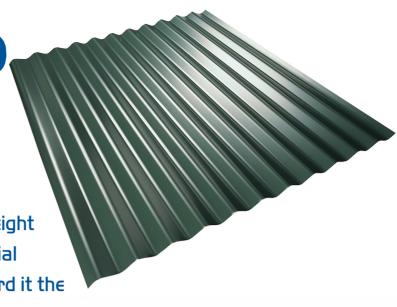
# CORRUGATED

Corrugated roofing & walling is rolled from Australian made BlueScope Hi-Tensile steel.

The classic profile whilst strong is also lightweight making it the most popular choice for residential roofing. It's soft and uniform curves also afford it the versatility to be used in just about all steel cladding applications.



## STEEL ROOF & WALL CLADDING

Our 762mm coverage Corrugated steel profile can be used on roof pitches down to a minimum of 5 degrees (1 in 12). The uniform 17mm ribs and substantial lap of minimum 1.5 corrugations provide excellent weather proofing while conventional pierce fixing allows for fast & efficient installation.

Corrugated 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: I 997.

All fasteners complying with AS3566 Class 3 may be used. 5 fasteners per sheet per support.
(In most non cyclonic areas 5 fasteners per end support and 3 fasteners per internal support may 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) Metal Tek 12-14x35 (1-3mm)

Crest Fixing to Timber:
Type 17 12-11x50mm (hardwood)
RoofZip M6-11x50 (softwood)

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

Pan Fixing:
Type 17 10-12x25mm
Type 17 10-12x30mm or
RoofZip M6-11x25

Corrugated 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 high end. Apex advises that site installation methods should comply with Australian Standards HB39.

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



## CORRUGATED

#### 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).

#### **CORRUGATED SPECIFICATIONS**

Material - High tensile steel, G550

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

Cover - 762mm (width) Profile height - 17mm

Finish - Available in ZINCALUME@/COLORBOND@



BMT (mm)	APPLICATION	SPAN TYPE	AS4055 Wind Classification							
			3 Fasteners per support				5 Fasteners per support			
			NI	N2	N3	N4	ΝI	N2	N3	N4
0.42	Roof	Single	700	700	600	-	700	700	700	700
		End	900	900	750	-	900	900	900	900
		Internal	1500	1200	1050	-	1200	1500	1500	1500
	Wall	Single	1650	1350	1050	900	1650	1500	1350	1300
		End	2100	1550	1100	1000	2100	1900	1500	1450
		Internal	2700	2200	1700	1450	2700	2300	2050	1950
0.48	Roof	Single	800	800	600	-	800	800	800	800
		End	1300	1300	1000	-	1300	1300	1300	1300
		Internal	1600	1600	1550	-	1600	1600	1600	1600
	Wall	Single	1800	1450	1100	950	1800	l 750	I 450	1400
		End	2250	1850	1500	1300	2250	1950	1700	1650
		Internal	2700	2200	I 950	1800	2700	2300	5100	2000

Table I. APEX Corrugated sheets — 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)
		Single	700
	Roof	End	900
		Internal	1500
		Un-stiffened Overhang	200
0.42		Stiffened Overhang	300
0.46	Wall	Single	1650
		End	2100
		Internal	2700
		Overhang	200
	Roof	Single	800
		End	1300
		Internal	1600
		Un-stiffened Overhang	250
0.48		Stiffened Overhang	350
0,46	Wall	Single	1800
		End	2250
		Internal	2700
		Overhang	250

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)	2°	3°	5°	7.5°	10°			
100	-	-	29	34	38			
150	-	-	20	23	25			
200	-	-	15	17	19			
250	-	-	12	14	15			
300	-	-	10	11	13			
400	-	-	7	8	10			
500	-	-	6	7	8			

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 CORRUGATED 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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