Fragile Domed Rooflight Refurbishment



The Problem / Challenge

To refurbish the existing stained glass fragile domed roof-light to prevent water ingress and allowing backlit illumination.

The Risks

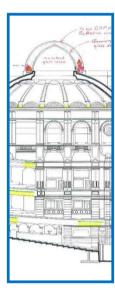
Falls from height during the construction. Falls of people or objects during the maintenance and cleaning of the stained glass panels.



Curved Rotating Ladder + Slide-lock



Rooflight from Below



7-storey Auditorium with Dome & Rooflight

The Solution

- A glass fibre outer dome was installed by crane for weatherproofing.
- The inner glass domed roof-light was repaired from a birdcage scaffold within the auditorium.
- Maintenance walkway installed between the two domes with a high level fall restraint cable fixed to the outer dome.
- Access to the upper curved areas of glass is via a curved ladder gantry with a slidelock harness attachment.
- Easily accessed light fittings fitted at low walkway level reflect off the underside of the outer dome to illuminate the rooflight.

The Benefits

The client has been able to reinstate a spectacular roof-light feature whilst overcoming the weatherproofing and significant maintenance safety challenges.

Key Points



Walkway & Up-Light

- Specialist design subcontractors consulted early.
- Communication with the Client and FM team essential in agreeing strategy and budget at early stage by annotation of drawings.
- A combination of fall prevention methods were carefully selected, each justified in respect of the hierarchy of control measures.