# POWRMATIC

Delivering complete climate control solutions worldwide

Natural smoke ventilators to meet the performance and aesthetic requirements of building operators, architects, specifies and contractors.

The Powrmatic Ventilation Range.



# Krystalite AOV Glazed Louvre



## Krystalite Product Benefits



Exhaust Ventilators (N-SHEV's).

This standard covers products in the sector of smoke control. EN12101-2 covers Natural Smoke and Heat

SMOKE VENTILATION SYSTEM



CUSTOM BUILT TO SIZE



SINGLE/DOUBLED TRIPLE



GLAZING ADAPTOR



EN12101-2 TESTED VENTILATOR



PROVEN & STYLISH

# Style Safety Bespoke

The Krystalite from Powrmatic

Our most advanced architectural smoke and natural ventilator which combines aesthetics, function and fire safety for facade building integration.

The aesthetically pleasing product matches modern day design with high performance. Making it a perfect cost effective solution for replacing window systems whilst adding the ability of smoke ventilation.

# e Smoke & Natural Ventilator

# Product Features

### Style

The Krystalite glass louvre system is designed around a proven combination of aluminum blade channels, extruded aluminum frames and adapters to meet the requirements of specifiers. This aesthetically pleasing product matches modern building design coupled with high integrity engineering whilst meeting all technical standards. The concealed blade operating mechanism housed within the perimeter frame gives the louvre a clean uncluttered appearance. When closed the security blade channels prevent removal of glass blades and all fixings are concealed and inaccessible.

### Versatile Application

The Krystalite is suitable for a wide range of applications. These applications include glazing systems, facades, curtain wall frames and block work openings. Making it the perfect solution for offices, shopping centres, industrial buildings and atriums. In essence, the application options are endless for the Krystalite.

### Bespoke Size

You can choose the height and width of Krystalite needed in your structure. Additional modules can be joined together with a system of coupling mullions and transoms for horizontal and vertical joining of units forming a glass louvre facade of almost infinite dimensions.

### **Approvals**

The Krystalite offers excellent U- values to keep the buildings appropriately insulated. For example the DG24 offers U-Value of 1.1W/ m²K whilst the TG34 offers U-Values of 0.5W/m²K. The Krystalite offers an impressive noise reduction of up to 41dB(a) which allows for far greater acceptance from building standards and authorities in modern buildings. The Powrmatic Krystalite is fully tested to BS EN 12101-2:2003 therefore fit for purpose in any N-SHEV (Natural, smoke and heat exhaust ventilation )

#### **N-SHEV**

The Krystalite can be used as part of a Natural Smoke and Heat Exhaust Ventilation System (N-SHEV) or/and comfort ventilation.

### Finish

The Krystalite is available in various finishes. This includes various glazing options from single to triple glazing as well as insulated aluminum.

The frame colour is completely customisable allowing the Krystalite to effortlessly blend into any application. The colour finishes are natural anodised or Polyester powder coated to a standard RAL colour.



### Safety & Sustainability

This architectural ventilator offers the occupants and building natural daylight with efficient natural ventilation and the confidence that in case of an emergency, it can be used as part of a natural Smoke and Heat Exhaust Ventilation System (N-SHEVS) and comfort ventilation. The Krystalite is conscious of the future and is a sustainable product in itself. The low U values allow for great insulated buildings, key for building a sustainable future.



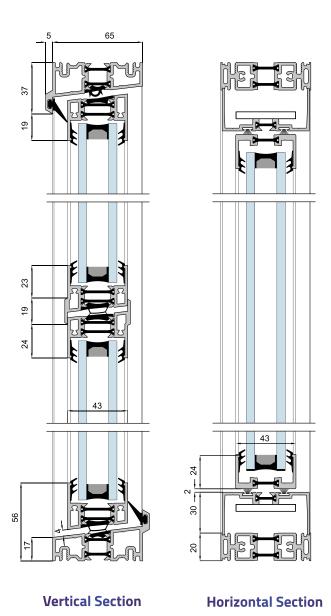
## **Typical Profile Design**

Krystalite

### **Double Glazed DG24**

Double Glazed 24mm EN12101-2 Tested

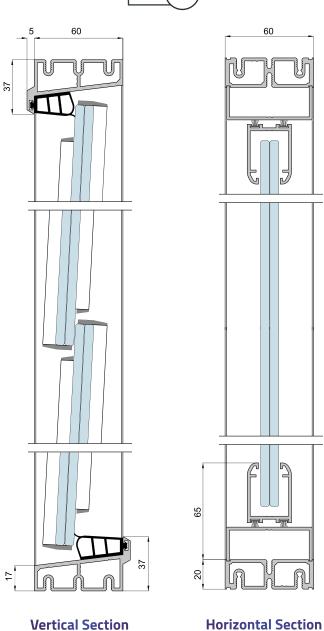




## **Single Glazed G12**

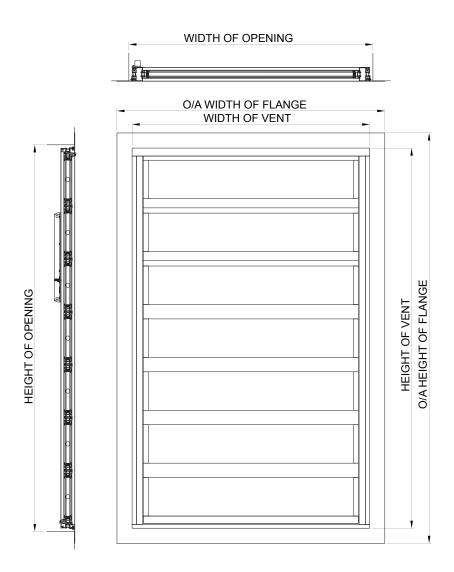
Single Glazed 12mm EN12101 -2 Tested





<sup>\*</sup> Other glass specifications are available please contact us for details.

## **Technical Specification**



### **Custom Size**

You can choose the height and width of Krystalite needed in your structure.

Additional modules can be joined together with a system of coupling mullions and transoms for horizontal and vertical joining of units forming a glass louvre façade of almost infinite dimensions.

(Dimensions limits may apply for smoke ventilation)

### U-Values & dB(a)

The Krystalite offers excellent U- values to keep the buildings appropriately insulated. For example the DG24 offers U-Value of 1.1W/m²K whilst the TG34 offers U-Values of 0.5W/m²K.

The Krystalite offers an impressive noise reduction of up to 41dB(a) which allows for far greater acceptance from building standards and authorities in modern buildings.

## **Finish Options**

The Krystalite is available in various finishes. This includes various glazing options from single to triple glazing as well as insulated aluminum.

The frame colour is completely customisable allowing the Krystalite to effortlessly blend into any facade. The colour finishes are natural anodised or Polyester powder coated to a standard BS or RAL colour.

<sup>\*</sup> For free areas please contact us.

# **Krystalite**Installations







# Krystalite Installations







# Opensky AOV Louvred Smok



### **Opensky Product Benefits**



control, EN12101-2 covers Natural Smoke and Heat

Exhaust Ventilators (N-SHEV's).











VERTICAL OR HORIZONTAL OPTION

**WEATHER PROOF** 

# Versatile Compliant Approved

The Opensky from Powrmatic

Our louvred Opensky is a natural and smoke ventilator perfect for comfort ventilation or as part of a N-SHEV (Natural, smoke and heat exhaust ventilation) system.

The Opensky is available in a range of dimensions, control operations and finishes making it suitable for a wide range of applications.

# e & Natural Ventilator

# Product Features

### **N-SHEV**

The Opensky is an economical option to ensure safety in case of a fire emergency. It can be used as part of a Natural Smoke and Heat Exhaust Ventilation System (N-SHEV) or/and comfort ventilation.

### Finish

The Opensky is available in an extensive range of finishes. The blades are available in un-insulated aluminum, insulated aluminum and polycarbonate. Furthermore, the finish can either be single skin aluminum finish or PPC to any RAL/BS and finish. This allows the Opensky to suit varied applications whilst not compromising on aesthetics.

### Vertical or Horizontal Options

The Opensky can be installed vertically or horizontal allowing it to be installed either as a head of a smoke shaft or a corridor ventilator. In addition it can be controlled either electrically, pneumatically or manually enhancing its versatility to suit any application needed.

### Easy Installation & Servicing

The option of demountable blades offers you easier access to the actuators from the outside making already a low-maintenance smoke ventilator effortless to service. The product is delivered to the client already pre-assembled saving time and cost on site.



### **Approvals**

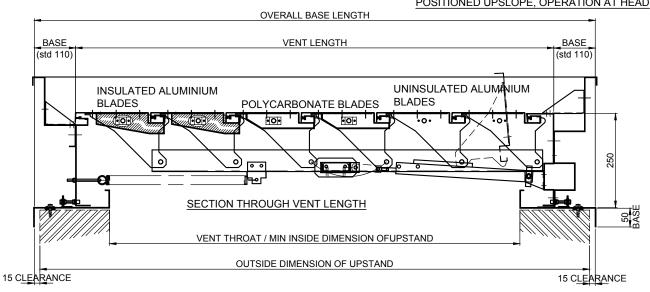
The opensky has been tested to EN 12101-2 in a wide variety from sizes from 870mm length (vent size) 500mm width (vent size) to 3470mm length (vent size) to 2000mm width (vent size). In addition, the Opensky base is not standard and can be tailored order to suit any size required. Offering you full control over your smoke ventilator.

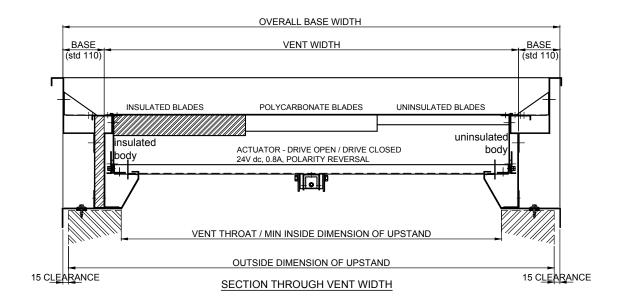


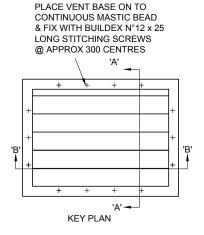
## **Roof Opensky**

Generic Drawing

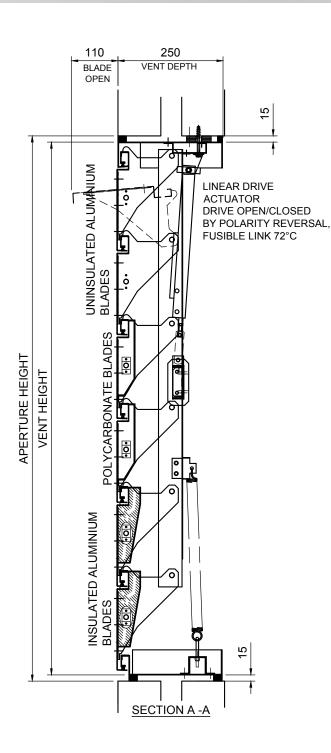
## FOR ANY SLOPE ON UPSTAND, HEAD MUST BE POSITIONED UPSLOPE, OPERATION AT HEAD

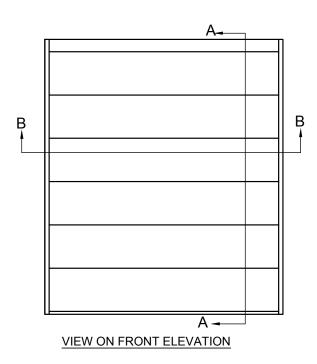


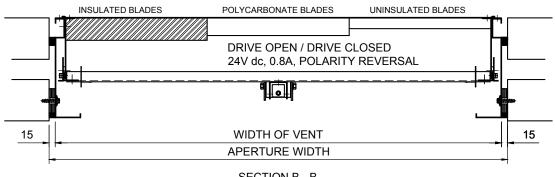




# Wall Opensky Generic Drawing







## **Example Free Areas**

Roof Opensky

## **Roof Application**

Width starts at throat size 410mm, Vent size 500mm it goes up in increments of 100mm to max throat size 1910mm and max vent size of 2000mm.

Length starts at throat size 690mm, Vent size 870mm it goes up in increments of 200mm to max throat size 3290mm and max vent size of 3470mm.

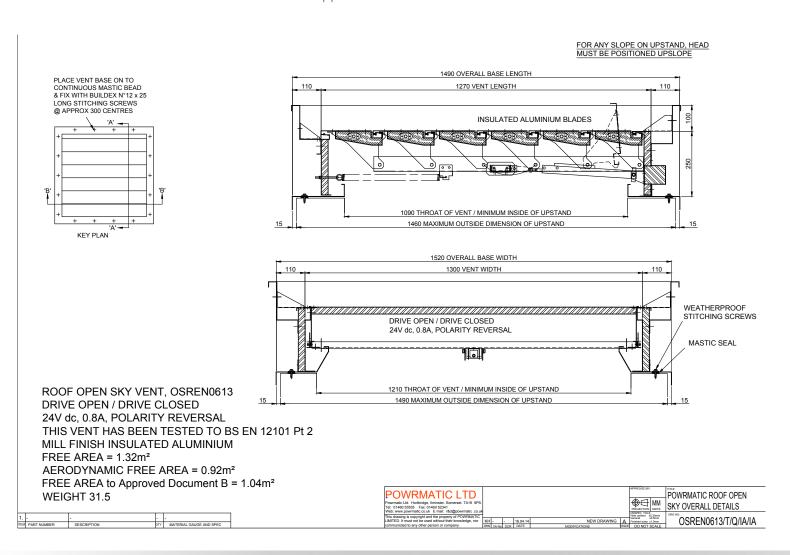
A range of sizes are available to meet the 1.0m<sup>2</sup> and 1.5m<sup>2</sup> minimum free area requirements. Please contact us for more information relating to the application or specification of these products.

### Example illustrated below has a free area of 1m<sup>2</sup> Approved Document B

Approved document B free area

Blade code	Throat Length (mm)	Vent Length (mm)	Throat Width (mm)	Vent Width (mm)
06	1290	1470	1210	1300

Insulated aluminium blades achieves 1m<sup>2</sup> Approved Document B free area



## **Example Free Areas**

Wall Opensky

## **Wall Application**

Width starts at throat size 410mm, Vent size 500mm it goes up in increments of 100mm to max throat size 1910mm and max vent size of 2000mm.

Length starts at throat size 690mm, Vent size 870mm it goes up in increments of 200mm to max throat size 3290mm and max vent size of 3470mm.

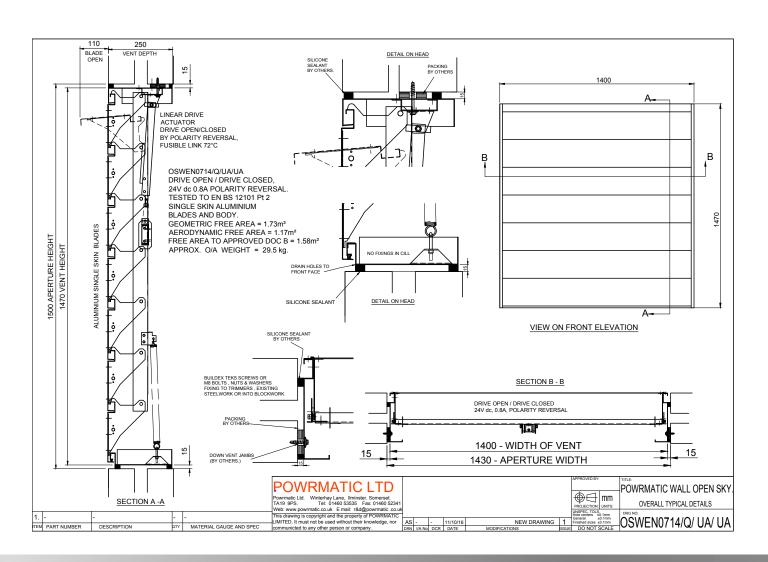
A range of sizes are available to meet the 1.0m<sup>2</sup> and 1.5m<sup>2</sup> minimum free area requirements. Please contact us for more information relating to the application or specification of these products.

Furthermore, the wall Opensky can be provided with a rear or front fixing flange to allow you more control over the installation of your vent.

### Example illustrated below 1.5m<sup>2</sup> ADB Un-Insulated aluminium blades and body

Approved document B free area

Blade code	Aperture Height (mm)	Vent Height (mm)	Aperture Width (mm)	Vent Width (mm)
07	1500	1470	1430	1400



# **Opensky**Installations





# **Opensky**Installations





## **About Us**

Powrmatic design, develop and deliver HVAC solutions worldwide across a wide range of commercial and industrial applications creating comfortable and safe environments, differentiated through innovation, integrity, compliance and service.

Our specialised HVAC divisions:

### Heating

Industrial and commercial warm air and radiant space heating solutions manufactured to achieve efficient performance, compliance and reliability for every application in partnership with the HVAC trade.

### Ventilation

Custom designed highly efficient, cost-effective smoke, natural and powered ventilators manufactured to meet project requirements of building operators, architects, specifiers and contractors.

### **Air Conditioning**

Worldwide distributors of innovative wall mounted heat pumps air conditioner technology providing efficient comfort cooling and heating all year round.

### **Engineered Products**

Bespoke heating and ventilation solutions designed to serve individual customers specific project requirements. In addition our OEM products provide partner AHU manufacturers with high quality energy efficient gas fired heat exchangers.

## **Contact Us**

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