# APSPAN OO

Apspan is a modern roofing & walling profile rollformed from Australian made BlueScope Hi-Tensile steel. The profile whilst strong is also lightweight making its strong linear appearance perfect for most commercial, domestic and architectural applications.



# STEEL ROOF & WALL CLADDING

Apspan can be used on lower roof pitches down to a minimum of 2 degrees (1 in 27). The deep 24mm ribs and anti-capillary side lap provide excellent water carrying capacity while conventional pierce fixing allows for fast & efficient installation.

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

The high strength Zincalume steel has a minimum yield stress of a G550 (550Mpa minimum yield stress) with an AM I25 coating complying with AS I397.

All Colorbond prepainted steel complies with AS/NZS2728: I997.

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 Ix50 (under Imm) Auto Tek M5.5-14x50 (1-3mm)

Crest Fixing to Timber:
Type 17 12-11x65mm (hardwood)
RoofZip M6-11x65 (softwood)

Pan Fixing: Tek 10-16x16mm or RoofZip M6-11x25

Pan Fixing:
Type I7 IO-I2x25mm
Type I7 IO-I2x30mm or
RoofZip M6-I1x25

Apspan 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 Apspan profile.





### SPAN TABLES - NON-CYCLONIC AREAS

#### INTRODUCTION

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

#### **APSPAN SPECIFICATIONS**

Material - High tensile steel, G550

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

Cover - 700mm (width) Profile height - 24mm

Finish - Available in ZINCALUME@/COLORBOND@



BMT (mm)	APPLICATION	SPAN TYPE	AS4055 Wind Classification							
			3 Fasteners per support				4 Fasteners per support			
			NI	N2	N3	N4	ΝI	N2	N3	N4
0.42	Roof	Single	1300	1300	1300	-	1300	1300	1300	1300
		End	1800	1800	1700	-	1800	1800	1800	1500
		Internal	2400	2000	1800	-	2400	2400	2250	1600
	Wall	Single	2500	1950	1750	1500	2550	2050	1900	1750
		End	3000	2300	1950	1550	3200	2650	2150	1800
		Internal	3300	2500	2000	1750	3500	3100	2750	1950
0.48	Roof	Single	2000	1850	1500	-	2000	2000	1800	1700
		€nd	2200	2100	1800	-	2300	2300	2100	I 750
		Internal	3000	2350	2000	-	3000	2850	2350	2000
	Wall	Single	3000	2100	1850	1750	2600	2250	2050	1950
		End	3300	2350	2100	1850	3300	2700	2300	2150
		Internal	3300	2950	2350	1950	3600	3300	2850	2400

Table I. Apspan 700 spans for different wind classifications

- I. All spans are in mm.
- 2. This table is only valid for structures with the following geometric limitations:
- a. Distance from ground level to the underside of eaves does not exceed 6.0m.
- b. Distance from ground level to the highest point of the roof (excluding chimneys) does not exceed 8.5m.
- c. Width including roofed verandas (excluding eaves) does not exceed 16.0 m, and the length does not exceed five times the width.
- d. Roof pitch does not exceed 35°.

BMT (mm)	Application	Span type	Maximum recommended span – (mm)	
	Roof	Single	1300	
		End	1800	
		Internal	2400	
		Un-stiffened Overhang	300	
0.42		Stiffened Overhang	600	
0.46	Wall	Single	2500	
		End	3000	
		Internal	3300	
		Overhang	300	
	Roof	Single	2000	
		End	2200	
		Internal	3000	
		Un-stiffened Overhang	400	
0.48		Stiffened Overhang	700	
0.48	Wall	Single	3000	
		End	3000	
		Internal	3300	
		Overhang	400	

Table 2. Maximum recommended spans

#### **ROOF PITCH**

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

Peak	Roof slope							
rainfall intensity (mm/hr)	z°	3°	5°	7.5°	10°			
100	95	110	130	150	170			
150	65	70	85	100	115			
200	45	55	65	75	85			
250	35	40	50	60	65			
300	30	35	40	50	55			
400	20	25	30	35	40			
500	15	20	25	30	35			

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 APSPAN 700 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.

# APEX YOUR STEEL PARTNER



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