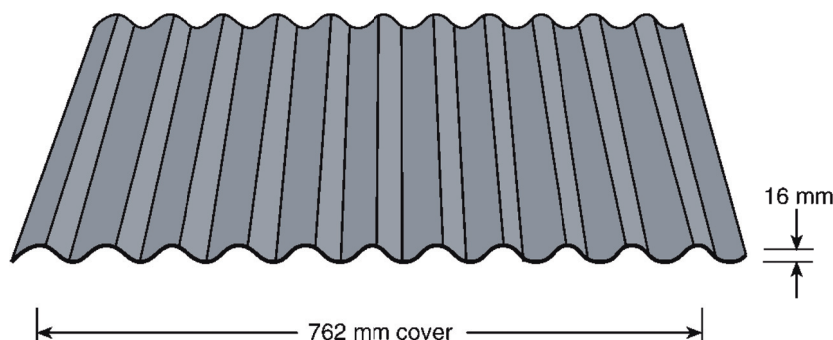


CORRUGATED 16mm



FEATURES & BENEFITS

- 762mm coverage.
- Rolls accurately for a seamless finish.
- Available in a variety of gauges - 0.42 BMT, 0.48 BMT & 0.60 BMT curving quality.
- Made from 100% BlueScope steel.
- Suitable for both roofing and walling applications.

The smooth lines of the corrugated allow the profile to create a modern finish or complement a traditional style building. A popular and reliable product, the Revolution Roofing Corrugated 16mm can be used as either a roofing or walling product.

The traditional corrugated is available in a range of materials, metal grades, colours and shapes. Whether for commercial, industrial or domestic use, the Revolution Roofing Corrugated 16mm profile has been designed to complement any building project.

MATERIAL SPECIFICATIONS

Revolution Roofing only use 100% BlueScope Steel products.

ZINCALUME® steel aluminium/zinc alloy-coated steel complying with AS1397-2001 G550, AZ150 (550MPa minimum yield stress, 150g/m² minimum coating mass); or Stainless Steel standard grade designation is AISI/ASTM Type 430; UNS No. S43000.

COLORBOND® steel metal thickness is 0.35, 0.42 or 0.48mm. G550, AZ150 (550MPa minimum yield stress, 150g/m² minimum coating mass).

COLORBOND® Ultra base metal thickness is 0.42 or 0.48mm. G550, AZ200 (550MPa minimum yield stress, 200g/m² minimum coating mass).

COLORBOND® steel .60 Blue Orb G300, AZ150 (300Mpa minimum yield stress, 150g/m² minimum coating mass).

COLORBOND® Metallic steel base metal thickness is 0.48mm. G550, AZ150 (550Mpa minimum yield stress, 150g/m² minimum yield stress, 150g/m² minimum coating mass).

The COLORBOND® pre-painted steel complies with AS/NZS2728:1997.

MINIMUM ROOF PITCH 5 DEGREES

For Corrugated 16mm a minimum roof pitch of 5 degrees is recommended. It is recommended that sheet lengths greater than 24m will require an expansion joint.

TOLERANCE & MASSES

Corrugated 16mm Masses						
Measurement	Zincalume 0.42 BMT	Colorbond 0.42 BMT	Zincalume 0.48 BMT	Colorbond 0.48 BMT	Zincalume 0.60 BMT	Colorbond 0.60 BMT
kg/m	3.26	3.32	3.7	3.76	4.7	4.78
kg/m ²	4.28	4.35	4.86	4.93	6.18	6.29
m ² /t	234	230	206	203	162	159

Tolerances

Length: +10mm/ -10mm Width: +4mm/ -4mm

The Revolution Corrugated 16mm has been tested to the following standards:

- AS 1562.1 - 1992 Design and installation of sheet roof and wall cladding.
- AS 4040 - 1992 Methods of testing sheet roof and walling cladding - Part 0: Introduction, list of methods and general requirements - Part 2: Methods of testing sheet roof and wall cladding - Resistance to wind pressures for non-cyclone regions.
- The Revolution Roofing Corrugated 16mm is manufactured to AS1397 and AS2728 standards.
- The Revolution Roofing Corrugated 16mm requires installation to follow the AS1445 and AS1565 standards following the HB39 code.



Zincalume® Colorbond®

CORRUGATED 16mm

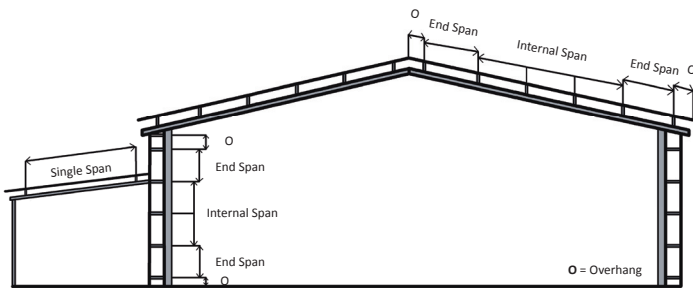
SPAN TABLE NON-CYCLONIC

Revolution Roofing Corrugated 16mm Recommended Maximum Support Spacings (mm) SPAN TABLE		
Type of Roof Span BMT (mm)	0.42	0.48
Single Span	800	900
End Span	900	1300
Internal Span	1200	1800
Unstiffened Eaves Overhang	200	250
Stiffened Eaves Overhang	300	350
Type of Wall Span BMT (mm)	0.42	0.48
Single Span	1650	1900
End Span	2100	2300
Internal Span	2700	2800
Overhang	200	250

Note:

1. For roofing the data is based on foot traffic loading.
2. For walling the data is based on wind pressure.
3. The above data table is based on supports of 1mm BMT.

STANDARD INTERPRETATION OF SPANS



Design Parameters

Region A: $C_{pe} = 0.65$
 Terrain Category 2 $C_{pi} = 0.20$
 Height = 10m $P_u = 2.25$ kPa
 $K_L = 2.0$ $P_s = 1.93$ kPa

SERVICEABILITY AND STRENGTH

Non-Cyclonic 0.42 BMT NON-CYCLONIC Wind Uplift Resistance - Service and Strength Limit State Design					
Span (mm)	End Span (Trend)		Span (mm)	Internal Span (Trend)	
	Serviceability (kPa)	Strength (kPa)		Serviceability (kPa)	Strength (kPa)
900	1.53	7.05	1200	1.13	6.75
1200	1.26	5.20	1500	0.90	5.26
1500	1.05	3.77	1800	0.71	4.05
1800	0.88	2.60	2100	0.56	3.02

Non-Cyclonic 0.48 BMT NON-CYCLONIC Wind Uplift Resistance - Service and Strength Limit State Design					
Span (mm)	End Span (Trend)		Span (mm)	Internal Span (Trend)	
	Serviceability (kPa)	Strength (kPa)		Serviceability (kPa)	Strength (kPa)
900	1.61	7.64	1200	1.60	7.36
1200	1.26	5.87	1500	1.31	5.91
1500	0.98	4.49	1800	1.07	4.72
1800	0.76	3.37	2100	0.87	3.72

Cyclonic 0.42 BMT & 0.48 BMT CYCLONIC Wind Uplift Resistance - Service and Strength Limit State Design				
Span (mm)	0.42 BMT		0.48 BMT	
	End Span (kpa)	Internal Span (kpa)	End Span (kpa)	Internal Span (kpa)
600	8.62		9.07	
900	5.81	7.35	6.51	7.92
1200	3.82	5.36	4.7	6.11
1500	2.27	3.82	3.29	4.7
1800	1.01	2.56	2.14	3.55
2100		1.49		2.57

The above cyclonic data is based on supports of 1.5mm BMT.

CORRUGATED 16mm

FASTENER SPACING NON-CYCLONIC

Crest Fastener Location
5 fasteners per sheet - end supports and end laps



Valley Fastener Location
5 fasteners per sheet - end supports and end laps



3 fasteners per sheet - internal supports
(roofing should be lapped away from prevailing weather)



3 fasteners per sheet - internal supports
(roofing should be lapped away from prevailing weather)



Note: Side lap fasteners are optional when using 5 fasteners per sheet, but are a requirement when only using 3 fasteners per sheet for valleys.

FASTENER SPACING CYCLONIC

Crest Fastener Location
5 fasteners per sheet - end supports and end laps



Crest Fastener Location
5 fasteners per sheet - internal supports
(roofing should be lapped away from prevailing weather)



Maximum Support Spacings

The maximum recommended support spacings are based on testing in accordance with AS1562.1-1992, AS4040.1-1992 and AS4040.2-1992. The recommended roof spans take in to consideration both resistance to wind pressure and light roof traffic (traffic arising from maintenance). The wall spans take in to consideration the resistance to wind pressure only.

Note: After exposure of cladding to an extreme wind event, it is recommended that inspection be performed to confirm cladding integrity.

* The above data displayed is based on trend data, which is a true representation of the average product capability.

CORRUGATED 16mm

INSTALLATION & SCREWS NON-CYCLONIC

Side Laps

Revolution Roofing recommend using side lap fasteners at mid spans when using the corrugated at its maximum length. This ensures the sheet laps are held firmly in place and help reduce the possibility of future leaks that arise from expansion and contraction. The edge of the corrugated with its improved capillary action should always be used as the underlap. When cladding is supported, side lap fasteners are generally not needed for extra strength.

End Laps

End laps are not generally required as corrugated iron is available in long lengths, however if they are necessary for a certain application please contact your nearest Revolution Roofing office for information regarding the sequence of laying and the amount of overlap.

Turning of Sheet Ends

It is common practice to overlap sheets into gutters by 50mm when the roof pitch is 25 degrees or in extreme weather areas. The valleys of the sheets should be turned down at lower ends and turned up at upper ends. When corrugated is laid on a pitch less than 5 degrees, cut back the corner of the undersheet, at the downhill end of the sheet to block capillary action.

Lengths

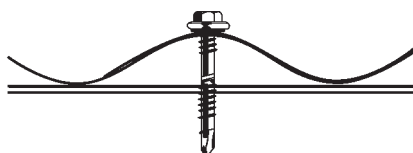
Sheets are provided at your required length.

Corrugated 16mm Non-Cyclonic Pierce Fixing		
Type	Fixing to Steel	Fixing To Timber
Crest Fixed	M6.2-13 x 50mm Hex Head HG/Seal	M6.2-13 x 50mm Hex Head HG/Seal
Valley Fixed	10-16 x 16mm Metal Tek's hexagon head with seal	M6-11 x 25mm Roofzips hexagon head with seal
Side Lap & Accessories	Self drilling needle point stitching screws with hex, slot-head EPDM seal: 8-15 x 15 alternatively self drilling screws with hex, washer-head & EPDM seal:10-16 x 16 or sealed blind rivets: 4.8mm diameter aluminium.	

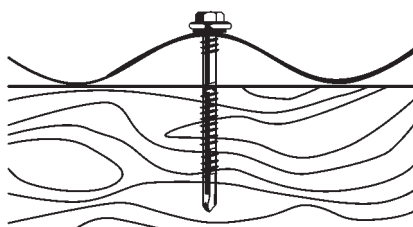
Corrugated 16mm Cyclonic Pierce Fixing		
Type	Fixing to Steel	Fixing To Timber
Crest Fixed	M6.2-13 x 50mm Hex Head HG/Seal + Corrolok washers 5-691-01-010-2C4, 1mm thick, class 4	M6.2-13 x 50mm Hex Head HG/Seal + Corrolok washers 5-691-01-010-2C4, 1mm thick, class 4
Valley Fixed	10-16 x 16mm Metal Tek's hexagon head with seal + Corrolok washers 5-691-01-010-2C4, 1mm thick, class 4	M6-11 x 25mm Roofzips hexagon head with seal + Corrolok washers 5-691-01-010-2C4, 1mm thick, class 4
Side Lap & Accessories	Self drilling needle point stitching screws with hex, slot-head EPDM seal: 8-15 x 15 alternatively self drilling screws with hex, washer-head & EPDM seal:10-16 x 16 or sealed blind rivets: 4.8mm diameter aluminium.	

ROOFING CREST FIXING

Fixing to Steel

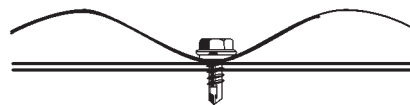


Fixing to Timber



WALLING VALLEY FIXING

Fixing to Steel



Fixing to Timber

