



## Case Study – Alexander Rose, Burgess Hill

### New lease of light with Zenon Arc

Zenon Arc barrel vault rooflight used to replace old rooflights on exterior furniture manufacturer; Alexander Rose in Burgess Hill, West Sussex.

Blenheim Roofing are industrial and commercial refurbishment specialists, offering a complete design and installation service for all types of guaranteed roofing systems. They provide clients with a professional service from the initial survey to the completion of the project.

The contractors were requested by the client to survey the badly leaking roof and offer suggestions around remedial works to prevent the leaks. It was found that the aged polycarbonate barrel vault rooflights were likely to be the major culprit as the survey had shown them to be discoloured, cracked (allowing water to ingress), contain high levels of condensation and organic debris, that had entered the rooflight cavity through the cracks, building up into a sludge like substance deteriorating the rooflights further. Replacement of the rooflights was considered the best option which would remedy the water ingress whilst also improving the existing daylight and thermal performance. Zenon Arc insulated barrel vault GRP rooflights were chosen to meet the specification criteria.

Zenon Arc GRP rooflights are well suited for standing seam, curved roof applications. The rooflights were manufactured to fit a 1000mm daylight opening, with a triple skin configuration with Zenon Pro 24 weather sheet and a 40mm honeycomb Insulator™ layer.

The rooflight sheets are made from GRP which is a resin reinforced with traditional glass fibres. When natural light passes through the material it is scattered or 'diffused'. This significantly reduces the apparent difference between light and shade and minimises the creation of shadows and glare, therefore creating a more consistent and evenly lit space.

When incorporating the honeycomb Insulator™ core as part of a rooflight configuration, a lower U-value can be offered without significantly compromising the light transmission. Insulator™ comprises a lightweight, transparent cell structure and when light enters it is channelled directly, or by reflectance, into the building creating a better, wider spread of diffused light irrespective of the angle of incidence of the light.

Mike Trail; Project Manager at Blenheim Roofing said, 'We offer our clients quality solutions to give the best end result. Zenon Arc was ideal for this project and Hambleside Danelaw worked with us closely to deliver a great job to a happy customer'.

The right level of natural daylight is critically important in building where operatives need good detail perception to complete their tasks. The new rooflights will help the client to rely less on internal artificial lighting, reducing the buildings running costs.

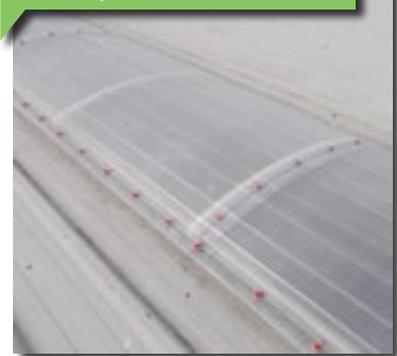
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Or you can visit our website; [www.hambleside-danelaw.co.uk/zenon-rooflights/](http://www.hambleside-danelaw.co.uk/zenon-rooflights/)

Close up of Arc modules



Thermally insulated end cap



Arc utilised on curvature



## Products used in this project

### Zenon Arc barrel vault rooflights

Zenon Arc barrel vault GRP rooflights are available either uninsulated, or insulated with the Zenon Insulator™ system, and are characterised by longitudinal ribs for extra rigidity. They may be constructed from Zenon Pro and Zenon Evolution rooflight sheets, depending upon the performance specification, durability and non-fragility periods required, to provide two daylight opening width options of 1000mm and 1200mm.

Zenon Arc Pro rooflights are manufactured using the conventionally reinforced Zenon Pro 24 rooflight sheets, and Zenon Arc Evolution rooflights are manufactured using the high strength, low carbon Zenon Evolution LC1 outer sheet combined with a Zenon Pro liner.

Suitable for flat roofs, low pitch, curved, standing seam and secret fix roof installations, they offer diffused light transmission to reduce glare, improved thermal performance, lower embodied carbon levels and long term non-fragility to ACR Classification B.

### Zenon Pro rooflight sheets

Zenon Pro is ideal for industrial, commercial or agricultural buildings. Benefits include;

- A full range of weight options to suit all specification requirements
- Available in over 1000 profiles to suit new build and refurbishment projects
- Suitable for installing in single skin and double skin assemblies
- Insulated with either multi-wall polycarbonate or our patented Insulator™ core
- Compatible with both site-assembled and composite panel cladding systems
- High levels of natural daylight
- Carries Zenon Shield, a highly durable UV protection surface film
- Meets all non-fragility requirements subject to specification
- Manufactured and CE marked in accordance with BS EN 1013