

Fragile Domed Roof-light Refurbishment - London Coliseum

The Problem/Challenge

To refurbish the existing stained glass fragile domed rooflight 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.

The Solution

A glass fibre outer dome was installed by crane for weatherproofing purposes. 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 slide lock 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

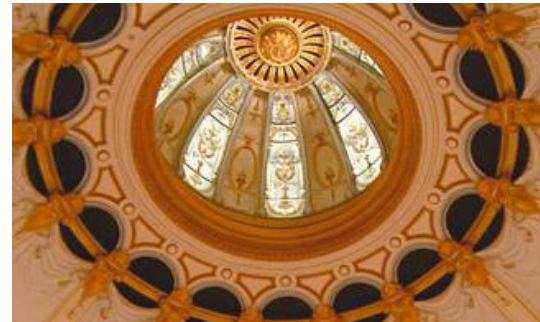
The client has been able to reinstate a spectacular roof-light feature whilst overcoming the weatherproofing and significant maintenance safety challenges.

Key Points

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.



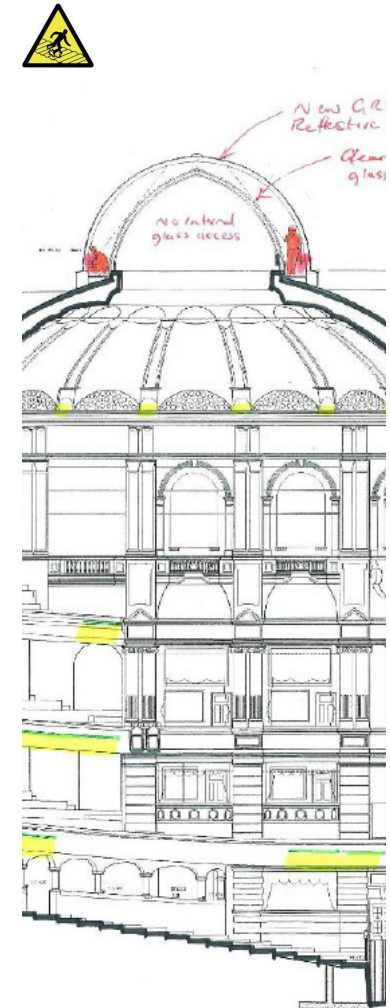
Roof light from below



Curved rotating ladder + slide-lock eg. Glide lock fixed rail ladder climbing system



Walkway and up-light



7-storey high auditorium with dome and roof light at top