

Technical Data Sheet

P5500T

Product Description:

Atkore Unistrut P5500T Channel is one of our larger channel options and contains slots along the length of the channel to easily attach to other products and fixings.

Features:

- Unistrut's P5000T this channel is commonly used for trapeze supports, seismic bracing, ceiling grids, pipe, conduit, duct and cable tray supports, racks, and other general framing.
- The slotted material allows for adjustability and doesn't compromise too much on material strength.
- It has 85% of the capacity of the solid version of the profile.



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]
- 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:



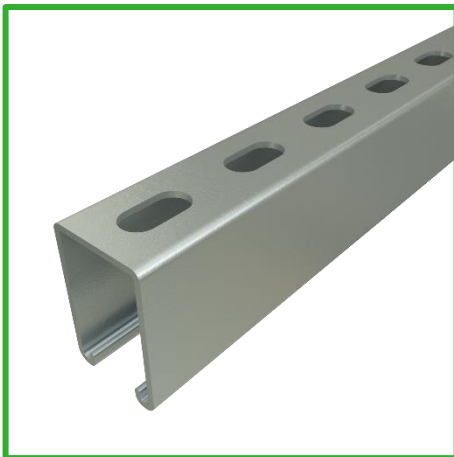
TrueGalv
(TG)



Galvabond
(GB)



Stainless Steel
(SS)



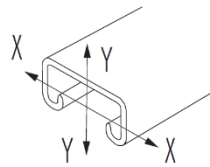
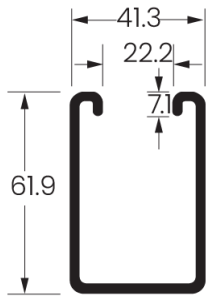
Hot Dip Galvanised
(HG)



Plain
(PL)

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Dimensions:



A - 398mm²
 kg/m - 3.12kg/m
 I_{x-x} = 0.170 10⁶mm⁴
 Z_{x-x} = 5.322 10³mm³
 r_{x-x} = 20.7mm
 I_{y-y} = 0.130 10⁶mm⁴
 Z_{y-y} = 6.300 10³mm³
 r_{y-y} = 18.1mm

Note: All dimensions shown are in millimeters.

Australia		New Zealand		Description	Material thickness	Weight
Cat No	Mat No	Cat No	Mat No			
P5500T-PL	3000099	NA		P5500T PLAIN SLOTTED 6M LENGTH	2.5MM	3.1kg/m
P5500T-GB	4001203	NA		P5500T GALVABOND SLOTTED 6M LENGTH	2.5MM	3.1kg/m
P5500T-TG	4039713	NA		P5500T TRUEGALV SLOTTED 6M LENGTH	2.5MM	3.1kg/m
P5500T-HG	4001204	P5500T-HG	2266253	P5500T HOT DIP GALVANISED SLOTTED 6M LENGTH	2.5MM	3.1kg/m
P5500T-SS	4039946	NA		P5500T STAINLESS STEEL 316 SLOTTED 6M LENGTH	2.5MM	3.39kg/m

Load Rating & Deflection:

Length (mm) 	Max. Allowable Load (kg) 	Deflection at Allowable Load (mm) 	Max. Allowable Column Load (kg) 
250	2483.67	0.13	5234.2
500	1271.43	0.51	4213.47
750	847.96	1.16	3099.94
1000	635.71	2.06	2189.33
1250	509.18	3.22	1594.84
1500	423.47	4.64	1262.41
1750	363.27	6.31	1053.37
2000	317.35	8.24	907.55
2250	282.65	10.43	800.48
2500	254.08	12.88	716.86
2750	231.63	15.58	647.52
3000	212.24	18.55	590.42

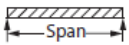
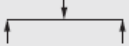

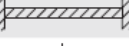

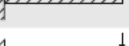

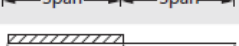

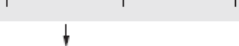
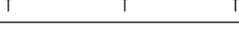
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Conversion factors

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:

