

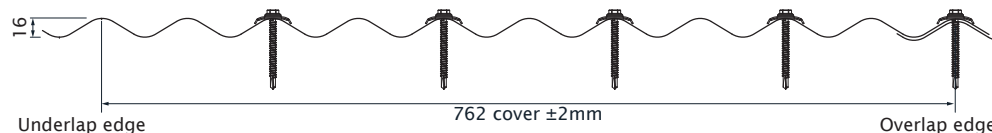
This product has been determined to satisfy NCC Performance Requirement H1P1 for structural resistance of materials and forms of construction in high wind areas

CGI ROOF CLADDING

Region C



Fixing screws to comply to AS3566, I-2002 Self-drilling screws for the building and construction industries - General requirements and mechanical properties.



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 Details

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 = 66m/s (limit state), with $M_c = 1.05$
- $M_s/M_e/M_d = 1.00$
- $K_{c,e} = K_{c,i} = 0.9$
- Importance Level 2

Height (m)	Terrain/Height Multiplier ($M_{z,cat}$)			
	1.0	2.0	2.5	3.0
≤3	0.97	0.91	0.87	0.83
≤5	1.01	0.91	0.87	0.83
≤10	1.08	1.00	0.92	0.83

Pressure Coefficients:

Internal $C_{p,i} = +0.7$
External $C_{p,e} = -0.9$

Design Criteria determined in accordance with AS/NZS 1170.2:2021 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 1170.2:2021 Wind Actions for evaluation of pressure, P_z . Examples include elevated buildings and h/d ratios which exceed 0.5.
- Refer AS/NZS 1170.2:2021 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 in Deemed to Comply Manual

DTCM drawing number: M/395/01-01

Chairperson Signature:

Chairperson Name: Elisha Harris

Date of Approval: 27/10/2025 Expiry Date: 27/10/2030

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 > 900mm 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	K1	3m Maximum Average Roof Height						5m Maximum Average Roof Height						10m Maximum Average Roof Height								
		Pz (kPa)	0.42mm BMT			0.48mm BMT			Pz (kPa)	0.42mm BMT			0.48mm BMT			Pz (kPa)	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	3.90	800	950	1180	900	1250	1320	4.23	800	950	1130	900	1190	1260	4.84	800	950	1050	900	1080	1150
	1.5	5.00	800	950	1030	900	1060	1130	5.42	800	910	970	900	990	1060	6.20	800	810	880	880	880	950
	2.0	6.10	800	820	890	890	890	970	6.61	760	760	830	820	820	900	7.56	660	660	730	700	700	780
	3.0	8.30	590	590	650	630	630	700	8.99	530	530	580	570	570	620	10.28	430	430	-	460	460	510
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	3.51	800	950	1200	900	1300	1400
	1.5	4.02	800	950	1170	900	1230	1300	4.02	800	950	1170	900	1230	1300	4.50	800	950	1100	900	1140	1210
	2.0	4.91	800	950	1040	900	1070	1140	4.91	800	950	1040	900	1070	1140	5.49	800	900	960	900	980	1050
	3.0	6.67	760	760	820	810	810	890	6.67	760	760	820	810	810	890	7.46	670	670	740	710	710	790
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

Notes covering basis of DTC (Relevant test reports etc)

- Cyclonic Fatigue Testing in accordance with the NCC 2022 BCA Volume Two - Low-High-Low Pressure Testing, and AS4040.3:2018.
- Design Criteria determined in accordance with AS/NZS 1170.2:2021 Wind Actions.
- Cyclonic Testing of CGI Roof Sheeting, Report no. 69 revision A, 05/2014, Stratco Testing Facility, Gepps Cross, South Australia.

Checking Engineer

Name: Glenn Turner
Registration Number: NER 3823731
Date: 16/07/2025
Signature:

Must be an Australian registered structural engineer

Certifying Engineer

Name: Hamish Bills
NT Registration Number: 127148ES
Date: 16/07/2025
Signature:

Must be a registered structural engineer in the Northern Territory