

# Flat Rooflight System



bringing **light** into living



bringing **light** into living

Contemporary but practical our Flat Rooflight system is designed to meet the needs of the modern building using environmentally friendly materials delivering superior aesthetics creating crisp clean lines.

Once installed the secure rooflight maximises natural light providing an elegant appeal to any home, office, school or hotel whilst offering additional natural ventilation.

## Kestrel Flat Rooflight System

This innovative and practical aluminium rooflight system is available in Fixed, Ventilation or Egress versions and a wide range of sizes. Units are designed with the minimum use of glazing bars and have narrow sightlines to provide the look of a frameless system. All profiles have polyamide breaks which provide excellent thermal efficiency. Profiles can be single or dual colours, such as when a white finish internally and black externally is required for example. The system has also been designed to allow the glass to be removed in the event of double-glazed unit failure. The glass is bonded to a PVC cassette, which is easily removed and replaced if required.

### Fixed (standard or walk-on)

Fully thermal efficient, secure and cost-effective fixed roof lights provide natural light throughout the building. Units can be specified in a wide range of sizes to 2600mm in length. For longer lengths, a supporting rafter bar is incorporated. Energy-efficient double or triple units can be specified to provide a U-value as low as 1.2W/m<sup>2</sup>K.

### Ventilation

Designed to allow a source of ventilation into your home. Using fully concealed chain drive actuators the Ventilation rooflight opens to 360mm to enable air to filter into the room creating an airy and light living space.

### Egress

The Egress rooflight is ideal for any office, school or hotel that requires an alternative means of access to the roof for maintenance purposes. With built-in gas springs, the rooflight is designed to open up to a 70 degree angle. Espagnolette locking ensures the rooflight is safe and secure.



## TECHNICAL SPECIFICATION

Application	Residential new build, refurbishment and light commercial.						
	<b>Fixed</b>			<b>Ventilation</b>		<b>Egress</b>	
Glazing options: Double DGU / Triple TGU	28.4mm DGU	30.8mm DGU	44-48mm TGU *	28.4mm DGU	30.8mm DGU	28.4mm DGU	30.8mm DGU
Maximum width	1100mm	1500mm	1500mm	1100mm	1500mm	1100mm	1500mm
Maximum length	2500mm	2600mm**	2600mm**	2500mm	2600mm	2500mm	2600mm
Maximum weight of opening rooflight:							
with Single Actuator	n/a			40kg		n/a	
with Dual Actuator	n/a			60kg		n/a	
with Gas Springs	n/a			n/a		45kg	
Operation	n/a			Electric 230V / 24V or Manual		Manual	
Security	n/a			n/a		Espagnolette locking	
Flush double glazed or stepped edge units	Flush or stepped edge option						
Jointing	Mechanical						
Thermal Performance	Profiles with 24mm polyamide thermal breaks						
U-Value	1.2 W/m <sup>2</sup> K (based on fixed version with IGU centre pane 1.1 W/m <sup>2</sup> K and upstand 1250mm x 1250mm)						
Installation	Rooflight frame to be fixed down to suitable upstand kerb. 150mm minimum upstand height						
Installation pitch	4° - 5°						
Finishes	Mill finish. Etched and anodised Silver AA25 or colours on request. Polyester powder coat paint. See separate list for standard colour range available.						
Single or dual colour profiles	Option						
Design standards	BS EN 12020-2:2001 Aluminium and aluminium alloys, extruded precision profiles. BS 3987:1991 Specification for anodic oxide coatings. BS EN 12206-1:2021 Paints and varnishes, coating of aluminium and aluminium alloys.						

\* With Adapter Profile (KAS 1557) \*\* Sizes over 2300mm incorporate rafter bar (KAS 1559)

### Product limitations:

Recommended maximum sizes for rooflights are as follows:

28.4mm DG units: 6mm toughened outer - 16mm cavity - 6.4mm laminated inner = 1100 x 2500mm.

30.8mm DG units: 8mm toughened outer - 14mm cavity - 8.8mm laminated inner = 1500 x 2600mm.

The above figures are based on the following: 2° pitch, snow loading 0.6Kn/m<sup>2</sup>, wind loading 1.25Kn/m<sup>2</sup>

Note that these sizes are only a guide and each installation must be assessed on its own merits with factors such as snowdrift (is the rooflight positioned against a parapet wall?), extra snow loading (is there a roof above the rooflight from which snow could fall?), to be taken into consideration.

We always recommend that if in any doubt, a structural engineer is employed or glass supplier contacted to verify sizes can be achieved.

### Maximum size of opening rooflights:

Opening rooflights should only be manufactured with DGU's (not triple glazed or walk-on) due to the weight of glass. The size/weight of the opening versions of rooflight have been limited to the following:

Ventilation option: For a single actuator; max weight = 40kg which equates to a rooflight 1100 x 1100mm using a 28mm DG unit or an area of 1.2m<sup>2</sup>. The maximum width of rooflight for a single actuator is 1300mm.

For sizes larger than this an option of a dual actuator is available please see below.

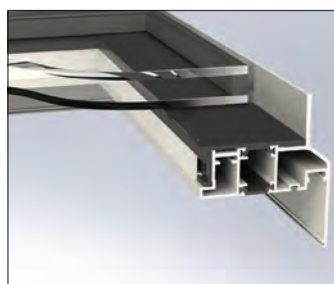
Minimum dimension of base frame on opening side of rooflight is 700mm.

Ventilation option: For a dual actuator; max weight = 60kg which equates to a rooflight 1500 x 1100mm using a 28mm DG Unit or an area of 1.65m<sup>2</sup>. The maximum width of rooflight for a dual actuator is 2500mm. Minimum dimension of base frame on opening side of rooflight is 1300mm.

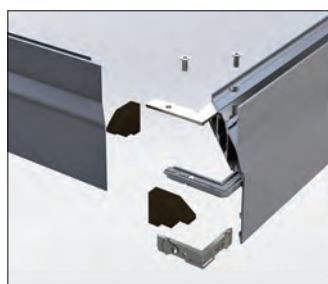
Egress option: 45Kg which equates to a rooflight 1200 x 1200mm using a 28mm DG unit. or an area 1.4m<sup>2</sup>.



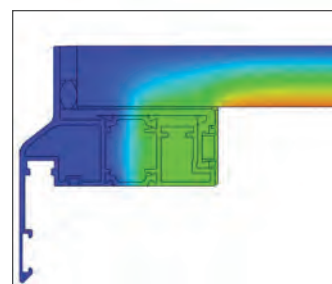
Fully concealed chain drive actuators  
24v or 230v



Profiles are constructed with 24mm  
polyamide thermal breaks



Corner jointed with mechanical cleats



Excellent thermal performance when  
combined with a correctly specified IGU

We operate a continuous development programme and we reserve the right to amend specification without prior notification. Please contact the technical department for further information. All copyright, trademarks and registered design rights for the products detailed in this brochure are the property of Kestrel Aluminium Systems Ltd.



### Kestrel Aluminium Systems Ltd

180 Rupert Street, Aston, Birmingham, B7 5DT

Tel: 0121 333 3575 Fax: 0121 333 5335

Email: [info@kestrelaluminium.co.uk](mailto:info@kestrelaluminium.co.uk)

[www.kestrelaluminium.co.uk](http://www.kestrelaluminium.co.uk)

