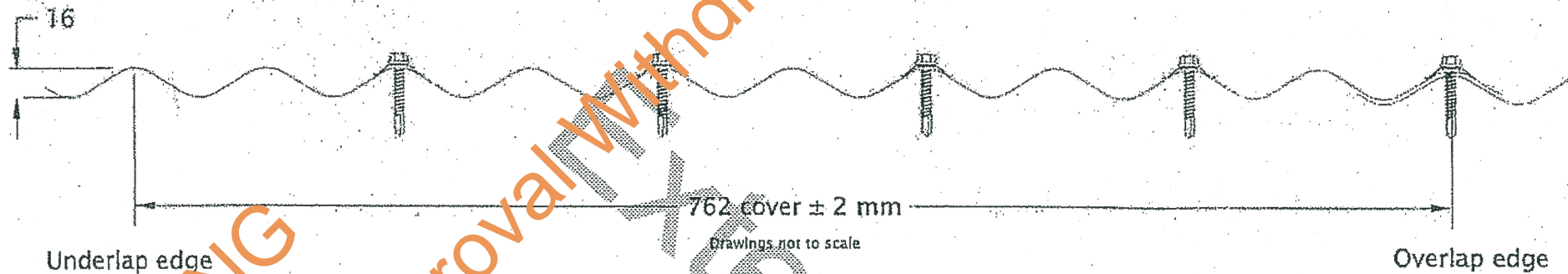




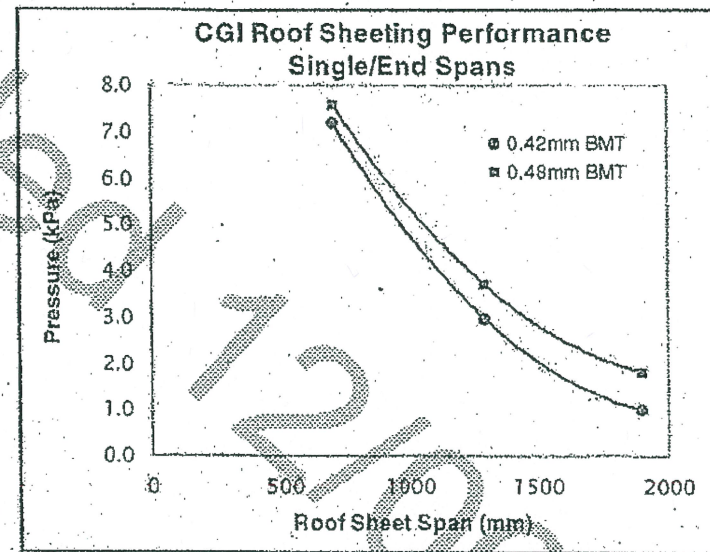
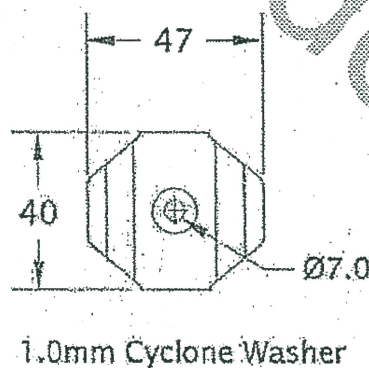
CGI ROOF CLADDING WITH CYCLONIC WASHERS



Fastener Details

Material	Fastener	Minimum
Steel	0.75 - 4.0mm	Minimum 13 gauge x 50mm hex head screw with cyclonic washer assembly
Timber	Hardwood (F11)	Minimum 13 gauge x 50mm hex head screw with cyclonic washer assembly
	Soft wood (F5)	Minimum 13 gauge x 50mm hex head screw with cyclonic washer assembly

NB: For spans > 900mm side lap fixing midspan using an 8 x 12mm self drilling screw or 3.2mm blind rivet is recommended. This provides a weather proof seal and secures the overlap if the roof is occasionally traversed.



Design Pressures Pz (kPa)

Span (mm)	0.42mm BMT			0.48mm BMT		
	Single	End	Internal	Single	End	Internal
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	5m Building Height						10m Building Height							
		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
1 & 2	1	4.16	800	950	1150	900	1200	1270	4.61	800	950	1080	900	1120	1190
	1.5	5.33	800	920	980	900	1000	1080	5.91	800	850	910	900	920	990
	2	6.50	780	780	840	840	840	910	7.20	700	700	770	740	740	820
2.5	1	3.53	800	950	1200	900	1300	1400	4.12	800	950	1150	900	1210	1280
	1.5	4.52	800	950	1090	900	1140	1210	5.28	800	930	990	900	1010	1090
	2	5.52	800	900	960	900	980	1050	6.43	780	780	850	840	840	920
3 & 4	1	2.95	800	950	1200	900	1300	1530	3.65	800	950	1200	900	1300	1370
	1.5	3.78	800	950	1200	900	1280	1340	4.68	800	950	1070	900	1110	1180
	2	4.61	800	950	1080	900	1120	1190	5.71	800	870	940	900	950	1020

Product Name

CGI (Corrugated Iron)

Product Description

0.42mm and 0.48mm BMT AS1397/G550 AZ150

Manufacturer's Name

Stratco (Australia) Pty Limited

Design Criteria

The following criteria was used in the development of the tables:

- Region C with a design return period of 500 years.
- $V_R = F_c 66m/s$ (limit state), with $F_c = 1.05$
- $M_x/M_y/M_z = 1.00$

Height (m)	Terrain/height Multiplier (M _{Z,cat})		
	1&2	2.5	3&4
<=5	0.95	0.88	0.80
<=10	1.00	0.95	0.89

Pressure Coefficients:
Internal C_{pi} = +0.7
External C_{pe} = -0.9

Limitations

- Design pressures and maximum allowable spans are based on five fasteners per sheet per support.
- For design criteria where $h/d \Rightarrow 1$ (Table 5.3(A)) and roof pitch $\leq 10^\circ$ reduce batten spacing by 30%.
- When fixing over insulation, screw length should be increased to ensure sufficient penetration of the fastener.
- When fixing to Stratco Cyclonic Roof Battens, roofing spans may be limited by the allowable batten spacing. Refer to the Stratco cyclonic Roof Batten DTC sheet.
- Maximum allowable overhang is 200mm for roof cladding.
- For elevated buildings that allow flow under, the internal pressure coefficient increases to +0.8, maximum allowable spans are to be reduced by 50mm.

Accepted for Inclusion

DTCM ref: M/116/04A (tested to L.H.L.)

Chairman's Signature:

P. Russell

Chairman's Name:

PETER RUSSELL

Date of Approval:

11/6/09

Expiry Date:

11/6/12

- Building Code of Australia (BCA) - Low-High-Low Pressure Testing
- Design Criteria are determined in accordance with AS/NZS1170.2 2002 Wind Actions
- Cyclonic Testing of CGI Roof Sheeting, Report No. 69, 05/2008

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**Design Engineers Certification

Name: Trevor John
Registration Number: 106278
Date: 15/05/09
Signature: *T. John*

**registered as a structural engineer in Australia

**Certifying Engineers Certification

Name: John Roeger
NT Registration Number: 18940ES
Date: 19-05-09
Signature: *J. Roeger*

**registered as a structural engineer in Northern Territory

New Expiry: 12/12/15
Signature: *[Signature]*