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FIELDERS PREMIUM PROFILES

FIELDERS

Shadowline 305

WA Profile

The possibilities are endless

Colorbond

Fielders Shadowline is a unique Architectural aesthetically pleasing profile, that has the ability to deliver a distinct but classic smooth finish, to your next roofing or walling project. Fielders Shadowline 305 can be used as either a concealed fixed (button punched) roof profile or a screw fixed or concealed fixed wall profile.

Shadowline 305 Product Specification

The information contained in the following brochure provides architects, engineers and builders, a comprehensive overview of Shadowline 305, sheet profile and its capabilities and applications. For more information and to read the complete product specifications and installation recommendations, we encourage you to please visit **fielders.com.au**

A distinct and classically smooth finish.

- Fixed both horizontally and vertically as wall cladding.
- Multiple concealed fixing options available.
- Fielders Shadowline 305 can be rolled to any transportable length in ZINCALUME® with the full range of COLORBOND® colours in 0.70BMT gauge.
- Available on-site with Fielders Mobile Mill.

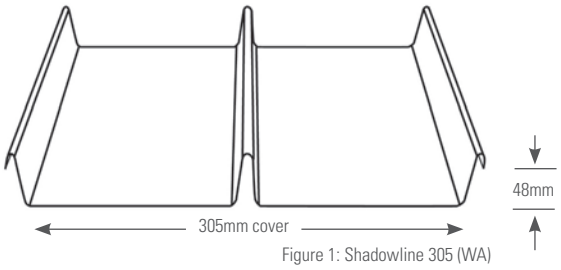

Figure 1: Shadowline 305 (WA)

Shadowline 305 Material Specifications

Property		0.70 BMT	Notes
Total Coated Thickness		0.75	TCT
Mass / Unit Length (kg/m)	ZINCALUME®	2.85	1000/(m/Tonne)
	COLORBOND®	2.90	
Mass / Unit Area (kg/m²)	ZINCALUME®	9.36	1000/(m Mass/profile width)
	COLORBOND®	9.53	
Minimum Yield Strength		G300	Base Steel Designation
Minimum Coating Class		AM100	Minimum Coating 100g/m² of Zinc - Aluminium - Magnesium
Coverage (mm)		305	
Tolerance		Sheet Length ±10mm Cover Width ±5mm	
Thermal Expansion		2.9mm average per 5m at 50° C change	

Shadowline 305 is manufactured to AS 1397 and AS 2728 Cat. 3. It is to be installed in accordance with AS 1445, AS 1562, and HB39. The sectional properties are theoretical values per sheet width. These properties are gross values only.

Product Specification - Cyclonic

Walling Wind Load Capacity Limit State Design (kPa) - Screw Fixed (Every Pan)

Profile	0.70mm BMT					
Span	Single Span		End Span		Internal Span	
	Serviceability	Strength	Serviceability	Strength	Serviceability	Strength
450	6.23	8.09	5.44	7.59	6.00	8.10
600	6.05	8.03	4.66	6.86	5.30	7.46
900	5.69	7.83	3.37	5.56	4.08	6.30
1200	5.33	7.54	2.42	4.45	3.10	5.26
1500	4.97	7.15	1.81	3.55	2.36	4.37
1800	4.62	6.65	1.54	2.84	1.85	3.61

Roofing and Walling Wind Load Capacity Limit State Design (kPa) - Button Punched (Every Rib)

Profile	0.70mm BMT					
Span	Single Span		End Span		Internal Span	
	Serviceability	Strength	Serviceability	Strength	Serviceability	Strength
450	7.48	9.74	6.58	8.84	7.23	9.75
600	7.10	9.75	5.69	7.59	6.43	8.63
900	6.34	9.48	4.15	5.50	5.01	6.66
1200	5.59	8.83	2.96	3.95	3.82	5.07
1500	4.83	7.79	2.12	2.94	2.88	3.85
1800	4.07	6.37	1.62	2.48	2.17	3.01

Maximum Roofing Spans (mm) for Foot-Traffic - Button Punched (Every Rib)

Gauge (mm)	Span Type	Spans (mm)
0.70 BMT	Single	1800
	End	2600
	Internal	2600

Maximum Spans based on foot-traffic.

Button Punched (Roofing and Walling)

Roofing and Walling Maximum Recommended Span (mm) - Button Punched (Every Rib)

Span Type	0.70 mm BMT (0.75 mm TCT)	
	Roof	Wall
Single Span	1800	N/A
End Span	2000	2700
Internal Span	2500	2700
Unstiffened Overhang	150	450
Stiffened Overhang	450	450

Roof data is based on foot-traffic. Wall data is based on wind pressures. Supports must not be less than 1.0 mm BMT.

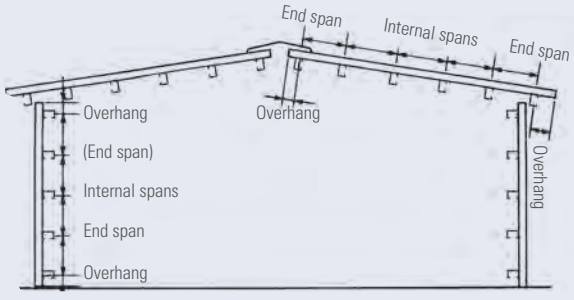

Figure 2: Span Locations

Roofing and Walling Wind Load Capacity Limit State Design (kPa) - Button Punched (Every Rib)

Profile	0.70mm BMT					
Span	Single Span		End Span		Internal Span	
	Serviceability	Strength	Serviceability	Strength	Serviceability	Strength
900	2.60	3.60	1.45	4.20	2.05	5.20
1200	2.10	3.25	1.45	3.80	1.90	4.90
1500	1.70	2.85	1.40	3.45	1.80	4.55
1800	1.35	2.70	1.35	3.15	1.65	4.15
2100	1.10	2.40	1.30	2.75	1.55	3.65
2400	0.95	2.20	1.25	2.45	1.45	3.05
2700	0.80	1.95	1.15	2.25	1.30	2.50

Supports must not be less than 1.0 mm BMT.

Screw Fixed (Walling Only)

Walling Maximum Recommended Span (mm) - Screw Fixed (Every Pan)

Walling		Terrain Category 2		Terrain Category 3	
Wind Region	Base Metal Thickness	End	Internal	End	Internal
A	0.70	3000*	3000*	3000*	3000*
B	0.70	3000*	3000*	3000*	3000*

Note:
1. Maximum walling spans comply with both strength and serviceability wind pressure requirements.
2. Wind Loading Design Parameters: Design Life 50 years, Importance Level 2, Maximum Roof Height H = 10m, External Pressure Coefficient Cpe = -0.65, Internal Pressure Coefficient Cpi = 0.2, Local Pressure Factor K_L = 2.0 (end and single spans), K_L=1.0 (internal spans).
3. *Spans in excess of 3000mm may be available subject to enquiry. Wall applications or long spans require particular attention to installation practice.

Walling Wind Load Capacity Limit State Design (kPa) - Screw Fixed (Every Pan)

Non Cyclonic				
Profile	0.70mm BMT			
Span	End Span		Internal Span	
	Serviceability	Strength	Serviceability	Strength
900	4.09	12.09		
1200	3.63	9.34	4.24	12.09
1500	3.48	7.16	3.50	9.34
1800	3.21	5.09	3.27	7.16
2100	2.74	3.67	3.09	5.09
2400	2.46	3.63	2.74	3.67
2700	1.98	3.09		
3000	1.78	2.88		
3300	1.49	2.38		

Supports must not be less than 1.0 mm BMT.

Installation

Shadowline 305 is either pierce fixed or concealed fixed to its supports. For concealed fixed the clips are screwed to the supports whilst the profile is fixed to the clip via a button punch tool which squeezes the profile onto the clip allowing for no penetration of the decking enhancing the profiles water tightness capabilities. Refer to the downloadable Roofing and Walling Manual on the Fielders website.

Recommended Fasteners Shadowline 305 - Button Punched (Every Rib) - Non-Cyclonic

Fixing Supports	Clip Fixed
Fix to Steel (Total 2.0mm) Single & lapped steel thickness ≥0.55 up to 1.0mm BMT	10-16x16, Metal Teks, WH or 10-16x22, Metal Teks, WH
Fix to Steel Single thickness steel >1.0mm BMT up to 3.0mm BMT	10-16x16, Metal Teks, WH or 10-16x22, Metal Teks, WH
Fix to Steel (Total 3.8mm) Lapped thicknesses of >1.0mm BMT up to 1.9mm BMT	10-16x16, Metal Teks, WH or 10-16x22, Metal Teks, WH
Fix to Timber Hardwood (J1-J3)	10-12x25, Type 17, WH
Fix to Timber Softwood (J4)	10-12x35, Type 17, WH

Recommended Fasteners Shadowline 305 - Screw Fixed (Every Pan) - Non-Cyclonic

Fixing Supports	Clip Fixed
Fix to Steel Single thickness steel ≥1.5mm BMT	10-16x16, Metal Teks, HWF or 10-16x22, Metal Teks, HWF

Recommended Fasteners Shadowline 305 - Cyclonic

Fixing Supports	Fixing Configuration	Fastener
Steel 1.5 mm	Screw-Fixed	14-10 x 25mm hexagon head self-drilling metal screws fixed at every pan
	Button-Punched	10-16 x 16mm wafer head self-drilling metal screws

To find out more information on Shadowline 305, contact your local Fielders representative or view the **Fielders Roofing and Walling Manual** available on the Fielders website. It contains comprehensive details on the installation process, technical data including Rainfall Capacities, and Complete Technical Specifications. Or you can download it at **fielders.com.au/manuals**