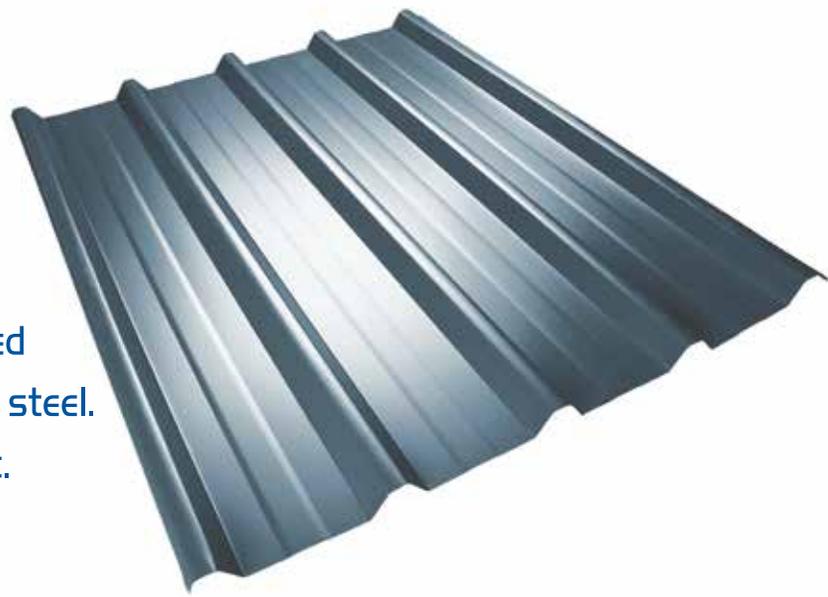


APCLAD



Apclad is a modern roofing profile rollformed from Australian made BlueScope Hi-Tensile steel. The profile whilst strong is also lightweight.

STEEL ROOF & WALL CLADDING

Apclad can be used on lower roof pitches down to a minimum of 2 degrees (1 in 27). The deep 29mm ribs, wide pans and anti-capillary side laps provide excellent water carrying capacity while conventional pierce fixing allows for fast & efficient installation.

Apclad is available in the full range of Colorbond prepainted steel colours and unpainted next generation Zinalume. Colorbond ULTRA is available for harsh environments and Colorbond Metallic finishes may be specified for architectural applications.

The high strength Zinalume steel has a minimum yield stress of a G550 (550Mpa minimum yield stress) with an AM 125 coating complying with AS 1397. All Colorbond prepainted steel complies with AS/NZS2728: 1997.

All fasteners complying with AS3566 Class 3 may be used. 4 fasteners sheet per support to be used. Although wall cladding may be pan fixed all roof cladding must be crest fixed with sealing washers to maximise watertightness.

Crest Fixing to Steel purlins:
RoofZip M6-1 1x50 (under 1mm)
Auto Tek M5.5- 14x50 (1-3mm)

Pan Fixing:
Tek 10-16x16mm or
RoofZip M6-1 1x25

Crest Fixing to Timber:
Type 17 12-1 1x65mm (hardwood)
RoofZip M6-1 1x65 (softwood)

Pan Fixing:
Type 17 10-12x25mm
Type 17 10-12x30mm or
RoofZip M6-1 1x25

Apclad is manufactured in long lengths to eliminate the need for end laps. It is best practice where practical to lay sheets with overlap edge facing away from the prevailing weather. Allow roof sheets to overlap into gutters by 50mm, turn down pans into gutter and turn up pans at the ridge end. Apex advises that site installation methods should comply with Australian Standards HB39.

Written site specific BlueScope material warranties are available for our Apclad profile.



For further information on span tables, water carrying capacity, steel data sheets and lead times please refer to our website www.apexsteel.com.au or contact your closest Apex Sales Office.

INTRODUCTION

The span tables below consider both, light foot traffic (for roof only) and wind pressure (for roof and wall).

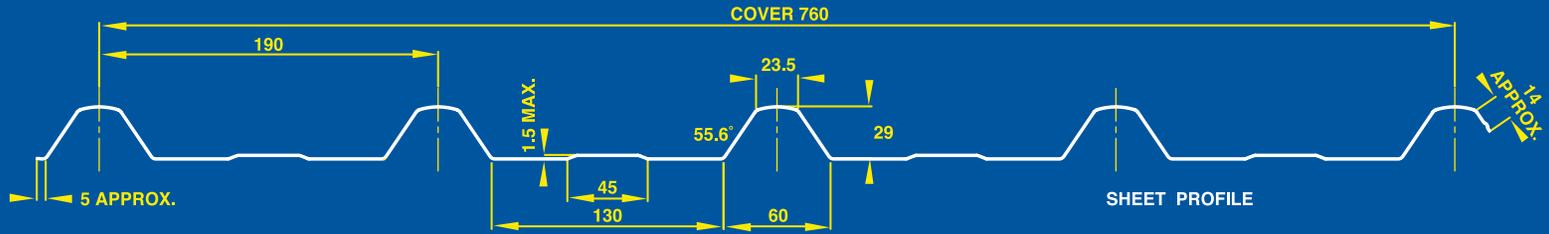
APCLAD SPECIFICATIONS

Material - High tensile steel, G550

Base metal thickness (B.M.T.) - Available in either 0.42/0.48mm

Cover - 762mm (width) Profile height - 29mm

Finish - Available in ZINCALUME®/COLORBOND®



BMT (mm)	APPLICATION	SPAN TYPE	AS4055 Wind Classification			
			N1	N2	N3	N4
0.42	Roof	Single	1100	1100	1100	1100
		End	1300	1300	1300	1300
		Internal	1900	1900	1900	1500
	Wall	Single	2400	2100	1850	1700
		End	3000	2550	2250	1700
		Internal	3000	3000	2600	1950
0.48	Roof	Single	1600	1600	1600	1500
		End	1850	1850	1850	1500
		Internal	2600	2600	2350	1800
	Wall	Single	2700	2400	2000	1950
		End	3000	2950	2550	2050
		Internal	3000	3000	2900	2250

Table 1. APEX Apclad sheets – spans for different wind classifications

- All spans are in mm and are based on 4 fasteners per sheet at each support.
- This table is only valid for structures with the following geometric limitations:
 - Distance from ground level to the underside of eaves does not exceed 6.0m.
 - Distance from ground level to the highest point of the roof (excluding chimneys) does not exceed 8.5m.
 - Width including roofed verandas (excluding eaves) does not exceed 16.0 m, and the length does not exceed five times the width.
 - Roof pitch does not exceed 35°.

BMT (mm)	Application	Span type	Maximum recommended span - (mm)
0.42	Roof	Single	1100
		End	1300
		Internal	1900
		Un-stiffened Overhang	150
		Stiffened Overhang	300
	Wall	Single	2400
End		3000	
Internal		3000	
Overhang		150	
0.48	Roof	Single	1600
		End	1850
		Internal	2600
		Un-stiffened Overhang	200
		Stiffened Overhang	350
	Wall	Single	2700
		End	3000
		Internal	3000
		Overhang	200

Table 2. Maximum recommended spans

ROOF PITCH

The maximum roof lengths for different roof pitches are given in table 3 below

Peak rainfall intensity (mm/hr)	Roof slope				
	2°	3°	5°	7.5°	10°
100	220	255	320	380	435
150	145	170	210	255	290
200	110	125	160	190	220
250	85	100	125	160	175
300	70	85	105	125	145
400	55	60	80	95	110
500	40	50	60	75	85

Note: Roof length (m) is from ridge to ridge

Table 3. Maximum roof lengths for drainage

THERMAL EXPANSION

Metal cladding is subject to expansion and contraction due to temperature changes which on a roof can be severe. The maximum recommended sheet lengths for screw fixed cladding is 25m for Zincalume/light colours and 18m for dark colours. For roof lengths in excess of this an expansion joint should be used to mitigate the effect of thermal expansion.

DISCLAIMER

This document is an aid for building professionals and designers and is only valid for APCLAD roof and wall cladding sheets manufactured and distributed by APEX Building Products Pty Ltd. This document is not a substitute for professional advice - please seek professional advice regarding the use of this product.

A P E X Y O U R S T E E L P A R T N E R



32-36 Saltwater Circuit,
Narangba, QLD 4504
Ph: (07) 3491 4999
Fax: (07) 3491 4900

4 Cojo Place,
Dandenong South, VIC 3175
Ph: (03) 9768 4700
Fax: (03) 9768 4799

400 Martins Road,
Greenfields, SA 5107
Ph: (08) 8281 4911
Fax: (08) 8281 4922

INSTALLATION

GENERAL INSTALLATION

Installation must comply with relevant Australian Standards (including AS1562.1, AS1397, AS 2728), project specifications and manufacturer recommendations.

SHEET ORIENTATION & LAYING DIRECTION

Lay sheets:

- Away from prevailing weather

Ensure:

- Correct overlap direction before lifting to roof

Start from:

- One end of the building, maintaining alignment

Side Laps:

- Anti-capillary rib is underlap side
- Orientation is critical to prevent water ingress

Side lap fixing:

- Not always required
- Recommended in high wind areas

End Conditions:

- Sheet overhang into gutter approx. 50mm
- For improved weatherproofing Turn down pans at eaves Turn up pans at ridge

Low Pitch Roofs ($\leq 5^\circ$) Additional controls required:

- Turn down pans at sheet ends
- Turn up at ridge
- Ensure no capillary water paths

Sheet Placement

- Place bundles over structural supports
- Do NOT:
 - Place loads mid-span
 - Lift, do not drag sheets

Walking on Roof

- Walk over supports where possible
- Wear soft-soled footwear
- Avoid concentrated loads in pans

FIXING METHOD

APCLAD[®] is a pierce-fixed system.

ROOF FIXING (Mandatory)

- Fix through crest of ribs only
- Minimum: 4 fasteners per sheet per support
- Purpose: Maximises watertightness

WALL FIXING

- Crest or pan fixing permitted

FASTENERS

All fasteners complying with AS3566 Class 3 may be used. 4 fasteners per support to be used. Although wall cladding may be pan fixed all roof cladding must be crest fixed with sealing washers to maximise water tightness.

Fastener Installation

- Perpendicular to sheet
- In centre of rib or pan
- Minimum 25mm from sheet ends

SAFETY & QUALITY

- Sheets may be sharp. Use cut-resistant gloves
- Use fall protection systems
- Follow site SWMS and OHS requirements

STORAGE & HANDLING

- Store off the ground and under cover
- If wet separate and dry immediately
- Avoid dragging sheets and scratching coating

Cutting

- Use cold cutting methods (e.g. circular saw with metal blade)
- Do NOT use abrasive discs (causes coating damage)
- Remove all swarf immediately

TECHNICAL NOTES & DISCLAIMER

All descriptions, dimensions, and figures are approximate and subject to change without notice. Apex Steel reserves the right to modify product design and specifications at any time. This publication is intended to assist qualified trades and specifiers in the installation of Apex products. It is not a substitute for professional judgement or building design advice. Except as required by law, Apex Steel shall not be liable for any loss or damage arising from use of this document.

