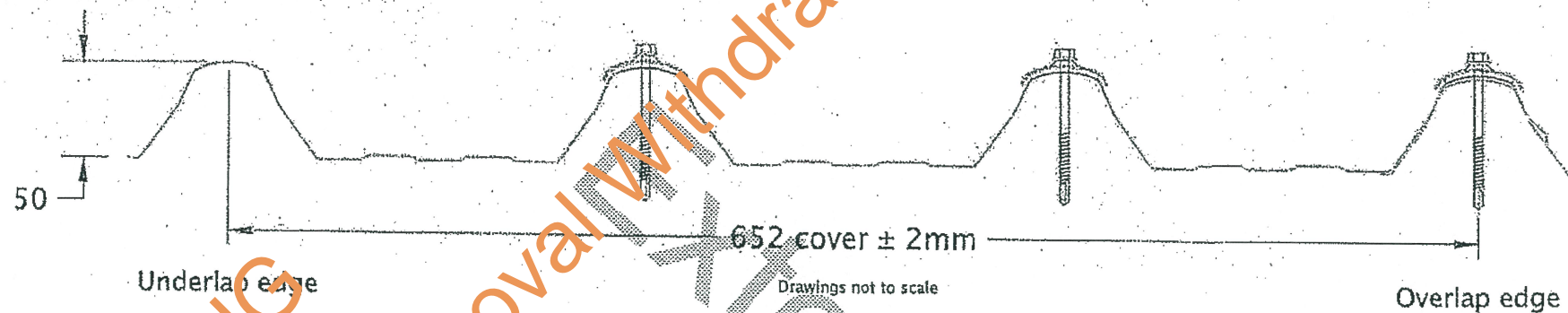


PRODEK® ROOF CLADDING WITH CYCLONIC WASHERS



Product Name
Prodek

Product Description
0.42mm and 0.48mm BMT AS1397/G550 AZ150

Manufacturer's Name
Stratco (Australia) Pty Limited

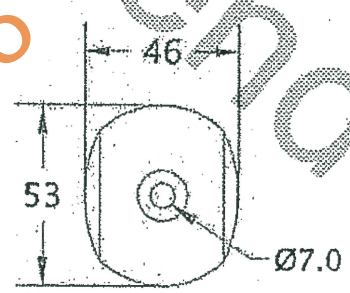
Design Criteria

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

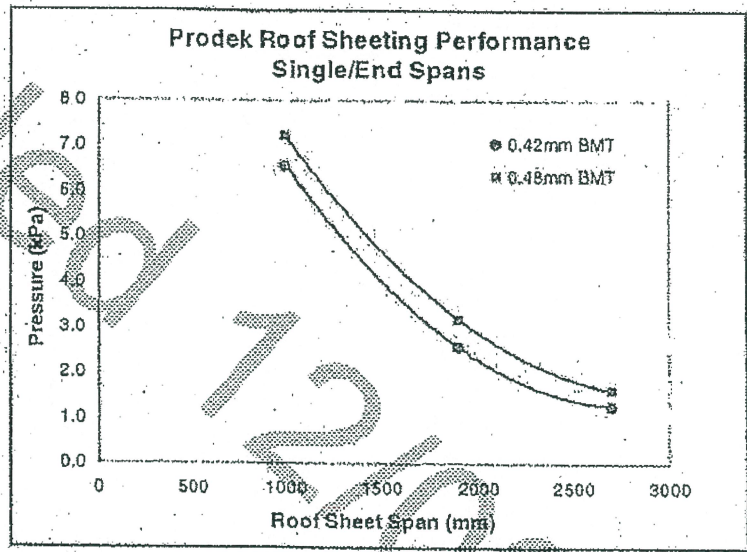
1. Region C with a design return period of 500 years.
2. $V_a = F_c 66m/s$ (limit state), with $F_c = 1.05$
3. $M_s/M_i/M_d = 1.00$

Fastener Details

Steel	1.5 - 4.0mm	Minimum 13 gauge x 75mm hex head screw with cyclonic washer assembly
Number	Hardwood (H1)	Minimum 13 gauge hex head screw embedded at least 30mm into timber
	Softwood (S1)	Minimum 13 gauge hex head screw embedded at least 30mm into timber



1.0mm Cyclone Washer



NB: For spans > 900mm side lap fixing mid-batten 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.

Height (m)	Terrain/height Multiplier ($M_{z,ext}$)		
	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 $C_{pe} = -0.9$

Design Pressures P_z (kPa)

Span (mm)	0.42mm BMT			0.48mm BMT		
	Single	End	Internal	Single	End	Internal
1000	6.58	6.58	7.20	7.22	7.22	7.90
1300	4.95	4.95	5.41	5.62	5.62	6.14
1600	3.62	3.62	3.95	4.28	4.28	4.68
1900	2.58	2.58	2.82	3.20	3.20	3.50
2200	1.84	1.84	2.01	2.39	2.39	2.61
2500	1.40	1.40	1.53	1.84	1.84	2.01
2700	1.27	1.27	1.39	1.62	1.62	1.77

Maximum Allowable Spans (mm)

Terrain Category	K1	5m Building Height						10m Building Height							
		P_z (kPa)	0.42mm BMT			0.48mm BMT			P_z (kPa)	0.42mm BMT			0.48mm BMT		
			Single	End	Internal	Single	End	Internal		Single	End	Internal	Single	End	Internal
1 & 2	1	4.16	1460	1460	1550	1620	1620	1720	4.61	1370	1370	1450	1510	1510	1610
	1.5	5.33	1220	1220	1310	1350	1350	1450	5.91	1110	1110	1210	1240	1240	1340
	2	6.50	1010	1010	1110	1120	1120	1230	7.20	-	-	-	1000	1000	1110
2.5	1	3.53	1620	1620	1700	1790	1790	1890	4.12	1470	1470	1560	1640	1640	1730
	1.5	4.52	1380	1380	1470	1540	1540	1630	5.28	1230	1230	1320	1370	1370	1470
	2	5.52	1180	1180	1280	1320	1320	1420	6.43	1020	1020	1120	1140	1140	1240
3 & 4	1	2.95	1780	1780	1860	1980	1980	2070	3.65	1590	1590	1670	1760	1760	1850
	1.5	3.78	1550	1550	1640	1720	1720	1820	4.68	1350	1350	1440	1500	1500	1590
	2	4.61	1370	1370	1450	1510	1510	1610	5.71	1150	1150	1240	1280	1280	1380

- Limitations
1. Design pressures and maximum allowable spans are based on all crests being fastened to supports.
 2. For design criteria where $h/d \Rightarrow 1$ (Table 5.3(A)) and roof pitch $\leq 10^\circ$ reduce batten spacing by 30%.
 3. When fixing over insulation, screw length should be increased to ensure sufficient penetration of the fastener.
 4. Not to be used with 0.55mm or 0.75mm metal battens.
 5. Maximum allowable overhang is 200mm for roof cladding.
 6. For elevated buildings that allow flow under, the internal pressure coefficient increases to +0.8, maximum allowable spans are to be reduced by 100mm.

Accepted for Inclusion

DTCM ref: M/116/05A (tested to L.H.L.)

1. Building Code of Australia (BCA) - Low-High-Low Pressure Testing
2. Design Criteria are determined in accordance with AS/NZS1170.2 2002 Wind Actions
3. Cyclonic Testing of Prodek Roof Sheeting, Report No. 72, 02/2009

**Design Engineers Certification

Name: Trevor John
Registration Number: 106278
Date: 15/05/09
Signature: *[Signature]*
*registered as a structural engineer in Australia

**Certifying Engineers Certification

Name: John Roeger
NT Registration Number: 18940ES
Date: 19-05-09
Signature: *[Signature]*
*registered as a structural engineer in Northern Territory

Chairman's Signature: *[Signature]*

Chairman's Name: PETER RUSSELL

Date of Approval: 11/6/09 Expiry Date: 11/6/12

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