GETTING **ROOFLIGHTS** RIGHT

What to ask your builder or architect

THE ROOFLIGHT ASSOCIATION

Everyone loves a well daylit space. Daylight from rooflights makes rooms feel more inviting and brings a number of well-documented health benefits – as well as adding desirability and value to your property.

A rooflight is just like an ordinary window, but installed into a roof, right?

Wrong. *Rooflights are subject to different conditions and require a specialist design approach to provide appropriate levels of performance, safety and security. This little booklet is designed to help you avoid some common pitfalls, by asking the right questions before you start.*

1. Is your rooflight actually a rooflight?

Always ensure that your rooflights are supplied as complete units or assemblies by a reputable specialist rooflight manufacturer and installed by a qualified person. Never accept a rooflight that is to be fabricated on-site by your builder, or is simply a standard double-glazed window unit turned horizontally. As the trade body representing UK rooflight suppliers, we receive frequent reports of poor design or workmanship, or inappropriate materials resulting in damage to property and danger to life. We've even seen cases where glazing panels have blown off roofs in high winds, due to incorrect design or installation – resulting in extreme danger for people outside the property, not to mention a gaping hole in the roof.

2. Is your rooflight glass safe?

Ask your supplier for confirmation that the inner pane of your rooflights is laminated glass. Some suppliers may claim that a toughened glass inner pane is sufficient, but the term 'toughened' implies safety and whilst it is much stronger than annealed glass, it can in some cases shatter spontaneously,

The glazing on this rooflight was not properly fixed, resulting in it being blown off in windy weather and ending up in a neighbour's garden. Luckily, no-one was injured in this instance.

The toughened glass inner pane on this rooflight has shattered. A laminated inner pane should be used.

due to manufacturing imperfections, resulting in the risk of small pieces of glass falling into the space and onto any occupants below. If toughened glass is used, your supplier must present a risk assessment that is specific to your installation.

You also need to consider safety for people accessing the roof. Confirm with your supplier that your rooflights meet the relevant non-fragility classification.

You could be held responsible if a person falls through your rooflight and it doesn't meet the relevant classification.

3. Is your rooflight thermally efficient?

The Building Regulations stipulate appropriate levels of thermal performance for rooflights.

Thermal efficiency of building products is indicated by a 'u-value': the lower the value, the higher the thermal efficiency. In domestic dwellings, the required rooflight u-value is 2.0 or less for new build projects and 1.6 or less for refurbishment. These figures apply to the whole assembly, including any upstand, kerb or frame to which the rooflight is fixed.

However, to flatter the efficiciency of their products, some rooflight suppliers quote ‘centre pane’ u-values which apply only to the glazing, not the complete assembly. It’s therefore extremely important to confirm with your supplier that the quoted u-value is for the whole assembly, not just the glass. This is because the structure around the glazing is often subject to higher thermal losses than the glazing itself.

Remember, inadequate thermal efficiency can lead to increased demands on heating and the resulting avoidable increases in harmful emmissions, as well as other problems like condensation or cold spots in your home.

4. Is your rooflight secure?

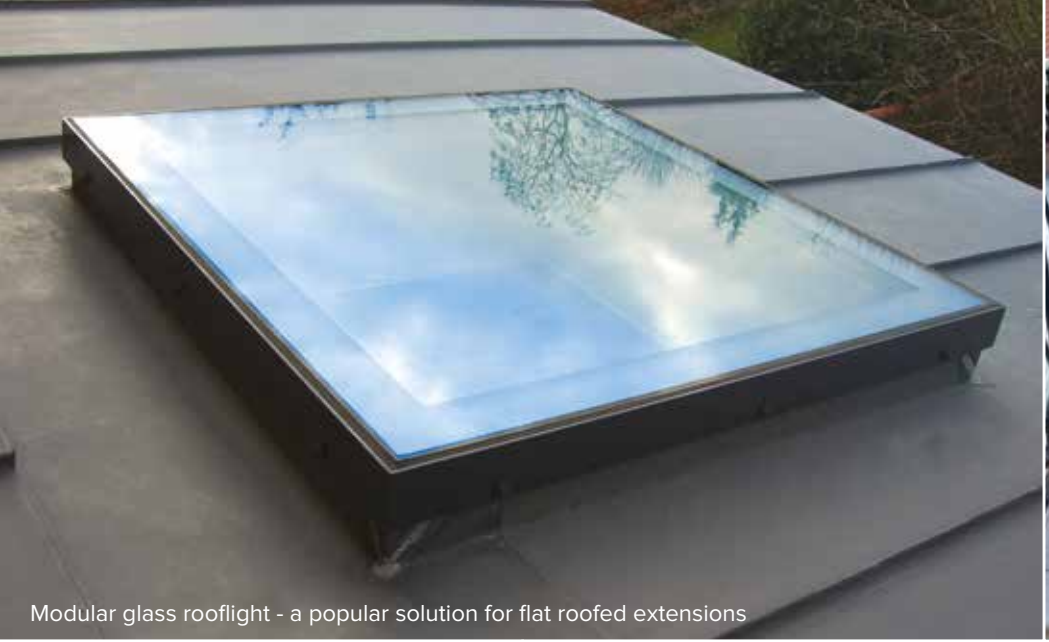
If you’re thinking about installing a rooflight in a place that could be accessed by unwanted visitors, for example, on a flat roofed extension, you need to consider security. The Building Regulations state that rooflights deemed as easily accessible need to be proven to resist criminal attack or incorporate features proven to resist crime. To demonstrate this they need to have been tested to one of the security standards listed in Approved Document Q of The Building Regulations and have achieved a minimum performance standard. Be sure to check this with your supplier.

5. Is your rooflight going to perform well over its lifespan?

Correctly designed and installed rooflights should provide years of trouble-free service. However, in recent years we have been made aware of cases where design or quality have fallen short of expectations, leading to problems in the medium and long term.

These have included:

- Poor design or installation leading to leakage through seals, or glazing becoming dislodged by wind.
- Rooflights installed without a sufficient incline to allow water run-off, resulting in leakage through edge seals.

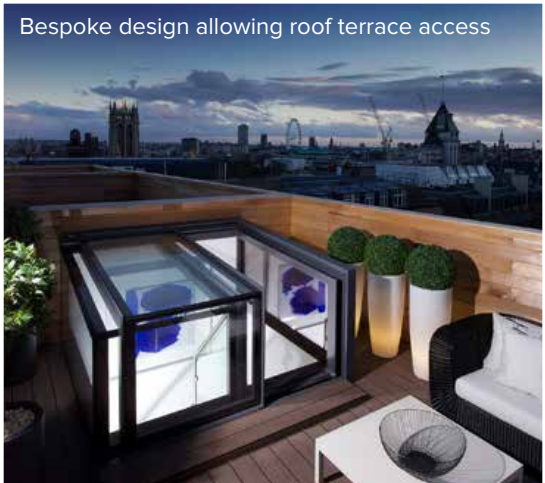


Modular glass rooflight - a popular solution for flat roofed extensions

Walk-on rooflight

Roof windows for pitched roofs

Lantern style rooflight



Bespoke design allowing roof terrace access

- Inadequate glass thickness leading to sagging of the glazing which results in ‘ponding’ on the rooflight. This can lead to leakage and/or a build-up of unsightly and difficult-to-clean deposits on the glazing. It can also present a safety hazard.

Other points to consider before installing rooflights

The size and position of your rooflights will play an important role in delivering appropriate levels of daylight to the right areas in your home.

Careful planning at this stage will ensure a good result without the potential for unwanted glare or heat build-up. Discuss these points with your supplier, who should also be able to advise on options for shading if required.

‘Walk-on’ rooflights

The majority of rooflights are not designed to carry the weight of a person and should never be walked upon. However, there is a very specialised class of ‘walk-on’ rooflights which are specifically designed to be installed into floors on roof decks and terraces where pedestrian access is unrestricted. This type of rooflight can bring exciting new design opportunities to maximise useable space. It’s important to note, however, that these are specialist products using very thick glass and are therefore very heavy, requiring specialist installation procedures.

Getting a great result is easy – with the right supplier

Choose a reputable supplier and your rooflights will be a valuable asset to your home, delivering natural daylight as well as controllable ventilation if required. A quick and simple way to ensure you choose a trusted supplier is to check that they are a Rooflight Association member. Our membership criteria covers all the points listed here, so choosing a Rooflight Association member will ensure peace-of-mind.

The Rooflight Association represents manufacturers and suppliers of all types of rooflights into the UK market. Our purpose is to identify and promote best practice in rooflight specification, installation, maintenance and safety.

Our Technical Committee has been instrumental in collecting, analysing and interpreting rooflighting data used in The UK's Building Regulations.

For further information, visit our website: www.rooflightassociation.org

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