

Hurricane® Standard (H) Turbine Ventilator

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

Issue **B**

Product Type & Application

The Bradford Hurricane® Standard (H) is a wind-driven turbine ventilator designed to exhaust heat and moisture from non-BAL residential (Class 1) and commercial roofs (Class 2 to 9).

Compliance with the NCC

For use in Australia, when correctly specified and installed, this product provides the following compliance:

NCC2022

- **Weatherproofing** - Meets the requirements of the NCC 2022 Volume 1 Weatherproofing Performance Requirement F3P1 via Deemed-to-Satisfy (DtS) and performance solution pathways.

NCC2019

- **Weatherproofing** - Meets the requirements of the NCC 2019 Volume 1 Amend. 1 Weatherproofing Performance Requirement FP1.4 via Deemed-to-Satisfy (DtS) and performance solution pathways.

Evidence of Suitability

- Weatherproofing - Northrop Report SY222211-00 - RPPFA1.

Limitations of Use

- **IMPORTANT** - Do Not Modify This Product: Performance and safety are only achieved by the product or configuration listed in this PTS.
- Do not use for exhausting hazardous, abrasive, acidic and alkaline vapour or areas containing explosive or corrosive materials.
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- This product has not been tested for use in cyclonic wind regions C or D.
- This product is not suitable for use in Bush Fire BAL-12.5 to BAL-40 or BAL-FZ rated areas.
- The optional stainless-steel mesh used in this product as an insect guard does not comply with BAL requirements.
- This product is not suitable for use within 500m of a saltwater body.
- Seek technical advice from Bradford Ventilation on application suitability if unsure.

Specific Design or Installation Instructions

- Isolate power before installation.
- **Caution:** The turbine head of this product can rotate without warning (even during installation) – always keep body parts away from moving components.
- This is a general-purpose ventilation product, always refer to the installation guidance provided with the product prior to installation.
- The table below shows the minimum make-up air requirement per ventilator that should be provided in accordance with AS1668.2

Product	Make-Up Air* per ventilator - 100% open, evenly distributed open area
Hurricane® 100-400	≥ 0.3m ²
Hurricane® 450-600	≥ 0.5m ²
Hurricane® 700-900	≥ 0.9m 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 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)
- If the product is installed with a stainless-steel mesh, it should be periodically inspected to 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.
- The size of the ventilator should be selected based upon the available roof area and required airflow performance.

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

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.

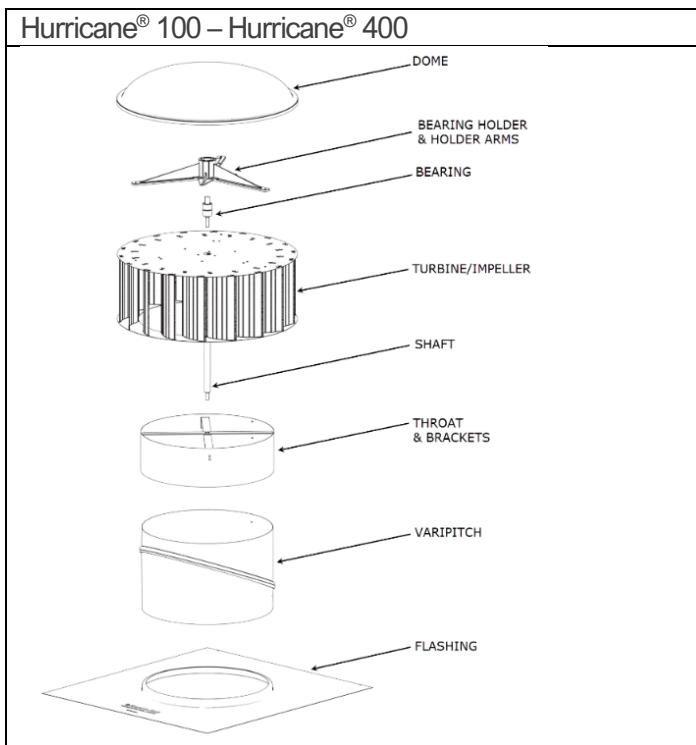
Refer to the product warranty at bradfordventilation.com.au for more information.

Hurricane® Standard (H) Turbine Ventilator

Applicable Product Codes (SKU)

Hurricane® 100mm	Hurricane® 150mm	Hurricane® 300mm	Hurricane® 400mm
Mill Finished 61452	Mill Finished 61478	Mill Finished 61504	Mill Finished 61530
Custom 601150	Custom 601162	Custom 600670	Custom 600671

Product Specifications (in exploded view)



Product Information Summary H100 / H150 / H300 / H400

Ventilator Range	Hurricane®			
Ventilator Model	H100	H150	H300	H400
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	50 m/s No Water - Class A	50 m/s No Water - Class A
Effective Aerodynamic Area, EAA	0.003 m ²	0.009 m ²	0.044 m ²	0.082 m ²
Discharge Coefficient, C _d	0.539 - Class 2	0.529 - Class 2	0.712 - Class 1	0.731 - Class 1
Flow Coefficient, C _f	0.2 - Class 4	0.21 - Class 4	0.27 - Class 3	0.24 - Class 4
Nominal Performance* (m ³ /h)				
0 m/s	25 m ³ /h	76 m ³ /h	375 m ³ /h	699 m ³ /h
3 m/s	26 m ³ /h	79 m ³ /h	397 m ³ /h	742 m ³ /h
6 m/s	28 m ³ /h	87 m ³ /h	457 m ³ /h	857 m ³ /h

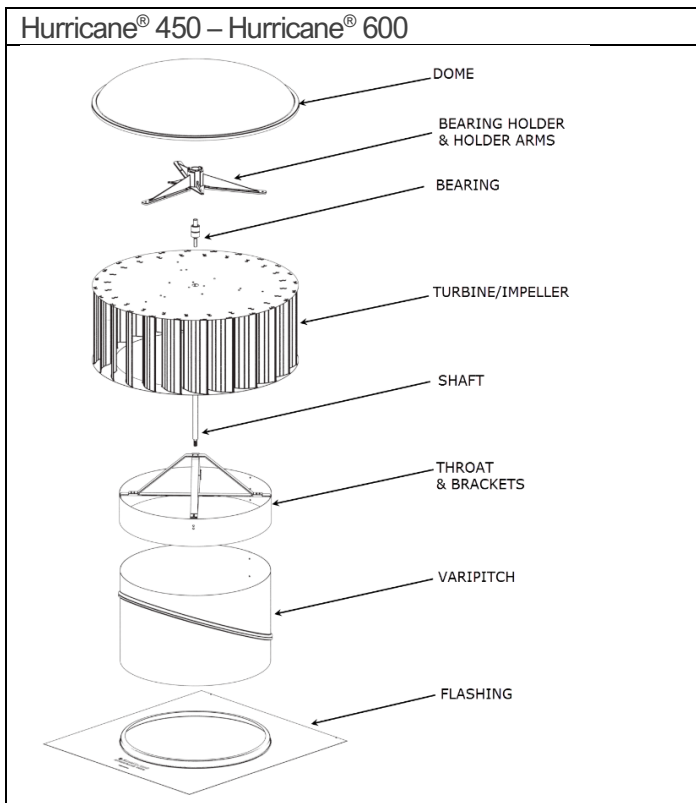
*In accordance to AS/NZS 4740:2000 nominal performance parameters where $h = 6m$, $\Delta T = 14^{\circ}C$, $T = 20^{\circ}C$

Hurricane® Standard (H) Turbine Ventilator

Applicable Product Codes (SKU)

Hurricane® 450mm	Hurricane® 500mm	Hurricane® 600mm
Mill Finished 61556	Mill Finished 61582	Mill Finished 61608
Custom 600672	Custom 600673	Custom 600674

Product Specifications (in exploded view)



Product Information Summary H450 / H500 / H600

Ventilator Range	Hurricane®		
Ventilator Model	H450	H500	H600
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	50 m/s No Water - Class A
Effective Aerodynamic Area, EAA	0.108 m ²	0.137 m ²	0.165 m ²
Discharge Coefficient, C _d	0.764 - Class 1	0.780 - Class 1	0.639 - Class 2
Flow Coefficient, C _f	0.30 - Class 3	0.31 - Class 3	0.24 - Class 4
Nominal Performance* (m ³ /h)			
0 m/s	921 m ³ /h	1169 m ³ /h	1408 m ³ /h
3 m/s	988 m ³ /h	1259 m ³ /h	1475 m ³ /h
6 m/s	1165 m ³ /h	1497 m ³ /h	1660 m ³ /h

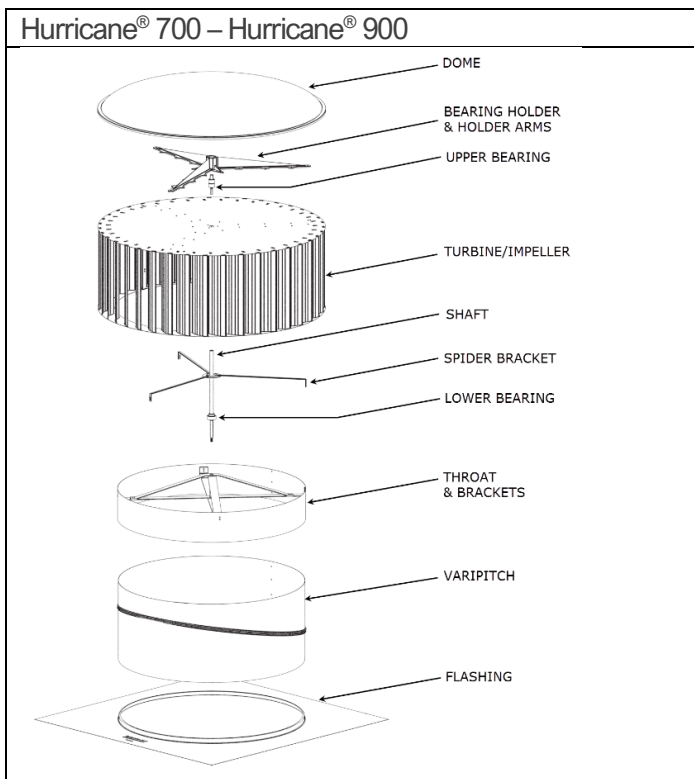
*In accordance to AS/NZS 4740:2000 nominal performance parameters where $h = 6m$, $\Delta T = 14^{\circ}C$, $T = 20^{\circ}C$

Hurricane® Standard (H) Turbine Ventilator

Applicable Product Codes (SKU)

Hurricane® 700mm	Hurricane® 900mm
Mill Finished 61634	Mill Finished 61686
Custom 600675	Custom 600677

Product Specifications (in exploded view)



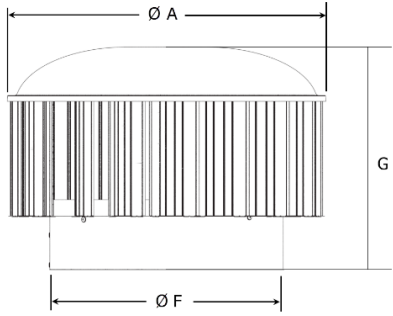
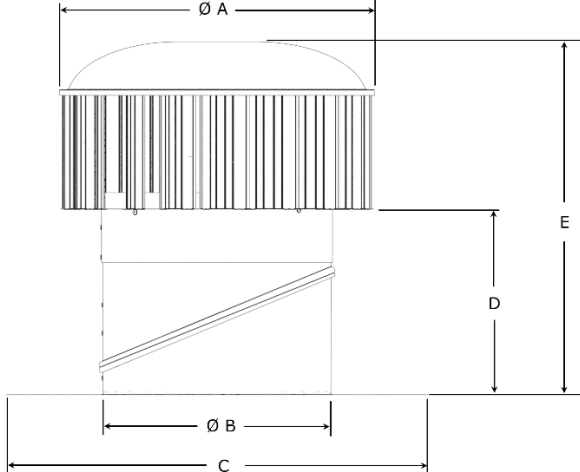
Product Information Summary H700 / H900

Ventilator Range	Hurricane®	
Ventilator Model	H700	H900
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	0.226 m ²	0.372 m ²
Discharge Coefficient, C _d	0.631 - Class 2	0.63 - Class 2
Flow Coefficient, C _f	0.18 - Class 4	0.22 - Class 4
Nominal Performance* (m ³ /h)		
0 m/s	1929 m ³ /h	3175 m ³ /h
3 m/s	1978 m ³ /h	3297 m ³ /h
6 m/s	2119 m ³ /h	3638 m ³ /h

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

Hurricane® Standard (H) Turbine Ventilator

Product Dimensions (in mm)

Top					Turbine							
												
Model	Dimension (mm)			Weight (kg)	Model	Dimension (mm)				Weight (kg)	Roof Slope Range	
	ØA	ØF	G			ØA	ØB	C	D	E		
H100	290	107	253	1.3	H100	290	98.6	430 x 430	139	313	1.8	0° - 45°
H150	332	155	283	1.9	H150	332	145.6	430 x 430	164	363	2.4	0° - 45°
H300	477	308	364	3.7	H300	477	298	600 x 500	225	480	4.9	0° - 45°
H400	561	410	389	4.5	H400	561	401	750 x 700	274	560	6.3	0° - 45°
H450	648	462	443	6.2	H450	648	452	750 x 700	319	634	8.1	0° - 45°
H500	702	511	459	6.9	H500	702	502	750 x 700	345	700	9.2	0° - 45°
H600	766	602	484	8.1	H600	766	592	1000 x 1000	359	724	11.8	0° - 45°
H700	876	705	556	11.6	H700	876	695	1000 x 1000	371	796	15.8	0° - 22.5°
H900	1096	897	643	18.1	H900	1096	891	1200 x 1200	421	936	24.1	0° - 22.5°