FIELDERS PROFILES
Flexibility is our Strength™

TL-5 Profile

NSW Profile

The possibilities are endless

Colorbond®

Fielders popular TL-5™ profile combines a versatile, modern design and excellent spanning qualities. Available in 0.42 or 0.48mm BMT, TL-5™ is also multipurpose as it can be used as either a roof or walling product for domestic and commercial applications.

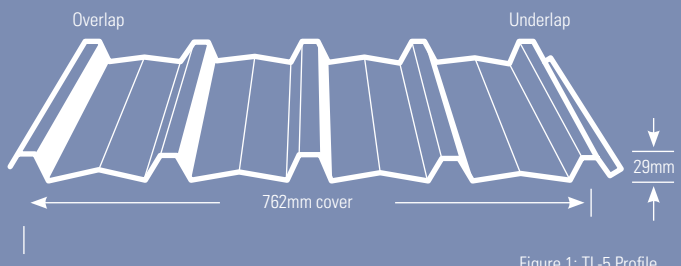


Figure 1: TL-5 Profile

Modern and Versatile Profile

- Economical 760mm sheet coverage .
- Quick and cost-effective to install.
- 29mm rib height and specially designed anti-capillary groove in the side lap ensure watertightness down to a two degree roof pitch.
- Available in long lasting ZINCALUME® and COLORBOND® steel.

TL-5™ Product Specification

This brochure contains a brief overview of some of the product's technical information which you, your Architect, Engineer or your builder may require regarding the Fielders' TL-5™ Profile. For more information and to read the complete product specifications and installation recommendations visit **fielders.com.au**.

Product Specification

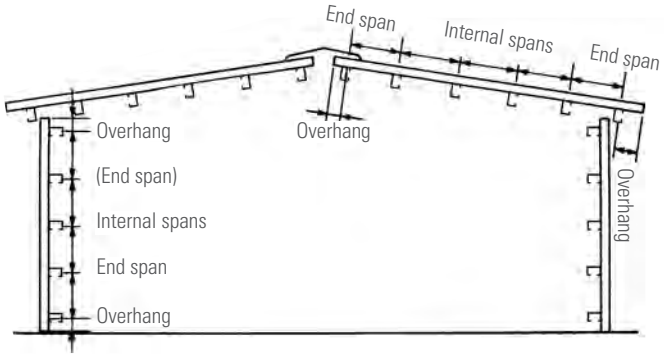
TL-5™ Material Specifications

Property		0.42 BMT	0.48 BMT	Notes
Total Coated Thickness		0.47	0.53	TCT
Mass / Unit Length (kg/m)	ZINCALUME®	3.30	3.70	1000 / (m/Tonne)
	COLORBOND®	3.36	3.77	
Mass / Unit Area (kg/m^2)	ZINCALUME®	4.34	4.87	1000 / (m Mass/profile width)
	COLORBOND®	4.42	4.96	
Minimum Yield Strength		G550		Base Steel Designation
Available Coating Classes		Z600 (Heritage Galvanised), AM100 (COLORBOND®), AM125 (Zincalume), AM150 (COLORBOND® Ultra) and Z450 (Galvanised)		Minimum Coating g/m^2
Coverage (mm)		762		
Tolerance		Sheet Length ±7mm Cover Width ±4mm		
Thermal Expansion		2.9mm average per 5m at 50° C change		

1. TL-5 is manufactured to AS 1397 and AS 2728. It is to be installed in accordance with AS 1445, AS 1562, and HB39.

TL-5™ Maximum Recommended Span (mm) – Non Cyclonic

Span Type	BMT	
	0.42	0.48
ROOF		
Single Span	1100	1600
End Span	1300	1850
Internal Span	1900	2600
Unstiffened Overhang	150	200
Stiffened Overhang	300	350
WALL		
Single Span	2400	2700
End Span	3000	3000
Internal Span	3000	3000
Overhang	150	200



Notes: 1. For roofs: Data is based on foot-traffic loading. 2. For walls: Data is based on pressures (see wind pressure table). 3. Table data is based on supports of 1mm BMT. 4. Refer to notes on page over regarding Maximum Recommended Span Considerations.

Maximum Recommended Span Considerations

Maximum recommended support spacings are based on testing in accordance with AS1562.1:1992, AS4040.1:1992 and AS4040.2:1992. These spacings may vary by serviceability and strength limit states for particular projects.

The pressure considered is based on buildings up to 10m high in Region B, Terrain Category 3, Ms =0.85, Mi =1.0, Mt =1.0 with the following assumptions made:

Roofs: Cpi=+0.20, Cpe=-0.90, Kl =2.0 for single + end spans, Kl =1.5 for internal spans (roof spans consider both resistance to wind pressure and light roof traffic (traffic arising from incidental maintenance).

Walls: Cpi=+0.20, Cpe=-0.65, Kl =2.0 for single spans, Kl =1.5 for internal spans (wall spans consider resistance to wind pressure only).

Limit State Wind Pressure Capacities (kPa) – Non Cyclonic

Profile	0.42mm BMT						0.48mm BMT					
Span	Single Span		End Span		Internal Span		Single Span		End Span		Internal Span	
	Serviceability	Strength	Serviceability	Strength	Serviceability	Strength	Serviceability	Strength	Serviceability	Strength	Serviceability	Strength
600	4.98	10.25	4.18	6.35	5.05	9.50	7.27	12.00	6.29	9.40	7.37	9.90
900	3.91	8.35	3.63	5.85	4.18	7.95	5.06	11.60	5.13	8.00	5.96	8.55
1200	2.83	6.45	3.08	5.30	3.42	6.55	3.34	6.90	3.96	6.55	4.66	7.35
1500	1.87	4.75	2.55	4.80	2.83	5.25	2.06	7.75	2.93	5.30	3.54	6.25
1800	1.16	3.60	2.06	4.30	2.36	4.30	1.15	6.10	2.13	4.35	2.72	5.40
2100	0.75	3.00	1.62	3.80	1.94	3.65	0.71	4.75	1.54	3.65	2.22	4.75
2400	0.53	2.75	1.22	3.25	1.56	3.30	0.50	3.60	1.12	3.25	1.92	4.30
2700	-	-	0.85	2.75	1.23	3.05	0.42	2.65	0.82	2.95	1.64	3.85
3000	-	-	0.50	2.25	0.97	2.85	-	-	0.58	2.75	1.38	3.45

Supports must be no less than 1.0mm BMT. Testing was conducted in accordance with AS 1562.1:1992. The pressure capacities for serviceability are based on a deflection limit of (span/120) + (maximum fastener pitch/30). The pressure capacities for strength have been determined by testing the cladding to failure (ultimate capacity).

TL-5 Pierce Fixing - Non-Cyclonic

Fixing Supports	Crest Fixed	Pan Fixed	Side Laps (If required)
Fix to Steel Single & lapped steel thickness ≥0.55 up to 1.0mm BMT	RoofZips M6-11x50	10-16x16, Metal Teks HH or M5-16x25 Designer Head or RoofZips M6-11x25	10-16x16, Metal Teks HH or Roof Zips M6-11x25 or M5-16x25 Designer Head or Sealed blind rivet ø4.8mm aluminium
Fix to Steel Single thickness steel ≥1.0mm BMT up to 3.0mm BMT	12-14x45, Metal Teks HG, HH or AutoTeks M5.5-14x50	10-16x16, Metal Teks HH or M5-16x25 Designer Head	
Fix to Steel Total lapped thickness of ≥1.0mm BMT up to 3.8mm BMT	12-14x45, Metal Teks HG, HH or AutoTeks M5.5-14x50	10-16x16, Metal Teks HH	
Fix to Timber Hardwood (J1-J3)	12-11x65, Ype 17 HG, HH	10-12x25, Type 17, HH M5-16x25 Designer Head or 12-11x25, Type 17, HH	
Fix to Timber Softwood (J4)	12-11x65, Type 17 HG, HH or RoofZips M6-11x65	10-12x30, Type 17, HH M5-16x25 Designer Head 12-11x25, Type 17, HH or RoofZips M6-11x25	

Notes: 1] For other steel thicknesses not specified please seek advice from screw manufacturer. 2] Values given are: gauge/threads per inch/ lengths (mm). HH = Hex. Head, WH = Wafer Head, HG = Hi-Grip. 3] Care is required during installation to prevent stripping of thin material. (Single ply.). 4] Screw specification as above or equivalent fastener. 5] All screws with EPDM sealing washer.

Metal/Timber Compatibility Lead, copper, bare steel and green or some chemically treated timbers are not compatible with this product; thus don't allow any contact of the product with those materials, nor discharge of rainwater from them onto the product.

Cutting We recommend a circular saw with a metal-cutting blade when cutting onsite. It produces fewer damaging hot metal particles and leaves less resultant burr than a carborundum disc. Sweep all metallic swarf and other debris from roof areas and gutters at the end of each day and at the completion of the installation as failure to do so can lead to surface staining when the metal particles rust.

Maintenance Optimum product life will be achieved if all external surfaces are washed regularly. Areas not cleaned by natural rainfall (such as the tops of walls sheltered by eaves) should be washed down every six months.

Safety, Storage and Handling Product may be sharp and heavy. Heavy-duty cut resistant gloves and appropriate manual handling techniques or a lifting plan are recommended when handling material. Keep the product dry and clear of the ground. If stacked or bundled product becomes wet, separate it, wipe it with a clean cloth to dry thoroughly. Handle materials carefully to avoid damage: don't drag materials over rough surfaces or each other; don't drag tools over material; protect from swarf.

Sealed Joints For sealed joints use screws or rivets and neutral-cure silicone sealant branded as suitable for use with galvanised or ZINCALUME® steel.