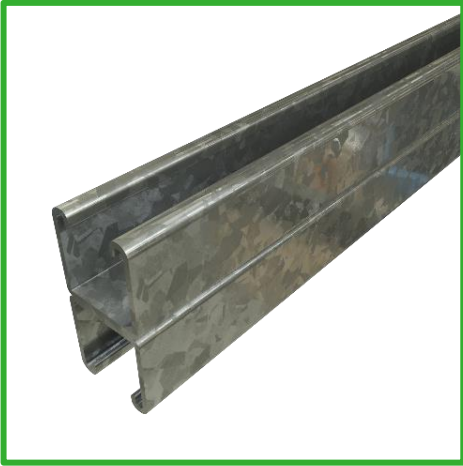
Finishes:

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

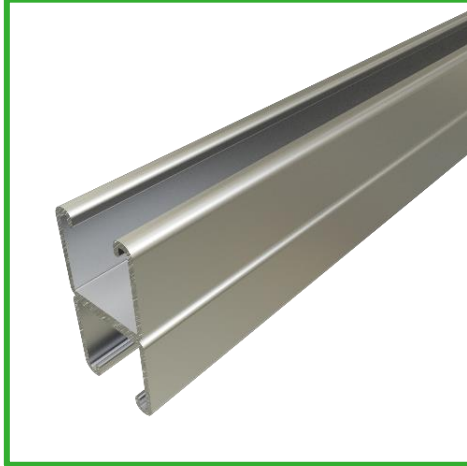
Note: Before using Atkore Unistrut Strut, it's essential to consult the manufacturer's specifications and guidelines to ensure proper installation and performance in your specific application.

Technical Data Sheet

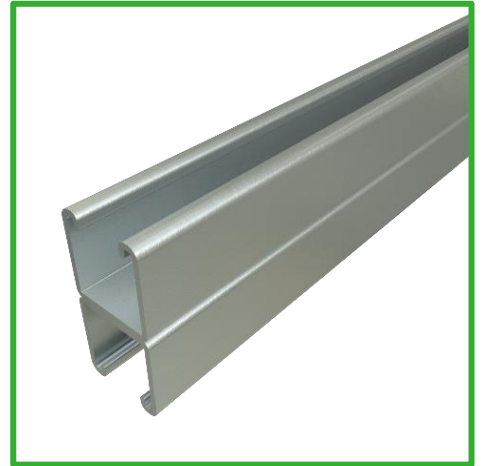
Finishes:



Galvabond
(GB)



Stainless Steel
(SS)



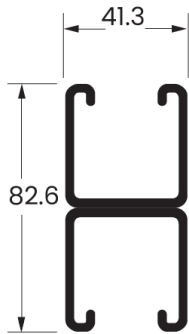
Hot Dip Galvanised
(HG)



Plain
(PL)

Technical Data Sheet

Dimensions:



Note: All dimensions shown are in millimeters.

Australia		New Zealand		Description	Material thickness	Weight
Cat No	Mat No	Cat No	Mat No			
P1001-PL	3000068	P1001P	2092855	P1001 SLOTTED PLAIN 6M LENGTH	2.5MM	5.18kg/m
P1001-GB	3000067	NA		P1001 SLOTTED GALVABOND 6M LENGTH	2.5MM	5.18kg/m
P1001-HG	4000851	P1001H	2091829	P1001 SLOTTED HOT DIP GALVANISED 6M LENGTH	2.5MM	5.18kg/m
P1001-SS	4000853	P1001SS316	2091897	P1001 SLOTTED STAINLESS STEEL 316 6M LENGTH	2.5MM	5.45kg/m

Load Rating & Deflection:

Length (mm)	Max. Allowable Load (kg)	Deflection at Allowable Load (mm)
250	2616	0.08
500	1998	0.5
750	1333	1.13
1000	999	2
1250	799	3.13
1500	666	4.5
1750	571	6.13
2000	500	8.01
2250	444	10.13
2500	400	12.51
2750	363	15.14
3000	333	18.02

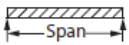
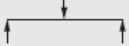

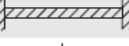

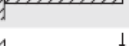

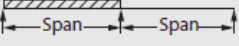

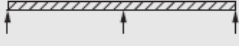

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Conversion factors

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:

