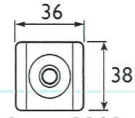
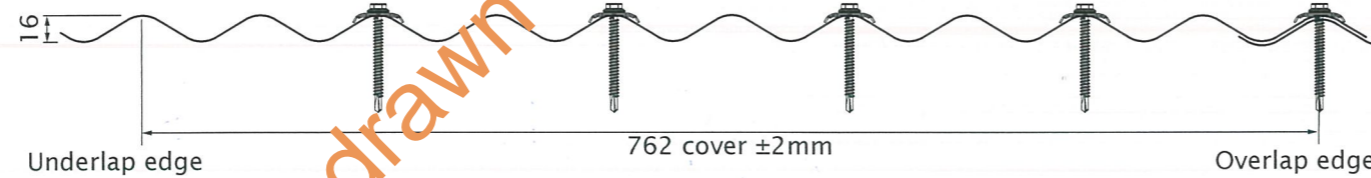




# CGI ROOF CLADDING

## Region C



1.0mm G300  
Cyclonic Washer  
with EPDM Seal

Fixing screws to comply to AS3566. 1-2007 Self-drilling screws for the building and construction industries - General requirements and mechanical properties.

### Fastener Details

Steel	Minimum 0.75mm (BMT)	Class 4 minimum 14g x 55mm self drilling screw with cyclonic washer assembly.
Timber	Hardwood F11/JD2 or stronger	Class 4 minimum 14g x 55mm self drilling screw with cyclonic washer assembly, embedded at least 35mm into timber.
	Softwood F7/JD4 or stronger	Class 4 minimum 14g x 55mm self drilling screw with cyclonic washer assembly, embedded at least 35mm into timber.

Note: For spans > 2000mm side lap fixing midspan using an 8x15mm self drilling stitch screw with seal or 3.2mm sealed blind rivets are recommended (maximum 600mm centres). This provides a weather proof seal and secures the overlap.

### Design Pressures - Strength Limit State Capacity (kPa)

Span (mm)	0.42mm BMT			0.48mm BMT		
	Single	End	Internal	Single	End	Internal
400	10.76	10.76	11.77	11.23	11.23	12.28
700	7.21	7.21	7.88	7.60	7.60	8.31
1000	4.80	4.80	5.25	5.39	5.39	5.89
1300	2.96	2.96	3.24	3.69	3.69	4.04
1600	1.69	1.69	1.85	2.50	2.50	2.73
1900	1.00	1.00	1.09	1.82	1.82	1.99

### Maximum Allowable Spans (mm)

Terrain Category	KI	Pz (kPa)	3m Maximum Average Roof Height						Pz (kPa)	5m Maximum Average Roof Height						Pz (kPa)	10m Maximum Average Roof Height					
			0.42mm BMT			0.48mm BMT				0.42mm BMT			0.48mm BMT				0.42mm BMT			0.48mm BMT		
			Single	End	Internal	Single	End	Internal		Single	End	Internal	Single	End	Internal		Single	End	Internal	Single	End	Internal
1.0	1.0	4.07	800	950	1160	900	1220	1290	4.57	800	950	1090	900	1130	1200	5.20	800	940	1000	900	1020	1100
	1.5	5.21	800	940	1000	900	1020	1100	5.86	800	850	920	900	920	1000	6.67	760	760	820	810	810	890
	2.0	6.35	790	790	860	860	860	930	7.15	700	700	770	750	750	830	8.13	600	600	660	640	640	720
	3.0	8.64	560	560	610	600	600	650	9.72	470	470	520	510	510	550	11.06	-	-	-	410	410	450
1.5	1.0	3.74	800	950	1200	900	1280	1350	3.99	800	950	1170	900	1240	1300	4.66	800	950	1070	900	1110	1180
	1.5	4.80	800	950	1050	900	1090	1160	5.11	800	950	1010	900	1040	1110	5.97	800	840	900	900	910	980
	2.0	5.85	800	860	920	900	930	1000	6.23	800	810	880	870	870	950	7.28	690	690	760	730	730	810
	3.0	7.96	620	620	680	660	660	730	8.47	570	570	630	610	610	670	9.91	460	460	500	490	490	540
2.0	1.0	3.44	800	950	1200	900	1300	1420	3.44	800	950	1200	900	1300	1420	4.15	800	950	1150	900	1200	1270
	1.5	4.40	800	950	1110	900	1160	1230	4.40	800	950	1110	900	1160	1230	5.32	800	920	990	900	1010	1080
	2.0	5.37	800	920	980	900	1000	1070	5.37	800	920	980	900	1000	1070	6.48	780	780	850	840	840	920
	3.0	7.30	690	690	760	730	730	810	7.30	690	690	760	730	730	810	8.82	540	540	600	580	580	640
2.5	1.0	3.14	800	950	1200	900	1300	1490	3.14	800	950	1200	900	1300	1490	3.47	800	950	1200	900	1300	1410
	1.5	4.02	800	950	1170	900	1230	1300	4.02	800	950	1170	900	1230	1300	4.45	800	950	1100	900	1150	1220
	2.0	4.91	800	950	1040	900	1070	1140	4.91	800	950	1040	900	1070	1140	5.43	800	910	970	900	990	1060
	3.0	6.67	760	760	820	810	810	890	6.67	760	760	820	810	810	890	7.38	680	680	750	720	720	800
3.0	1.0	2.86	800	950	1200	900	1300	1560	2.86	800	950	1200	900	1300	1560	2.86	800	950	1200	900	1300	1560
	1.5	3.66	800	950	1200	900	1300	1370	3.66	800	950	1200	900	1300	1370	3.66	800	950	1200	900	1300	1370
	2.0	4.47	800	950	1100	900	1150	1220	4.47	800	950	1100	900	1150	1220	4.47	800	950	1100	900	1150	1220
	3.0	6.07	800	830	890	890	890	970	6.07	800	830	890	890	890	970	6.07	800	830	890	890	890	970

Note: For roofing applications a local pressure of KI = 3.0 is applicable adjacent roof corners on roofs with a pitch less than 10°.

Product Name  
**CGI Roof Cladding**

Product Description  
Stratco CGI Roof Cladding is manufactured from 0.42 or 0.48 BMT G550 steel. Cladding available in colour or zinc/al finish, minimum AM100 coating.

Manufacturer's Name  
**Stratco (Australia) Pty Ltd**  
780 Stuart Highway, Berrimah NT 0828. ABN 30 007 528 850

Design Criteria  
The following criteria was used in the development of the tables:  
Region C with an annual probability of exceedance of 500 years (strength), 25 years (serviceability).

- VR = Fc66m/s, with Fc=1.05 (strength); VR = Fc47m/s, with Fc=1 (serviceability)
- Ms/Mt/Md = 1.00
- Kc,e = Kc,i = 0.9
- Importance Level 2

Height (m)	Terrain/Height Multiplier (Mz,cat)				
	1.0	1.5	2.0	2.5	3.0
≤3	0.99	0.95	0.91	0.87	0.83
≤5	1.05	0.98	0.91	0.87	0.83
≤10	1.12	1.06	1.00	0.92	0.83

Pressure Coefficients:  
Internal Cp,i = +0.7 (strength), +0.2 (serviceability)  
External Cp,e = -0.9

Design Criteria determined in accordance with AS/NZS 1170.2:2011 Wind Actions.

- Limitations
- Design pressures and maximum allowable spans are based on five crest fasteners per sheet per support.
  - The maximum allowable spans have considered serviceability requirements.
  - When fixing over insulation, screw length should be increased to ensure sufficient penetration of the fastener.
  - When fixing to roof battens, roofing spans may be limited by the allowable batten spacing. Refer to the relevant roof batten DTC sheet.
  - Maximum allowable overhang is 200mm for roof cladding.
  - For pressure coefficients which vary from those specified in the design criteria, refer AS/NZS 1170.2:2011 Wind Actions for evaluation of pressure, Pz. Examples include elevated buildings and h/d ratios which exceed 0.5.
  - Refer AS/NZS 1170.2:2011 Structural Design Actions Part 2: Wind Actions for definition of local pressure zones.
  - Walk flat footed over supports where possible keeping your weight evenly distributed over the soles of your shoes spread over as many corrugations as possible.

Accepted for Inclusion

DTCM ref: M/711

Notes covering basis of DTC (Relevant test reports etc)

- Cyclonic Fatigue Testing in accordance with the NCC 2019 BCA Volume Two - Low-High-Low Pressure Testing.
- Cyclonic Testing of CGI Roof Sheeting, Report no. 69 revision A, 05/2014, Stratco Testing Facility, Gepps Cross, South Australia.

\*Checking Engineers Certification  
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Date: 15/09/2020  
Signature:

\*registered as a structural engineer in Australia

\*Certifying Engineers Certification  
Name: MATTHEW MAMMONE  
NT Registration Number: 24389OES  
Date: 16/09/2020  
Signature:

\*registered as a structural engineer in Northern Territory

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 18-09-2020 Expiry Date: 18-09-2025