

## WindMaster<sup>™</sup> BAL Natural Roof Ventilator

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

Issue B

### **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)

### 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 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 installation 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;
- o 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	
	< 35	2	6	
18° to 22° (Not suitable for roof pitches less than 18°)	< 71	4	10	
	< 107	6	16	
	< 143	8	20	
	< 178	10	24	
	< 214	12	30	

<sup>&</sup>lt;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

CSR Bradford Locked Bag 1345 North Ryde BC NSW 1670 csrbradford.com.au

For further technical advice call **1300 850 305** or visit **csrbradford.com.au** 

CSR



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### Applicable Product Codes (SKU)

61151	Paperbark	61152	Cove	125754	Gully	125751
90674	Surfmist	61143	Evening Haze	90673	Mangrove	125755
61147	Wilderness	61150	Cottage Green	61148	Headland	61145
61161	Terrain	125753	Manor Red	61146	Shale Grey	61155
61153	Windspray	61154	Basalt	125752	Wallaby	125756
61149	Deep Ocean	61159	Ironstone	61166	Monument	90675
61144	Mill	61141				
	61423		7			
	61151   90674   61147   61161   61153   61149   61144	61151 Paperbark   90674 Surfmist   61147 Wilderness   61161 Terrain   61153 Windspray   61149 Deep Ocean   61144 Mill	61151 Paperbark 61152   90674 Surfmist 61143   61147 Wilderness 61150   61161 Terrain 125753   61153 Windspray 61154   61149 Deep Ocean 61159   61144 Mill 61141	61151Paperbark61152Cove90674Surfmist61143Evening Haze61147Wilderness61150Cottage Green61161Terrain125753Manor Red61153Windspray61154Basalt61149Deep Ocean61159Ironstone61144Mill61141State	61151 Paperbark 61152 Cove 125754   90674 Surfmist 61143 Evening Haze 90673   61147 Wilderness 61150 Cottage Green 61148   61161 Terrain 125753 Manor Red 61146   61153 Windspray 61154 Basalt 125752   61149 Deep Ocean 61159 Ironstone 61166   61144 Mill 61141 Ironstone 61166	61151Paperbark61152Cove125754Gully90674Surfmist61143Evening Haze90673Mangrove61147Wilderness61150Cottage Green61148Headland61161Terrain125753Manor Red61146Shale Greya61153Windspray61154Basalt125752Wallaby61149Deep Ocean61159Ironstone61166Monument61144Mill61141Shale StateStateState

### **Product Specifications**

General				
Ventilator Type	Natural Roof Ventilator			
Turbine Diameter	420 mm			
Varipitch Diameter	306 mm			
Product Weight	1.90 kg			
Wind Loading	Passed Wind Loading Test in accordance to AS/NZS 4740 up to 205 km/h			
Roof Pitch	Greater than 18°			

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			

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### Windmaster<sup>™</sup> BAL Natural Roof Ventilator

### Product Dimensions (in mm)



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