

# TurboBeam™ Wind Driven Turbine Ventilator

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

Issue **C**

## Product Type & Application

The Bradford Ventilation TurboBeam is a wind driven ventilator with a clear turbine, designed to remove heat and provide natural light to the roof space or storage area, without the use of electrical energy.

## Compliance with the NCC

When correctly specified and installed this natural roof ventilator:

### NCC2019

**Ventilation of Roof Spaces** - Meets the requirements of the NCC2019 Volume 1 Amend.1 F6.4 and NCC 2019 Volume 2 Amend.1 3.8.7.4 as a Deemed-To-Satisfy solution.

**Weatherproofing** - Meets the requirements of the NCC 2019 Volume 2 Amend. 1 Weatherproofing Performance Requirement P2.2.2 via Deemed-to-Satisfy (DtS) and performance solution pathways.

### NCC2022

**Ventilation of Roof Spaces** - Meets the requirements of NCC2022 Volume 1 F8D5 and ABCB Housing Provisions Standard 2022 10.8.3 as a Deemed to Satisfy solution for condensation management for NCC Climate Zones 6, 7 and 8.

**Weatherproofing** - Meets the requirements of the NCC 2022 Volume 2 Weatherproofing Performance Requirement H2P2 via Deemed-to-Satisfy (DtS) and performance solution pathways.

## Evidence of Suitability

- Ventilation of roof spaces - Bradford Ventilation DTS Solution Calculation.
- Weatherproofing - Arcadis Report 30051677\_4.

## Conditions of Storage, Use & Maintenance

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

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

## Limitations of Use

- The TurboBeam is designed for Class 1 and Class 10 construction in non-cyclonic regions.
- Do not use for exhausting hazardous, abrasive, acidic and alkaline vapour or areas containing explosive or corrosive materials.
- This product is not suitable for use in Bush Fire BAL-12.5 to BAL-40 or FZ rated areas.

## Specific Design or Installation Instructions

- Isolate power before installation.
- This product requires specific areas to be sealed against water entry and other areas to be left unsealed to allow internal condensation drainage – refer to the installation guide for details.
- Installation must be accordance with the Bradford Ventilation Residential Turbine Ventilator Installation Instruction.
- The rotating head of this product must be installed horizontally to ensure correct operation.
- Refer to the tables below for recommended ventilation levels. Note that there are differences between NCC 2019 and NCC 2022.

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

## TurboBeam™ Wind Driven Turbine Ventilator

### Specific Design or Installation Instructions cont.

#### NCC2019 Ventilation of Roof Spaces Deemed-To-Satisfy Solution Requirements Calculation in Table 1:

- 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 TurboBeam and Bradford Metal Eave vents in the Deemed-To-Satisfy Solution Table below;
- Distribute the TurboBeam(s) and Bradford Metal Eave Vents evenly.

**Table 1. NCC 2019 Bradford Deemed-To-Satisfy Solution**

Roof Pitch	Total Ceiling Area (m <sup>2</sup> )	Number of TurboBeams required	Bradford Metal Eave Vents required
> 22°	46	1	4
	92	2	7
	138	3	10
	184	4	13
	231	5	16
	277	6	19
	323	7	22

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

Where the roof pitch is ≤ 22°, the number of ventilators and eave vents specified must be doubled for the same ceiling area.

#### NCC2022 Ventilation of Roof Spaces Deemed-To-Satisfy Solution Requirements Calculation in Table 2:

The table below indicates the ventilation opening requirements for condensation management in NCC Climate Zones 6, 7 and 8. The NCC gives an open area requirement per meter length of the longest horizontal dimension of the roof, the table indicates how many products are required based on this.

TurboBeam vents should be installed not more than 900mm below the ridge or highest point of the roof space, measured vertically.

**Table 2. NCC 2022 Bradford Deemed-To-Satisfy Solution**

Products	TurboBeam Roof Ventilator	Eave Vent
Roof Pitch		
<10°		1 Eave Vent for every <b>0.7m</b> of horizontal roof length. These must be equally divided between the two opposing ends of the roof.
≥10° and <15°	1 TurboBeam for every <b>9.2m</b> of horizontal roof length	1 Eave Vent for every <b>1.4m</b> of horizontal roof length
≥15° and <75°	1 TurboBeam for every <b>9.2m</b> of horizontal roof length	1 Eave Vent for every <b>4.9m</b> of horizontal roof length
≥15° and <75° Cathedral	1 TurboBeam for every <b>9.2m</b> of horizontal roof length	1 Eave Vent for every <b>1.4m</b> of horizontal roof length

## TurboBeam™ Wind Driven Turbine Ventilator

### Applicable Product Codes (SKU)

CLEAR 61183
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### Product Specifications

General		Material	
<b>Ventilator Type</b>	Wind Driven Natural Ventilator	<b>Turbine</b>	High Impact Acrylic
<b>Turbine Diameter</b>	327.5 mm	<b>Varipitch</b>	Aluminium
<b>Varipitch Diameter</b>	255.5 mm	<b>Flashing</b>	Aluminium
<b>Product Weight</b>	1.9 kg	<b>Shaft</b>	Aluminium
<b>Wind Loading</b>	Passed Wind Loading Test in accordance to AS/NZS 4740 up to 205 km/h	<b>Bearings</b>	Twin Stainless-Steel Bearings

## TurboBeam™ Wind Driven Turbine Ventilator

### Product Dimensions (in mm)

