

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1), THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENT P2.1.1 FOR CONSTRUCTION IN HIGH WIND AREA

Product Name  
**METROLL CORODEK ROOF CLADDING**

Product Description  
Metroll Corodek- is manufactured from G550 colour coated steel or zinc-aluminium alloy coated (AZ150) steel. In some locations galvanised (Z450) may also be available.

Manufacturer's Name  
Metroll Queensland Pty. Ltd.  
t/as Metroll Darwin  
81 Marjorie Street  
Pinelands NT 0828  
ABN 17 010 035 266



Design Criteria

- The following criteria from AS/NZS 1170.2:2002 have been used to generate the tables.
1. Importance level 2 Annual probability of exceedance 1:500
  2.  $V_{500} = 66$  m/s,  $F_c = 1.05$ ,  $V_R = 69$  m/s.
  3.  $M_s = M_t = M_d = 1.0$
  4.  $C_{pe} =$  as per AS/NZS 1170.2
  5. Height multiplier as determined by Structural Engineer
  6. For local pressure factors and building aspect ratios refer to table 5.6 AS1170.2

Limitations

- This DTC sheet is for roof applications only.
- Foot traffic limitations as indicated. Refer note 4.
- Internal spans should have both end spans 20% shorter than the tabulated values.
- The maximum permissible free edge overhang is: 150mm from screw line.
- The maximum permissible stiffened edge overhang is: 300mm from screw line.
- Sheeting span can be limited by maximum batten spacing when using cyclonic steel battens.
- It is essential that the relevant deemed to comply information for the batten product is used in conjunction with this sheet,

Accepted for Inclusion

DTCM ref: *m/178/1* Sheet 1 of 2

Chairman's Signature:

Chairman's Name:

*STEVEN J. HURLIGH*

Date of Approval: *13.3.14*

Expiry Date: *13.3.19*

METROLL CORODEK ROOF CLADDING - SERVICEABILITY LIMIT STATE DESIGN PRESSURES (kPa)

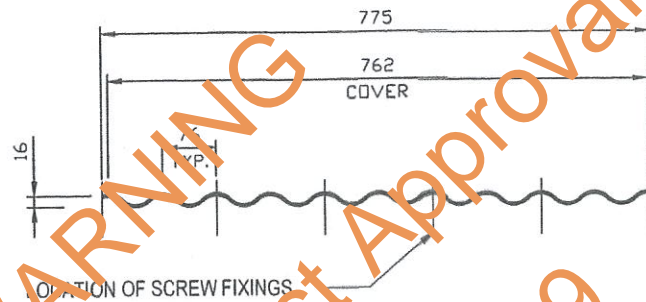
Thickness BMT (mm)	Cyclone Washers Fitted	Span Type	Maximum Design Pressure (kPa) For Span L (mm)						
			450	600	750	900	1200	1500	1800
0.42	No	Internal	6.65	4.87	3.80	3.09	2.21	1.40	0.86
		Equal	6.08	4.34	3.37	2.75	2.01	1.20	0.78
		Double	4.85	3.47	2.69	2.20	1.61	0.96	0.62
	Yes	Internal	-	6.40	4.77	3.99	2.94	1.45	0.87
		Equal	-	6.83	4.16	3.19	2.13	1.25	0.79
		Double	-	4.67	3.33	2.55	1.70	1.00	0.63
0.48	No	Internal	8.26	6.11	4.83	3.97	2.60	1.73	0.95
		Equal	7.63	5.50	4.33	3.57	2.64	1.47	0.87
		Double	6.02	4.40	3.46	2.85	2.11	1.18	0.70
	Yes	Internal	-	-	7.73	5.30	3.16	1.83	0.95
		Equal	-	-	7.05	4.83	2.87	1.54	0.87
		Double	-	-	5.64	3.93	2.90	1.24	0.70
0.60	No	Internal	8.64	6.67	5.49	4.70	3.71	2.23	1.24
		Equal	7.88	6.08	5.00	4.28	3.38	1.93	1.13
		Double	6.30	5.00	4.13	3.51	2.70	1.62	0.90
	Yes	Internal	-	-	8.16	6.29	3.95	2.34	1.27
		Equal	-	-	7.44	5.53	3.60	1.93	1.16
		Double	-	-	5.95	4.49	2.88	1.59	0.93

METROLL CORODEK ROOF CLADDING - ULTIMATE LIMIT STATE DESIGN PRESSURES (kPa)

Thickness BMT (mm)	Cyclone Washers Fitted	Span Type	Maximum Design Pressure (kPa) For Span L (mm)						
			450	600	750	900	1200	1500	1800
0.42	No	Internal	8.21	5.98	4.64	3.75	2.63	2.04	1.65
		Equal	7.48	5.29	4.07	3.31	2.40	1.85	1.50
		Double	5.68	4.23	3.26	2.65	1.92	1.48	1.20
	Yes	Internal	-	9.81	7.98	6.72	5.18	3.62	2.59
		Equal	-	8.64	7.25	6.13	4.72	3.21	2.36
		Double	-	7.15	5.85	4.95	3.78	2.57	1.89
0.48	No	Internal	10.08	7.79	6.43	5.52	4.39	3.47	2.85
		Equal	9.17	7.10	5.85	5.03	4.00	3.15	2.60
		Double	7.34	5.68	4.86	4.15	3.20	2.52	2.08
	Yes	Internal	-	-	10.22	8.39	6.93	4.49	3.46
		Equal	-	-	9.32	7.57	5.50	4.03	3.16
		Double	-	-	7.46	6.03	4.40	3.22	2.52
0.60	No	Internal	9.87	7.50	6.08	5.13	3.95	3.42	3.07
		Equal	9.00	6.84	5.54	4.68	3.90	3.12	2.80
		Double	7.20	5.64	4.50	3.79	2.99	2.53	2.24
	Yes	Internal	-	-	10.05	8.51	6.58	4.87	3.73
		Equal	-	-	9.16	7.78	6.00	4.37	3.40
		Double	-	-	7.33	6.24	4.90	3.49	2.72

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Thickness BMT (mm)	Cyclone Washers Fitted	Span Type	Maximum Design Pressure (kPa) For Span L (mm)						
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		Double	5.68	4.23	3.26	2.65	1.92	1.48	1.20
	Yes	Internal	-	9.81	7.98	6.72	5.18	3.62	2.59
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		Double	-	7.15	5.85	4.95	3.78	2.57	1.89
0.48	No	Internal	10.08	7.79	6.43	5.52	4.39	3.47	2.85
		Equal	9.17	7.10	5.85	5.03	4.00	3.15	2.60
		Double	7.34	5.68	4.86	4.15	3.20	2.52	2.08
	Yes	Internal	-	-	10.22	8.39	6.93	4.49	3.46
		Equal	-	-	9.32	7.57	5.50	4.03	3.16
		Double	-	-	7.46	6.03	4.40	3.22	2.52
0.60	No	Internal	9.87	7.50	6.08	5.13	3.95	3.42	3.07
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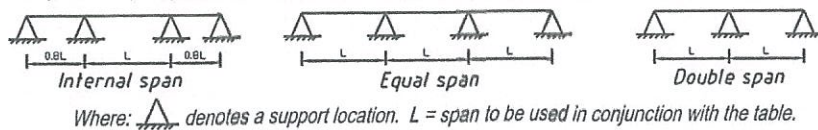


SCREW FIXINGS TABLE

Timber	M6.5-12x55 roof zips
0.75 to 1.0mm Steel	M6.5-12x55 roof zips
1.2 to 4mm Steel	14-10x53 hex head

NOTES TO TABLES

1. The table values are only valid for use when the supporting steel members are high tensile steel, G450 with a thickness greater than or equal to 0.75mm or F17 Hardwood.
2. Roof sheeting shall be crest fixed to supports with class 4 self drilling screws refer table at every second rib in accordance with the manufacturer's recommendations. Length to suit insulation/sarking and 30mm embedment into timber.  
Cyclone washers, where specified, shall be "Coritok" shaped to suit the sheeting profile.
3. Side lap fasteners are required on all spans greater than 900mm and shall consist of No. 8-18 x 12mm screws at midspan.
4. Italic denotes spans that exceeds foot traffic limitations.
5. Maximum spans to suit foot traffic are 1350mm for 0.42BMT and 1850mm for 0.48BMT
6. Descriptions of span types in the tables refer to the following support and geometry configurations:



1.00mm Metal support thickness

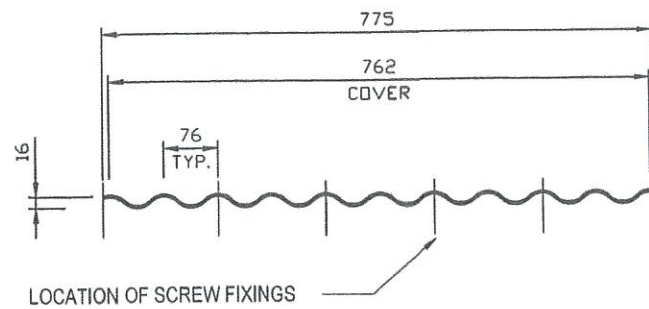
1.50mm Metal support thickness

1. This table has been prepared by LCJ Engineers Pty Ltd. It is based on the LowHigh Low testing completed by the Cyclone Testing Station (CTS), School of Engineering, James Cook University. The results of this testing are outlined in the test report TS716 produced by the CTS. Ultimate cyclic wind load strength tests were NATA accredited tests.
2. Load testing carried out by James Cook University, cyclone testing station, report No.TS716. Product tested to AS 4040.1, AS 4040.3 and low-high-low as per BCA specification B1.2. Tests carried out: cyclonic airbox wind test for strength. Static testing for serviceability. Buildex test report No. ELTR 1532

\*\*Design Engineers Certification  
LCJ Engineers Pty. Ltd.  
Name: Daniel Johnstone  
Rego Number: RPEQ 5892 / NT 58497ES  
Date: *12/2/14*  
Signature: *[Signature]*  
\*\*registered as a structural engineer in Australia

\*\*Certifying Engineers Certification  
Heiner Structural Engineers Pty. Ltd.  
Name: Michael Hatton  
NT Rego Number: NT 52229ES  
Date: 12/02/2014  
Signature: *[Signature]*  
\*\*registered as a structural engineer in Northern Territory

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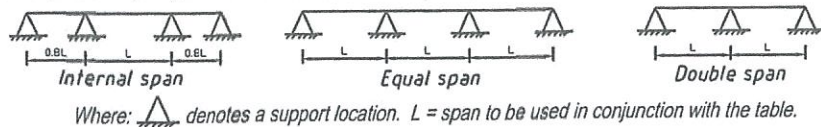


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NOTES TO TABLES

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- Roof sheeting shall be crest fixed to supports with class 4 self drilling screws refer table at every second rib in accordance with the manufacturer's recommendations. Length to suit insulation/sarking and 30mm embedment into timber. Cyclone washers, where specified, shall be "Corrilok" shaped to suit the sheeting profile.
- Side lap fasteners are required on all spans greater than 900mm and shall consist of No. 8-18 x 12mm screws at midspan.
- Italic denotes spans that exceeds foot traffic limitations.
- Maximum spans to suit foot traffic are 1350mm for 0.42BMT and 1850mm for 0.48BMT
- Descriptions of span types in the tables refer to the following support and geometry configurations:



Timber Support  
50mm min. thickness

0.75mm Metal support  
thickness

METROLL CORODEK ROOF CLADDING - SERVICEABILITY LIMIT STATE DESIGN PRESSURES (kPa)									
Thickness BMT (mm)	Cyclone Washers Fitted	Span Type	Maximum Design Pressure (kPa) For Span L (mm)						
			450	600	750	900	1200	1500	1800
0.42	No	Internal	8.65	4.87	3.60	3.09	2.21	1.40	0.86
		Equal	8.08	4.34	3.37	2.75	2.01	1.20	0.78
		Double	4.65	3.47	2.69	2.20	1.61	0.96	0.62
	Yes	Internal	-	8.40	4.77	3.69	2.34	1.45	0.87
		Equal	-	5.83	4.16	3.19	2.13	1.25	0.79
		Double	-	4.67	3.33	2.55	1.70	1.00	0.63
0.48	No	Internal	8.28	8.11	4.83	3.87	2.90	1.73	0.95
		Equal	7.53	5.50	4.33	3.57	2.64	1.47	0.87
		Double	6.02	4.40	3.46	2.86	2.11	1.18	0.70
	Yes	Internal	-	-	7.73	5.30	3.15	1.83	0.95
		Equal	-	-	7.05	4.63	2.87	1.54	0.87
		Double	-	-	5.64	3.88	2.30	1.24	0.70
0.60	No	Internal	8.64	6.67	5.46	4.70	3.71	2.23	1.24
		Equal	7.88	6.08	5.00	4.28	3.38	1.50	1.13
		Double	6.30	5.00	4.13	3.51	2.70	1.52	0.90
	Yes	Internal	-	-	8.16	6.29	3.65	2.34	1.27
		Equal	-	-	7.44	5.58	3.60	1.69	1.16
		Double	-	-	5.65	4.46	2.88	1.59	0.93

METROLL CORODEK ROOF CLADDING - ULTIMATE LIMIT STATE DESIGN PRESSURES (kPa)									
Thickness BMT (mm)	Cyclone Washers Fitted	Span Type	Maximum Design Pressure (kPa) For Span L (mm)						
			450	600	750	900	1200	1500	1800
0.42	No	Internal	8.21	5.98	4.64	3.75	2.63	2.04	1.65
		Equal	7.48	5.29	4.07	3.31	2.40	1.85	1.60
		Double	5.68	4.23	3.28	2.65	1.92	1.48	1.20
	Yes	Internal	-	9.81	7.69	6.72	5.18	3.62	2.59
		Equal	-	8.94	7.25	6.13	4.72	3.21	2.36
		Double	-	7.15	5.85	4.95	3.78	2.57	1.89
0.48	No	Internal	10.06	7.79	6.43	5.52	4.39	3.47	2.85
		Equal	9.17	7.10	5.89	5.03	4.00	3.15	2.60
		Double	7.34	5.88	4.88	4.15	3.20	2.52	2.08
	Yes	Internal	-	-	10.22	8.36	6.03	4.49	3.46
		Equal	-	-	9.32	7.57	5.50	4.03	3.15
		Double	-	-	7.48	6.06	4.40	3.22	2.52
0.60	No	Internal	9.87	7.50	6.08	5.13	3.95	3.42	3.07
		Equal	9.00	6.84	5.54	4.68	3.60	3.12	2.80
		Double	7.20	5.54	4.50	3.79	2.88	2.53	2.24
	Yes	Internal	-	-	10.05	8.51	6.58	4.87	3.73
		Equal	-	-	9.18	7.76	6.00	4.37	3.40
		Double	-	-	7.33	6.24	4.60	3.49	2.72

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	Yes	Internal	-	-	10.05	8.51	6.58	4.87	3.73
		Equal	-	-	9.18	7.76	6.00	4.37	3.40
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DTCM ref: *m/178/2* Sheet 2 of 2

Chairman's Signature:

Chairman's Name:

*STEVEN J EHRlich*

Date of Approval: *13.3.14*

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Name: Daniel Johnstone  
Rego Number: RPEQ 5892 / NT 58497ES  
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\*\*registered as a structural engineer in Australia

\*\*Certifying Engineers Certification  
Heiner Structural Engineers Pty. Ltd.  
Name: Michael Hatton  
NT Rego Number: NT 52229ES  
Date: 12/02/2014  
Signature: *M Hatton*  
\*\*registered as a structural engineer in Northern Territory