

The logo for Windcatcher X-Air features a stylized 'C' composed of blue and yellow curved segments. To the right of the 'C', the word 'Windcatcher' is written in a bold, blue, sans-serif font, and 'X-Air' is written below it in a smaller, italicized, blue, sans-serif font.

Windcatcher
X-Air

The text 'Next generation natural ventilation system' is displayed in a white, sans-serif font against a light blue background. The text is positioned in the lower-left quadrant of the image. Below the text, there are decorative wavy lines in blue and yellow that span the width of the page.

Next generation natural
ventilation system

The Monodraught logo consists of a circular icon on the left, divided into blue, white, and yellow segments, resembling a stylized globe or a drop. To the right of the icon, the word 'Monodraught' is written in a blue, sans-serif font.

Monodraught

WINDCATCHER® X-Air next generation natural ventilation system features

- Computer generated aerodynamic design delivers greater ventilation rate
- ACTIVLOUVRE system provides enhanced ventilation control and ultimate weather protection
- Integral solar powered architectural lighting system
- Composite insulated upstand allows rapid installation, low U-value and high air tightness
- Reduced lead time
- 5 standard colours
- Made from fully recyclable materials

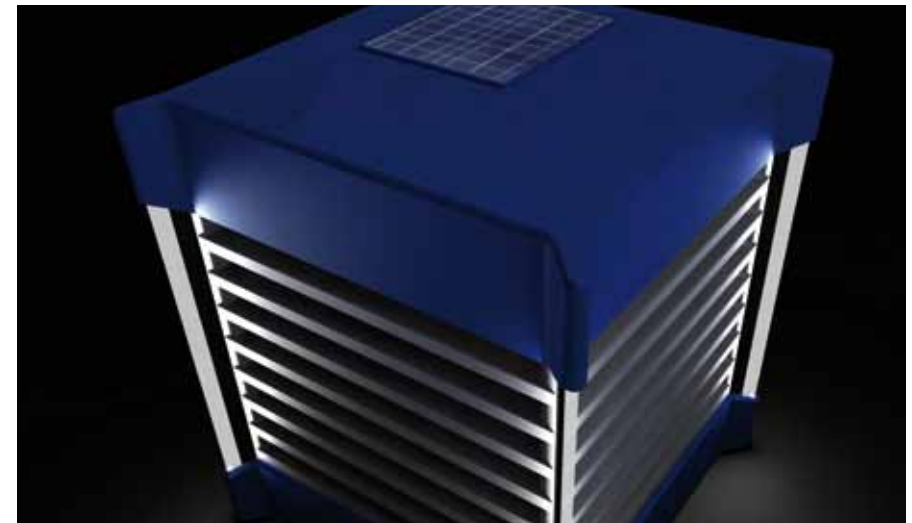
The Monodraught WINDCATCHER X-Air is the next generation of natural ventilation that follows in the footsteps of the successful WINDCATCHER classic systems that have proved to be so popular.



ACTIVLOUVRE® modulating aerofoil louvre technology Patent No. 1011356.1/European patent pending

The ACTIVLOUVRE technology provides ventilation control at roof level and prevents weather ingress into the WINDCATCHER. The system comprises of an external set of static louvres and an internal set of active louvres positioned to give a constant width through the opening. The active louvres can be raised and lowered to vary the free area of the opening according to the control strategy. The greatest air flow rates through the louvres are achieved when they are fully open, but the ACTIVLOUVRE system is able to modulate their position to increase the resistance of the louvre, or they can be fully shut to prevent the ingress of snow, which any open louvre system by definition is susceptible to.

Architectural Solar Powered Lighting System Patent No. 1012112.7



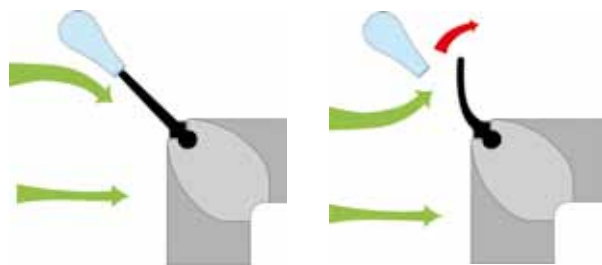
The WINDCATCHER X-Air incorporates an architectural lighting system powered by a 10Watt photovoltaic panel mounted within the cap of the system. A solar panel collects solar energy throughout the day, even during overcast skies, charging an internal Lithium ION battery. The system automatically illuminates at low light and so the WINDCATCHER X-Air can provide soft architectural lighting with no user input.



External Air Catchment Fins

Patent No. 1012116.8

The External Air Catchment Fins are located on each corner of the WINDCATCHER X-Air and comprises of a tear drop profile light tube and a pressure release fin. When the wind speed is low, the fins are used to increase the cross sectional louvre area. This increases the positive and negative pressure on the windward and leeward faces, respectively, and increases the total rate of air flow through the system. When wind speed is high the rubber fin flexes, helping to relieve excessive wind loading.



Low wind speed

High wind speed
5m/s and above

Aerofoil Louvre

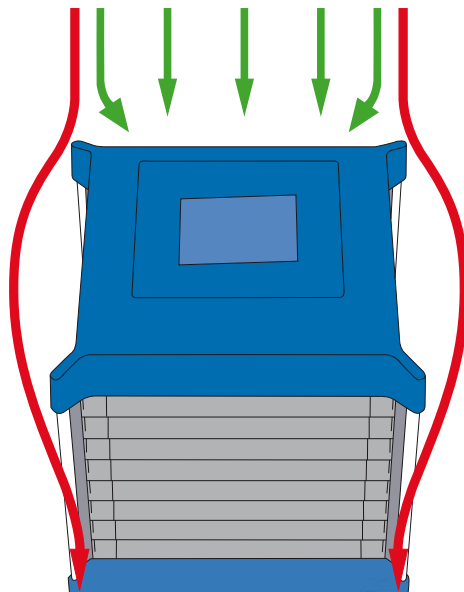
Patent No.1012114.3

The ACTIVLOUVRE technology is designed to provide ventilation control, but also to be aerodynamically efficient. By reducing losses through the louvred section the level of ventilation per system is increased, and so when its performance is compared to a standard louvre, it is found to be significantly greater. The aerodynamic profile was developed using computational fluid dynamic (CFD) techniques and wind tunnel tests in association with the University of Reading and University of Nottingham.

Swept Divider

Patent No.1012115.0

Monodraught WINDCATCHER systems are divided into four separate quadrants, but the WINDCATCHER X-Air system incorporates turning vanes to gently turn the air flow while avoiding flow separation and increased frictional losses. The dividers also have a structural role providing support for mechanical components and to act as a barrier between them and the air flow.



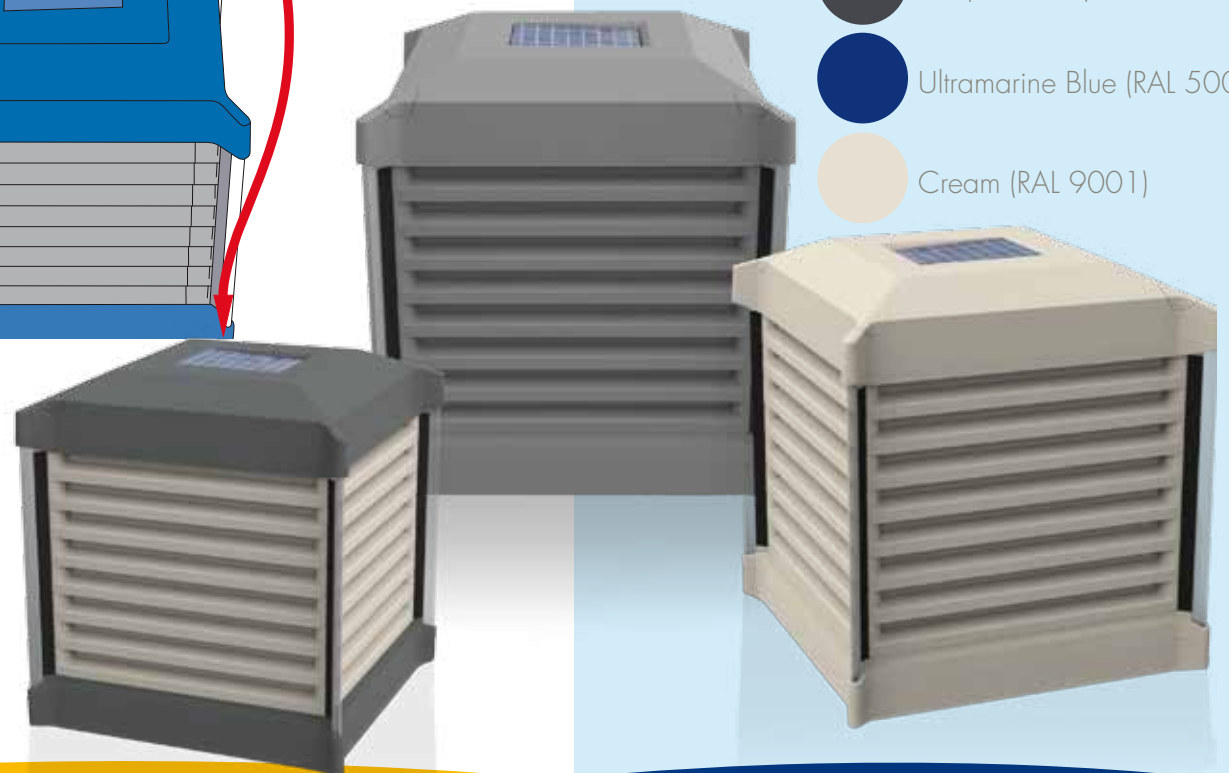
Sizes

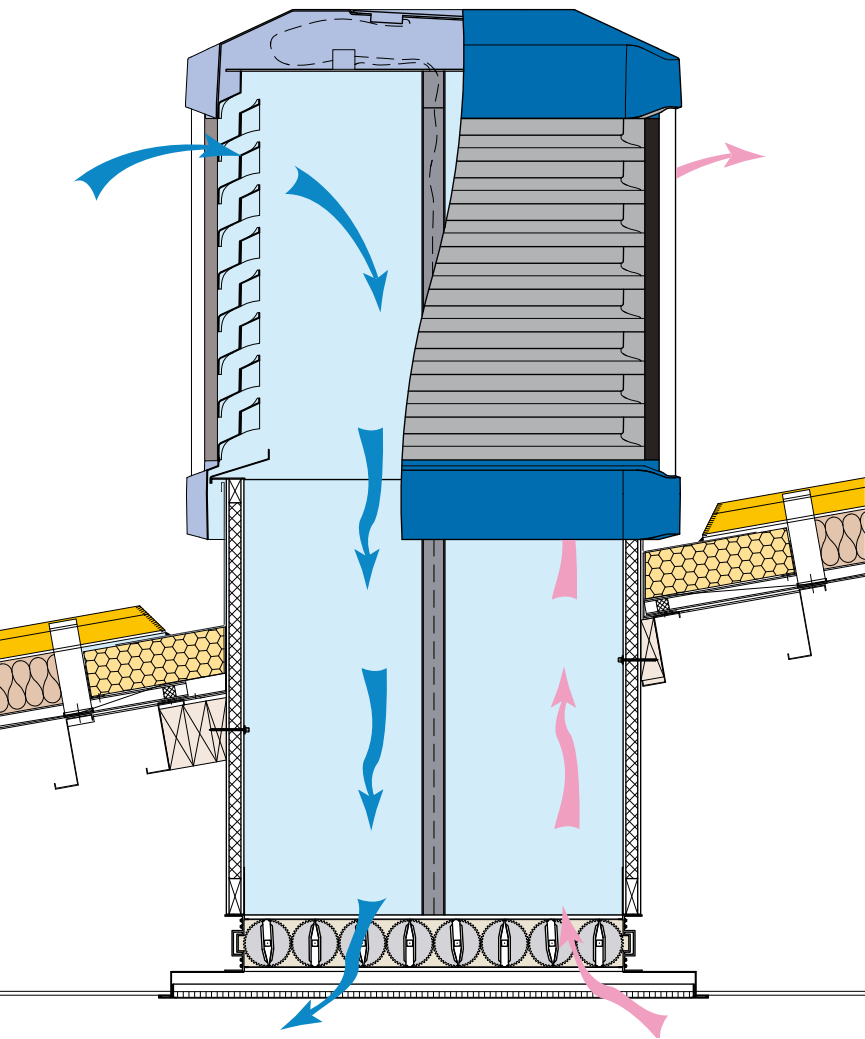
WINDCATCHER X-Air systems are available in a range of sizes. Monodraught provide detailed calculations to size the WINDCATCHER X-Air systems for any particular application.

Colours

The WINDCATCHER X-Air components are available in 5 colours and can be ordered in a number of combinations.

- Agate Grey (RAL 7038)
- Dusty Grey (RAL 7037)
- Graphite Grey (RAL 7024)
- Ultramarine Blue (RAL 5002)
- Cream (RAL 9001)

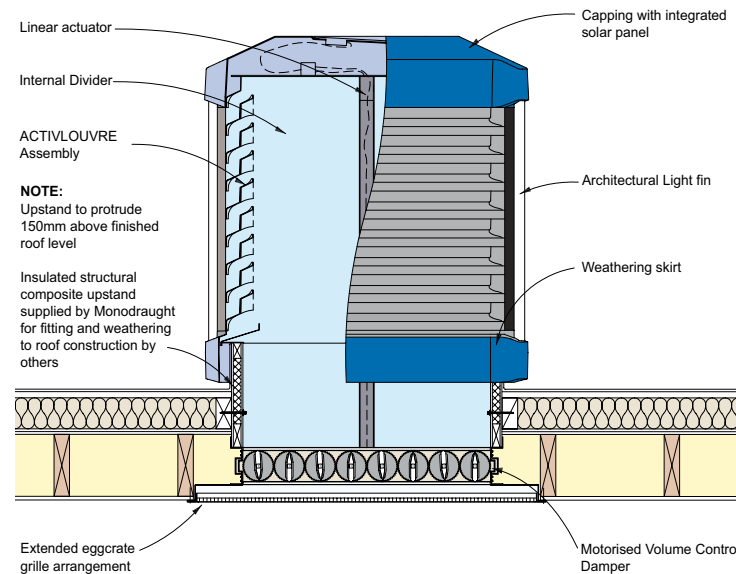




Maximum roof pitch of 15° in order to install WINDCATCHER X-AIR system

Composite Upstand

Monodraught have developed an insulated upstand arrangement to be used with the WINDCATCHER X-Air. The upstand is a multi-layer construction allowing for high levels of insulation, and also ensures every system maintains an air tight seal and reduces install times to a minimum. The WINDCATCHER X-Air can only be installed onto flat roofs or roofs with a pitch of 15° or less and must be installed onto a Monodraught upstand.



Specification

Manufacturer: Monodraught Ltd, Halifax House, Cressex Business Park, High Wycombe, Bucks, HP12 3SE. Tel: 01494 897700, Fax: 01494 532465

Type: Monodraught WINDCATCHER X-Air system

Louvres: ACTIVLOUVRE system incorporating mechanical, top level volume flow control and weather ingress protection.

Internal Airways: Turning vanes providing reduced turbulence of inlet and extract flows.

Kerb: Insulated composite upstand provided by Monodraught to suit roof construction (fitted and weathered to roof construction by others prior to Monodraught attendance).

Volume Control Dampers: 24 volt modulating insulated volume control dampers with high specification air shut off.

Ceiling Grilles: White powder coated eggcrate grille or linear grilles.

www.x-air.co.uk

www.monodraught.com

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