

Rooflight Company Products

COMMON QUESTIONS AND ANSWERS

March 2005

Q - What is the U-Value of a Conservation Rooflight?

Why a new Part L?

The revision to the Approved Document of Part L of the Building Regulations represents the steepest fall in required U-values for building elements ever issued. It is part of a package of measures adopted by the government to bring the United Kingdom into line with its undertakings toward the **Kyoto Accord**. This Accord recognised the threat to the environment posed by global warming and called upon all nations to take steps to reduce the production of the greenhouse gases that cause global warming. A key part of the government's plan to reduce the production of these gases is to be achieved by reducing the consumption of fossil fuel used for heating by insulating our homes and businesses better. The requirements of the new Part L Approved Documents are, therefore, part of our very necessary duty towards this planet and the welfare of generations to come.

Does the Conservation Rooflight comply with the new Regulations?

Yes. We anticipated the arrival of the new Part L requirements and increased the specification of glazing to the Conservation Rooflight over a year ago in order to bring the thermal performance of the Conservation Rooflight into line with the new Regulations.

The double glazing panels we use incorporate Pilkington K glass, and have a U-value of 2.1 W/m²K. We have calculated that the average installed U-value of a Conservation Rooflight is 1.7 W/m²K, – well below the 2.2 W/m²K requirement for a steel rooflight in the new Regulations. The reason the installed U-value figure is lower than the glass-alone figure is that the rafters that support the rooflight from below add insulation underneath the rooflight and thus brings the U-value for the rooflight assembly down. We are currently taking steps to further improve the thermal performance of the Conservation Rooflight.

What is the U-value of a Conservation Rooflight?

The calculated average installed U-value over the whole Conservation Rooflight range is 1.7 W/m²K. Individual sizes in the range may vary from this according to the proportion of glass to frame and the number of glazing bars used, but 1.7 is a reasonable average. Our Studio Range of rooflights, Plateau and Pyramid rooflights substantially share the design of the Conservation Rooflight and require similar underlying structures for support. Their installed U-values are therefore similar to that of the Conservation Rooflight.

What is the area of a Conservation Rooflight for the purposes of the Building Regulations?

The area of a Conservation Rooflight for the purposes of the new Regulations is the internal finished size of the opening.

Can I specify/use Conservation Rooflights without having to do a complex calculation for Building Regulations?

Yes. Because the Conservation Rooflight U-value falls within the Building Regulations requirement of 2.2 W/m²K it can be used without complex heat loss calculations, as long as the area of windows, doors and rooflights to an extension or new building is no greater than 25% of the total floor area. This proportion can be increased but a more complex 'balancing' calculation between the areas and U-values of the floor, walls, roof and windows/doors/rooflights would be required to show compliance with the Regulations. Lower U-values in some elements can be used to balance higher U-values in others, or permit an increase in the area of windows/doors.

In cases of replacement of existing rooflights the Regulations are satisfied if the replacement rooflight complies with the 2.2 W/m²K figure – which the Conservation Rooflight does.

If a property requiring rooflights is Listed, in a Conservation Area, or National Park – does this make any difference to the new U-values required?

Yes. There are special provisions in the new Regulations permitting latitude in the U-values of new elements added to historic buildings. This may also include parts of an extension where it is desired to match an existing feature. The Conservation Rooflight in any case complies with the new Regulations, so there would be no need for a relaxation in order to use them to historic property.

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At the Rooflight Company we are committed to continuous product development in order to ensure that all of our rooflight designs perform to the highest thermal and weathertightness standards possible, whilst still maintaining fine lines and ultra-low profile. Please do not hesitate to contact us should you have any query – we will be happy to assist.

Q – What is the guarantee period for Rooflight Company products?

A – All Rooflight Company products have a glazing guarantee period of 5 years from date of purchase and the frame and silicone are guaranteed for a period of 15 years from the date of purchase (terms and conditions apply).

Q - How much do your rooflights weigh?

A - Each rooflight size and type has a different weight. The weight of each rooflight size and type is shown in the products section on this website.

Q - How do you support your rooflights?

A - All our rooflights for pitched roofs are supported directly on and fixed to roof joists. The sizing and spacing of roof joists is frequently a matter of what is given by the existing structure in instances where rooflights are installed to existing roofs. In new roofs the roof joists can be optimised or placed so as to facilitate ease of rooflight installation. In all instances the sizing of the roof joists to support a rooflight should be advised by, or checked with, a structural consultant such as a consulting structural engineer. The Rooflight Company Plateau's, Pyramids and Lanterns are supported on up stand kerbs.

We are able to propose clear structural width and length dimensions for all standard rooflight types, and offer such in the form of diagrams with proposed clear structural width and length dimensions. In all instances the sizing of the structural members themselves should be checked by a structural consultant as set out above.

[Click here to view framing diagrams and installation details.](#)

Q - What do the size dimensions of your rooflights mean?

A - We quote the sizes of our rooflights as clear structural widths and lengths. This is the clear opening that is required within the roof structure in order to install the specific rooflight. Along with the clear structural dimensions we also provide clear viewable widths and lengths. This relates to the unobstructed clear viewing area visible from the inside of the building when looking outward.

Q - What roof pitches are your rooflights suitable for?

A - From nominally flat (say 5 degrees) to 85 degrees. The 'normal' range is between 17.5 degrees and 60 degrees. Between the pitches of 5 degrees and 17.5 degrees, and 60 degrees and 85 degrees special measures should be taken at the abutments of the rooflight to the roof finish to ensure that the abutments are weathertight. We are able to advise on appropriate detailing.

Q - What is the difference between your rooflights and Velux rooflights?

A - The Conservation Rooflight® offers a more sympathetic approach than Velux rooflights in achieving the basic requirements of light and ventilation, while being designed to the highest standards of safety and comfort. The glazing is divided by real glazing bar(s) and the frame is of such a low profile that the glazing is at or below the level of the roof tiles. The casement shows just the thin edges of the steel of which it is made and the colour and texture of the paint reduce the reflection off of the frame making it less conspicuous.

Q - What is the difference between the Conservation Rooflight and cast rooflights?

A - The Conservation Rooflight looks exactly like a Victorian cast iron rooflight, but under the surface it is very different indeed.

Cast rooflight types are very simple in their detailing on account of the fact that they must be pulled from a mould. The simplicity of the detailing makes such rooflights susceptible to draughts in strong wind and leakage in deluging rain quite apart from their susceptibility to condensation. They may look 'correct' from the outside but cast rooflights may be hard to live with on account of the weathering and condensation problems inherent to the design.

Conservation Rooflights are made in a very different way, in order to get over the potential for weathering and condensation problems with castings. They are fabricated of folded and welded sheet steel, which is subsequently hot zinc sprayed and polyester powder coated after the unit is made. The use of relatively thin folded sections makes it possible to achieve complex details that are better at keeping the weather out than the simple sections of castings. This is borne out by the Conservation Rooflight design having 'met and substantially exceeded' the requirements of BS 6376 Part 1: 1989.

Q - Aren't metal rooflights susceptible to condensation, like metal windows?

A - Yes, unless they are fitted with a thermal break or a thermal lining device such as our Thermoliner®

In fact condensation is more problematic on a rooflight than on a vertical window because the condensation drips or runs down onto wall and floor finishes instead of just lying on a sill and evaporating like condensation on a vertical steel window. It is for this reason that steel windows were commonly installed with quarry tiled sills.

The only effective answer to condensation on any metal window or door is a thermal break or a thermal lining that works. Our Patented Thermoliner is exclusive to the Rooflight Company. It uniquely does not set out to prevent condensation it allows condensation to occur in a controlled manner out of sight of the rooflight user. It drains any condensate water out of the building via small drains at the rooflight sill.

Q - Do you do flashings kits?

A - No. As the girth of flashings differs with the type of roofing material used and the pitch of the roof, we believe that the procurement of the flashings is best left to those most experienced in executing the flashings in the particular circumstances a rooflight is to be used.

We can recommend flashings details for all roofing materials and roof pitches. See the abutment details which are available from the 'downloads' section.

Q - What are the ventilating areas of your rooflights?

A - The ventilation areas of our rooflights are shown when you view any product on this site. It is calculated on the open area that is available when the rooflight is fully wound open. This varies according to the type of ironmongery used to open the rooflight some ironmongery opens a casement further than other ironmongery. We have based our calculations on the most commonly used types of ironmongery the 150mm and the 300mm winder types.

Q - Do your rooflights have trickle vents like other windows and rooflights?

A - The whole of our rooflight is a trickle vent, according to Building Control officers we have consulted.

This is because in their view the means of ventilation is 'controllable and secure' when a winding device is used to open it. This means that under normal circumstances a Rooflight Company opening rooflight can be used as a trickle vent providing 'background ventilation' to a habitable room in accordance with the requirements of the Building Regulations. In fact most of our rooflights can provide considerably greater than the current open area requirements of the Building Regulations - 8,000 sq. mm..

Some Building Inspectors interpret the Building Regulations differently, however, and it is recommended that they be consulted on the specific type and location of the rooflight proposed before relying upon the rooflight as a sole means of providing background ventilation to a room in a Building Regulations application.

Q - How do you clean your rooflights?

A - With a cleaning tool optionally available from us.

All of our standard rooflights for pitched roofs can be cleaned from inside with a cleaning tool. Rooflights that are longer than a CR-13 need to be opened further to achieve this, and we are able to supply ironmongery that can achieve the required opening in these instances.

Q - What are your payment terms?

A - We accept most credit and debit cards for full settlement in advance for our rooflights, or payment against a Pro Forma invoice. We can issue a VAT invoice upon request. Rooflights are generally dispatched the day following receipt of payment. Alternatively Rooflight Company rooflights may be obtained from major Builders Merchants.

Q - Do you do Escape rooflights?

A - Yes. We do a range of Escape and Access rooflights for pitched and flat roofs, more information can be found in our 'products' section.

Q - Can you do different coloured rooflights?

A - Yes. We can offer any available BS colour in addition to our standard colours (please note: this does effect lead-time and cost).