



**Revolution
Roofing**
STEEL YOURSELF

REV5 PLUS

REVSPEC

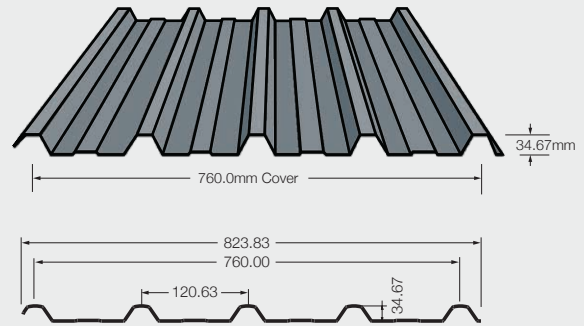
REVSPEC

V14.0

Rev5 Plus

OVERVIEW

Minimum Roof Pitch	1.5 Degree
Maximum Sheet Length	24 Metres
Spring Curving	25m Maximum Radius
Mechanical Curving	N/A
Watertight Guarantee	20 Years



PROFILE AVAILABLE

NSW	NT	QLD	TAS	SA	VIC	WA	CYCLONIC
						✓	

AVAILABLE FINISHES

RevZinc AM125	HERITAGE GALVANISED	NEXTEEL	MATT FINISH	NextSTAR™ ULTRA	METALLIC	NextREME™ Aluminium	CORTEN	COPPER	STAINLESS STEEL
✓		✓	✓	✓	✓	✓			
PERFORATED	FENCING	VICTORY							

GAUGES AVAILABLE

STEEL				ALUMINIUM		
0.32	0.35	0.42	0.48	0.60	0.70	0.80
		✓	✓		✓	

SPAN TABLE NON-CYCLONIC ROOF SHEETING

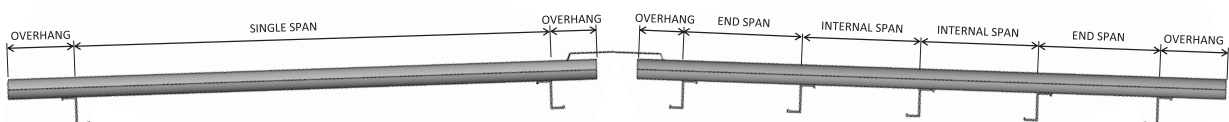
ROOF SPAN	0.35 BMT	0.42 BMT	0.48 BMT
Single Span	800	1250	1600
End Span	1200	1750	2250
Internal Span	1500	2350	2950
Unstiffened Overhang	100	150	180
Stiffened Overhang	150	300	350

SPAN TABLE NON-CYCLONIC WALL CLADDING

ROOF SPAN	0.35 BMT	0.42 BMT	0.48 BMT
Single Span	1500	1800	2400
End Span	1450	1750	2250
Internal Span	2050	2350	2950
Unsupported Cantileaver	400*	400*	400*

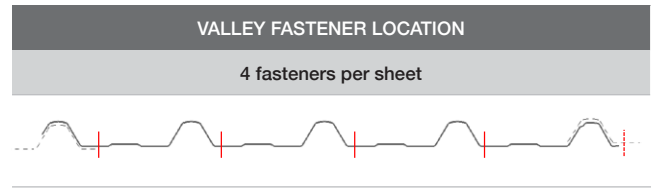
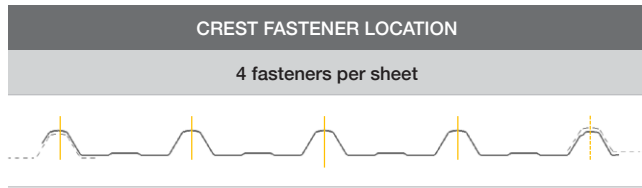
* Rivet required, securing the overlap, 50mm from the end of the sheet

SPAN DEFINITIONS



Rev5 Plus

FASTENER SPACING NON-CYCLONIC



Suggested Rev5 Plus 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	Self Drilling 12-14 x 68mm Hex Head Hi Grip Tekes w/- Seal	Self Drilling 12-14 x 68mm Hex Head Hi Grip Tekes w/- Seal	Self Drilling 12-14 x 68mm Hex Head Hi Grip Tekes w/- Seal	M6.2 -13x65mm or 65mm T17 Timber
Valley Fixed	M6- 11x25mm or 10-16 x 16mm Metal Tekes Hexagon Head with Seal		M6- 11x25mm or 10-16 x 16mm Metal Tekes Hexagon Head with Seal	M6-11 x 25mm hexagon head with seal or T17 x 25mm Hex Head

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

INSULATION

Roof Blanket with a thickness up to 100mm can be installed under Rev5 Plus 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.

MASSES

Nexteel™

	0.35 BMT	0.42 BMT	0.48 BMT
kg/lm	2.89	3.48	3.94
kg/m2	3.80	4.58	5.18

RevZinc AM125

	0.35 BMT	0.42 BMT	0.48 BMT
kg/lm	2.85	3.39	3.86
kg/m2	3.75	4.46	5.08

Rev5 Plus

NON-CYCLONIC SERVICEABILITY AND STRENGTH

Non-Cyclonic Rev5 Plus 0.35 BMT								
NON-CYCLONIC wind uplift Resistance - Service and Strength Limit State Design								
Span (mm)	Single Span		Span (mm)	End Span		Span (mm)	Internal Span	
	Serviceability (kPa)	Strength (kPa)		Serviceability (kPa)	Strength (kPa)		Serviceability (kPa)	Strength (kPa)
900	3.27	6.51	900	1.90	3.34	1200	1.83	3.18
1200	1.94	4.36	1200	1.51	2.65	1500	1.53	2.67
1500	1.30	3.19	1500	1.12	2.21	1800	1.23	2.31
1800	0.93	2.48	1650	0.92	2.05	2100	0.93	2.05

Non-Cyclonic Rev5 Plus 0.42 BMT								
NON-CYCLONIC wind uplift Resistance - Service and Strength Limit State Design								
Span (mm)	Single Span		Span (mm)	End Span		Span (mm)	Internal Span	
	Serviceability (kPa)	Strength (kPa)		Serviceability (kPa)	Strength (kPa)		Serviceability (kPa)	Strength (kPa)
900	5.03	9.46	900	2.61	4.39	1200	2.44	3.57
1200	2.78	6.97	1200	1.88	3.57	1500	1.90	3.05
1500	1.76	5.04	1500	1.32	3.05	1800	1.45	2.67
1800	1.21	3.46	1650	1.08	2.84	2100	1.08	2.39

Non-Cyclonic Rev5 Plus 0.48 BMT								
NON-CYCLONIC wind uplift Resistance - Service and Strength Limit State Design								
Span (mm)	Single Span		Span (mm)	End Span		Span (mm)	Internal Span	
	Serviceability (kPa)	Strength (kPa)		Serviceability (kPa)	Strength (kPa)		Serviceability (kPa)	Strength (kPa)
900	5.13	10.20	900	2.70	5.67	1200	2.58	5.36
1200	3.20	8.46	1200	2.19	4.42	1500	2.20	4.44
1500	2.22	6.72	1500	1.86	3.64	1800	1.94	3.81
1800	1.65	4.98	1650	1.74	3.35	2100	1.74	3.34

DESIGN PARAMETERS

Region	A
Terrain Category	2
Height	10 metre
Vz	45 m/sec
Q*u,s	0.83 kPa
Cpe	+0.7 / -0.65
Cpi	-0.2 / +0.2

INTERNAL Bay	END Bay
$K_1 = 1.0$	$K_1 = 2.0$
$\sum C = -0.85$	$\sum C = -1.50$
	$P_u = 1.82 \text{ kPa}$
	$P_s = 0.74 \text{ kPa}$

TESTS CARRIED OUT IN ACCORDANCE WITH:

AS 1562.1:2018 Design and Installation of Sheet Roof and Wall Cladding - Metal

AS 4040:1992 Methods of Testing Sheet roof and wall cladding

TESTING STATIONS USED TO CONDUCT TESTING:

James Cook University
University of South Australia

Rev5 Plus

RAINWATER TABLES

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

Rev5 Plus - Rainfall Capacity

Roof Slope (degrees)	Rainfall Capacity (mm/hr)					
	150	200	250	300	350	400
1	161	123	100	85	76	61
2	210	160	130	110	99	82
3	250	190	153	129	115	99
5	314	238	192	162	143	125
10	356	280	234	234	185	167

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

Relative Discharge comparison per Profile

Relative Discharge x 10 ⁻⁶ m ³ / s / m							
Slope	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

Rainfall Intensity per 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
Yorketown	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

Rev5 Plus

STANDARD SPECIFICATION

RevZinc AM125

Steel base thickness {0.42, 0.48 BMT} with an aluminium / zinc / magnesium alloy coating complying with AS1397-2011 (550 MPa minimum yield strength, 125 grams per square metre minimum metallic coating mass)

Nexteel™ Standard Painted Steel, Matt Finish, Metallic

Steel base metal thickness is {0.42, or 0.48 BMT} with an aluminium / zinc alloy coating substrate complying to AS1397-2011 and paint coating complying to AS/NZS 2728 Type 4 (550 MPa minimum yield Strength)

PAINT OPTIONS

NextONE™

Substrate:	Zinc Aluminium Alloy Coated Steel
Coating:	150 grams per m2 minimum metallic coating mass, nominally 75 gram per side
Primer:	Polyester
Paint:	Polyester topcoat nominally 25 microns
Additional Performance:	Enhanced UV stability
Protective Plastic Coating (if required):	75 microns thick

NextSTAR™

Substrate:	Zinc Aluminium Alloy Coated Steel
Coating:	AZ150 = 150 grams per m2 minimum metallic coating mass, nominally 75 gram per side
Primer:	Polyester
Paint:	Silicone Modified Polyester topcoat guaranteed thickness of 25 microns
Additional Performance Benefits:	Double UV stability and Ultra-Cool cool roof pigments
Protective Plastic Coating (if required):	75 microns thick

NextFACTOR™ XL

Substrate:	Zinc Aluminium Alloy Coated Steel
Coating:	AZ150 = 150 grams per m2 minimum metallic coating mass, nominally 75 gram per side
Primer:	Urethane
Paint:	PVDF 70% topcoat guaranteed thickness of 25 microns
ColourLock Clear Coating:	XL Clear DFB nominally 13um
Additional Performance Benefits:	Double UV stability and Ultra-Cool cool roof pigments
Protective Plastic Coating (if required):	75 microns thick

Rev5 Plus

PAINT OPTIONS (CONT.)

NextSTAR™ ULTRA

Substrate:	Zinc Aluminium Alloy Coated Steel
Coating:	AZ200 = 200 grams per m2 minimum metallic coating mass, nominally 100 gram per side
Primer:	Polyester
Paint:	Silicone Modified Polyester with a topcoat guaranteed thickness of 25 microns
Additional Performance Benefits:	Double UV stability and Ultra-Cool cool roof pigments
Protective Plastic Coating (if required):	75 microns thick

NextREME SE™

Substrate:	Aluminium
Alloy:	5052 suitable for extreme coastal environments
Primer:	Urethane
Paint:	Silicone Modified Polyester with a topcoat guaranteed thickness of 25 microns
Additional Performance Benefits:	Double UV stability and Ultra-Cool cool roof pigments
Protective Plastic Coating (if required):	75 microns thick

NextREME XC™

Substrate:	Aluminium
Alloy:	5052 suitable for extreme coastal environments
Primer:	Urethane
Paint:	PVDF 70% with a topcoat guaranteed thickness of 25 microns
ColourLock Clear Coating:	XL Clear DFB nominally 13um
Additional Performance Benefits:	Double UV stability and Ultra Cool roof pigments
Protective Plastic Coating (if required):	75 microns thick

ISO 9223:2012

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

MARINE CLASSIFICATION

Select from the following exposure severity category:

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