

CYCLONE ASSEMBLY COMPONENTS

Comprising of self drilling screw & one piece cyclone washer

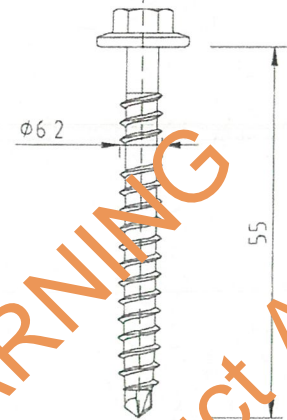
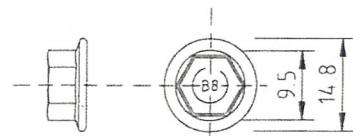
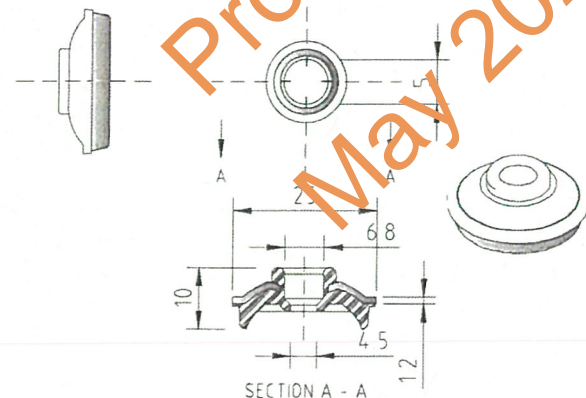
VORTEX CYCLONE UNIVERSAL SCREW

FOR METAL BATTENS & STEEL PURLINS

M6.2-13 x 55 mm

(HEAD MARKING B8, B8V)

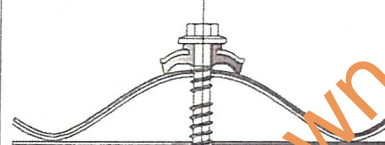
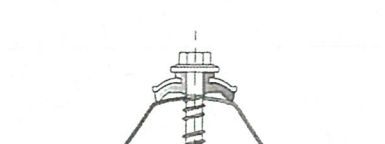
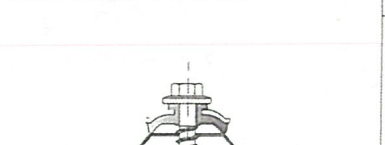
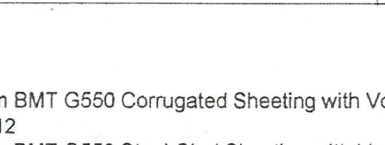
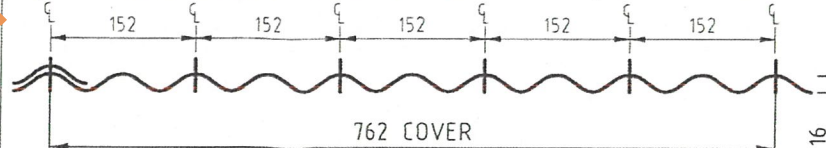
All dimensions in mm (nominal)

BREMICK BRA - CYCLONE WASHER / SEAL
ONE PIECE ALUMINIUM / EPDM CYCLONE WASHER

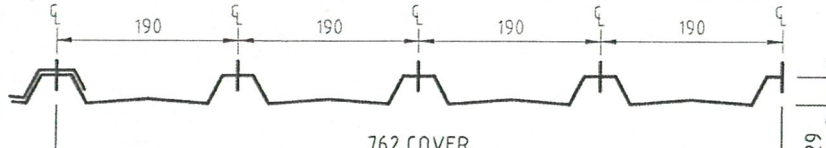
SECTION A - A

Testing was undertaken using fasteners with the "Revolution B8" coating system, indicated by the B8 & B8V head marking. Bremick fasteners has undertaken independent testing for "Revolution B8" coated fasteners in accordance to AS 3566.2: 2002 and has met and exceeded the requirements for Class 4 coating finish.

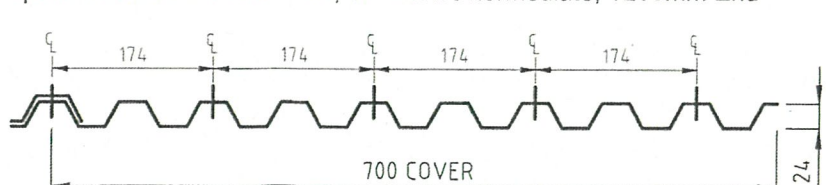
To achieve the required energy efficiency requirements, the use of an insulation spacer may be required. Refer to the roof sheeting manufacturers' recommendations for that particular roof profile insulation thickness combination. A longer screw of the same type may be required which will not impact on the capacity of the screw, as long as the major thread diameter clears the underside of the purlin to ensure maximum thread engagement.

FASTENING:STEELINE CORRUGATED 762
0.42mm BMT G550 min.**FASTENING TO:**STEEL PURLINS
1.5mm BMT min. G450 min.
METAL BATTENS
0.75mm BMT min. G550 min.**FASTENING:**STEELINE STEEL CLAD 762
0.42mm BMT G550 min.**FASTENING TO:**STEEL PURLINS
1.5mm BMT min. G450 min.
METAL BATTENS
0.75mm BMT min. G550 min.**FASTENING:**STEELINE STEEL SPAN 700
0.42mm BMT G550 min.**FASTENING TO:**STEEL PURLINS
1.5mm BMT min. G450 min.
METAL BATTENS
0.75mm BMT min. G550 min.**CORRUGATED ROOFING PROFILE - STEELINE CORRUGATED 762****FASTENER SPACINGS**Crest Fastener Locations : Alternate Ribs (152mm Centres)
Spans Tested : 900mm End, 1150mm Intermediate, 900mm End

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

SQUARE RIB ROOFING PROFILES - STEELINE STEEL CLAD 762**FASTENER SPACINGS**Crest Fastener Locations : Each Rib (190mm Centres)
Spans Tested : 1200mm End, 1500mm Intermediate, 1200mm End

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

SQUARE RIB ROOFING PROFILES - STEELINE STEEL SPAN 700**FASTENER SPACINGS**Crest Fastener Locations : Alternate Ribs (174mm Centres)
Spans Tested : 1200mm End, 1500mm Intermediate, 1200mm End

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

Product Name**Vortex™ Cyclone - Cyclone Assembly****Product Description: Roofing Fasteners****M6.2-13x55 - BRA - Cyclone Assembly
With Steeline Profiles****Manufacturer's Name:**

BREMICK Pty Ltd

F1, 62 Maddox Street

Alexandria NSW 2015

Ph: 02 8332 1501

Email: sales@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 _t)	Design Load (kN)
Corrugated	0.94	1.46	0.64
Steel Clad	1.17	1.46	0.80
Steel Span	1.02	1.46	0.70

Table 2 : Strength Limit State Design Pressures

Roofing Profile	Test Pressure (kPa)	C.O.V. (K _p)	Design Capacity (kPa)
Corrugated	6.02	1.46	4.12
Steel Clad	4.54	1.46	3.11
Steel Span	4.31	1.46	2.95

Fixing of side laps with stitching screws is generally considered good practice during installation to maintain a weather-tight seal.

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: 2002 - Self-drilling screws for building and construction industries - General requirements and mechanical properties.

Strength limit state fastener loads have been derived from the test pressures using simplified static analysis with the uniform pressure (load) distribution.

The fastener is only applicable for use with Steeline cladding products with the conditions described in this data sheet.

Accepted for Inclusion

DTCM ref:

M/583/01

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 24/05/2019 Expiry Date: 24/05/2024

Test Certificates

EngTest Report C120908-3, Test 3 Low-High-Low Cyclonic Testing of 0.42mm BMT G550 Corrugated Sheeting with Vortex Cyclone M6.2-13x55 Screws and BRA 25x1.2mm Washers, 13 December 2012
EngTest Report C120908-4, Test 4 Low-High-Low Cyclonic Testing of 0.42mm BMT G550 Steel Clad Sheeting with Vortex Cyclone M6.2-13x55 Screws and BRA 25x1.2mm Washers, 13 December 2012
EngTest Report C120908-8, Test 8 Low-High-Low Cyclonic Testing of 0.42mm BMT G550 Steel Span Sheeting with M6.2-13x55 Screws and BRA 25x1.2mm Washers, 13 December 2012

****Design Engineers Certification**

Name: RACHAEL ZEUNER

Rego Number: 2222141

Date: 17.4.2019

Signature:

**registered as a structural engineer in Australia

****Certifying Engineers Certification**

Name: TREVOR JOHN

NT Rego Number: 12178ES

Date: 17.04.2019

Signature:

**registered as a structural engineer in Northern Territory