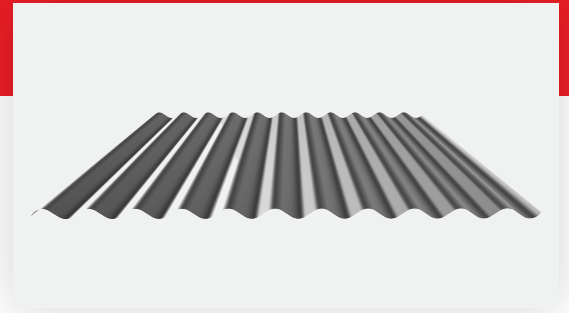


Corrugated 16mm



OVERVIEW

Corrugated 16mm is designed for a seamless finish for both Roofing and Walling Applications, thanks to its high-quality 762mm coverage and durability.

COVERAGE WIDTH

762mm Nominal

MINIMUM ROOF PITCH

5 Degrees

RIB HEIGHT

16mm

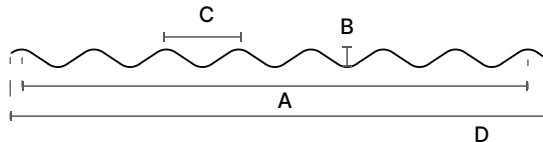
SPRING CURVING

12000mm Minimum Radius

MECHANICAL CURVING

500mm Minimum Radius

PROFILE



- A = 762.0mm +/- 2mm
- B = 16.0mm
- C = 76.2mm
- D = 838.0mm

* Visit revbydesign.com.au for CAD & Revit Files

AVAILABILITY

LOCATION



- AUSTRALIA WIDE
- CYCLONIC

MATERIAL & GUAGES

- 0.35 BMT
- 0.42 BMT
- 0.48 BMT
- 0.60 BMT
- Zinalume® AM125
- COLORBOND® Steel
- COLORBOND® Steel Ultra
- COLORBOND® Steel Matt
- COLORBOND® Fencing
- Nexalume™ AZ150
- NEXTEEL NextSTAR™
- NEXTEEL NextSTAR™ Ultra
- NEXTEEL NextSTAR™ Matt

NON-CYCLONIC SPAN TABLE

ROOF SHEETING NON-CYCLONIC SPAN TABLE

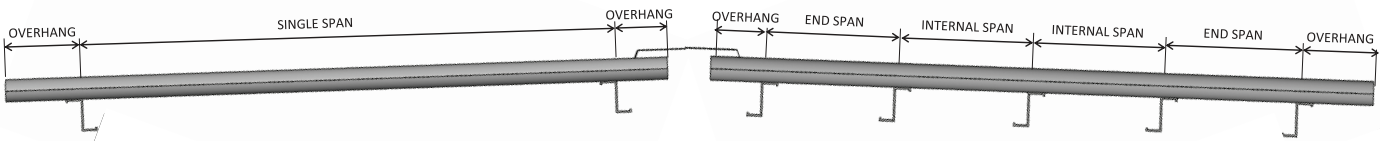
ROOF SPAN	0.42 BMT	0.48 BMT	0.60 BMT
Single Span	700	900	1200
End Span	900	1200	1300
Internal Span	1200	1600	1800
Unstiffened Overhang	200	250	250
Stiffened Overhang	250	300	300

WALL CLADDING NON-CYCLONIC SPAN TABLE

WALL SPAN	0.42 BMT	0.48 BMT
End Span	1200	1200
Internal Span	1400	1950
Unsupported Cantileaver	300*	300*

* Rivet required, securing the overlap, 50mm from the end of the sheet

SPAN DEFINITIONS



DESIGN PARAMETERS

Region	A	Height	10 metre	Internal Bay	End Bay
Terrain Category	2	Vz	45 m/sec	K ₁ = 1.0	K ₁ = 2.0
		q*u	1.215 kPa	∑C = -0.85v	∑C = -1.50
		qs	0.821 kPa	Pu = 1.03 kPa	Pu = 1.82 kPa
		Cp.e	-0.65	Ps = 0.70 kPa	Ps = 1.23 kPa
		Cp	0.2		

NON-CYCLONIC SERVICEABILITY & STRENGTH

NON-CYCLONIC CORRUGATED 16mm 0.42 BMT

Wind load Resistance (kPa) - Limit State Design

End Span			Internal Span		
Span (mm)	SERVICEABILITY (kPa)	STRENGTH (kPa)	Span (mm)	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 CORRUGATED 16mm 0.48 BMT

Wind load Resistance (kPa) - Limit State Design

End Span			Internal Span		
Span (mm)	SERVICEABILITY (kPa)	STRENGTH (kPa)	Span (mm)	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

RAINWATER TABLES

Maximum roof lengths (m) for drainage measured from ridge to gutter, no allowance has been made for penetrations or water diversion.

CROSS SECTIONAL AREA COMPARISON PER PROFILE

EFFECTIVE CROSS-SECTIONAL AREA (m ² / m)	
Corrugated 16mm	1.249 x 10 ⁻³
True Oak 21mm	2.520 x 10 ⁻³
True Oak 'Super 5'	6.416 x 10 ⁻³
Rev5	11.85 x 10 ⁻³
Rev5 Plus	15.29 x 10 ⁻³
RevKlip 700	13.91 x 10 ⁻³
RevSpan 700	4.589 x 10 ⁻³

CORRUGATED 16mm - RAINFALL CAPACITY

ROOF SLOPE (DEGREES)	RAINFALL CAPACITY (mm/hr)					
	150	200	250	300	350	400
5	21	15	12	10	8	7
7.5	24	17	14	11	9	8
10	27	19	15	13	11	10

RELATIVE DISCHARGE X 10⁻⁶m³ / s / m PER PROFILE

SLOPE (DEGREES)	CORRUGATED 16mm	TRUE OAK 21mm	TRUE OAK 'SUPER 5'	REV5	REV5 PLUS	REVKLIP 700	REVSPAN 700
1	103.3	286.1	1227.1	4018.5	5932.9	4974.0	1034.3
2	146.1	404.6	1736.2	5682.9	8390.4	7034.3	1462.8
5	231.0	639.8	2754.2	8985.6	13266.5	11122.3	2312.9
10	326.8	904.8	3882.4	12707.5	18761.6	15729.3	3270.9
15	400.2	1108.1	4752.9	15563.5	22978.2	19264.5	4006.0

RAINWATER INTENSITY BY LOCATION

RAINFALL INTENSITY BY LOCATION (mm / hr)		
	Average recurrence (years)	
Locality	Once in 20	Once in 100
AUSTRALIAN CAPITAL TERRITORY		
Canberra	143	193
NEW SOUTH WALES		
Albury	139	180
Broken Hill	143	219
Newcastle	226	316
Sydney	200	262
NORTHERN TERRITORY		
Alice Springs	166	239
Darwin	233	274
QUEENSLAND		
Brisbane	234	305
Cairns	229	278
Mackay	250	316
Townsville	235	300

RAINFALL INTENSITY BY LOCATION (mm / hr)		
	Average recurrence (years)	
Locality	Once in 20	Once in 100
SOUTH AUSTRALIA		
Adelaide	125	187
Gawler	110	158
Mt Gambier	103	144
Murray Bridge	120	178
Yorke town	155	166
TASMANIA		
Hobart	85	116
Launceston	90	121
VICTORIA		
Ballarat	131	188
Geelong	102	144
Melbourne	132	187
Mildura	142	218

RAINFALL INTENSITY BY LOCATION (mm / hr)		
	Average recurrence (years)	
Locality	Once in 20	Once in 100
WESTERN AUSTRALIA		
Albany	125	178
Broome	232	287
Bunbury	147	199
Geraldton	138	193
Perth	130	172

*Rainwater Intensity Data obtained from the National Construction Code and the Bureau of Meteorology.

MASSES

COLORBOND® STEEL AM100

	0.35 BMT	0.42 BMT	0.48 BMT	0.60 BMT
kg/lm	2.79	3.36	3.76	4.55
kg/m ²	3.67	4.40	4.93	5.97

NEXTEEL™ AM100

	0.35 BMT	0.42 BMT	0.48 BMT	0.60 BMT
kg/lm	2.79	3.36	3.76	4.55
kg/m ²	3.67	4.40	4.93	5.97

HERITAGE GALVANISED

	0.42 BMT	0.48 BMT
kg/lm	3.72	4.55
kg/m ²	4.88	5.97

ZINCALUME® AM125

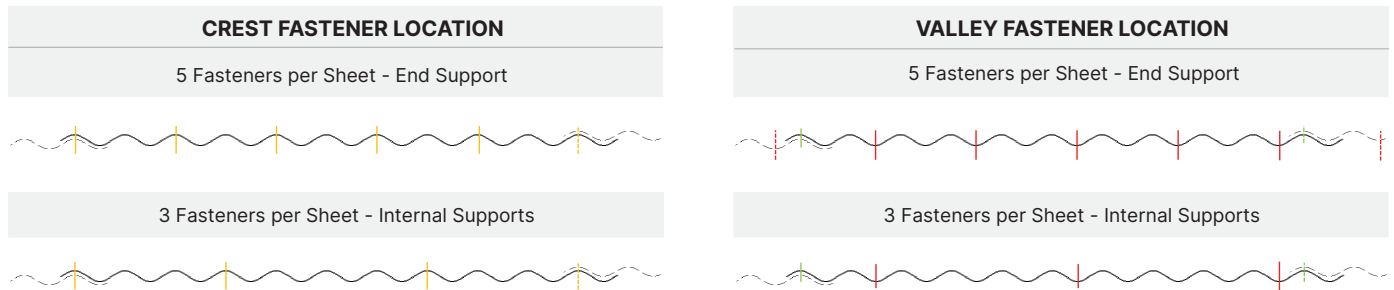
	0.35 BMT	0.42 BMT	0.48 BMT	0.60 BMT
kg/lm	2.70	3.22	3.66	4.48
kg/m ²	3.55	4.22	4.81	5.88

NEXALUME™ AZ150

	0.35 BMT	0.42 BMT	0.48 BMT	0.60 BMT
kg/lm	2.70	3.22	3.66	4.48
kg/m ²	3.55	4.22	4.81	5.88

FASTENER SPACING NON-CYCLONIC

As per NCC ABCB Housing Provisions Table 7.2.5, maximum roof lengths (m) for drainage measured from ridge to gutter, no allowance has been made for penetrations or water diversion.



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.

SUGGESTED NON-CYCLONIC PIERCE FIXING

SUGGESTED CORRUGATED 16mm NON CYCLONIC PIERCE FIXING				
TYPE	FIXING TO STEEL (UP TO 1.9mm)	FIXING TO STEEL (2.0mm - 3.5mm)	FIXING TO METAL BATTENS (0.55 - 1.0mm)	FIXING TO TIMBER
Crest Fixed	12-14×35mm Metal Tekes	Self Drilling 12×55mm Hex Head HiGrip w/- Seal	M6-11×50mm Roof Zips	M6-11×50mm Roof Zips
Valley Fixed	M6-11×25mm or 10-16×16mm Metal Tekes Hex Head with Seal		M6-11×25mm or 10-16×16mm Metal Tekes HexHead with Seal	M6-11×25mm Hex Head with Seal or T17×25mm Hex Head

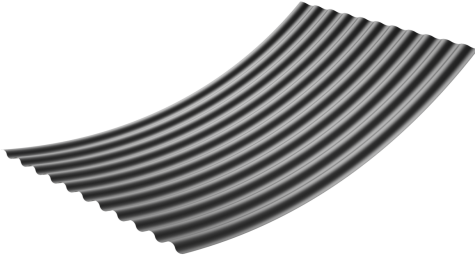
NOTE: After exposure of cladding to extreme wind event, it is recommended that inspection to be performed to confirm cladding integrity.

INSULATION OPTIONS

Roof Blanket with a thickness up to 100mm can be installed under Corrugated 16mm without the requirement of a thermal spacer, the length of the fasteners may have to increase to compensate for the thickness of the insulation.

Noting the energy efficiency requirements of non-residential buildings may call for a thermal spacer on blanket of all sizes, this is governed by Section J of the National Construction Code.

MECHANICAL CURVING



Corrugated 16mm can be mechanically curved in the factory, however the following should be noted:

- Cover is 762mm
- Minimum Radius of 500mm

STANDARD SPECIFICATION

COLORBOND® STEEL AM100

RELEVANT FOR COLORBOND® STEEL, COLORBOND® MATT STEEL PRODUCTS

Steel base thickness (0.35, 0.42, 0.48 or 0.6) with an Aluminium Zinc Magnesium Alloy Coated Steel with Activate® Technology Coating. COLORBOND® Steel AM100 Substrate compliance AS 1397:2021, and Paint Finish Substrate compliance AS/NZS 2728:2013 Type 3.

● SUBSTRATE	Aluminium Zinc Magnesium Alloy Coated Steel with Activate® Technology - AS 1397:2021
● COATING	AM100 = 100g per m ² Minimum Metallic Coating Mass
● PRIMER	Nominal 5µm Universal Corrosion Inhibitive Primer
● PAINT	Nominal 20µm Finish Coat AS/NZS 2728:2013 Type 3
● PROTECTIVE PLASTIC	Nominal 50µm CORSTRIP® (if required)

COLORBOND® STEEL AM150

RELEVANT FOR COLORBOND® STEEL ULTRA PRODUCTS

Steel base thickness (0.35, 0.42, 0.48 or 0.6) with an Aluminium Zinc Magnesium Alloy Coated Steel with Activate® Technology Coating. COLORBOND® AM150 Ultra Steel Substrate compliance AS 1397:2021, and Paint Finish Substrate compliance AS/NZS 2728:2013 Type 3.

● SUBSTRATE	Aluminium Zinc Magnesium Alloy Coated Steel with Activate® Technology - AS 1397:2021
● COATING	AM150 = 150g per m ² Minimum Metallic Coating Mass
● PRIMER	Nominal 5µm Universal Corrosion Inhibitive Primer
● PAINT	Nominal 20µm Finish Coat AS/NZS 2728:2013 Type 3
● PROTECTIVE PLASTIC	Nominal 50µm CORSTRIP® (if required)

NEXTEEL™ AM100

RELEVANT FOR NEXTSTAR™, NEXTSTAR™ MATT STEEL PRODUCTS

Steel base thickness (0.35, 0.42, 0.48 or 0.6) with an Aluminium Zinc Magnesium Alloy Coated Steel Coating. NEXTEEL™ AM100 Steel Substrate compliance AS 1397:2021, and Paint Finish Substrate compliance AS/NZS 2728 Type 4.

● SUBSTRATE	Aluminium Zinc Magnesium Alloy Coated Steel - AS 1397:2021
● COATING	AM100 = 100g per m ² Minimum Metallic Coating Mass
● PRIMER	Nominal 5µm Polyester
● PAINT	Nominal 20µm Advanced Durability Polyester AS/NZS 2728 Type 4
● PROTECTIVE PLASTIC	Nominal 50µm NextSTRIP (if required)

NEXTEEL™ AM150

RELEVANT FOR NEXTSTAR™ ULTRA STEEL PRODUCTS

Steel base thickness (0.35, 0.42, 0.48 or 0.6) with an Aluminium Zinc Magnesium Alloy Coated Steel Coating. NEXTEEL™ AM150 Steel Substrate compliance AS 1397:2021, and Paint Finish Substrate compliance AS/NZS 2728 Type 4.

● SUBSTRATE	Aluminium Zinc Magnesium Alloy Coated Steel - AS 1397:2021
● COATING	AM150 = 150g per m ² Minimum Metallic Coating Mass
● PRIMER	Nominal 5µm Polyester
● PAINT	Nominal 20µm Advanced Durability Polyester AS/NZS 2728 Type 4
● PROTECTIVE PLASTIC	Nominal 50µm NextSTRIP (if required)

STANDARD SPECIFICATION

COLORBOND® STEEL AM70

RELEVANT FOR COLORBOND® STEEL FENCING PRODUCTS

Steel base thickness (0.35, 0.42, 0.48 or 0.6) with an Aluminium Zinc Magnesium Alloy Coated Steel with Activate® Technology Coating. COLORBOND® Steel AM70 Substrate compliance AS 1397:2021, and Paint Finish Substrate compliance AS/NZS 2728:2013 Type 3.

● SUBSTRATE	Aluminium Zinc Magnesium Alloy Coated Steel with Activate® Technology Substrate (Fence Panels) or Zinc-Coated Steel Substrate (Post & Rails) - AS 1397:2021
● COATING	AM70 = 70g per m ² Minimum Metallic Coating Mass
● PRIMER	Nominal 5µm Universal Corrosion Inhibitive Primer
● PAINT	Nominal 20µm Finish Coat AS/NZS 2728:2013 Type 3
● PROTECTIVE PLASTIC	Nominal 50µm CORSTRIP® (if required)

ZINCALUME® AM125

Steel base thickness (0.35, 0.42, 0.48 or 0.6) with an Aluminium Zinc Magnesium Alloy Coated Steel Coating. Zincalume AM125 Substrate compliance AS 1397:2021, 125g per square metre minimum Metallic Coating Mass.

● SUBSTRATE	Aluminium Zinc Magnesium Alloy Coated Steel - AS 1397:2021
● COATING	AM125 = 125g per m ² Minimum Metallic Coating Mass

NEXALUME AZ150

Steel base thickness (0.35, 0.42, 0.48 or 0.6) with a Hot-Dipped Aluminium Zinc Magnesium Alloy Coating. Nexalume AZ150 Substrate compliance AS 1397:2021, 150g per square metre minimum Metallic Coating Mass.

● SUBSTRATE	Hot-Dipped Aluminium Zinc Magnesium Alloy Coated Steel - AS 1397:2021
● COATING	AZ150 = 150g per m ² Minimum Metallic Coating Mass

MARINE CLASSIFICATION

- **Class 1** (ISO 9223 Category C1): Rural areas far inland and remote from marine or industrial influence
- **Class 2** (ISO 9223 Category C2): Inland areas remote from the coast or areas of pollution
- **Class 3** (ISO 9223 Category C3): Coastal areas with low salinity
- **Class 4** (ISO 9223 Category C4): Severe marine which begins between 100m - 400m from breaking surf or 100m from calm marine.
- **Class 5** (ISO 9223 Category C5): Very severe marine: Close to breaking surf, typically 0 to 100m from breaking surf/exposed marine.
- **Class CX**: Extreme (as per AS 4312:2019): Rare classification, reserved for offshore structures and the most severe sea conditions

ISO 9223:2012

Corrosion of metals and alloys — Corrosivity of atmospheres — Classification, determination and estimation.