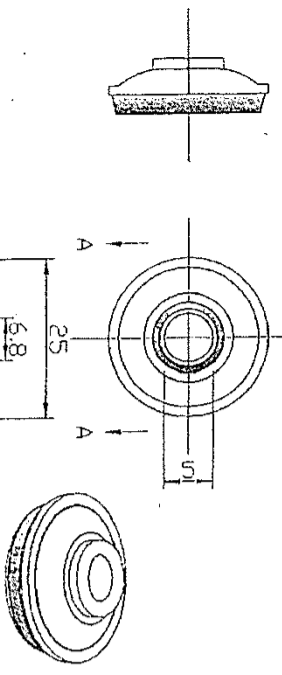
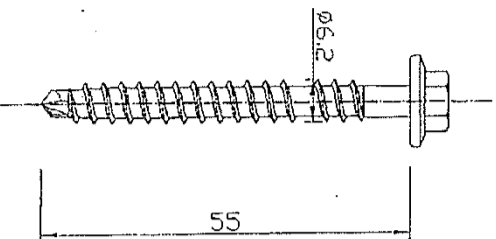
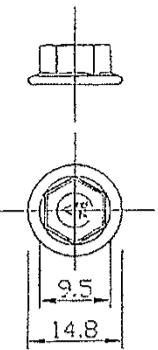


CYCLONE ASSEMBLY COMPONENTS

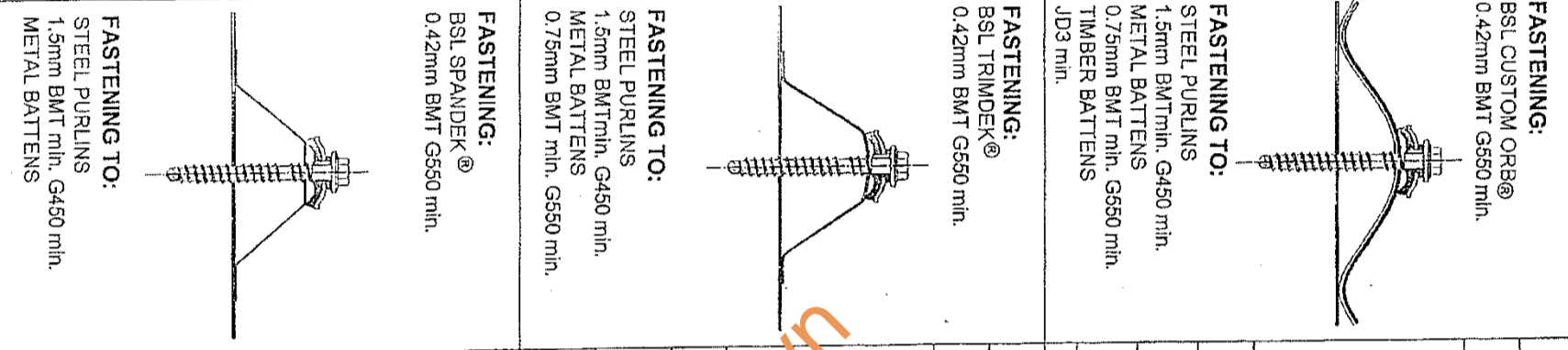
Comprising of self drilling screw & one piece cyclone washer

VORTEX CYCLONE UNIVERSAL SCREW

FOR METAL BATTENS, TIMBER BATTENS & STEEL PURLINS
M6.2-13 x 55.65 & 95mm
(HEAD MARKING B4 V & B4 ONLY)



SECTION A - A



FASTENING:
BSL CUSTOM ORB®
0.42mm BMT G550 min.

FASTENING TO:
STEEL PURLINS
1.5mm BMT min. G450 min.
METAL BATTENS
0.75mm BMT min. G550 min.
TIMBER BATTENS
JD3 min.

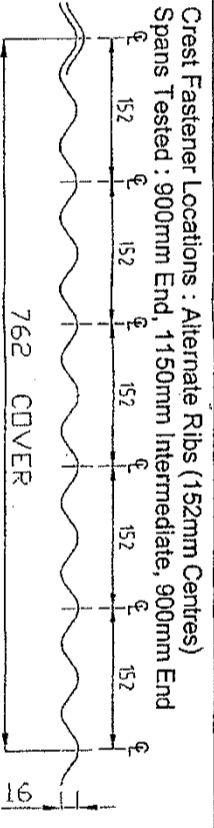
FASTENING TO:
STEEL PURLINS
1.5mm BMT min. G450 min.
METAL BATTENS
0.75mm BMT min. G550 min.

FASTENING:
BSL SPANDEK®
0.42mm BMT G550 min.

FASTENING TO:
STEEL PURLINS
1.5mm BMT min. G450 min.
METAL BATTENS

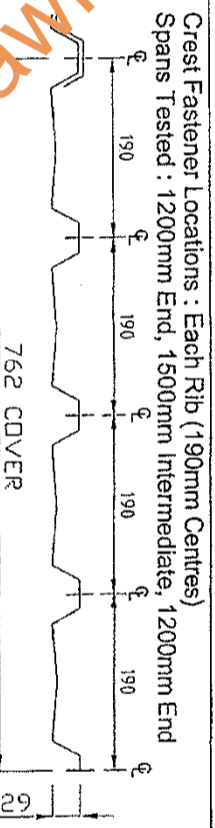
CORRUGATED ROOFING PROFILE - BSL CUSTOM ORB®

FASTENER SPACINGS



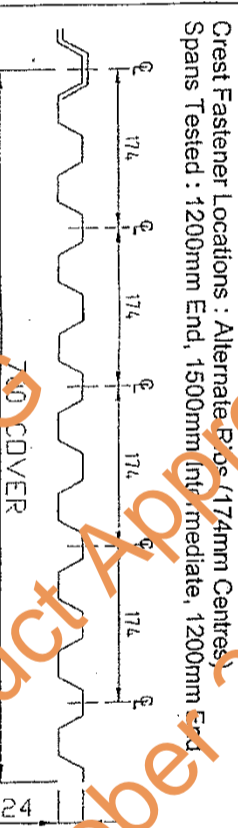
| | | |
|--------------------|--|--|
| Supports | Crest Fixing | Side Lap Fixing |
| Steel Purlins G450 | Bremick Vortex™ Cyclone M6.2-13x55 - BRA | Bremick Vortex™ Stitch M6.5-13x20 (900mm Centres min.) |
| 1.5mm BMT min. | | |
| Metal Battens | | |
| 0.75mm BMT min. | | |
| Timber JD3 min. | | |

SQUARE RIB ROOFING PROFILES - BSL TRIMDEK®



| | | |
|--------------------|--|--|
| Supports | Crest Fixing | Side Lap Fixing |
| Steel Purlins G450 | Bremick Vortex™ Cyclone M6.2-13x55 - BRA | Bremick Vortex™ Stitch M6.5-13x20 (900mm Centres min.) |
| 1.5mm BMT min. | | |
| Metal Battens | | |
| 0.75mm BMT min. | | |

SQUARE RIB ROOFING PROFILES - BSL SPANDEK®



| | | |
|--------------------|--|--|
| Supports | Crest Fixing | Side Lap Fixing |
| Steel Purlins G450 | Bremick Vortex™ Cyclone M6.2-13x55 - BRA | Bremick Vortex™ Stitch M6.5-13x20 (900mm Centres min.) |
| 1.5mm BMT min. | | |

Testing was undertaken at the University of Adelaide and BlueScope Lysaght Technology Centre. Tested and approved in accordance with the requirements of AS/NZS 1170.2 and the Building Code of Australia (BCA) 2008 Specifications B 1.2 for the Design of Buildings in cyclonic areas.

Test Certificate Numbers

Adelaide University: TR01, TR03, TR05, TR07, TR09 and TR11
BlueScope Lysaght Technology Centre: BSL 11:03:2009/1

****Design Engineers Certification**

Name: *Wendy Spalence*
Rego Number: *WEE 5 8192*
Date: *6.9.10*
Signature: *[Signature]*

****Certifying Engineers Certification**

Name: *Trevor Wain*
NT Rego Number: *12178ES*
Date: *5.05.2010*
Signature: *[Signature]*

Product Name
Vortex™ Cyclone - Cyclone Assembly

Product Description: Roofing Fasteners

M6.2-13x55 - BRA - Cyclone Assembly

Manufacturer's Name
BREMICK FASTENERS Pty Ltd
www.bremick.com.au

Design Criteria
Fastener & support spacing to be controlled such that the maximum design loading per fastener or maximum design pressures do not exceed:

Table 1 : Strength Limit State Design Loads per Fastener

| Roofing Profile | Test Load (kN) | C.O.V. (k _f) | Design Load (kN) |
|-----------------|----------------|--------------------------|------------------|
| Custom Orb® | 0.88 | 1.30 | 0.68 |
| Trimdek® | 1.05 | 1.30 | 0.81 |
| Spandek® | 1.08 | 1.38 | 0.78 |

Table 2 : Strength Limit State Design Pressures

| Roofing Profile | Test Pressure (kPa) | C.O.V. (k _f) | Design Capacity (kPa) |
|-----------------|---------------------|--------------------------|-----------------------|
| Custom Orb® | 5.36 | 1.30 | 4.12 |
| Trimdek® | 4.04 | 1.30 | 3.11 |
| Spandek® | 4.49 | 1.38 | 3.26 |

Limitations

This sheet confirms the structural adequacy of the roof sheeting assembly (sheeting, screw and washer) when correctly installed and does not extend to the capacity of the batten/purlin. Refer to the sheeting & batten manufacturers data for maximum support spacings. Axial withdrawal capacity for each fastener exceeds the 3.1kN requirements of AS3566.1.
Strength limit state fastener loads have been derived from the test pressures using simplified static analysis with the uniform pressure (load) distribution.

Accepted for Inclusion

DTCM ref: *M/165/01*

Chairman's Signature:

Chairman's Name: *STEVEN J EARL ICAI*

Date of Approval: *21/10/10* Expiry Date: *21/10/13*
New Expiry Date: *21/10/13*
Signature: *[Signature]*