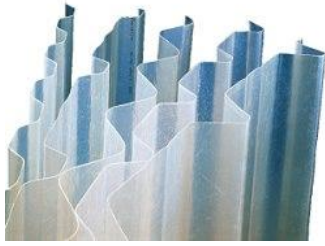


Rooflights



Let there be light! Once upon a time the only option of getting light into a barn or industrial building was wired glass. Now there's a choice of material, thickness and different specifications for 900 different profiles, including those for the 300 or so metal profiles about. Whilst we carry stocks of rooflights for our most usual profiles, others are readily available to order, as are made-to-measure double skinned FAIRs for composite panel roofs.

Main features

Did you know that rooflights provide three times more light than the same area of vertical glazing, and not only that, light is more evenly distributed within the building? This is really important in large buildings as vertical glazing will only provide natural light within about 6m of the window. As a general rule, a single skin rooflight will have a light transmission of about 80% to 90%, and material, thickness and number of layers will make a difference. Natural light also offers the benefit of passive solar gain, so you can maximise this by increasing rooflights on the sunnier side of buildings to exploit this. Of course, it can work the other way and too many rooflights can result in solar overheating. While the whole point of rooflights is to let light in, the materials must also be compatible with the roofing material, be long lasting and meet safety and fire requirements.

Main types

Single skin rooflights for non insulated single skin metal or fibre cement sheeting. These rooflights are manufactured to the exact profile of the main roof sheet.

FAIR or Factory Assembled Insulating Rooflights for use with composite or built-up single skin systems. These are sealed boxes comprising of a top sheet and under sheet matching the profiles exactly of the composite panel or built-up sheets, complete with cut back.

Solid or flat material used for replacing glass, this is usually supplied clear but may be tinted.

Multiwall polycarbonate usually for fitting as under lights when a roof is being retro insulated. See our [polycarbonate](#) pages for details of thicknesses.

What are they made of?

Most rooflights in the UK are made of GRP or polycarbonate, with PVC being used less and less these days.

GRP

Glass Reinforced Plastic or GRP is strong, versatile and cost effective and the most commonly used material in the UK to produce FAIRs and single skin rooflights in just about every profile you can think of. Despite its fibrous composition, GRP rooflights produce high levels of diffused light without glare and it's easy to work with. Exterior discoloration is minimised by the outer surface incorporating a UV protection system.

Polycarbonate

We can supply polycarbonate in a number of formats; single skin, FAIR, solid and multiwall. It's another versatile material with the added benefit of excellent impact resistance, superb levels of light transmission and high fire rating, so perhaps there's no surprise that it's more expensive than GRP. It can be tinted although most usually supplied as clear. Also supplied as flat solid sheet to replace glass. One thing about polycarbonate which is not always disclosed is that although very strong, it's quite soft and therefore prone to scratching.

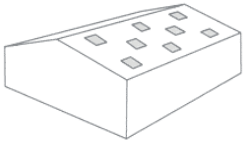
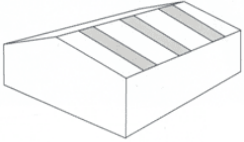
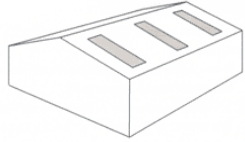
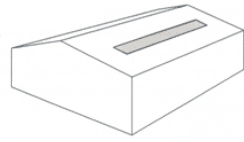
PVC

PVC provides a cheap and cheerful rooflight which we only supply in the profiles of corrugated iron, and asbestos P3 and asbestos P6. With a huge range of profiles being available in GRP and polycarbonate, with their superior qualities, PVC is rarely used in any situation other than DIY or agriculture.

Acrylic

Only available in solid form, acrylic is used as a more cost effective replacement for glass where the impact resistance of polycarbonate is not required. Acrylic has better scratch resistance properties can be of benefit.

See below the four main configurations of rooflight layouts.

			
<p>Chequerboard Provides most uniform distribution of light. Each rooflight is well supported on 4 sides so fixings cost is slightly increased.</p>	<p>Ridge to eaves One continuous sheet means less joins and overlaps, but since walking on rooflights should be avoided, access to the rest of the roof is limited.</p>	<p>Mid slope Most popular configuration on new builds, this layout offers a compromise to chequerboard and ridge to eaves.</p>	<p>In plane Although it provides good lighting levels, this is considered a bit of an old fashioned layout, as it's often used when replacing glass lights.</p>

How long from order to delivery or collection?

Generally speaking rooflights for our profiles are carried in stock so lead-time is seven working days. If it's a special order for an obsolete profile or for FAIRs, then allow fourteen to twenty-one working days from the date you place your order. We will always do our best and keep you informed. Collection of orders from your yard can speed things up considerably.

Not sure what you're going need for your project?

While we have many long term customers, we're used to dealing with people who haven't 'talked tin' before. Take a look at the following list of components which are used in sheeting projects. You may only need some of them but you will need to have thought about whether you need them all or not! We can talk you through the project and can deliver any of these products or the whole package if you want us to.

- [Metal sheeting](#)
- [Fibre cement](#)
- [Ridges and barges](#)
- [Insulation](#)
- Guttering ([plastic](#) and [made-to-measure](#) metals are both available)
- [Z Purlins](#)
- [Tec screws](#)
- [Foam fillers](#)

Handling and storage

All site H&S procedures, manual handling and risk assessments should be adhered to.

Store inside whenever possible, stacked horizontally max. 1m high on bearers on a smooth, clean, and flat surface. If outside storage is the only option, ensure sheets are stored as above and then covered with a dense, waterproof cover.

Great care is required when handling in windy weather.

Sheets over 3m in length are best carried by 2 people.

When fitting, check all dimensions before fitting.

FIXING NOTES

Here are some of the tricks of the trade to save you both time and frustration when fixing rooflights. This is general information for all types of materials:-



- Roof pitch should be more than **5 degrees** and if you can achieve more angle, even better.
- Roofing sheets are fixed onto purlins running across the roof (not rafters which run down the roof!)
- Purlins can be of timber, steel or light steel Z purlin.
- When spacing purlins, use a minimum of 4 foot (1.2m) centres between them
- Always use a self-tapping tec screws designed for the type of purlin you're fixing into.
- Always fix Box Profile rooflights through the bottom of the profile, directly into purlin as this prevents sheet distortion. Corrugated sheets are always fitted through the top of the corrugation.

- Start fixing sheets at the end of the building away from the prevailing wind so that the overlap is facing downwind.
- As a rule of thumb, put a fixing every 380mm or closer together in exposed conditions.
- Cut rooflights with a fine toothed hand saw or power tool at a shallow angle— metal blades are not suitable.
- Hold sheets firmly when cutting to prevent vibration.
- Where you overlap the sheets, the short overlap goes on top and the sheets are fixed in the trough, either side of the overlap using the standard longer tec screws. The joint itself is then fixed together with shorter tec screw known as stitchers to give a bullet-proof joint.
- Use red colour caps on rooflights so they show up the location of the rooflight during maintenance at a later date.
- For some jobs, you may need to seal the laps with mastic.
- Clean sheets by rinsing with warm water then gently washing with a sponge and a mild household cleaner.

Your notes on Rooflights: