

Friday, 14 February 2025

Sheeting Design Documentation

To whom it may concern,

The sheeting used for this structure has been designed as a category R2 sheeting with an imposed load of 0.25kPa and concentrated load of 1.4kN applied in accordance with NCC: 2022 and AS1562.1.

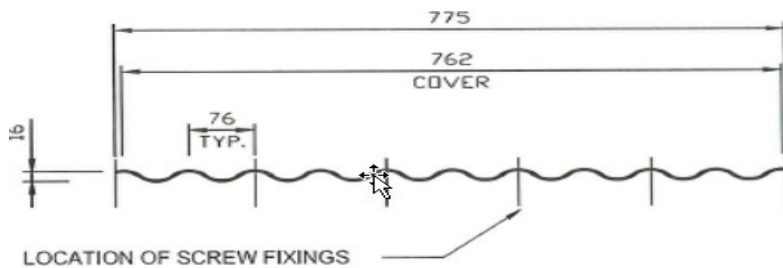
No allowance has been made for the fixing of rooftop-mounted equipment such as air-conditioning equipment directly to the cladding. Solar panels have been allowed for as per Engineering.

Metroll purlins have been designed to withstand foot traffic during installation and service. The use of appropriate cradles or cherry pickers is recommended. **As a minimum, never walk on purlins without safety mesh in place.**

When walking on Corodek roof sheeting always wear flat rubber soled shoes and only walk over areas where purlins or batten supports are installed.

Profile and Dimensions of Cladding

Metroll Corodek Steel Sheeting is Manufactured from G550 colour coated steel or zinc-aluminium alloy coated (AZ 150) steel. In some locations galvanised (Z450) may also be available.



Specification of Materials

Location	BMT (mm)	Steel Base (MPa)	Mass CB (kg/m ²)	Mass Zinc (kg/m ²)	Effective Cover	Min. Pitch	Max Spans (mm)		
							End	Internal	Overhang
Roof	0.42	G550	4.35	4.28	762	5 (1 in 12)	900	1200	150
Roof	0.48	G550	4.93	4.81	762	5 (1 in 12)	1200	1600	150
Wall	0.42	G550	4.35	4.28	762	N/A	1850	2350	150
Wall	0.48	G550	4.93	4.81	762	N/A	2050	2450	150

Design pressures to AS/NZS 1170.2

Location	Zone	Design Pressure (kPa)
Roof	Corner	-1.62
	Edge	-1.62
	General	-0.81
Wall	Corner	-3.01
	Edge	-2.00
	General	-1.00

Max Roof Run (m) for Slopes & Rainfall Intensity

Rainfall Intensity (mm/hr)	Corodek Roof Slope		
	1 in 12 (5°)	1 in 7.5 (7.5°)	1 in 6 (10°)
100	29	34	38
150	20	23	25
200	15	17	19

Max Roof Run (m) for Slopes & Rainfall Intensity			
Rainfall Intensity (mm/hr)	Corodek Roof Slope		
	1 in 12 (5°)	1 in 7.5 (7.5°)	1 in 6 (10°)
250	12	14	15
300	10	11	13
400	7	8	10

Fastener Specifications		
Connection Type	Non-Cyclonic	Cyclonic
Timber	M6 - 11 x 50 roof zips	M6.5 - 12 x 55 roof zips
0.75 to 1.0mm Steel	M6 - 11 x 50 roof zips	M6.5 - 12 x 55 roof zips
1.2 to 4mm Steel	M5.5 x 39 Auto Tek	14 - 10 x 53 Hex Head

Ends & End Laps



Intermediate Supports



Testing Criteria

This information is based on the **Low-High-Low testing competed 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.

Load testing carried out by James Cook University, cyclone testing station, report No.TS716. Product tested to AS4040.1, AS4040.3 and low-high-low as per BCA B1.2. Tests carried out: cyclonic airbox wind test for strength. Static testing for serviceability. Buildex report No. ELTR 1532.

Signed

A handwritten signature in black ink, appearing to read 'J Ronaldson'.

John Ronaldson
for and on behalf of
Apex Engineering Group PTY LTD
ACN 632 588 562