

Hurricane™ BAL Turbine Ventilator

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

Issue **A**

Product Type & Application

The Bradford Hurricane BAL is a bushfire rated wind-driven roof mounted turbine ventilator designed to exhaust heat and moisture. It is constructed from non-combustible materials with an ember guard assembled in the throat of the ventilator and is suitable for use in BAL 12.5 to 40 zones.

Compliance with the NCC

When correctly specified and installed this wind-driven turbine ventilator meets the requirements of:

- NCC2019 Volume 1 Part G5 - Construction in Bushfire Prone Areas
- NCC2019 Volume 2 Part 3.10.5 - Construction in Bushfire Prone Areas

Evidence of Suitability

- Hurricane BAL Assessment Report (ETR-00087)

Conditions of Storage, Use & Maintenance

- Store in the original packaging in a cool and dry area.
- This product requires regular check for wear/tear.
- The ember guard must be cleaned regularly to maintain product flowrate.
- Do not attempt to repair – contact Bradford Ventilation.

Refer to the product warranty at bradfordventilation.com.au for more information.

Limitations of Use

- This product is only suitable for installations on metal roof.
- The maximum roof slope for this product is 22.5°
- Do not use for exhausting hazardous, abrasive, explosive materials, alkaline vapour, corrosive or in very high moisture environments (such as water tanks).
- This product is not suitable for cyclonic rated regions.
- Product flow rate will be reduced if ember guard mesh is not adequately maintained.
- This product is not suitable for BAL-FZ rated areas.
- Seek technical advice from Bradford Ventilation on application suitability if unsure.

Specific Design or Installation Instructions

- This product is compliant with the requirements of AS3959-2018 up to BAL40 when installed on a metal roof with a pitch up to 22.5° in accordance with the product installation guide.
- This product's aluminium flashing is non-combustible and must be used and shaped to seal the roof's penetration in accordance with AS3959 – seal all gaps against ember and water ingress using UV stable fire rated sealant applied to the perimeter of the flashing to form a continuous seal between flashing and roof.
- The minimum free-open-area per ventilator is 0.3m² and should be provided as per the recommendations in AS1668.2
- Make-up air should be provided via evenly distributed openings which are permanently open and positioned to help the ventilator work more effectively and efficiently (refer to the product installation guide for guidance) – note that these openings may also require ember protection in BAL zones which may restrict airflow and require the replacement air/make-up air area calculation to be increased.
- The source of make-up air should be outdoor air.
- The rotating head of this product must be installed horizontally to ensure correct operation – adjustment of the varipitch and base flashing is critical to achieve this orientation (refer to the installation guide for details)
- The ember guard mesh must not be removed from this product but should be periodically inspected. Remove foreign objects and/or dust build-up to maintain airflow.
- 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.

For general installation guidance refer to the product installation guide at www.bradfordventilation.com.au

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Applicable Product Codes (SKU)

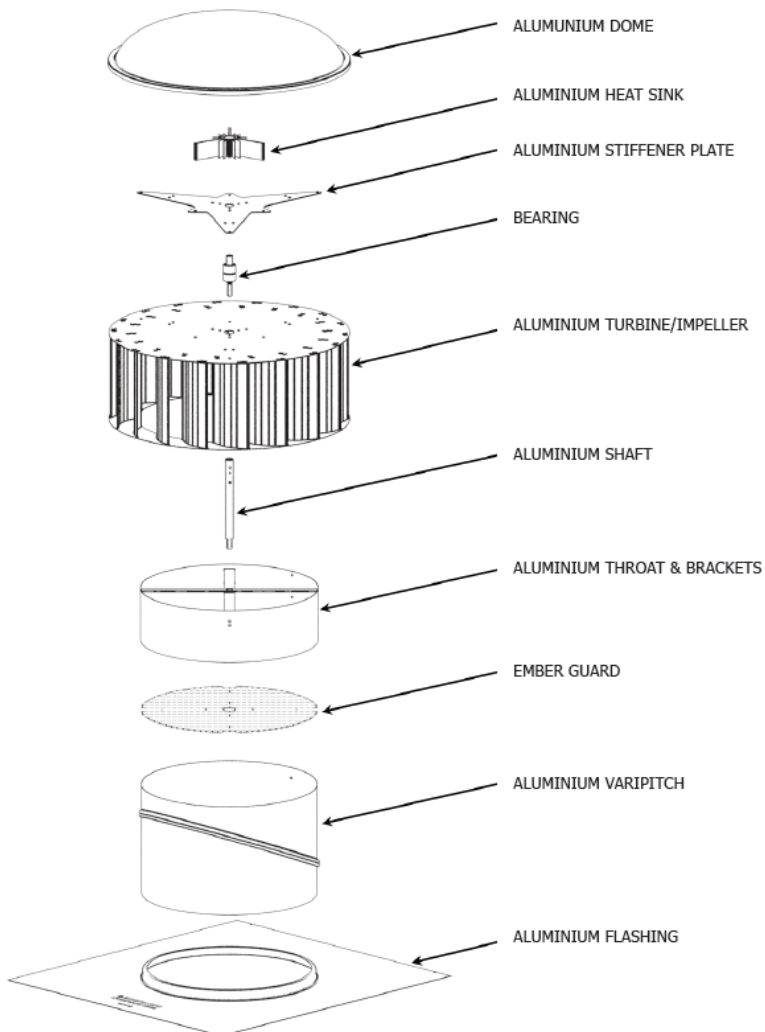
Hurricane BFR 300mm

Hurricane BFR Complete 300mm - Mill Finished	Hurricane BFR Complete 300mm – Powder Coated	Hurricane BFR Top 300mm - Mill Finished	Hurricane BFR Top 300mm – Powder Coated
600670	600670	600670	600670

Hurricane BFR 400mm

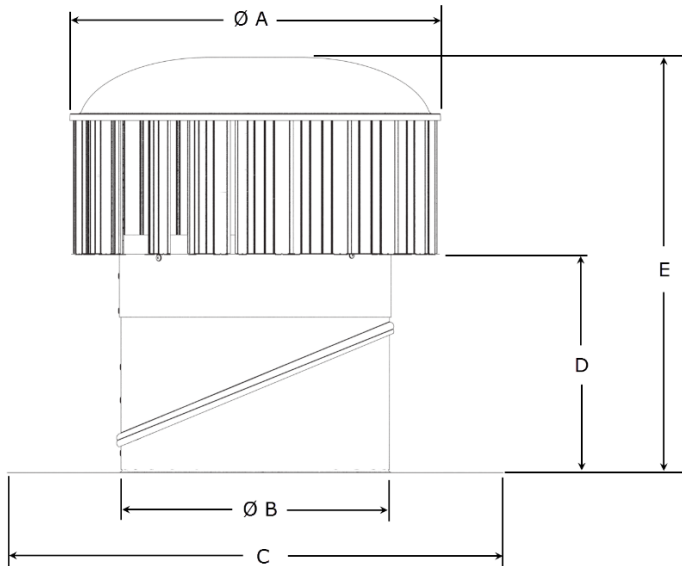
Hurricane BFR Complete 400mm - Mill Finished	Hurricane BFR Complete 400mm – Powder Coated	Hurricane BFR Top 400mm - Mill Finished	Hurricane BFR Top 400mm – Powder Coated
600671	600671	600671	600671

Product Specifications (in exploded view)

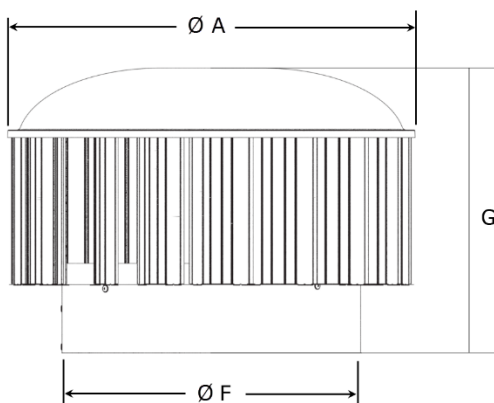


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Product Dimensions (mm)



Model	Dimension (mm)					Weight (kg)	Roof Slope Range
	ØA (OD)	ØB (ID)	C	D	E		
BAL 300	477	298	600 x 500	225	480	4.9	0° - 22.5°
BAL 400	561	401	750 x 700	274	560	6.3	0° - 22.5°



Model	Dimension (mm)			Weight (kg)
	ØA (OD)	ØF (ID)	G	
BAL 300	477	308	364	3.7
BAL 400	561	410	389	4.5

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Product Information Summary

Ventilator Range	Hurricane® BAL	
Ventilator Model	BAL 300	BAL400
Ventilator Type (AS/NZS 4740:2000 cl 1.5)	Type 4 - Rotating wind-driven roof ventilator	
Ventilator Performance Class (AS/NZS 4740:2000 Table 1.2)		
Rain Resistance	50 m/s No Water - Class A	50 m/s No Water - Class A
Effective Aerodynamic Area, EAA	0.044 m ²	0.058 m ²
Discharge Coefficient, C _d	0.71 - Class 1	0.52 - Class 2
Flow Coefficient, C _f	0.31 - Class 3	0.35 - Class 3
Wind Loading	57m/s - Level 1	57m/s - Level 1
Nominal Performance* (m ³ /hr)		
0 m/s	188 m ³ /hr	497 m ³ /hr
3 m/s	202 m ³ /hr	533 m ³ /hr
6 m/s	239 m ³ /hr	628 m ³ /hr

*In accordance to AS/NZS 4740:2000 nominal performance parameters where $h = 6m$, $\Delta T = 14^{\circ}C$, $T = 20^{\circ}C$