

Composite Panel Rooflights

Installation Recommendations



1. Rooflight Composite Panel

GRP (Glass Reinforced Polyester) rooflights, in a variety of profiles, different specifications and weights to meet all customer requirements.

2. Primary Fixings

There should always be a minimum of 5 fixings per purlin. These fixings should have a minimum 29mm diameter self-sealing washer with a poppy red cap. Due to differences in design profiles available, the number and position of fixings varies. Ideally, the fixings should be positioned as evenly as possible across the profile of the sheet and central to each trough. Wider troughs may need two each.

3. Side Stitch Fastener

A sidelap stitch fastener is used when fixing the rooflight sidelaps over the metal profile. These fixings should have a poppy red cap and use a minimum of a 16mm diameter self-sealing washer and be placed at a maximum of 400mm centres.

When not using a steel fixing strip incorporated into the rooflight construction, an expanding grommet type fastener should be used to fasten the side lap of the metal over the rooflight. When using a Zenon Evolution outer sheet the steel fixing strip is not required, and side stitch fasteners may still be used.

4. Steel Fixing Strip

An optional galvanised steel strip is fitted into the rooflight during fabrication enabling the installer to use standard sidelap stitchers.

5. Sidelap Sealant

The sidelap sealant is essential and must be installed on the crown of the underlapping panel. The sealant should be a continuous 6x5mm butyl type strip.

6. End Lap Sealant

The sealant strips should be 6x5mm, 6mm Ø or 8mm Ø bead butyl type strip sealant. Two strips should be positioned approximately 10 to 15mm either side of the fixing, and a further strip positioned 15mm from the outer end lap.

Where a better seal is required at the bottom of the lap to keep out dirt and trapped water, a bead of premium quality neutral cure silicone sealant positioned approximately 10 to 15mm from the bottom of the lap may be used as an alternative to the butyl strip.

7. Spreader Plate

A spreader plate is recommended to ensure that the composite panels and rooflights have a secure bearing. The composite rooflight must bear onto the purlin or spreader plate by no less than 25mm.

8. Enhanced End Lap Fixing (75mm End Laps)

Where a 75mm end lap is required, the number of primary fasteners should be increased to nine and the outer crowns fixed through to the purlin in conjunction with saddle washers. A 50 x 6mm Butyl co-laminate end lap sealant tape should be used, position centrally to the fastener line.



Rooflight cross section

Labels in the diagram:

- 1. ROOFLIGHT
- 2. Primary fixings
- 3. Side stitch fastener (rooflight underlap)
- 4. Steel fixing strip
- 5. Sidelap sealant
- Composite panel
- Zenon Insulator or polycarbonate sheet insulator layer

Rooflight long section

This diagram illustrates the long section of a rooflight assembly. The roof structure consists of a concrete slab (brown) with a composite panel (blue) on top. The rooflight panel (1) is a translucent blue sheet supported by primary fixings (2) and end lap sealants (6). The rooflight panel is secured to the concrete slab by a Zenon Insulator or polycarbonate sheet insulator layer (3) and a Purlin (4). The rooflight panel is supported by a Cleat (5) and a Spreader Plate (7). The rooflight panel is shown with a 150mm end lap, with dimensions of 25mm and 5mm indicated. The rooflight panel is shown with a 150mm end lap, with dimensions of 25mm and 5mm indicated. The rooflight panel is shown with a 150mm end lap, with dimensions of 25mm and 5mm indicated.

Labels in the diagram include:

- 1. ROOFLIGHT
- 2. Primary fixings
- 3. Zenon Insulator or polycarbonate sheet insulator layer
- 4. Purlin
- 5. Cleat
- 6. End lap sealants
- 7. Spreader Plate 100mm wide min. (recommended)
- Composite panel
- Filler
- DOWN SLOPE
- UP SLOPE