APDECK 700

Apdeck is a concealed fix roofing profile rollformed from Australian made BlueScope Hi-Tensile steel. The concealed fixing system eliminates the need for exposed fasteners making its clean lines perfect for most commercial, domestic and architectural applications.

STEEL ROOF & WALL CLADDING

Apdeck can be used on lower roof pitches down to a minimum of 1 degrees (1 in 50) for 0.48mm and 2 degrees for 0.42mm material. The deep 42mm ribs and wide pans provide excellent water carrying capacity while the concealed clip system gives added water tightness and a fast & efficient installation.

Apdeck 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 AM125 coating complying with AS1397. All Colorbond prepainted steel complies with AS/NZS2728:1997.

All fasteners complying with AS3566 Class 3 may be used. 3 fasteners per Clip per support to be used.

Fixing to Steel purlins:
Batten Zip 12-11x40mm (under 1mm)
Tek 12-14x30mm full thread (1mm-3mm)

Fixing to Timber:
Batten Zip 12-11x40mm

Apdeck is manufactured in long lengths to eliminate the need for end laps. The concealed fix clips system allows for longer runs than most conventional pierce fix profiles. 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 Apdeck profile.

APEX BUILDING PRODUCTS

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

APDECK 700

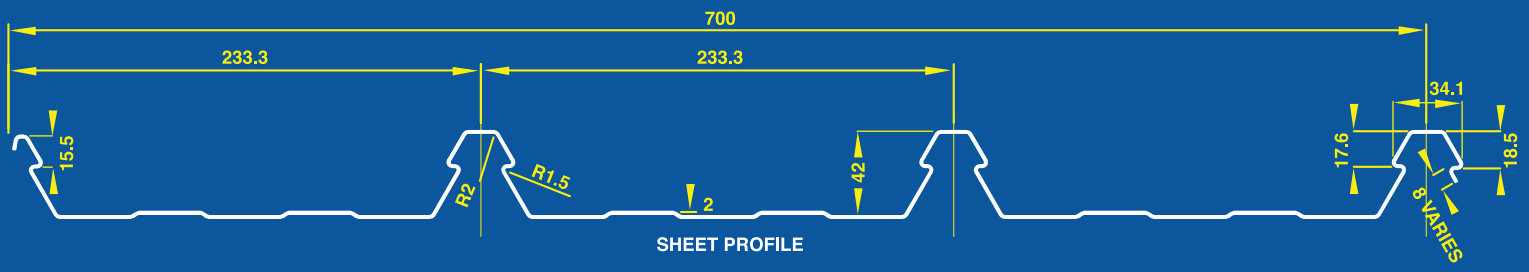
SPAN TABLES - NON-CYCLONIC AREAS

INTRODUCTION

The span tables below are prepared for wind pressure (for roof and wall) in non-cyclonic wind regions.

APDECK SPECIFICATIONS

Material - High tensile steel, G550 Base metal thickness (B.M.T.) - 0.42/0.48mm
Cover - 700mm (width) Profile height – 42.5mm
Finish - Available in ZINCALUME©/COLORBOND©



SHEET PROFILE

Ultimate Strength Pressures

The ultimate strength wind pressures on a roof for different wind classifications, as specified in AS4055-2012 are given in Table 1.

AS 4055 wind classification	Pressure on roof - see figure 1 (kPa)				Pressure on walls - see figure 2 (kPa)		
	Downward pressure	Upwards pressure (uplift)			Outwards pressure	Inwards pressure	
	Any position RE, G, RC	Roof edge - RE	Roof general area - G	Roof corner - RC	Any position - G, SC	General area - G	Wall edge - SC
N1	+0.44	-1.25	-0.69	-1.81	+0.62	-0.53	-0.94
N2	+0.60	-1.73	-0.95	-2.51	+0.86	-0.74	-1.30
N3	+0.95	-2.70	-1.49	-3.92	+1.35	-1.16	-2.03
N4	+1.41	-4.02	-2.21	-5.83	+2.01	-1.72	-3.01
N5	+2.07	-5.91	-3.25	-8.58	+2.96	-2.53	-4.44
N6	+2.80	-7.99	-4.39	-11.58	+3.99	-3.42	-5.99

Table 1. Wind pressures on roof and house walls (reproduced from AS4055-2012)

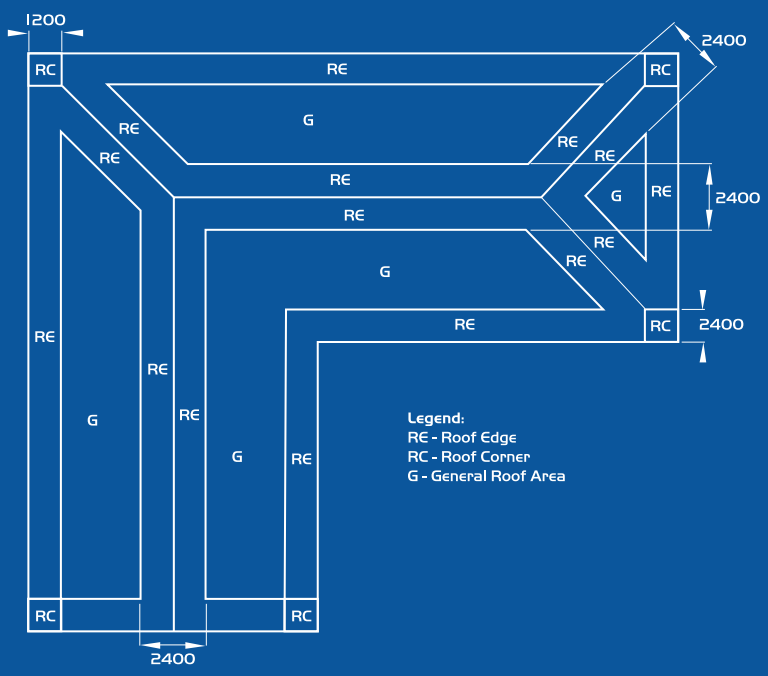


Figure 1. Pressure zones on housing roofs (plan view)

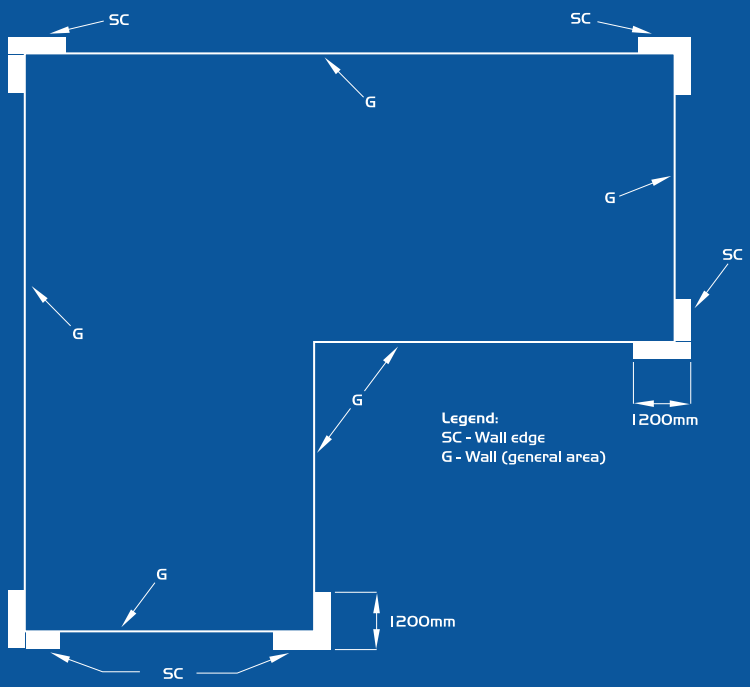


Figure 1. Pressure zones on housing walls (plan view)

APDECK 700

SPAN TABLES - NON-CYCLONIC AREAS

BMT (mm)	Application	Location on roof or wall	Max. spans based on wind pressures only				Roof foot traffic - Point Load (1.1 kN)		Un-stiffened Overhang	Stiffened Overhang
			AS4055 Wind Classification				Max. span based on foot traffic only (restricted - walk in pans away from roof edges)	Max. span based on foot traffic only (unrestricted - walk anywhere on sheet)		
			N1	N2	N3	N4				
0.42	Roof	General	2400	2400	2400	2175	2400	1100	150	450
		Edge	2400	2250	1050	-				
		Corners	2175	1350	-	-				
	Wall	General	2400	2400	2400	2400				
		Corners	2400	2400	2025	-				
0.48	Roof	General	2400	2400	2400	2175	2400	2100	200	500
		Edge	2400	2250	1350	-				
		Corners	2175	1575	-	-				
	Wall	General	2400	2400	2400	2400				
		Corners	2400	2400	2025	1125				

Table 2. Apdeck 700 spans for wind pressure and foot traffic

1. 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°.

ROOF PITCH

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

Peak rainfall intensity (mm/hr)	Roof slope					
	1°	2°	3°	5°	7.5°	10°
100	340	425	500	620	745	855
150	225	285	330	415	495	570
200	170	210	250	310	370	425
250	135	170	200	250	295	340
300	115	140	165	205	245	285
400	85	105	125	155	185	210
500	65	85	100	125	145	170

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.

DISCLAIMER

This document is an aid for building professionals and designers and is only valid for APDECK 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 BUILDING PRODUCTS

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