

Odyssey® Hybrid Ventilator

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

Issue **B**

Product Type & Application

This is a hybrid ventilator that uses both natural (wind) and powered ventilation to exhaust heat and moisture from the roof space and interior of the residential building (Class 1) and commercial buildings (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 2 Weatherproofing Performance Requirement H2P2 via Deemed-to-Satisfy (DtS) and performance solution pathways.

NCC2019

- **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.

Evidence of Suitability

- Weatherproofing - Arcadis Report 30051677_4.

Conditions of Storage, Use & Maintenance

- Store in the original packaging in a cool and dry area.
- The electronics and electrical components are designed for indoor installation only and should not come into contact with water.
- Do not attempt to repair – contact Bradford Ventilation for service advice.

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

Specific Design or Installation Instructions

- **WARNING:** 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.
- Replacement outside air must be provided via evenly distributed openings such as Bradford Ventilation Metal Eave Vents positioned to facilitate cross-flow ventilation and help the (type) ventilator to work more effectively and efficiently.
- Assembly and installation must be in accordance with the product Installation Manual.
- This product requires a 240V AC GPO for operation.
- 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 manual for details.
- Only use the provided Controller and Cables, do not attempt to connect the Ventilator, Valve, Sensor and LCD Display to any other device other than what is stated in Odyssey Installation Manual.
- It is recommended to install one ventilator for every 150m² of ceiling area.
- For multiple ventilator installations, ensure that the ventilator turbines and their respective ceiling grilles and eave vents (or similar) are evenly distributed for efficient ventilation.

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

Limitations of Use

- **IMPORTANT** - Do Not Modify This Product: Compliance with the evidence of suitability data referenced in this document is only achieved by the product or configuration listed in this PTS.
- This product has not been tested for use in cyclonic wind regions C or D.
- Do not use for exhausting hazardous, abrasive, acidic and alkaline vapour or areas containing explosive or corrosive materials.
- The maximum roof slope for installation of this product is 35° - minimum is 3° on metal roofs and 15° on tile roofs. Refer to the Installation Requirements for more details.
- This product is not suitable for use in Bush Fire BAL-12.5 to BAL-40 or BAL-FZ rated areas.
- Seek technical advice from Bradford Ventilation on application suitability if unsure.

Odyssey® Hybrid Roof Ventilator

Applicable Product Codes (SKU) – Odyssey H2400

Variant	Material Code
Headland	157191
Night Sky	157192
Surfmist	157194
Woodland Grey	157194

Applicable Product Codes (SKU) – Odyssey HR2400

Variant	Material Code
Headland	116756
Night Sky	116757
Surfmist	116758
Woodland Grey	116759

Installation Requirements

Variant	Odyssey H2400	Odyssey HR2400
Roof Slope Installation Range	Tiled Roofs 15° to 35° Metal Sheet Roofs 3° to 35° Note: Where applicable all roof pitches must comply to AS1562.1, the NCC & Australian Standards weatherproofing requirements within the ranges above.	
Homes with 600mm Rafter Spacing (Standard Unit)		
Roof Space Minimum Height	0.25 m	0.70 m
Roof Space Maximum Height	2.25 m	2.40 m
Homes with 450mm Rafter Spacing (requires Extension Collar)		
Roof Space Minimum Height	0.25 m	0.85 m
Roof Space Maximum Height	2.25 m	2.40 m

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Product Specifications

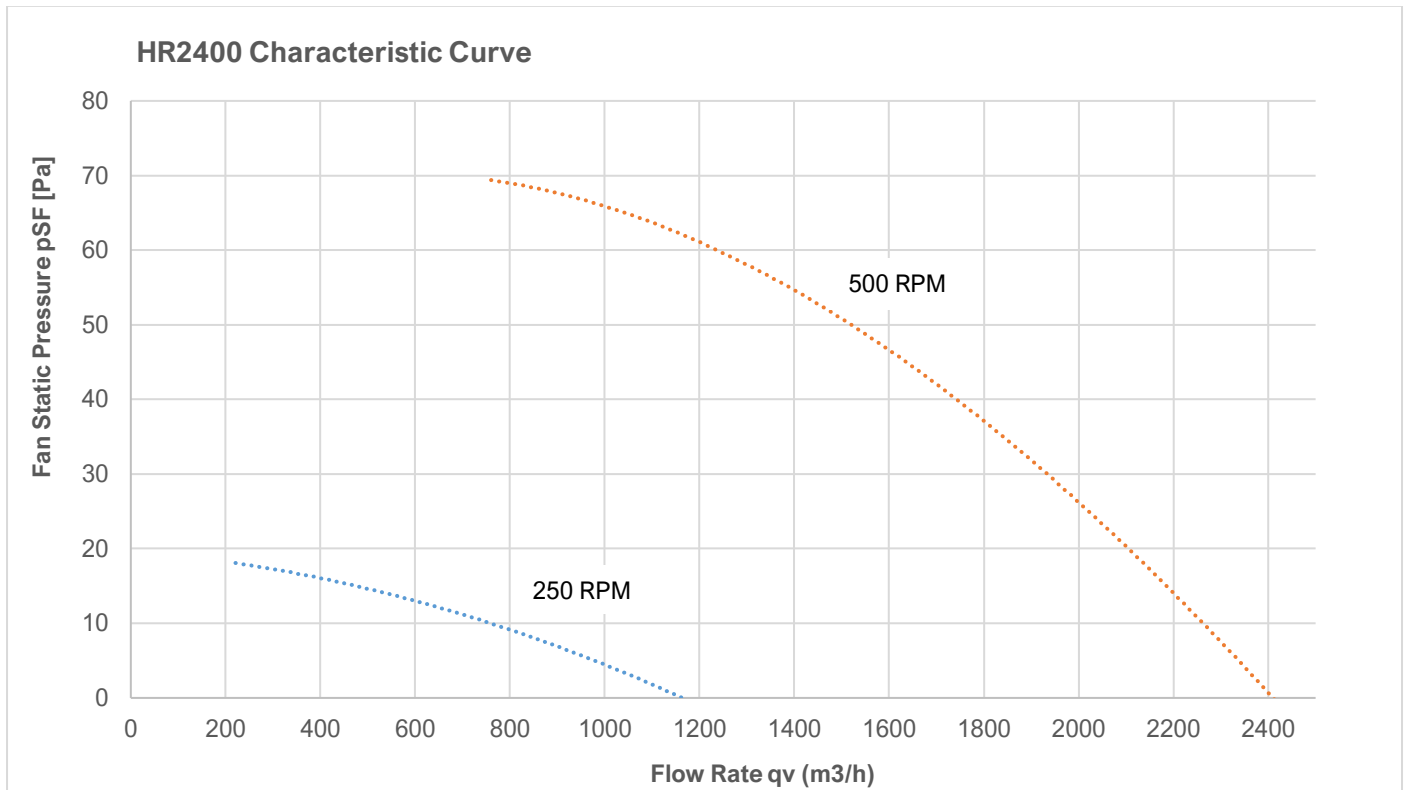
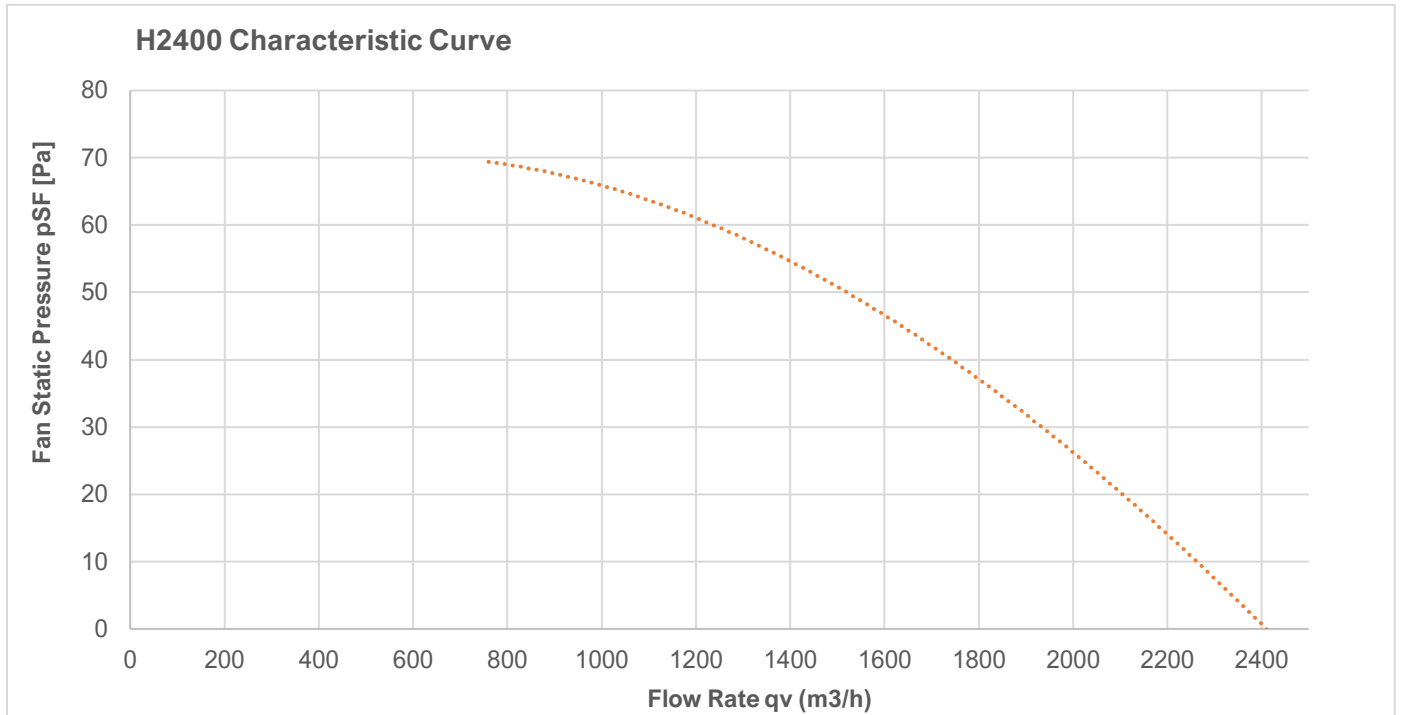
Variant	Odyssey H2400	Odyssey HR2400
Electrical	240 VAC 50 Hz Max. 75W	
Ventilation Zones	Living Space	Living Space & Roof Space
Inlet Throat Diameter	400 mm	-
Turbine Diameter	500 mm	-
Turbine Speed (Full Speed)	500 RPM	500 RPM
Turbine Speed (Half Speed)	-	250 RPM
Flow Rate (Full Speed) @ $\Delta psF=0$	2400 m ³ /hr	2400 m ³ /hr
Flow Rate (Half Speed) @ $\Delta psF=0$	-	1150 m ³ /hr
Motor	Electronic Commutating (EC) brushless motor	
Material		
Housing & Rotor	Plastic (ASA & PPS-GF40)	
Flashing & Collar	Soft Aluminium - Powder coated	
Weight	9.21 kg	
Diverter Valve		
Type	-	2-way air source diverter valve
Inlet/Outlet Nominal Diameter	-	400 mm
Actuator Voltage	-	24 VDC
Materials	-	Plastic (ASA & PA6-GF-30)
Weight	-	2.97 kg
Ducting		
Type	Flexible metallised polyester film with helix wire support	
Diameter	400 mm	
Length	2 m	
Colour	Black internal, reflective foil external	
Ceiling Grille		
Type	Return air grille with magnetically coupled removable grille	
Diameter	400 mm	
Materials	Plastic (ASA & PA6-GF30)	
Weight	1.06 kg	
Control System		
Type	Wall Switch	8.9 cm (3.5") colour touch screen
Cable Length	10 m	15 m

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Variant	Odyssey H2400	Odyssey HR2400
Control Type	Mechanical Switch Fixed Speed / Standby	Intelligent ventilation based of environmental sensors and user settings
Control System Setpoints (Target Temperatures)	-	Living Space 18°C - 28°C Roof Space 35°C - 50°C
Data Logging	-	Temperature – 2 years
Environment Sensors		
Type	-	Temperature & Humidity Sensor
Temperature Sensor Accuracy	-	±0.4 °C
Humidity Sensor Accuracy	-	±3%
Cable Length	-	10 m
Sensor Locations	-	Roof Space, External (Ambient) Internal (Living Space)

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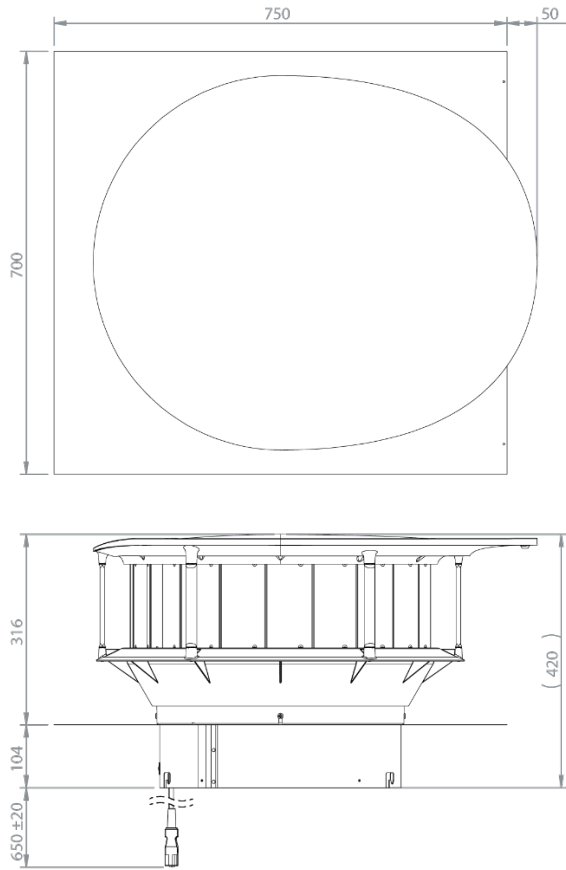
Product Performance – Ventilator Flow Rate



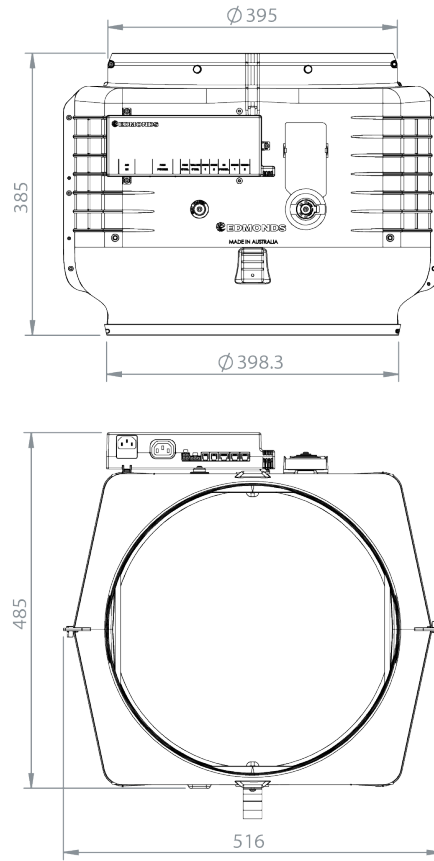
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Product Dimension (in mm)

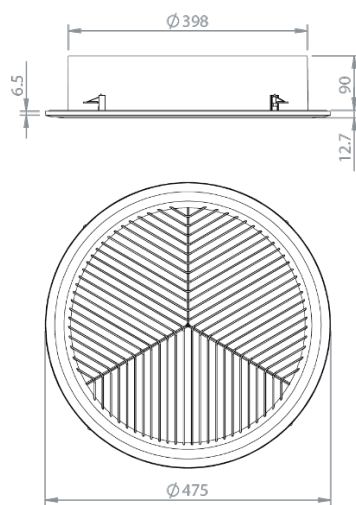
Ventilator



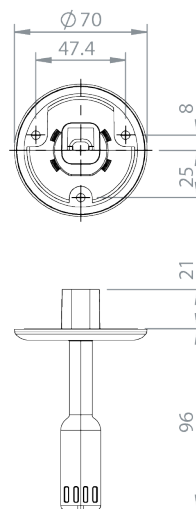
Diverting Valve (HR2400 Only)



Ceiling Grille



Temperature and Humidity Sensor (HR2400 Only)



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User Interface Panel (HR2400 Only)

