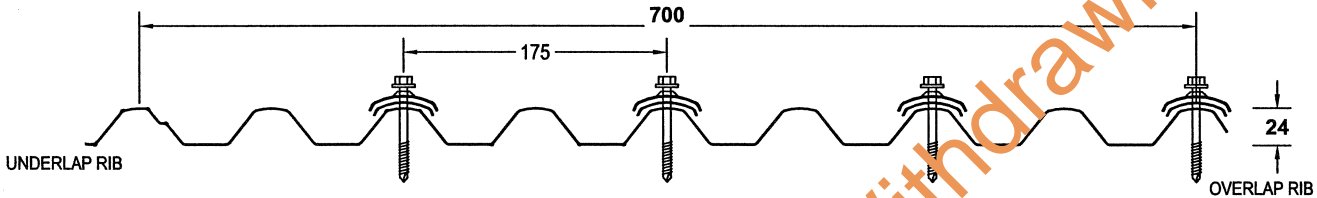


SMARTSPAN CLADDING WITH CYCLONIC WASHERS FOR ROOFING.



MATERIAL SPECIFICATIONS: 0.42mm or 0.48mm BMT AS1397/G550 AZ150

Cyclonic testing was carried out in accordance with AS4040.3 using the BCA 2004 Volume 1, NT B1.2 (c) (ii), *Design of Buildings in Cyclonic Areas*.

Testing Authority: Engtest Civil and Environmental, The School of Civil and Environmental Engineering, Adelaide University.

Test Report: C030407 - 09/09/03.

Tables are determined in accordance with AS 1170.2 2002, *Wind Action*, using polynomial interpolation of test results, subject to maximum recommended spans.

The maximum allowable overhang is 200mm for roofs.

When fixing over insulation, screw length should be increased to ensure sufficient penetration of the fastener.

Side lap fixing is recommended at midspan to maintain a weather proof seal and secure the overlap. Use either 8 x 12mm self drilling stitching screws or 3mm sealed blind rivets.

FASTENER DETAILS:

Steel	1.5mm to 3mm	14-10 x 50mm Hex Head Screw with cyclonic washer assembly.
	3mm to 5mm	14-20 x 50mm Hex Head Screw with cyclonic washer assembly.
Timber	Hardwood	14-10 x 50mm Type 17 Hex Head Screw with cyclonic washer assembly.
	Softwood	14-10 x 50mm Type 17 Hex Head Screw with cyclonic washer assembly.

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

Region C with a design return period of 500 years.

$V_R = F_c 66$ m/s (limit state), with $F_c = 1.05$.

Limit State wind speeds have been reduced by the square root of 1.5 to obtain permissible stress gust wind speeds.

$M_s, M_t, M_d = 1.00$

Refer Drawing No. M/115/6/12 for ITW Buildex cyclonic washer assembly

DESIGN PRESSURES, P_z (kPa):

Span (mm)	0.42mm BMT			0.48mm BMT		
	Single	End	Internal	Single	End	Internal
900	5.04	5.04	5.89	5.49	5.49	6.41
1200	3.84	3.84	4.48	4.50	4.50	5.26
1500	2.85	2.85	3.33	3.66	3.66	4.28
1800	2.07	2.07	2.42	2.97	2.97	3.47
2100	1.50	1.50	1.75	2.43	2.43	2.84
2400	1.15	1.15	1.34	2.04	2.04	2.38

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

MAXIMUM ALLOWABLE SPANS (mm):

Terrain Category	KI	5m Maximum Height						10m Maximum 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	2.77	1300	1520	1670	1890	1890	2130	3.07	1300	1420	1570	1750	1750	1970
	1.5	3.55	1280	1280	1430	1540	1540	1760	3.94	1170	1170	1330	1390	1390	1610
2	1	4.33	1060	1060	1230	1250	1250	1480	4.80	950	950	1120	1100	1100	1330
	1.5	2.35	1300	1680	1820	2000	2150	2420	2.74	1300	1530	1680	1910	1910	2150
2.5	1	3.02	1300	1440	1590	1770	1770	2000	3.52	1290	1290	1440	1550	1550	1780
	1.5	3.68	1240	1240	1400	1490	1490	1710	4.29	1080	1080	1240	1270	1270	1490
3 & 4	1	1.97	1300	1800	1990	2000	2200	2700	2.43	1300	1640	1790	2000	2090	2350
	1.5	2.52	1300	1610	1760	2000	2040	2290	3.12	1300	1410	1560	1720	1720	1950
2	1	3.07	1300	1420	1570	1750	1750	1970	3.80	1200	1200	1360	1440	1440	1660

LIMITATIONS OF USE:

- Not to be used with 0.75mm metal battens.

KBR

Kellogg Brown & Root Pty Ltd
ABN 91 007 660 317
Reg. No. - KEES8332

SMARTSPAN STEEL CLADDING

STRATCO (N.T.) PTY. LTD.
780 STUART HIGHWAY
BERRIMAH, N.T. 0828

DESIGN DATA SHEET

APPROVED: [Signature] 18.6.04 DATE: M/116/17 Amdt. DRAWING NUMBER.

Certified:

[Signature]

Date: 10/6/04