Tecstrut Channel Suspension & Framing System



- Complies with HVCA specification DW144.
- Manufactured from corrosion resistant materials.
- Channels produced in accordance with BS EN 10162: 2003
- System complies with BS6946 (1988).
- Comprehensive range of components & accessories.
- Ex-stock availability throughout the U.K.



Description

The Lindab channel suspension and framing system is designed to provide an effective yet economical solution to today's framing and support requirements. High quality materials are used throughout and the system complies with relevant industry standards including:-

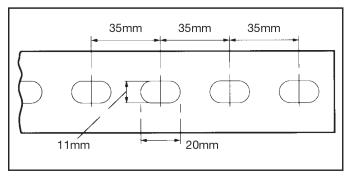
BS EN 10162: 2003 - All channels in the Tecstrut system are manufactured to comply with the tolerances detailed in this standard.

BS 6946: **1988** - The data provided takes into account the requirements of this standard for testing of channel, fittings and channel nuts.

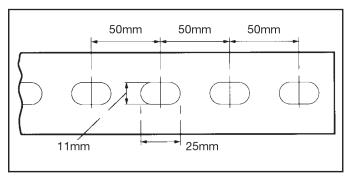
BS EN ISO 1461: 1999 - Where appropriate fittings and bracketry are post hot dip galvanised to this standard.

BS EN 10327: 2004 - Channels are manufactured from pre-galvanised steel to this specification.

Channel Slotting - 1.6mm sections



Channel Slotting - 2.5mm sections



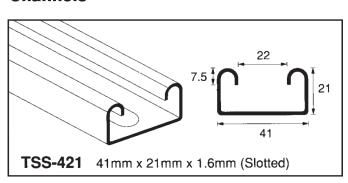
Channel Options

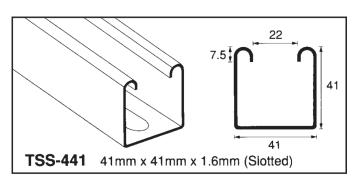
In addition to the channel sections shown opposite a multiple channel sections is available. This comprises two channels welded 'back to back'

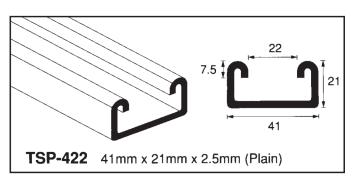
TSP-442D - 41mm x 41mm x 2.5mm x 2

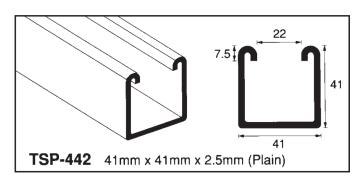
Multiple channel sections are produced by spot welding together two individual pre-galvanised channels at 150mm centres. Welds are then protected by the application of corrosion inhibiting paint.

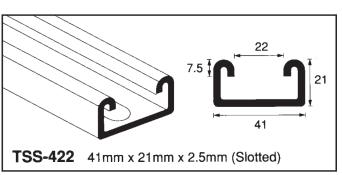
Channels

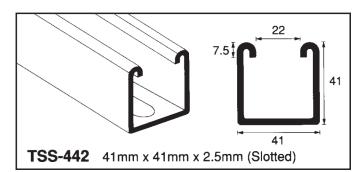




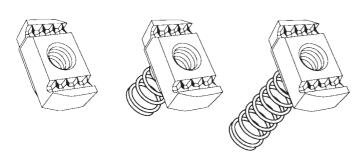








Channel Slide Nuts



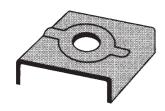
Tecstrut channel slide nuts and springs are self aligning and are specially manufactured to complement the range of Tecstrut channels. The slide nut can be moved along the channel for ease of alignment whilst the springs tension the nut against the internal channel lips to facilitate installation. In addition to the shape of the slide nuts prevents turning inside the channel eliminating the need to grip the nut whilst inserting bolts or threaded rod.

Nuts are available threaded M6, M8, M10 and M12, all zinc plated.

TSSN-L Long spring
TSSN-S Short spring
No spring

Springs are also available separately.

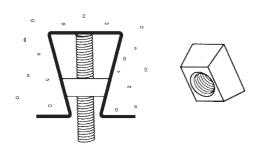
Top Plates



Ribbed rectangular washers designed to fit over the slotted channel.

Manufactured from 2.5mm corrosion resistant galvanised mild steel. 11mm diameter hole.

Wedge Nuts



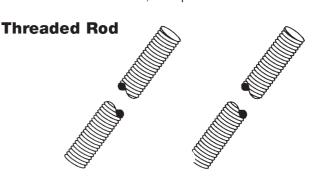
Manufactured from steel, zinc plated. For suspending services from profiled steel shuttered decking. Available to suit 6, 8, 10 and 12mm threaded rod.

No Drill Anchors





Available for M6, M8, M10 and M12 threadings. Manufactured from steel, zinc plated.



Threaded rod is manufactured from mild steel, zinc plated. Supplied in 3 metre lengths and available in M6, M8, M10 and M12 sizes.

Hexagonal Studding Connectors

Connectors are available to reduce wastage to a minimum.

Hexagonal Head Set Screws

Zinc Plated.

M6 x 20, 25, 30, 35, 40mm. M8 x 20, 25, 30, 35, 40mm. M10 x 20, 25, 30, 35, 40mm. M12 x 20, 25, 30, 35, 40mm.





Hexagonal Full Nut (8.8HT)

Zinc Plated. M6, M8, M10, M12.





Washers

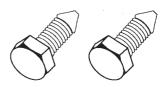
Lock Washers and Flat Washers, M6, M8, M10, M12 Penny Washers M6, M8, M10 x 30mm od. All zinc plated.





Cone Pointed Set Screws

Zinc Plated, M10 x 40mm.



Roofing Nuts and Bolts

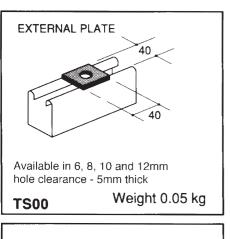
Zinc Plated. M6 x 20, M6 x 40, M8 x 25.

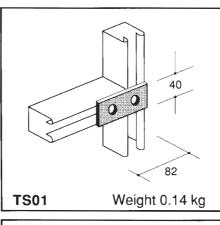


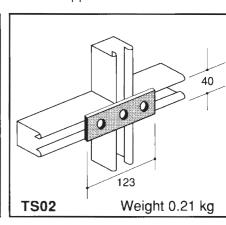


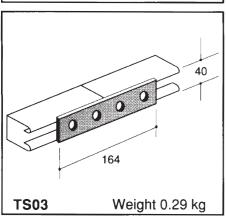
Tecstrut Fittings

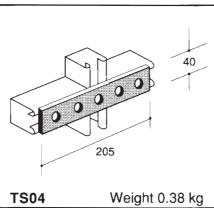
All fittings are generally manufactured from 6mm thick steel strip and hot dip galvanised to BSENISO1461:1999 unless otherwise indicated. Standard hole diameter 14mm. **NOTE:** All weights and dimensions approximate.

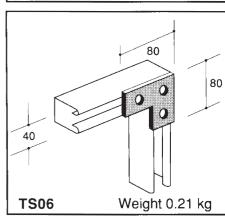


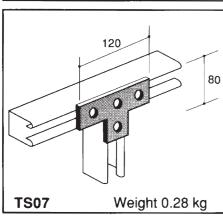


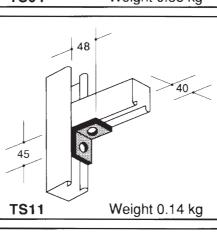


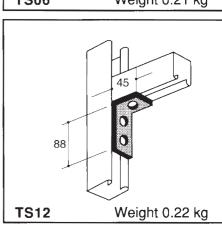


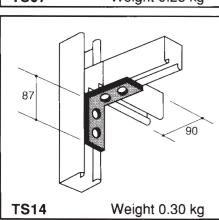


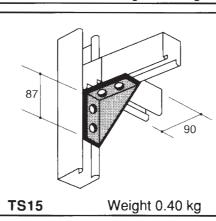


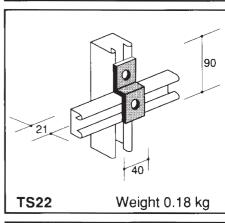


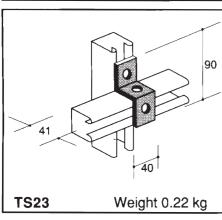


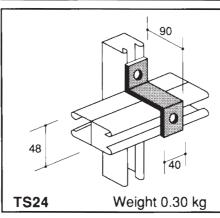


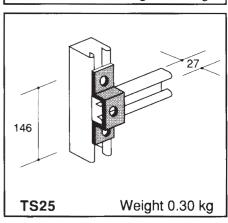




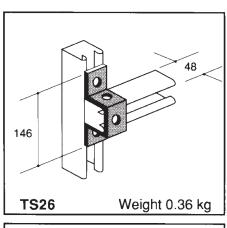


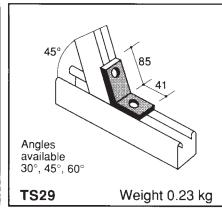


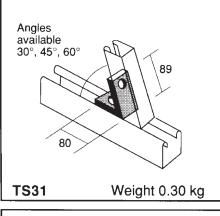


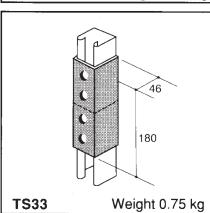


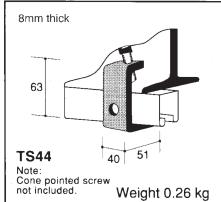
Tecstrut Fittings

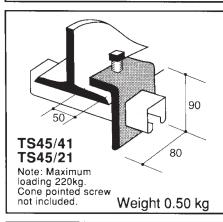


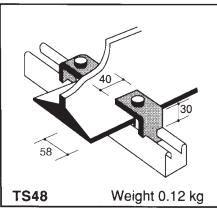


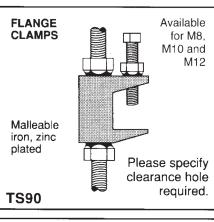


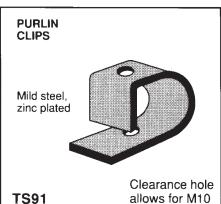


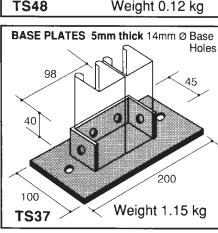


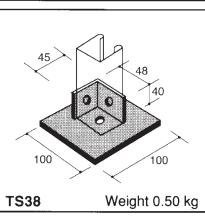


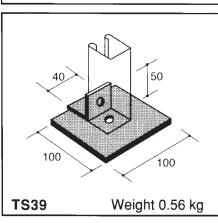


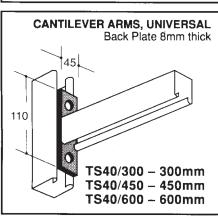


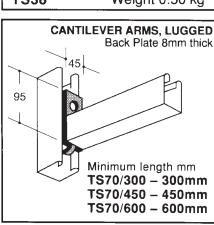


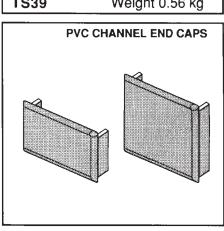










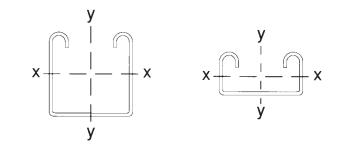


Load Data

Section	Span mm	Uniform Load@ 182N/mm²-KG (Deflection-mm)	Uniform Load@ max deflection of 1/180 of span-KG	Uniform Load@ max deflection of 1/360 of span-KG	Maximum Column Loading-KG
TSS-421	500 750 1000 1250 1500 2000 2500 3000	200 (1.8) 135 (4.0) 103 (7.0) 82 (11.0) 68 (16.3) 52 (29.0) 41 (44.5) 34 (65.5)	130 80 51 35 21 13	149 71 40 26 18 10 5	2010 1291 799 525 372 - -
TSS-441	500 750 1000 1250 1500 2000 2500 3000	655 (1.0) 435 (2.3) 331 (4.0) 257 (6.1) 216 (9.0) 159 (16.0) 130 (25.0) 108 (35.6)	- - 199 116 73 51	394 221 145 97 55 36 25	3351 2879 2190 1612 1195 739 501 366
TSP-422 TSS-422	500 750 1000 1250 1500 2000 2500 3000	268 (1.8) 180 (3.9) 137 (7.0) 106 (11.0) 90 (15.9) 69 (28.0) 55 (44.0) 45 (63.0)	106 68 48 27 17	210 94 53 34 24 13	2810 1760 1043 695 490 - -
TSP-442 TSS-442	500 750 1000 1250 1500 2000 2500 3000	970 (1.0) 649 (2.3) 480 (4.1) 385 (6.3) 326 (9.1) 246 (16.4) 197 (25.7) 163 (37.6)	- - 301 171 109 76	595 335 215 148 84 53 37	4890 4295 3390 2595 1980 1265 895 685
TSP-422D	500 750 1000 1250 1500 2000 2500 3000	801 (1.1) 522 (2.5) 399 (4.4) 312 (6.7) 263 (9.7) 199 (17.5) 158 (27.0) 131 (39.0)	- - 220 126 81 55	450 251 161 111 63 40 28	6400 5500 4155 2955 2125 1275 830
TSS-442D	500 750 1000 1250 1500 2000	2810 (0.5) 1890 (1.3) 1410 (2.2) 1110 (3.3) 905 (5.0) 705 (8.7)	- - - - -	- - - 790 457	9450 8950 7190 6880 5910 3780

Section Properties

Section Reference	Weight kg/m	X Moment of Inertia x/v in	centroid (cm ⁴)	Area of cross section (cm²)	Main axis angle x axis in centroid (deg)
TSS-421	1.10	0.769	3.236	1.347	90.00
TSS-441	1.57	4.366	5.452	1.914	90.00
TSS/TSP-422	1.86	1.024	4.729	2.074	90.00
TSS/TSP-442	2.65	6.363	8.307	3.035	90.00



Notes:

1. The above data is based upon plain sections throughout. Where slotted channels are used multiply load from table by 0.8.

406

2. Data is based upon uniformly distributed loads. If the load is concentrated at the centre of a span multiply load from table by 0.5 and deflection by 0.8.

286

199

2490

1690

- 3. **Stress 182N/mm².** Recommended when deflection is not critical, especially on longer spans.
- 4. **Deflection ¹/180 of span.** Recommended when deflection should be limited.
- 5. **Deflection ¹/360 of span.** Recommended when deflection needs to be imperceptible.

6. Channel Nut Loads

2500

3000

571 (13.6)

474 (20.0)

resistance to slip (2.5mm channels) - 16.5 KN maximum. Pull-out strength (2.5mm channels) - 24.7KN maximum. (Bolt size M10. Torque 70Nm).

N.B. The above data is calculated, not tested.

Spring Steel Fasteners Beam Clip Threaded Rod Hanger

Part no.	Flange	Rod thread	S.Load
RH10MT-12	2-4mm	M10	68kg
RH6MT-25	5-9mm	M6	68kg
RH8MT-25	5-9mm	M8	68kg
RH10MT-25	5-9mm	M10	68kg
RH6MT-50	10-16mm	M6	68kg
RH8MT-50	10-16mm	M8	68kg
RH10MT-50	10-16mm	M10	68kg

Vertical Flange Threaded Rod Hanger

Part no.	Flange	Rod thread	S.Load
VF1-8MT	2-5mm	M8	68kg
VF1-10MT	2-5mm	M10	68kg
VF2-6MT	5-7mm	M6	68kg
VF2-8MT	5-7mm	M8	68kg
VF2-10MT	5-7mm	M10	68kg

Z Purlin Threaded Rod Hanger

Part no.	Flange	Rod thread	S.Load
ZP6MT	2.5mm	M6	45kg
ZP8MT	2.5mm	M8	45kg
ZP10MT	2.5mm	M10	45kg

Allows perpendicular suspension for a variety of support systems.

Beam Clip Strap Hanger

Part no.	Flange	Strap	S.Load	
SH125	2-4mm	25mm	72kg	
SH250	5-9mm	25mm	90kg	
SH500	10-16mm	25mm	90kg	
Right Angle Strap Hanger				
Part no.	Flange	Strap	S.Load	
SHR125	2-4mm	25mm	72kg	
SHR250	5-9mm	25mm	90kg	
SHR500	10-16mm	25mm	90kg	

Pre-assembled strap hanger and horizontal beam clip for up to 25mm strap, for either parallel or right angle installation.

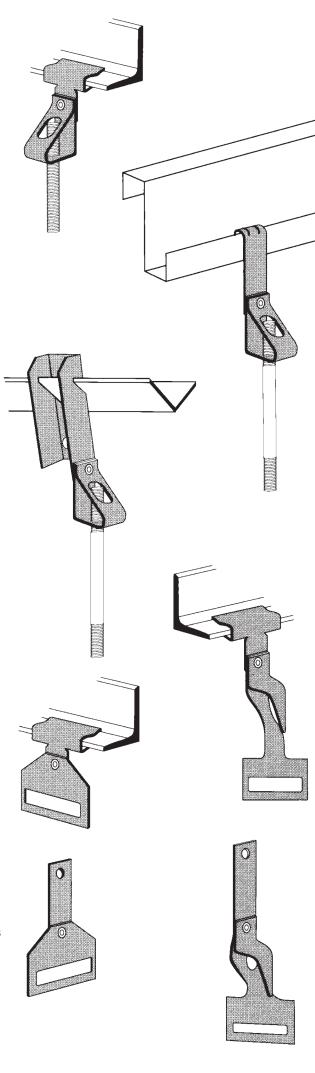
Straight and Right Angle Strap Hanger

Part no.		Strap	S.Load		
RHS-SH	M6	25mm	90kg		
Right Angle Strap Hanger					
RHA-SH	M6	25mm	90kg		

Easily mounted to wood, metal or concrete structural members with screws, bolts etc.

Notes:

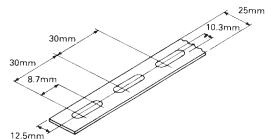
- 1. Fasteners are protected by a zinc rich finish which incorporates an organic resin coating providing an excellent barrier to moisture and heat. Fixings are coated to a thickness of 10-12 microns to BS7371, Parts 1, 2 and 11:1981.
- 2. Static loads given are based on tests up to x3 values listed.



Slotted Support Banding



Manufactured from corrosion resistant galvanised mild steel strip 0.9mm thick, and supplied in 30 metre coils. The elongated holes are punched at 30mm pitch to simplify alignment and fixing. Complies with the requirements of DW144.



Flexible Duct Insulating Strip



A highly versatile insulation system manufactured from high density phenolic foam which provides a new and improved solution to the requirement for structural insulation where ducts and pipes are supported. Fire resistant - Class 'O' rating.

Note: Also available for rectangular ducting. Please ask for our detailed literature for further information.

Split Rings



Manufactured from mild steel flat bar, drilled for clamping and zinc plated for a corrosion resistant finish.

Threaded Rod



Threaded rod is manufactured from mild steel, zinc plated. Supplied in 3 metre lengths and available in M6, M8, M10 and M12 sizes. Studding connectors are also available to reduce wastage to a minimum.