

# WindMaster™ BAL Natural Roof Ventilator

Refer to product table below for applicable product codes covered by this document

Issue **A**

## Product Type & Application

The Bradford Ventilation WindMaster BAL is created by assembling a Windmaster natural roof ventilator and a BAL (12.5 – 29) rated sparkguard. This product is a wind driven natural ventilator that is designed to exhaust heat & moisture from the roof space, without the use or electrical energy. It is specifically designed to meet the requirements of BAL12.5 to BAL29 when tested in accordance with AS3959-2009.

## Compliance with the NCC

When correctly specified and installed this natural roof ventilator ;

- Meets the requirement of the NCC2016 Volume 1 Part G5 - Construction in Bushfire Prone Areas
- Meets the requirement of the NCC2016 Volume 2 Clause 3.7.4.0 Bushfire Areas
- Meets the requirement of the NCC2019 Ventilation of Roof Spaces Volume 1 Clause F6.4 and Volume 2 Clause 3.8.7.4 as a Deemed-To-Satisfy solution.

## Evidence of Suitability

- Bradford Ventilation DTS Solution Calculation
- CSIRO Certificate of Assessment 2361 (Metal Roof)
- CSIRO Certificate of Assessment 2377 (Tile Roof)
- Should there also be a test reference here?

## Conditions of Storage, Use & Maintenance

- Store in the original packaging in a cool and dry area.
- Do not attempt to repair – contact Bradford Ventilation.

**Refer to the product warranty at [bradfordventilation.com.au](http://bradfordventilation.com.au) for more information.**

## Limitations of Use

- The Windmaster is designed for Class 1 and Class 10 construction in non-cyclonic regions.
- Do not use for exhausting hazardous, abrasive, explosive materials and vapour.
- This product is not BAL compliant for roof pitches less than 18°.
- This product is not suitable for BAL-40 and BAL-FZ bushfire (BAL) rated areas.

## Specific Design or Installation Instructions

- This product must be sealed at the roof penetration and the material used to seal the penetration shall be non-combustible.
- Assembly and installation must be accordance with the Windmaster BAL instruction manual.
- Refer to the table below for recommended ventilation levels.
- To facilitate effective and efficient crossflow ventilation, the WindMaster and eave vents must be evenly distributed.
- The rotating head of this product must be installed horizontally to ensure correct operation.

## NCC2019 Ventilation of Roof Spaces Deemed-To-Satisfy Solution Requirements:

- Calculate the area (m<sup>2</sup>) of ceiling directly under the roof space;
- Determine the pitch of the roof;
- Look-up the recommended number of Windmasters and Bradford metal eave vents in the Deemed-To-Satisfy Solution Table below;
- Distribute the Windmaster(s) and Bradford Metal Eave Vents evenly.

Bradford Ventilation Deemed-To-Satisfy Solution Table

Roof Pitch	Total Ceiling Area <sup>1</sup> (m <sup>2</sup> )	Number of Windmasters required	Bradford Metal Eave Vents required
> 22°	< 35	1	3
	< 71	2	5
	< 107	3	8
	< 143	4	10
	< 178	5	12
	< 214	6	15
18° to 22° (Not suitable for roof pitches less than 18°)	< 35	2	6
	< 71	4	10
	< 107	6	16
	< 143	8	20
	< 178	10	24
	< 214	12	30

<sup>1</sup> Total Ceiling Area is defined as the total ceiling area directly under the roof/attic space.

**For general installation guidance refer to the product installation guide at [www.bradfordventilation.com.au](http://www.bradfordventilation.com.au)**

## Windmaster™ BAL Natural Roof Ventilator

### Applicable Product Codes (SKU)

Classic Cream	61151	Paperbark	61152	Cove	125754	Gully	125751
Loft	90674	Surfmist	61143	Evening Haze	90673	Mangrove	125755
Pale Eucalypt	61147	Wilderness	61150	Cottage Green	61148	Headland	61145
Jasper	61161	Terrain	125753	Manor Red	61146	Shale Grey	61155
Dune	61153	Windspray	61154	Basalt	125752	Wallaby	125756
Woodland Grey	61149	Deep Ocean	61159	Ironstone	61166	Monument	90675
Night Sky	61144	Mill	61141				

<b>Sparkguard</b>	61423
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### Product Specifications

General	
Ventilator Type	Natural Roof Ventilator
Turbine Diameter	420 mm
Varipitch Diameter	300 mm
Product Weight	1.90 kg
Wind Loading	Passed Wind Loading Test in accordance to AS/NZS 4740 up to 205 km/h

Material	
Turbine	Aluminium
Varipitch	Aluminium
Flashing	Aluminium
Shaft	Zinc passivate plated mild steel
Bearing Holder, Support Ring and Brackets	Glass-Filled Nylon
Sparkguard	Stainless Steel
Screws	Stainless Steel and Galvanised

## Windmaster™ BAL Natural Roof Ventilator

### Product Dimensions (in mm)

