



Sustainably Enhancing Your Environment!



NBS Specifications

SUNCATCHER® Natural Ventilation and Daylight System

The Monodraught SUNCATCHER systems are a method of effectively conveying natural daylight and natural ventilation from roof level down into the building below by combining the principles of the WINDCATCHER® natural ventilation system with Monodraught's SUNPIPE® natural daylight system.

The WINDCATCHER system is divided internally into four quadrants so that one or more face into the wind. Here, windward quadrants supply air under that action of positive wind pressure, and leeward quadrants extract stale air under the action of negative wind pressure. On still days, the WINDCATCHER system acts as a conventional passive stack using the natural buoyancy of warm internal air to stimulate air flow out of the building.

The Monodraught SUNPIPE system directs sunlight into a room from roof level. Here, the system collects daylight using a patented Diamond dome, then it uses a silverized mirror-finished aluminium tube to transfer the light to a room, and finally a ceiling diffuser evenly distributes the light around the room.

Volume control dampers located at ceiling level vary the rate of ventilation according to the building requirements. In addition, during summer months the dampers open at night to provide secure night time cooling, which helps to reduce peak internal temperatures. The Monodraught WINDCATCHER systems can eliminate the need for air conditioning without compromising the security of the building.

1. FEATURES

- **Type:** ABS 350/ ABS 550/ GRP 95/ GRP 115/ GRP 125/ GRP 145/ GRP 155/ GRP 185/ GRP 225
- **Shape:** Circular/ Square
- **Controls:** Fully Automatic/ Semi Automatic/ BMS/ Manual
- **Outer casing:** ABS/GRP
- **Ceiling grille:** Linear bar grille/ White powder coated eggcrate

2. ADVANTAGES

- **Cost effective:** No running costs or energy consumption.
- **Healthier system:** Brings a steady supply of fresh air into the building, whilst at the same time expelling stale air to the atmosphere.



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- Is sustainable energy in action: Does not use any fossil fuelled energy but relies on harnessing wind power and the thermal rise of warm air
- Night time cooling: In the summer period the volume control dampers are programmed to open fully at night to utilize the cool air
- Precise control with a range of highly sophisticated control systems
- SUNPIPE top domes are self-cleaning due to their shape
- Evenly diffused natural daylight provided to internal spaces

Approvals

:CHAS registered

3. STANDARDS

- Complies with Building Regulations (E&W) Approved Document F in providing a Passive Stack Ventilation (PSV) system in accordance with BRE Paper, Reference 13/94. Manufactured in compliance with BS EN ISO 14001 and BS EN ISO 9001

4. Internal Airways:

- Airway protected internally with mesh. Volume Control Dampers with 24 V actuator.

5. Colour:

- ABS - Dark Grey (RAL 7010).
- GRP - Merlin Grey (BS 18-B-25)

6. Options:

- Type: Bespoke systems are also available. For sizing guidance or further details, please contact Monodraught Head Office (info@monodraught.com)

