



The Wallace Collection, London

Architect: Purcell Miller Tritton
Client: Coniston

Glazing Vision designed and manufactured a bespoke pyramid glass roof in order to maximise the amount of natural daylight that entered The Great Gallery.

The overall lighting design includes two glazed elements; the first situated on the building exterior was designed to harness as much daylight as possible, whilst the second was designed to allow this light to filter through to the gallery below. This second structure also needed to provide a safe structural flooring element in order to allow access for maintenance in the roof void.

Glazing Vision manufactured an external glazed modular lantern style skylight, measuring an impressive 28 metres in length and 3 metres wide, with large sections of heat soak tested low iron glass.

The glass roof was pitched at 3 degrees and linked by bespoke designed aluminium framework.

Directly beneath this a walk on glass rooflight was installed on top of an existing steel frame, comprising of 160 glazed sections measuring 830mm x 740mm. This new system enabled the installation of the new laylight in the gallery, reflecting the design of the laylight in Sir Richard Wallace's time.

Natural lighting considerations for a UV sensitive environment

Making lighting improvements within a sensitive historic interior can be challenging; light has always been difficult to manage in galleries due to the high risk of damage to artwork by direct sunlight and UV radiation which can fuel chemical reactions that cause paintings to weaken, change colour or fade.

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The conservation team worked closely with architects and Glazing Vision to ensure that the glass procured was suitable for its environment. The quality of light was paramount and with thicker white laminated sections being used on the walk on glazing, there were concerns that the green tint found in most glazing would compromise the overall aesthetic.

Low Iron Glass

The architects opted to specify specialist 'Low Iron' glass in both rooflights to maximise transparency and neutrality.

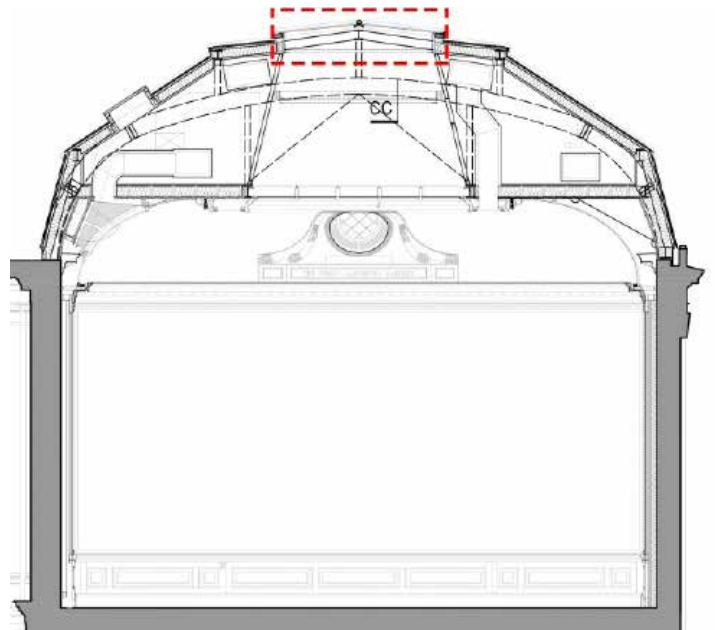
Low iron glass is manufactured using carefully selected raw materials specifically chosen for their low iron content; it is particularly effective when used in laminated glass, as it reduces the tendency for the Poly Vinyl Butyral (PVB) interlayers to exaggerate any tint of colour found in float glass.

Achievements

The integration of two glazing units has enabled natural daylight to be optimised in two separate and complex spaces simultaneously.

Interestingly, modern technology has been used here in order to bring something back from the past; the new open space and heightened ceilings now more than ever closely resemble the time of Sir Richard Wallace.

The bespoke pyramid unit and walk-on rooflight beautifully integrate with and enhance the traditional features of the museum.



The architectural drawing above demonstrates how Glazing Vision's rooflight (highlighted in red) was installed within the apex section at the very top of the building.



Most importantly, the refurbishment has given viewers the opportunity to further enjoy the largest and most exciting space in the building.

To find out more information on bespoke elongated pyramid rooflights, please call our technical department on 01379 353 741 or request a CPD at www.glazingvision.co.uk.