

## Passive Roof Ventilation Device

Metal Roofing - Pitch 15° to 75°

### What is Cor-Vent®?

Cor-Vent® is a passive ventilation device for metal roofs complying to NCC2022 ABCB Housing Provision Part 10.8.3 & Vol 1 F8D5 requirements. The Cor-Vent® ventilation devices are designed to allow passive airflow at both the low level and high level.

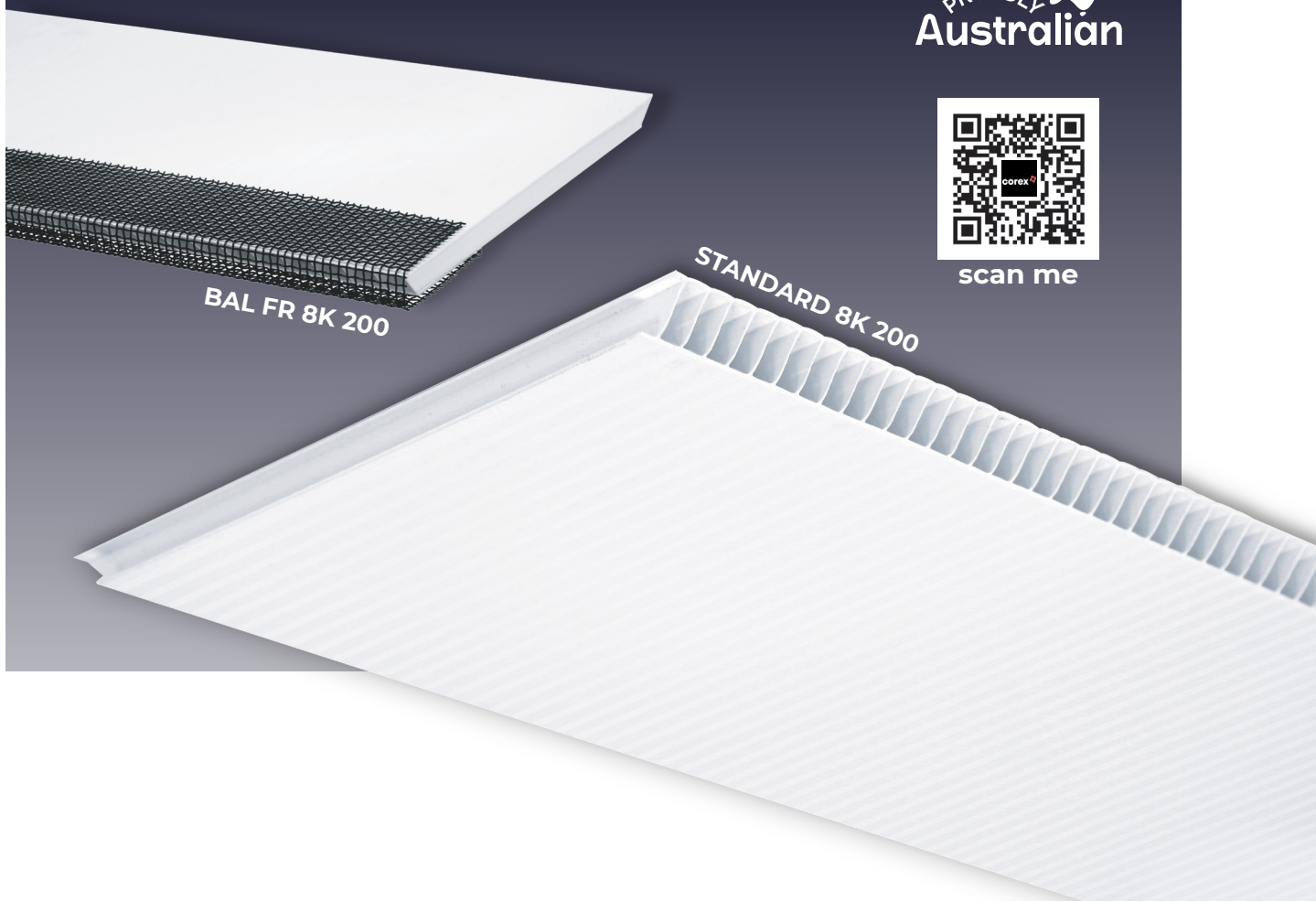
#### Features

- Applies to DtS ventilation requirements for climate zones 6,7 and 8.
- Designed for roof pitch ranging from 15 to 75 degrees.
- Cor-Vent® at the low level doesn't require fascia height alterations.
- Can be used with roof level insulation such as membranes (sarking) and blanket and foil.
- BAL FR tested to 1530.3 (BAL 12.5 ~ BAL 29) with Aluminium external mesh\*\*
- Includes a design registered, angled cut edge allow maintain airflow when installed under membranes.
- Light weight and engineered from Corflute®
- Made from recyclable polypropylene(PP)
- Easy to install and offered in lengths up to 2.5 meters
- Can be screwed or bonded to battens or rafters.

PROUDLY   
Australian



scan me



### Technical Data

Criteria	Test Method	Value
Compression strength	AS1301.429S	Min 600kPa
Melting Temperature	ASTM3418	165°C
Maximum working temperature	N/A	90°C
Spread of Flame Index (range 1-10) **	AS1530.3	0
Smoke developed index (range 1-10) **	AS1530.3	3
Heat evolved index (range 1-10) **	AS1530.3	0
Ember protection **	AS3959	2mm aperture stainless steel wire mesh

\*\*Cor-Vent® 8K FR BAL 200

### Roof Space Ventilation Requirements

Roof Pitch	Ventilation Openings
≥ 15° to < 75°	7000 mm <sup>2</sup> /m provided at the eaves and 5,000mm <sup>2</sup> /m at high level

### Dimensions

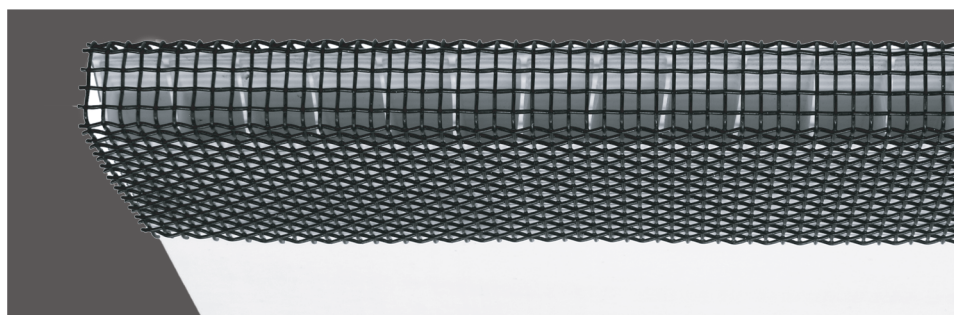
Product	Thickness (mm)	Width (mm)	Length (mm)	Weight (mm)	Ventilation Minimum Free Open Area
Cor-Vent® 8K 200	10	200	2500	0.9	8050
Cor-Vent® 8K FR BAL 200	10	200	2500	1.0	8050
Cor-Vent® 5K (High Level)	6	100	2500	0.3	5050

Table Notes:

Cor-Vent® 8K exceeds DTS 7,000mm<sup>2</sup>/m installed along the longest horizontal dimension of the roof.  
 Cor-Vent® 5K exceeds DTS 5,000mm<sup>2</sup>/m can be installed under ridge caps or apron flashings.

### Cor-Vent® 8K BAL FR & Fire Rate Solutions

- Corex has developed a BAL rated fire-retardant solution.
- Compliant to AS3959 Clause 3.6 (BAL-LOW to BAL-29).
- Supplied with a durable coated external aluminium ember mesh with less than 2mm apertures.
- Corex BAL/FR grade products have been validated to AS1530.3.
  - Spread of flame index 0
  - Smoke developed index 3
  - Heat evolved index 0
- Mesh profile design incorporates additional open area to meet roof ventilation requirements.



# Cor-Vent® - Example Calculations

## Practical example for Hip Roof (Pitch 22°) using Cor-Vent®

- Roof Pitch = 22° Longest Horizontal Dimension = 20m
- Ventilation opening required – Low Level.

## NCC2022 Roof Ventilation Requirement Calculations

Calculate the minimum ventilation opening area requirements for low and high level. The vent device calculations must meet or exceed these values.

- Low level  $2 \times 7000\text{mm}^2 \times 20\text{m}$  (longest horizontal dimension of the roof) =  $280,000\text{mm}^2$ .
- High level  $1 \times 5000\text{mm}^2 \times 20\text{m}$  (longest horizontal dimension of the roof)<sup>#</sup> =  $100,000\text{mm}^2$ .

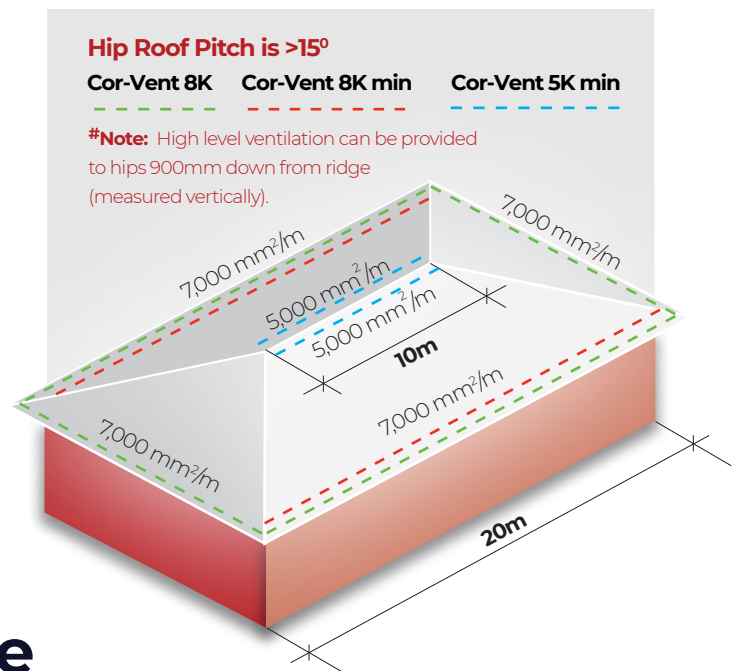
## Vent Device Calculations

### Cor-Vent 8K (Low Level)

- Cor-Vent® 8K provides an open area of  $8,050\text{mm}^2/\text{m}$ .
- Open area with Cor-Vent® 8K:  
 $20\text{m} \times 2 \times 8050\text{mm}^2 = 340,000\text{mm}^2$
- Exceeds the minimum requirement of  $280,000\text{mm}^2$

### Cor-Vent 5K (High Level)

- Cor-Vent 5K provides an open area of  $5,050\text{mm}^2/\text{m}$ .
- Open area with Cor-Vent® 5K:  
 $2 \times 10\text{m} \times 5050\text{mm}^2 = 101,000\text{mm}^2$
- Exceeds the minimum requirement of  $100,000\text{mm}^2$



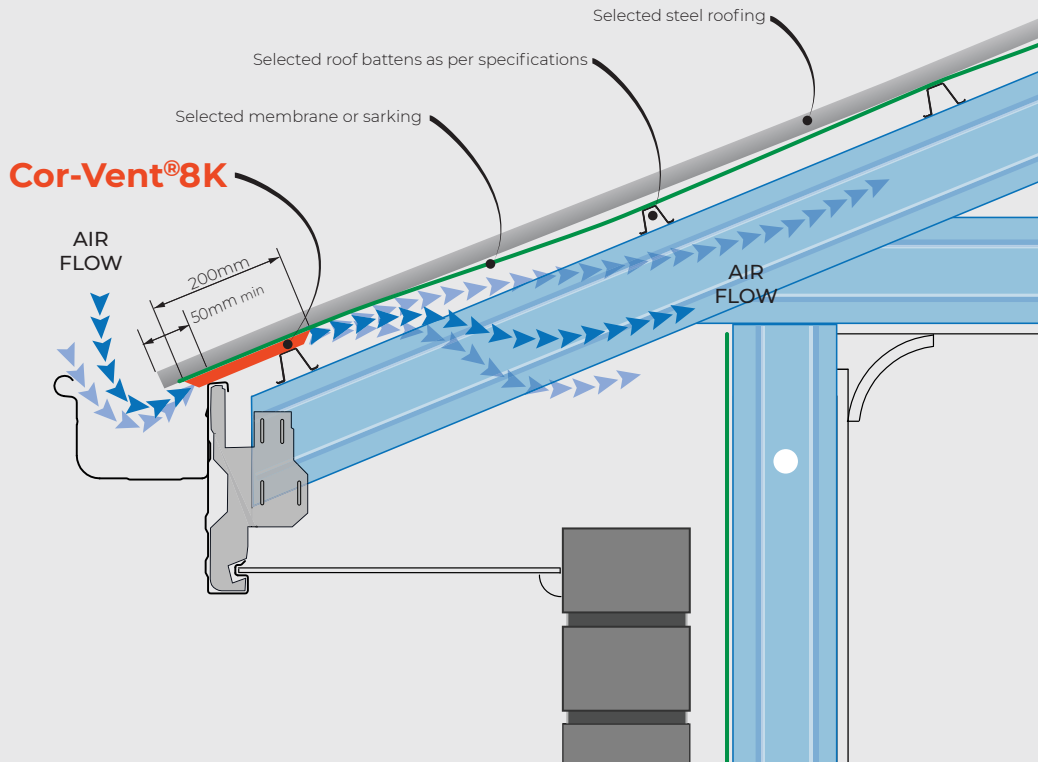
## Installation Guidance

### Cor-Vent® 8K Low Level Ventilation

- Low level ventilation for 15-75-degree roofing does not require fascia height change.
- Roofing sheet fastener length should be checked to ensure secure fixing to structure.
- Fix vent device with low profile headed fasteners, drive fixing below vent surface (coating class 3) at metre intervals.
- Cor-Vent® must be installed with branding at the top. This ensures the ventilation pathway is maintained with membranes.
- Weather proofing of structure must be maintained when installed.
- Ensure to use BAL FR and fire rated solutions when installing in bushfire zones.
- In marine zones it is recommended to use BAL FR to restrict salt aerosol migration into the roof space.
- Cor-Vent can be cut to size with standard cutting tools (e.g. tin snips).
- Membrane is laid over the Cor-Vent .

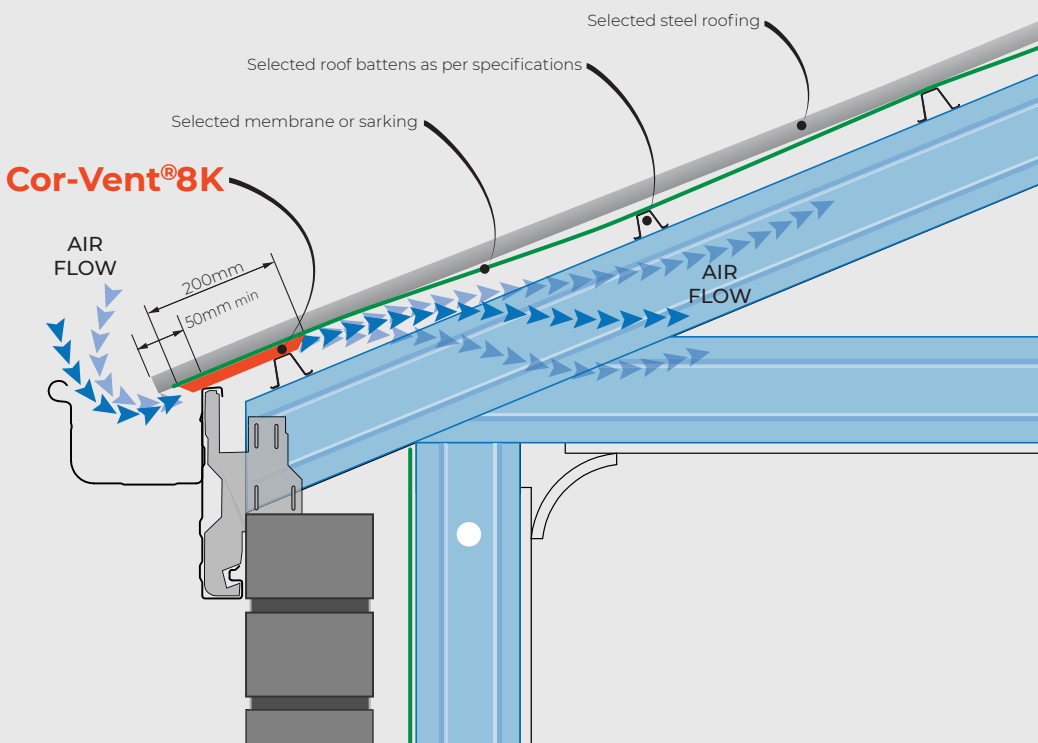
Low Level - Eave with a Soffit

Fig.1



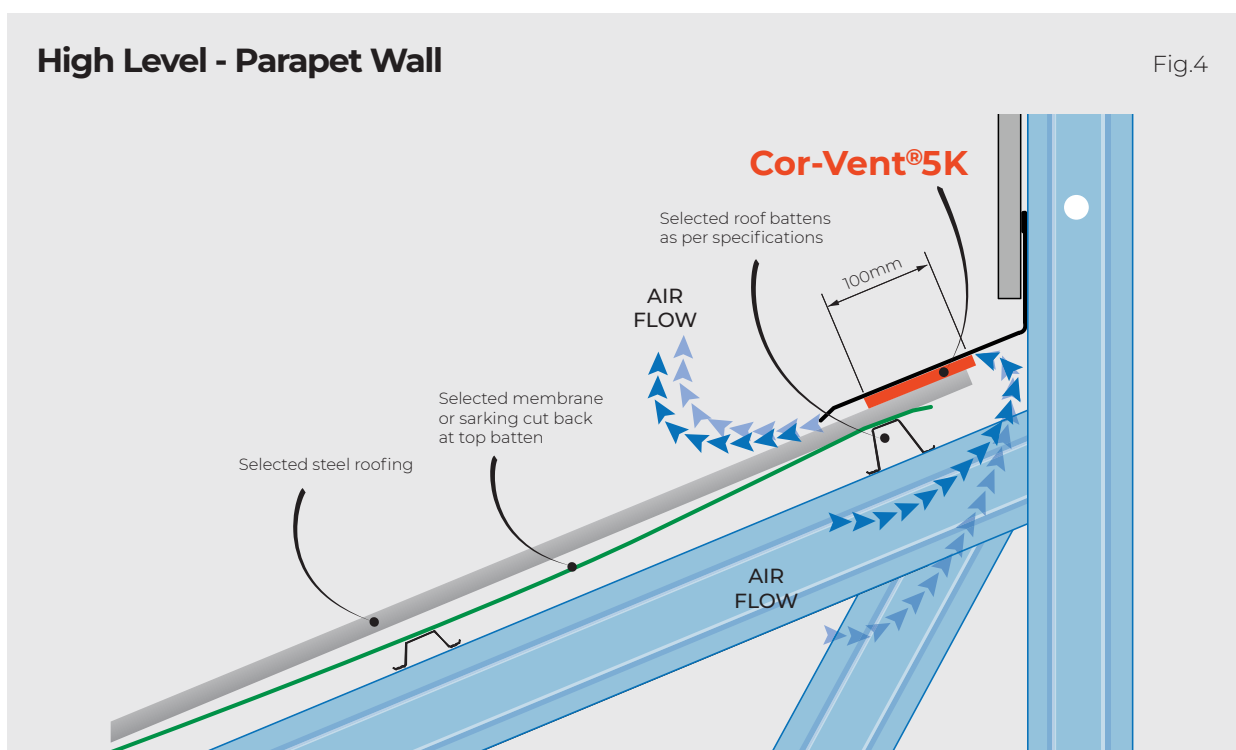
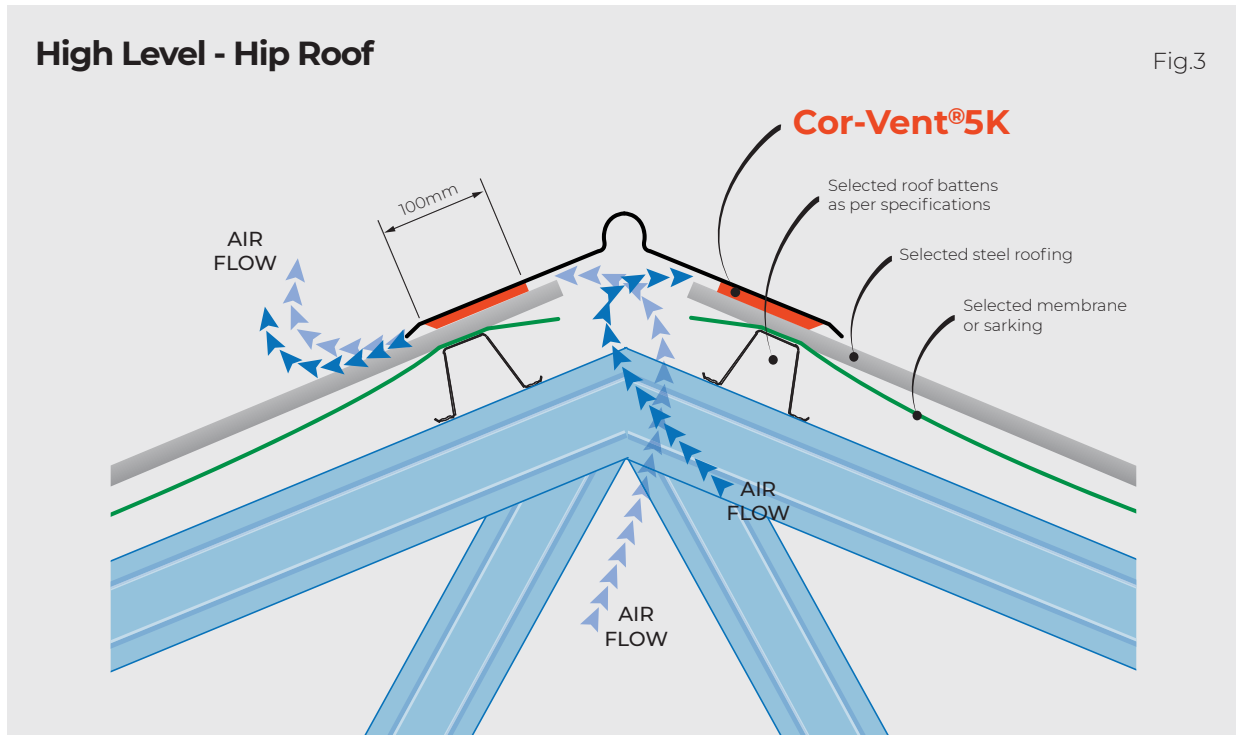
Low Level - Eave without a Soffit

Fig.2



### Cor-Vent® 5K High Level Ventilation

- Temporary fix vent device location to either cladding or flashing (e.g. double sided tape).
- Roofing fastener length should be checked to ensure secure fixing to structure
- Ensure membrane or blanket and foil is terminated at the ridge to maintain ventilation pathway.
- Weather proofing must be maintained when installed.
- No BAL solution is available for Cor-Vent® 5K



**Corex Recycling is a Melbourne based plastic recycle processor specialising in Corflute®, Polypropylene (PP), HDPE and other plastic recycling solutions.**

Part of Corex Plastics, Corex Recycling operates with over 30 years of expertise and knowledge within the plastics industry. This experience helps promote sustainable recycling solutions for all Corex products and most other plastics.

Corex Recycling had one of its largest infrastructure upgrades in 2017. The new infrastructure helped cater for rising demands and doubled the pre-existing recycling output. It also allowed for new opportunities to explore previously unseen specialized polymer streams with Corflute and beyond.

**At Corex, we believe that innovation is what sets us apart. That's why we created a business with a specialist range of services so that we can offer a one-stop-shop to our customers seeking locally made plastic solutions.**

As well as providing state of the art sheet extrusion, we design complete packaging solutions for a diverse range of industry sectors including;

- Building and construction
- Retail signage
- Food and beverage
- Automotive
- Horticulture



**Corex Plastics (Australia) Pty. Ltd.**

261 Frankston Dandenong Road, Dandenong 3175 AUSTRALIA

Phone: +61 3 9238 1300 | Email: [hello@corex.com.au](mailto:hello@corex.com.au) | Web: [corex.com.au](http://corex.com.au)

*All information is to the best of our knowledge, true and correct. However, as many factors outside our knowledge and control can effect the products, no warranty can be given or implied in respect of such information and no information should be construed as a warranty in relation to the product or its use.*

**PROUDLY**   
**Australian**