TNC Engineering

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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:2019 and AS1562.1.

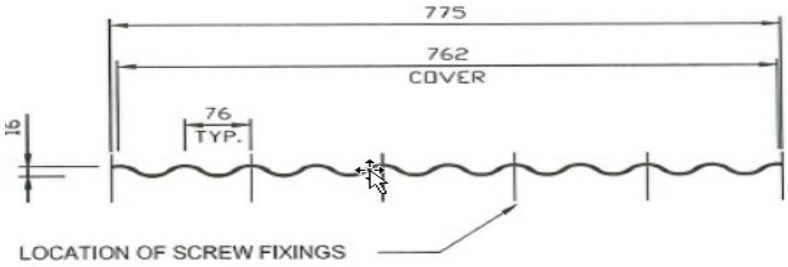
No allowance has been made for the fixing of rooftop-mounted equipment such as solar panels or air-conditioning equipment directly to the cladding.

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.



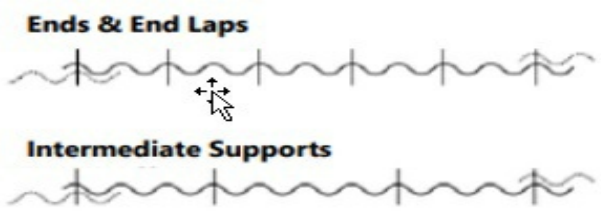
Specification of Materials									
Location	BMT (mm)	Steel Base (MPa)	Mass CB (kg/m²)	Mass Zinc (kg/m²)	Effective Cover	Min. Pitch	Max Spans (mm)		
							End	Internal	Overhang
Roof	0.42	G550	4.35	4.28	762	5 (1 in 12)	900	1200	150
Roof	0.48	G550	4.93	4.81	762	5 (1 in 12)	1200	1600	150
Wall	0.42	G550	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/NZS1170.2		
Location	Zone	Design Pressure (kPa)
Roof	Corner	-1.60
	Edge	-1.60
	General	-0.80
Wall	Corner	-1.48
	Edge	-0.99
	General	-0.49

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 Teks	14 - 10 x 53 Hex Head



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

R. Nancarrow
for and on behalf of
TNC ENGINEERING PTY LTD
(ACN 610 855 260)