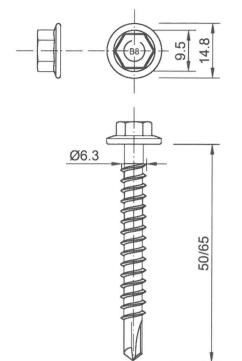
# CYCLONE ASSEMBLY COMPONENTS

Comprising of self drilling screw & one piece cyclone washer

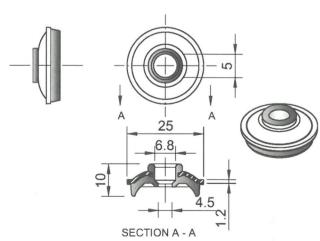
# METAL DRILLING SCREW WITH BRA WASHER CYCLONE **ASSEMBLY**

FOR SELF DRILLING INTO STEEL PURLINS 14-10 x 50/65mm (HEAD MARKING B8 & B8V) All dimensions mm (nominal) Screws are Class 4 in accordance with AS3566



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

**Test Certificates** 



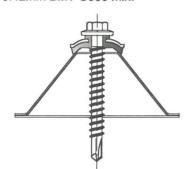
### **FASTENING:**

METROLL CORODEK 0.42mm BMT G550 min.



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

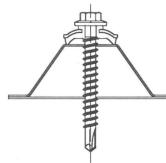
#### **FASTENING:** METROLL TRIMCLAD 0.42mm BMT G550 min.



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

# **FASTENING:** METROLL METROSPAN

0.42mm BMT G550 min.

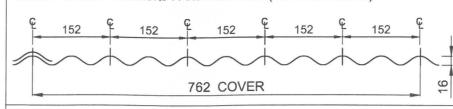


**FASTENING TO:** STEEL PURLINS 0.75mm BMT min. G550 min. 1.5mm BMT min. G450 min.

## CORRUGATED ROOFING PROFILE

#### **FASTENER SPACINGS**

Crest Fastener Locations: Alternate Ribs (152mm Centres)



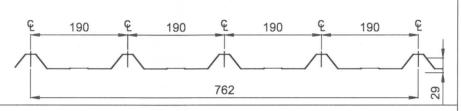
METROLL CORODEK ROOF CLADDING - ULTIMATE LIMIT STATE DESIGN PRESSURES (kPa)

| Span Type | Maximum Design Pressure (kPa) for Span L (mm) |      |      |      |      |      |  |
|-----------|-----------------------------------------------|------|------|------|------|------|--|
|           | 600                                           | 750  | 900  | 1200 | 1500 | 1800 |  |
| Internal  | 5.98                                          | 4.64 | 3.75 | 2.63 | 2.04 | 1.65 |  |
| Equal     | 5.29                                          | 4.07 | 3.31 | 2.40 | 1.85 | 1.60 |  |
| Double    | 4.23                                          | 3.26 | 2.65 | 1.92 | 1.48 | 1.20 |  |

#### **SQUARE RIB ROOFING PROFILES**

#### **FASTENER SPACINGS**

Crest Fastener Locations: Each Rib (190mm Centres)



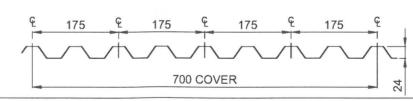
METROLL TRIMCLAD ROOF CLADDING - ULTIMATE LIMIT STATE DESIGN PRESSURES (kPa)

| Span Type | Maximum Design Pressure (kPa) for Span L (mm) |      |      |      |      |      |  |
|-----------|-----------------------------------------------|------|------|------|------|------|--|
|           | 600                                           | 900  | 1200 | 1500 | 1800 | 2100 |  |
| Internal  | 5.49                                          | 3.29 | 2.19 | 1.75 | 1.46 | 1.25 |  |
| Equal     | 4.75                                          | 2.83 | 2.00 | 1.59 | 1.33 | 1.14 |  |
| Double    | 3.80                                          | 2.27 | 1.60 | 1.28 | 1.06 | 0.91 |  |

#### TRAPEZOIDAL RIB ROOFING PROFILES

#### **FASTENER SPACINGS**

Crest Fastener Locations: Alternate Ribs (175mm Centres)



METROLL TRIMCLAD ROOF CLADDING - ULTIMATE LIMIT STATE DESIGN PRESSURES (kPa)

|           | Maximum Design Pressure (kPa) for Span L (mm) |      |      |      |      |      |  |
|-----------|-----------------------------------------------|------|------|------|------|------|--|
| Span Type | 600                                           | 750  | 900  | 1200 | 1500 | 1800 |  |
| Internal  | 6.06                                          | 5.08 | 4.43 | 3.62 | 2.53 | 1.81 |  |
| Equal     | 5.52                                          | 4.63 | 4.04 | 3.30 | 2.24 | 1.65 |  |
| Double    | 4.62                                          | 3.91 | 3.38 | 2.64 | 1.80 | 1.32 |  |

# Checking Engineer

Name: LEO NOICOS

Registration Number: 70762

Must be an Australian registered structural

#### Certifying Engineer

Name: RACHAEL ZEUNER

NT Registration Number: 309710ES

Date: 1/8/2025 Beunes Signature:

Must be a registered structural engineer

#### Product Name

# SDM BRA Cyclone Assembly

Product Description: Roofing Fasteners

SDM 14-10 x 50/65 - BRA Cyclone Assembly with Metroll Profiles

Manufacturer's Details: BREMICK Pty Ltd

F1, 62 Maddox Street Alexandria NSW 2015 Ph: 02 8332 1501

Email: sales@bremick.com.au

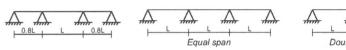
#### Design Criteria

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

Table 1: Strength Limit State Design Loads per Fastener

| Roofing<br>Profile | Test Load<br>(kN) | C.O.V.<br>( K ) | Design Load<br>(kN) |
|--------------------|-------------------|-----------------|---------------------|
| Corodek            | 0.73              | 1.38            | 0.53                |
| Trimdek            | 0.83              | 1.38            | 0.60                |
| Metrospan          | 1.05              | 1.38            | 0.76                |

Description of span types in tables refer to the following support and geometry configurations:



Where  $\triangle$  denotes a support location, L = span to be used in conjunction with the table

#### Limitations

1. 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.

2. Capacity of assembly pullover may be less than sheeting span capacity. Adjust sheeting spans

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

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

- Italic denotes spans that exceed foot traffic limitations
- Maximum Corodek spans to suit foot traffic are 1350mm
- Maximum Trimclad spans to suit foot traffic are 1350mm
- Maximum Metrospan spans to suit foot trafic are1800mm

# Accepted for Inclusion in Deemed to Comply Manual

DTCM drawing number: M/392/01

Splaneis Chairperson Signature:

Chairperson Name: Elisha Harris

Date of Approval: 04/09/2025 Expiry Date: 04/09/2030

JCU Cyclone Testing Station Report TS1069 Cyclic Simulated Wind Load Strength Testing of Roofing Screw and 25mm BRA Washer Assemblies for Roofing Applications, 26th June 2017