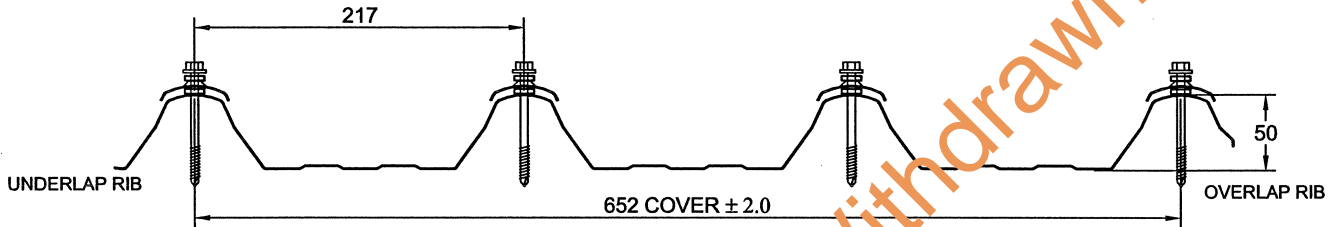


PRODEK CLADDING WITH CYCLONIC WASHERS FOR ROOFING.



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: C040302 - 31/03/04

Tables are determined in accordance with AS 1170.2 2002, *Wind Actions*, 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 | 2mm to 3mm | 14-10 x 75mm Hex Head Screw with cyclonic washer assembly. |
| | 3mm to 5mm | 14-20 x 75mm Hex Head Screw with cyclonic washer assembly. |
| Timber | Hardwood | 14-10 x 90mm Type 17 Hex Head Screw with cyclonic washer assembly. |
| | Softwood | 14-10 x 90mm 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.

$M_s, M_t, M_d = 1.00$

| 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 |

DESIGN PRESSURES, P_z (kPa):

| Span (mm) | 0.42mm BMT | | | 0.48mm BMT | | |
|-----------|------------|------|----------|------------|------|----------|
| | Single | End | Internal | Single | End | Internal |
| 900 | 4.14 | 4.14 | 4.84 | 5.40 | 5.40 | 6.31 |
| 1200 | 3.29 | 3.29 | 3.84 | 4.59 | 4.59 | 5.36 |
| 1500 | 2.57 | 2.57 | 3.00 | 3.87 | 3.87 | 4.52 |
| 1800 | 1.98 | 1.98 | 2.31 | 3.24 | 3.24 | 3.79 |
| 2100 | 1.52 | 1.52 | 1.78 | 2.70 | 2.70 | 3.15 |
| 2400 | 1.19 | 1.19 | 1.39 | 2.25 | 2.25 | 2.63 |

Pressure Coefficients:

Internal, $C_{pi} = +0.7$.

External, $C_{pe} = -0.9$.

MAXIMUM ALLOWABLE SPANS (mm):

| Terrain Category | KI | P_z (kPa) | 5m Maximum Height | | | | | | 10m Maximum Height | | | | | | |
|------------------|-----|-------------|-------------------|------|----------|------------|------|----------|--------------------|------|----------|------------|------|----------|------|
| | | | 0.42mm BMT | | | 0.48mm BMT | | | 0.42mm BMT | | | 0.48mm BMT | | | |
| | | | Single | End | Internal | Single | End | Internal | Single | End | Internal | Single | End | Internal | |
| 1 & 2 | 1 | 2.77 | 1400 | 1400 | 1590 | 2050 | 2050 | 2310 | 3.07 | 1280 | 1280 | 1470 | 1880 | 1880 | 2140 |
| | 1.5 | 3.55 | 1100 | 1100 | 1290 | 1640 | 1640 | 1900 | 3.94 | 960 | 960 | 1160 | 1460 | 1460 | 1730 |
| 2.5 | 2 | 4.33 | - | - | 1040 | 1300 | 1300 | 1570 | 4.80 | - | - | 900 | 1110 | 1110 | 1390 |
| | 1 | 2.35 | 1600 | 1600 | 1780 | 2320 | 2320 | 2580 | 2.74 | 1420 | 1420 | 1600 | 2070 | 2070 | 2320 |
| 3 & 4 | 1.5 | 3.02 | 1300 | 1300 | 1490 | 1910 | 1910 | 2170 | 3.52 | 1110 | 1110 | 1310 | 1660 | 1660 | 1920 |
| | 2 | 3.68 | 1050 | 1050 | 1250 | 1580 | 1580 | 1840 | 4.29 | - | - | 1050 | 1320 | 1320 | 1590 |
| 2 | 1 | 1.97 | 1800 | 1800 | 1980 | 2620 | 2620 | 2700 | 2.43 | 1560 | 1560 | 1740 | 2260 | 2260 | 2520 |
| | 1.5 | 2.52 | 1520 | 1520 | 1700 | 2210 | 2210 | 2470 | 3.12 | 1260 | 1260 | 1450 | 1860 | 1860 | 2110 |
| 2 | 2 | 3.07 | 1280 | 1280 | 1470 | 1880 | 1880 | 2140 | 3.80 | 1010 | 1010 | 1210 | 1520 | 1520 | 1790 |

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

Certified:

Date:

10/6/04

PRODEK STEEL CLADDING

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

DESIGN DATA SHEET

APPROVED: DATE: 18.8.04 DRAWING NUMBER: M/116/5 Amdt.