NORTHERN TERRITORY DEEMED TO COMPLY MANUAL – National Construction Code Volume 2 (Section 3.0.4 Structural resistance of materials in high wind areas)

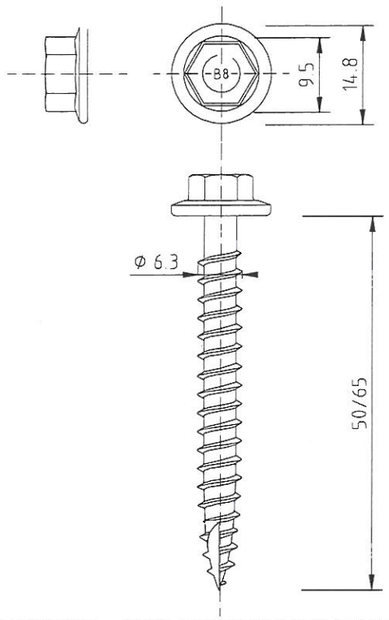
This product has been determined to satisfy NCC Performance Requirement P2.1.1 for structural stability and resistance.

CYCLONE ASSEMBLY COMPONENTS

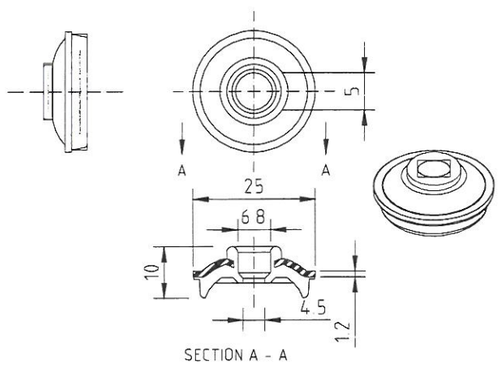
Comprising of self drilling screw & one piece cyclone washer

TYPE 17 WITH BRA WASHER CYCLONE ASSEMBLY

FOR METAL BATTENS & TIMBER BATTENS
14g -10x50/65mm
(HEAD MARKING B8 & B8V)



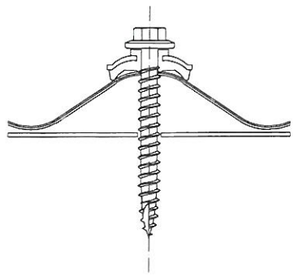
BREMICK BRA - CYCLONE WASHER / SEAL
ONE PIECE ALUMINIUM / EPDM CYCLONE WASHER



Note:
All dimensions mm (nominal)

Side Lap Fixing
Bremick Vortex™ Stitch M6.5-13 x 20
(900mm centres min.)

FASTENING:
STRATCO CORRUGATED
0.42mm BMT G550 min.

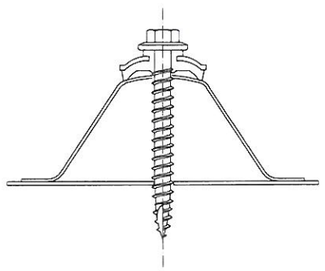


FASTENING TO:

METAL BATTENS
0.75mm BMT min. G550 min.

TIMBER BATTENS
F17 Hardwood

FASTENING:
STRATCO SUPERDEK
0.42mm BMT G550 min.



FASTENING TO:

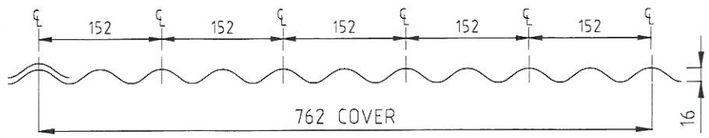
METAL BATTENS
0.75mm BMT min. G550 min.

TIMBER BATTENS
F17 Hardwood

CORRUGATED ROOFING PROFILE

FASTENER SPACINGS

Crest Fastener Locations : Alternate Ribs (152mm Centres)



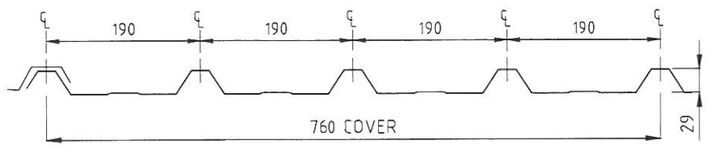
STRATCO CORRUGATED ROOF CLADDING - ULTIMATE LIMIT STATE DESIGN PRESSURES (kPa)

	Maximum Design Pressure (kPa) for Span L (mm)					
Span Type	**600**	**750**	**900**	**1200**	***1500***	***1800***
Internal	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)



STRATCO SUPERDEK ROOF CLADDING - ULTIMATE LIMIT STATE DESIGN PRESSURES (kPa)

	Maximum Design Pressure (kPa) for Span L (mm)					
Span Type	**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*

Test Certificate Numbers

JCU Cyclone Testing Station Report TS1221 Cyclic Simulated Wind Load Strength Testing of Roofing Screws and 25mm BRA Washer Assemblies for Roofing Applications. 31st August 2021.

*Checking Engineers Certification

Name: LEO NOICOS
Registration Number: NER 70762
Date: 10.03.2022
Signature:

*registered as a structural engineer in Ausralia

*Certifying Engineers Certification

Name: RACHAEL ZEUNER
NT Registration Number: 309710ES
Date: 10.3.2022
Signature: RZeuner.

**registered as a structural engineer in the Northern Territory

Product Name

Type 17 BRA Cyclone Assembly

Product Description: Roofing Fasteners

T17 14-10x50/65 - BRA Cyclone Assembly with Stratco Profiles

Manufacturer's Details: BREMICK Pty Ltd
88 Dalmeny Ave,
Rosebery NSW 2018
Ph: 02 8332 1500
Email: sales@bremick.com.au

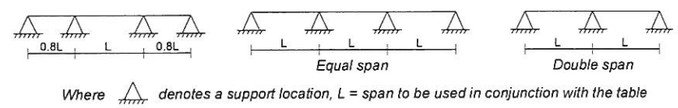
Design Criteria

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	0.73	1.38	0.53
Superdek	0.83	1.38	0.60

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



Where ⧋ 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. Strength limit state fastener loads have been derived from the test pressures using simplified static analysis with the uniform pressure (load) distribution.
2. Capacity of assembly pullover may be less than sheeting span capacity. Adjust sheeting spans accordingly.

Notes to tables:
1. Italic denotes spans that exceed foot traffic limitations.
2. Maximum Corrugated spans to suit foot traffic are 1350mm
3. Maximum Superdek spans to suit foot traffic are 1350mm

Accepted for Inclusion in Deemed to Comply Manual

DTCM drawing number: M/348/01

Chairperson Signature:

Chairperson Name: Paul Nowland

Date of Approval: 29/3/2022 Expiry Date: 29/3/2027