Structural Silicone Glazed Rooflights

Maximise Natural Light with the Slimmest System on the Market
Duplus Glass Rooflights

We manufacture our contemporary glass rooflights by combining high performance double glazed or triple glazed glass units with innovative structural silicone glazing techniques – a solution which guarantees that the space beneath an installed Duplus rooflight is bathed in the maximum amount of natural light available.

Structural silicone glazing techniques enable our fixed, circular and opening rooflights to be manufactured without the need to restrain the glass mechanically and our lantern and pyramid rooflights to be manufactured without the requirement for internal framework along the rooflights hips or ridge. The benefits of our production methods to you the customer are -

- That the rooflights have a truly contemporary aesthetic, there is no visible supporting framework to spoil the view.
- The integrity of the silicone seals will not be affected by wind loads or snow loads during the rooflights service life, guaranteeing a watertight product.
- The thermal performance of the double or triple glazed glass units is not compromised by supporting framework and so our rooflights offer a reduced risk of condensation by comparison to similar framed solutions.
- A fully factory assembled product manufactured, tested and inspected to the highest standards. Certified to ISO 9001-2008 and structurally silicone glazed in dry, clean and controlled conditions to Dow Corning® Quality Bond™ standard.

All of our rooflights are equally suitable for new build projects or as replacement rooflights. They are normally installed once the roof is complete and if necessary, after all internal works are finished. This allows more flexibility to the builders programme and minimises the risk of damage to the rooflight during the construction stage.

We have strong environmental credentials with certification to ISO14001:2004. We have a wealth of knowledge and expertise in this field, after all, we have been manufacturing glass rooflights in the UK since 1957.

For more information visit our website www.duplus.co.uk or call us on 01162 582 834
Fixed Rooflights

Our contemporary styled fixed glass rooflight is structurally silicone glazed ensuring a complete factory finished, fully watertight product with a high quality, elegant appearance. Unlike traditional ‘stepped edge’ glass rooflights where the outer edge of the glass is exposed and consequently vulnerable to breakage, our rooflights fully enclose the double or triple glazed units within perimeter framework to eliminate this risk.

Duplus fixed rooflights are double glazed in clear toughened safety glass as standard, with options of blue, bronze or grey tinting or if preferred, an obscure finish for privacy or high performance solar control to minimise solar gain (g) and maximise light transmittance (Lt).

Our fixed rooflight is easy to install, an internal perimeter gasket allows the rooflight to be placed directly on top of the builders kerb without the need for site applied silicone. It is then screwed to the builders kerb externally and a matching cover clip is then applied to conceal the fixings.

Our rooflights satisfy the thermal performance criteria defined in the Building Regulations and achieve a high resistance to condensation under normal conditions. True U-value and Ud-values are available upon request.

The extruded aluminium perimeter frame is powder coated RAL 7016 anthracite grey matt or RAL 9005 black matt as standard. Other RAL colour options are available upon request.

As standard all double glazed units incorporate clear low ‘E’ glass achieving a centre pane U-value of 1.1 W/m²K.

Triple glazed option available achieving a centre pane U-value of 0.6 W/m²K.

Available double glazed STOCK sizes are shown below.
Rooftlight to suit external kerb dimension:
750mm x 750mm
1000mm x 1000mm
1000mm x 1500mm
1000mm x 2000mm
Bespoke sizes are available upon request.

For our latest rooflight prices, please visit our website www.duplus.co.uk or call us on 01162 582 834
Lantern Rooflights

Our accredited structural silicone glazing techniques allow the production of a glass lantern rooflight without the requirement for internal framework to the products hips or ridge. When looking up at the rooflight, the external hip and ridge cappings are designed to remain unseen. The internal finish of the glass to glass joints creates a sleek, ‘frameless’ contemporary aesthetic that is truly jaw-dropping.

Duplus lantern rooflights are double glazed in clear toughened safety glass as standard, with options of blue, bronze or grey tinting or if preferred, an obscure finish for privacy or high performance solar control to minimise solar gain (g) and maximise light transmittance (Lt). Unlike traditional ‘stepped edge’ glass rooflights where the outer edge of the glass is vulnerable to breakage, our rooflights fully enclose the double or triple glazed units within the perimeter framework to eliminate this risk. The top surface of the double or triple glazed unit is flush with the external face of the perimeter frame to allow rainwater to disperse rapidly, minimising cleaning and maintenance requirements.

The extruded thermally broken aluminium perimeter frame is powder coated RAL 7016 anthracite grey matt externally and RAL 9910 white matt internally as standard. External hip and ridge cappings are fitted for aesthetics and are powder coated RAL 7016 anthracite grey matt to match the external perimeter frame at the base of the lantern rooflight. Other RAL colour options are available upon request.

As standard all double glazed units incorporate clear low ‘E’ glass achieving a centre pane U-value of 1.1 W/m²K.

Triple glazed option available achieving a centre pane U-value of 0.6 W/m²K.

Available double glazed STOCK sizes are shown below.
Rooflight to suit external kerb dimension:
1000mm x 1500mm
1000mm x 2000mm
Bespoke sizes are available upon request.

For our latest rooflight prices, please visit our website www.duplus.co.uk or call us on 01162 582 834
Pyramid Rooflights

Our pyramid rooflight uses the same technology as our lantern rooflight which means it has no internal hip framework ensuring that the maximum amount of natural light is able to penetrate the room beneath. Not only does this give a more contemporary appearance, but structural silicone glazing techniques offer greatly improved thermal efficiency when compared to similar products that rely on supporting internal aluminium framework.

Duplus pyramid rooflights are double glazed in clear toughened safety glass as standard, with options of blue, bronze or grey tinting or if preferred, an obscure finish for privacy or high performance solar control to minimise solar gain (g) and maximise light transmittance (Lt).

Our rooflights achieve outstanding thermal performance. True U-value and Ud-value available upon request.

The extruded thermally broken aluminium perimeter frame is powder coated RAL 7016 anthracite grey matt externally and RAL 9910 white matt internally as standard. External hip cappings are fitted for aesthetics and are powder coated RAL 7016 anthracite grey matt to match the external perimeter frame at the base of the pyramid rooflight. Other RAL colour options are available upon request.

As standard all double glazed units incorporate clear low ‘E’ glass achieving a centre pane U-value of 1.1 W/m²K.

Triple glazing option available achieving a centre pane U-value of 0.6 W/m²K.

Available double glazed STOCK size shown below.

To suit external kerb dimension:
1000mm x 1000mm

Bespoke sizes are available upon request.

For our latest rooflight prices, please visit our website www.duplus.co.uk or call us on 0116 2 582 834

Also available in capless version
Hinged Rooflights

Our high performance opening rooflights are available to open manually or by electric control. Manually opening rooflights are fitted with a chrome screwjack which is operated using a separate winding pole. Electrically controlled rooflights are opened by 24v electric actuators. Actuators open the rooflight to a maximum of 300mm and can be concealed within complementary framework if required. The electric actuator is controlled by a touch sensitive switch with an in-built transformer (see image opposite), simplifying the electrical wiring connections. Our switch fits neatly into a standard double gang back box. Optional extras include a rain sensor, temperature sensor and remote control.

Duplus rooflights are double glazed in clear toughened safety glass as standard, with options of blue, bronze or grey tinting or if preferred, an obscure finish for privacy or high performance solar control to minimise solar gain (g) and maximise light transmittance (Lt).

Our rooflights achieve outstanding thermal performance. True U-value and Ud-value available upon request.

The extruded thermally broken aluminium perimeter frame is powder coated RAL 7016 anthracite grey matt externally and RAL 9910 white matt internally as standard. Other RAL colour options are available upon request.

Our opening rooflight is easy to install, an internal perimeter gasket allows the rooflight to be placed directly on top of the builders kerb without the need for site applied silicone. It is then screwed to the builders kerb externally and a matching cover clip is then applied to conceal the fixings. A qualified electrician will be required to make the final connections to the actuator and the control system. Wiring diagrams are provided with all opening rooflights.

As standard all double glazed units incorporate clear low ‘E’ glass achieving a centre pane U-value of 1.1 W/m²K.

Triple glazed option available achieving a centre pane U-value of 0.6 W/m²K.

Available double glazed STOCK sizes and control methods are shown below.

To suit external kerb dimension:
- 1000mm (w) x 1000mm (l) Manual or Electric
- 1000mm (w) x 1500mm (l) Manual or Electric

Bespoke sizes are available upon request.

For our latest rooflight prices, please visit our website www.duplus.co.uk or call us on 01162 582 834
Sliding Rooflights

Duplus sliding rooflights are designed to provide a large opening to any roof. How you use this opening is for you to decide, but it could be that you are looking for the opportunity to open up more of your internal living space to the outside, it could be that you want to provide precise control for ventilation, it could be that you need an opening large enough to enable access onto a roof. In any of these instances the Duplus sliding rooflight is the ideal product.

Our high quality thermally efficient rooflight meets the requirements of the Building Regulations. The in-built telescopic sliding mechanism allows the rooflight to support its own weight when fully opened without the need of any roof tracks or further roof penetrating supports.

Our rooflight incorporates rack and pinion drive with a 24v concealed electric motor. The motor is controlled by a touch sensitive switch that allows precise control of the sliding rooflight. The switch incorporates an in-built transformer (see technical section), simplifying the electrical wiring connections and fits neatly into a standard double gang back box.

Optional extras include a rain sensor, temperature sensor, remote control and safety access control (PIR). If you are considering ordering a product where roof access will be required, then please request the additional access pack which incorporates chequer plate tread boards which help protect the rooflights internal framework and reduce the risk of slipping during access and egress. Should there be a power failure to the rooflight whilst it is in the open position, a manual override facility, including a key, can be used to disengage the rooflights motor. The rooflight can then be manually opened or closed.

Duplus rooflights are double glazed in clear toughened safety glass as standard, with options of blue, bronze or grey tinting or if preferred, an obscure finish for privacy or high performance solar control to minimise solar gain (g) and maximise light transmittance (Lt). Our rooflights achieve outstanding thermal performance. True U-value and Ud-value available upon request.

The extruded thermally broken aluminium perimeter frame is powder coated RAL 7016 anthracite grey matt externally and RAL 9910 white matt internally as standard. Other RAL colour options are available upon request.

Our sliding rooflight is easy to install, an internal perimeter gasket allows the rooflight to be placed directly on top of the builders kerb without the need for site applied silicone. A qualified electrician will be required to make the final connections to the motor and the transformer switch. Wiring diagrams are provided with all opening rooflights.

As standard all double glazed units incorporate clear low ‘E’ glass achieving a centre pane U-value of 1.1 W/m²K.

Triple glazed option available achieving a centre pane U-value of 0.6 W/m²K.

Key Features

- **Quality Product**
  - Fully factory sealed and assembled to ISO9001
  - Dow Corning® Quality Bond™ accredited

- **Building Regulations**
  - Rooflights meet or surpass the U-value requirements of Part L Building Regulations

- **Glass**
  - Toughened safety glass as defined for use in BS5516
  - Double glazed units incorporate a secondary unit seal to prevent delamination due to UV light

- **Thermal Performance**
  - High resistance to condensation under normal conditions

- **Bespoke Sizes & Finishes**
  - Wide range of sizes, RAL colours and glass specifications available.
  - Max. size 2000mm x 2000mm

- **10 Year Guarantee**
  - Duplus warrants the product to be free from defects for a period of 10 years (electrical components 1 year)

- **Versatility**
  - Suitable for access and egress. Electric operation as standard with manual override

For our latest rooflight prices, please visit our website www.duplus.co.uk or call us on 01162 582 834
Walk-On Rooflights

The Duplus walk on flat glass rooflight is designed to be flush with surrounding flooring, typically on roof terraces with decking. As with all Duplus rooflights a builders kerb is required for this product. The rooflight should be fitted first, with the surrounding flooring completed afterwards enabling an overall flush finish to be achieved. With a walk on product it is essential that the correct loading standards are considered, reference should be made to Eurocodes BS EN 1991.

Duplus walk on rooflights are suitable for residential applications and have been designed to meet the imposed load requirements of BS EN 1991 Subcategories A1, A2, A3 and A5. This means that they are capable of withstanding a uniform distributed load (UDL) of 2.5kN/m² and a concentrated load of 2.0kN. Note, for new projects started after 1st October 2013, walk on rooflights stating only compliance to the lower loads defined by BS6399 (1.5kN/m² UDL and 1.4kN concentrated load) should be avoided.

Following extensive structural glass calculations our smallest rooflights incorporate an external pane of toughened laminated glass which is 25.5mm thick. As you might expect, as the rooflight size becomes larger so does the thickness of the glass that you would be walking on, so our larger rooflights feature an external pane of toughened laminated glass which is 31.5mm – 33.5mm thick (dependant on ultimate glass specification).

Our rooflights achieve outstanding thermal performance. True U-value and Ud-value available upon request.

The extruded aluminium perimeter frame is powder coated RAL 9005 black matt as standard. Other RAL colour options are available upon request.

Avant Garde or Sandblasted anti-slip external glass treatments to BS7976-2 are available upon request.

Please refer to our website technical section for further details www.duplus.co.uk/technical/walk-on-rooflights

Typical sizes are shown below. To suit external kerb dimension:
1000mm x 1000mm
1000mm x 1500mm
1000mm x 2000mm (Max. size)
Bespoke sizes are available upon request.

Key Features

- Quality Product
  - Fully factory sealed and assembled to ISO9001
  - Dow Corning® Quality Bond™ accredited
- Building Regulations
  - Rooflights meet or surpass the U-value requirements of Part L Building Regulations
- BS EN 1991 Compliant
  - Suitable for use in A1,A2,A3 and A5 subcategories
    - UDL 2.5kN/m², concentrated load of 2.0kN
- Thermal Performance
  - High resistance to condensation under normal conditions
- Bespoke Sizes & Finishes
  - Wide range of sizes available.
    - Max. size 1000mm x 2000mm
  - Anti-slip treatments available to BS7976-2
- 10 Year Guarantee
  - Duplus warrants the product to be free from defects for a period of 10 years (electrical components 1 year)

For our latest rooflight prices, please visit our website www.duplus.co.uk or call us on 01162 582 834
Circular Rooflights

Our fixed circular rooflights are structurally silicone glazed to give a sleek, elegant appearance with exceptional strength and rigidity. Our product is delivered fully assembled and is very easy to install. The framework of our circular rooflight is manufactured from an extruded aluminium profile that is curved using our in-house rolling machinery. This enables us to produce a wide range of rooflight sizes to meet your specific requirements.

Duplus fixed rooflights are double glazed in clear toughened safety glass as standard, with options of blue, bronze or grey tinting or if preferred, an obscure finish for privacy or high performance solar control to minimise solar gain (g) and maximise light transmittance (Lt).

Our rooflights achieve outstanding thermal performance. True U-value and Ud-value available upon request.

The extruded aluminium perimeter frame is powder coated RAL 9005 black matt as standard. Other RAL colour options are available upon request.

As standard all double glazed units incorporate clear low ‘E’ glass achieving a centre pane U-value of 1.1 W/m²K.

Typical sizes are shown below.
To suit external kerb dimension:
1000mm Diameter (Minimum)
1500mm Diameter
1800mm Diameter
2000mm Diameter (Maximum)
Bespoke sizes are available upon request.

Key Features

- Quality Product
  - Fully factory sealed and assembled to ISO9001
  - Dow Corning® Quality Bond™ accredited

- Building Regulations
  - Rooflights meet or surpass the U-value requirements of Part L Building Regulations

- Glass
  - Toughened safety glass as defined for use in BS5516
  - Double glazed units incorporate a secondary unit seal to prevent delamination due to UV light

- Thermal Performance
  - High resistance to condensation under normal conditions

- Bespoke Sizes & Finishes
  - Wide range of sizes, RAL colours and glass specifications available.
  - Min. Diameter 1000mm
  - Max. Diameter 2000mm

- 10 Year Guarantee
  - Duplus warrants the product to be free from defects for a period of 10 years (electrical components 1 year)

For our latest rooflight prices, please visit our website www.duplus.co.uk or call us on 01162 582 834

This edition of Approved Document Q also known as ‘Part Q’ supports requirement Q1 of schedule 1 to the Building Regulations 2010 which came into effect on 1st October 2015.

The approved document sets out reasonable standards for doors and windows to resist physical attack by a casual or opportunist burglar by being both sufficiently robust and fitted with appropriate hardware.

Requirement Q1 states that, in relation to unauthorised access, reasonable provision must be made to resist unauthorised access to any dwelling and any part of a building from which access can be gained to a private residence within the building including communal areas and corridors.

Where is Part Q applicable?

Part Q applies only in relation to new dwellings. Part Q applies to easily accessible doors and windows that provide access in any of the following circumstances:

- a. into a dwelling from outside.
- b. into parts of a building containing flats from outside.
- c. into a flat from the common parts of the building.

Approved Document Q defines windows (including rooflights) and doors installed in ‘easily accessible areas’ as:

- d. a window or doorway, any part of which is within 2m of an accessible level surface such as the ground or basement level, or an access balcony, or
- e. a window within 2m vertically of a flat or sloping roof (with a pitch of less than 30 degrees) that is within 3.5m of ground level.

For more technical information, please visit our website www.duplus.co.uk
Glass – a net contributor of energy in buildings.

The Duplus rooflight product range incorporates double glazed safety glass units that are manufactured to BS EN 1279 – Insulating glass units and BS EN 12150 – Thermally toughened soda lime silicate safety glass. Our structurally silicone glazed rooflights incorporate double glazed units as standard that feature three thermal components, namely a low E coating, an argon gas cavity and a perimeter manufactured with a warm edge spacer bar.

The Low E, or low-emissivity coating to the glass is a transparent, microscopically thin metallic coating that works in two ways to economise heating energy. The dual action coating reflects the majority of heat back into the room thereby reducing the heat loss through the rooflight, and allows heat and light from the sun (known as passive solar heat gain) to pass through. These properties thus reduce the demand for energy to heat your home.

Our double glazed units incorporate a secondary silicone unit seal to prevent the delamination of the double glazed unit by UV light and are fully enclosed within the rooflights perimeter frame to minimise the risk of glass breakage. The silicone used in the edge seal of the double glazed unit has been thoroughly tested to ensure its compatibility with all other silicones and materials used within the construction of our rooflights.

As standard our rooflights incorporate clear double glazed units with a centre pane U-value of 1.1 W/m²K except our Walk-On rooflight which has a centre pane U-value of 1.2 W/m²K.

Triple glazed option is available which achieves a centre pane U-value of 0.6 W/m²K.

We are able to offer a wide range of glass solutions to suit our customers requirements, these optional extras include body tinted glazing.

Different body tint colours offer different levels of Light Transmittance (Lt). The higher the percentage (Lt) value the greater the amount of light transmitted through the glass. The (Lt) values given below are approximate and for guidance / comparison only.

<table>
<thead>
<tr>
<th>Glazing Type</th>
<th>4mm Glass Thickness</th>
<th>6mm Glass Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>80%</td>
<td>79%</td>
</tr>
<tr>
<td>Green Body Tinted</td>
<td>70%</td>
<td>64%</td>
</tr>
<tr>
<td>Blue Body Tinted</td>
<td>Only available in 6mm</td>
<td>47%</td>
</tr>
<tr>
<td>Bronze Body Tinted</td>
<td>54%</td>
<td>43%</td>
</tr>
<tr>
<td>Grey Body Tinted</td>
<td>49%</td>
<td>38%</td>
</tr>
</tbody>
</table>

For more technical information, please visit our website www.duplus.co.uk/technical
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