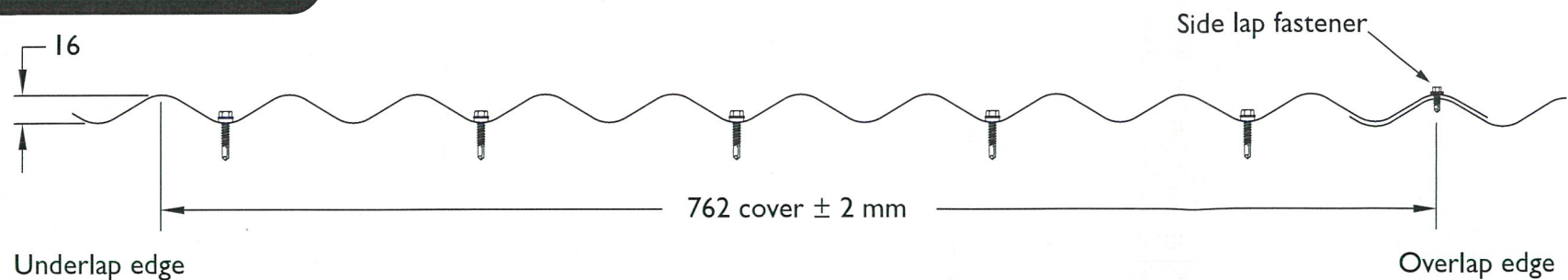




CGI WALL CLADDING

Region C



Fastener Details		
Steel	Minimum 0.75mm (BMT)	Class 4 M6 x 25mm self drilling screw with neoprene washer, fixed to every second pan.
Timber	Hardwood F11/JD2 or stronger	Class 4 minimum 12 gauge timber screws with neoprene washer, minimum 35mm embedment depth.
	Softwood F7/JD4 or stronger	Class 4 minimum 12 gauge timber screws with neoprene washer, minimum 35mm embedment depth.

Note: For spans > 900mm side lap fixing midspan using an 8 x 15mm self drilling stitch screw with seal or 3.2mm sealed blind rivets are recommended (maximum 500mm 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	12.22	12.22	13.36	13.14	13.14	14.37
600	6.80	6.80	7.44	7.50	7.50	8.20
900	5.23	5.23	5.71	5.74	5.74	6.27
1200	3.90	3.90	4.27	4.27	4.30	4.70
1500	2.83	2.83	3.09	3.09	3.19	3.49
1800	2.00	2.00	2.19	2.19	2.40	2.62

Maximum Allowable Spans (mm)																			
3m Maximum Average Roof Height										5m Maximum Average Roof Height									
Terrain Category	KI	Pz (kPa)	0.42mm BMT			0.48mm BMT			Pz (kPa)	0.42mm BMT			0.48mm BMT			Pz (kPa)	0.42mm BMT		
			Single	End	Internal	Single	End	Internal		Single	End	Internal	Single	End	Internal		Single	End	Internal
1.0	1.0	3.43	1320	1320	1400	1420	1420	1510	3.86	1210	1210	1290	1300	1300	1390	4.39	1080	1080	1170
	1.5	4.26	1110	1110	1200	1210	1210	1300	4.79	990	990	1080	1090	1090	1180	5.45	850	850	950
	2.0	5.08	920	920	1020	1020	1020	1120	5.72	800	800	890	900	900	990	6.51	650	650	750
	3.0	6.74	610	610	710	720	720	820	7.58	550	550	600	590	590	690	8.62	500	500	550
1.5	1.0	3.16	1390	1390	1470	1500	1500	1590	3.36	1340	1340	1420	1440	1440	1530	3.93	1190	1190	1270
	1.5	3.92	1190	1190	1280	1290	1290	1380	4.17	1130	1130	1220	1230	1230	1320	4.88	970	970	1060
	2.0	4.68	1010	1010	1100	1110	1110	1200	4.98	950	950	1040	1040	1040	1140	5.83	770	770	870
	3.0	6.20	700	700	800	810	810	910	6.60	630	630	730	740	740	840	7.72	540	540	600
2.0	1.0	2.90	1470	1470	1550	1590	1590	1680	2.90	1470	1470	1550	1590	1590	1680	3.50	1300	1300	1380
	1.5	3.60	1270	1270	1360	1370	1370	1460	3.60	1270	1270	1360	1370	1370	1460	4.34	1090	1090	1180
	2.0	4.30	1100	1100	1190	1200	1200	1290	4.30	1100	1100	1190	1200	1200	1290	5.19	900	900	1000
	3.0	5.69	800	800	900	900	900	1000	5.69	800	800	900	900	900	1000	6.87	590	590	690
2.5	1.0	2.65	1550	1550	1630	1690	1690	1780	2.65	1550	1550	1630	1690	1690	1780	2.96	1450	1450	1530
	1.5	3.29	1360	1360	1440	1460	1460	1550	3.29	1360	1360	1440	1460	1460	1550	3.68	1250	1250	1340
	2.0	3.93	1190	1190	1270	1290	1290	1380	3.93	1190	1190	1270	1290	1290	1380	4.39	1080	1080	1170
	3.0	5.20	900	900	990	1000	1000	1090	5.20	900	900	990	1000	1000	1090	5.82	780	780	880
3.0	1.0	2.41	1600	1630	1710	1790	1790	1800	2.41	1600	1630	1710	1790	1790	1800	2.41	1600	1630	1710
	1.5	2.99	1440	1440	1520	1560	1560	1650	2.99	1440	1440	1520	1560	1560	1650	2.99	1440	1440	1520
	2.0	3.57	1280	1280	1360	1380	1380	1470	3.57	1280	1280	1360	1380	1380	1470	3.57	1280	1280	1360
	3.0	4.73	1000	1000	1090	1100	1100	1190	4.73	1000	1000	1090	1100	1100	1190	4.73	1000	1000	1090

Note: For walling applications a local pressure of KI=3.0 is only applicable on buildings with an average roof height which exceeds the buildings shortest horizontal plan dimension. Typically, building designs require cladding to be secured to every wall stud regardless of allowable cladding spans. Consult your project engineer for confirmation if this is not the case.

- Notes covering basis of DTC (Relevant test reports etc)
1. Testing in accordance with AS4040.3:2018.
 2. Design Criteria determined in accordance with AS/NZS1170.2:2011 Wind Actions.
 3. CGI Walling Cyclonic Testing, Report No. 167 Revision A, 07/2014 Stratco Testing Facility, Gepps Cross, South Australia.

*Checking Engineers Certification

Name: Trevor John
Registration Number: 106278
Date: 4/3/2019
Signature: [Signature]

*registered as a structural engineer in Australia

*Certifying Engineers Certification

Name: Matthew Mammone
NT Registration Number: 243890ES
Date: 14/03/19
Signature: [Signature]

*registered as a structural engineer in Northern Territory

Product Name
CGI Wall Cladding (Corrugated Iron)

Product Description
Stratco CGI Wall Cladding is manufactured from 0.42 or 0.48 BMT G550 steel. Cladding available in colour or zinc/al finish, minimum AZ150 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:

1. Region C with an annual probability of exceedance of 1:500
2. $V_r = F_c$ 66m/s (limit state), with $F_c = 1.05$
3. $M_s/M_t/M_d = 1.00$
4. $K_{c,e} = K_{c,i} = 0.9$
5. Importance Level 2

Height (m)	Terrain/Height Multiplier ($M_{z,cat}$)				
	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 $C_{p,i} = +0.7/-0.65$
External $C_{p,e} = -0.65/+0.8$

- Limitations
1. Design pressures and maximum allowable spans are based on five fasteners per sheet per support.
 2. Maximum allowable spans are based on design pressures for strength limit state. For serviceability limit state wind capacities, refer to the Stratco CGI Design Guide.
 3. When fixing over insulation, screw length shall be increased to ensure sufficient penetration of the fastener.
 4. Maximum allowable overhang is 200mm for wall cladding.
 5. For elevated buildings that allow flow under, the internal pressure co-efficient increases to +0.8, maximum allowable spans are to be reduced by 8%.
 6. Refer AS/NZS 1170.2:2011 Structural design actions Part 2: Wind Actions for definition of local pressure zones.

Accepted for Inclusion

DTCM ref: M/436/01

Chairman's Signature: [Signature]

Chairman's Name: Paul Nowland

Date of Approval: 29/05/2019 Expiry Date: 29/05/2024