



AOV Smoke Vent

BS EN12101-2 Certified Smoke Ventilation

Technical Data Sheet V.1-2024

 Certified to BS EN12101-2

 15 Year Warranty*

 Industry Leading Weather Testing

 Sustainable & Energy Efficient

 Marine Grade Powder Coating

 Quick & Easy Installation

Key Features & Benefits

- AOV Smoke Vents come in two standard sizes, which achieve a Geometric Free Area (GFA) of 1.0m² and 1.5m² respectively
- Powered by two 24v concealed folding arm actuators
- Control Panel comes with Electric Lock, Battery Backup and 24v Transformer
- Fully thermally broken aluminium frames prevent cold bridging, reducing the risk of condensation
- Fully insulated base frame provides excellent thermal efficiency
- Certified to EN12101-2 Smoke and Heat Ventilation
- Full integration to building fire management system
- Excellent thermal performance
- Quick and easy to install
- Designed to be installed on all roof types
- Minimal framework: daylight is maximised while the visible framework is minimised
- More daylight = less artificial light = energy savings
- BIM Objects
- NBS Specification documents
- Product CAD drawings
- Install guides, setup and wiring instructions
- More daylight leads to enhanced well-being



- Free air calculations

Frame Specification

- The AOV Smoke Vent rooflight frames are manufactured from extruded aluminium section to BS 1474, EN 12020-1:2001
- Polyamide thermal breaks in lid and base frame to BS EN ISO 16396-2:2017 making the frames fully thermally broken and extremely thermally-efficient
- Polyester Powder Coated Aluminium to BS EN 12206-1:2004
- RAL Colours: Anthracite Grey (RAL 7016) Matt and Black (RAL 9005) Matt as standard options
- Bespoke RAL colour options also available, Matt finish as standard

Glass Specification

Hermetically sealed Double Glazed – IGU:

Outer: Heat Soak Tested Toughened glass

Cavity: Argon filled with Swisspacer warm edge spacer + silicone bonded for a fully UV resistant edge seal

Inner: Laminated or Heat Soak Tested Toughened Glass + Soft Coat Low-E for excellent thermal efficiency



- For even better thermal efficiency, bespoke glass with ultra-low U Values is available to special order
- Optional painted or sandblasted perimeter borders are available upon request

Product Testing & Certification

- Non-Fragility: CWCT TN92
- Non-Fragility CWCT Class 2 Certified
- AA Fire-rated: AA Designation (National Class) or Broof (T4) European Class
- Weather tested to CWCT Class A4 & Class R7

Critical Kerb External Dimensions = Rooflight Order Size

Min. Kerb Height: 150mm (at the eaves end)

Max. Size: 1.5m² GFA

Max. Recommended Kerb Pitch: 5° to maintain GFA m² sizes

Bespoke Glass Options

- Solar Control
- Privacy Glass
- Body Tinted Coloured Glass
- Acoustic Laminate
- Easy-Clean Coatings (Ritec)
- CUin Advanced Thermal Performance
- Paint or Sandblast borders
- Low Iron Glass
- Artwork manifestations
- Company logo manifestations

British Standards Compliance

- BS EN12101-2 Smoke and Heat Ventilation
- BS 6375-1: 2015+A1:2016 Weathertightness
- BS EN 1026:2016 Air Permeability
- BS EN 1027: 2016 Watertightness
- BS EN 12211: 2016 Wind Resistance
- BS EN 12206-1:2004: Polyester Powder Coating
- BS EN ISO 16396-2:2017 Thermal Break
- BS 1474, EN 12020-1:2001 Extruded Aluminium Sections
- BS EN 14351-1: 2006 + A2: 2016 Window Performance
- BR443: 2019 Conventions for U Value Calculations

Rooflight Performance

- Building Regulations (E&W) Approved Document L compliant design to achieve low U Values
- Building Regulations (E&W) Approved Document B compliant
- G-values: As low as 0.19
- Light Transmission: Up to 79.1%
- Thermal Modelling by WinIso

Design Loadings

Snow: 640 N/m²

Wind: 750 N/m²

Other loads to be specified by Client

Product Variations

- 1.0m² GFA
- 1.5m² GFA

Control Options

- Battery backup control panel
- Access and ventilation options
- Smoke, gas, wind, and rain sensors available
- Break glass and override switches available
- Full integration to building fire management system

Rooflight Cleaning & Maintenance

All our Flat Glass rooflights can be supplied with an Easy-Clean Coating, the Ritec ClearShield system provides an efficient solution to greatly reduce the need for cleaning.

'Non-stick', Easy-Clean rooflight protection provides:

- Reduced cleaning time, effort, and frequency
- Keeps rooflights looking like new, staying cleaner for significantly longer
- Resists glass staining and contamination from tree sap, bird droppings, traffic pollution and general dirt
- Helps to maintain Window Energy Ratings



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