

# Oceania

Royal Academy of Arts

ROYAL ACADEMY OF ARTS.



**SOLARSHIELD**  
Solutions for Glazing

Royal  
Academy  
of Arts

ROYAL ACADEMY OF ARTS - LONDON

OPTIMISE NATURAL LIGHT WITH DAYLIGHT REDIRECTION WINDOW FILM  
SUPPLIED AND INSTALLED BY SOLARSHIELD



## Solarshield have recently completed a successful installation at The Royal Academy of Art with the application of 3M daylight redirection film

Solarshield are proud to have recently completed a project in The Gabrielle Jungels-Winkler Galleries at the Royal Academy of Arts in London.

The multi-million-pound redevelopment includes a new bridge linking its two buildings in Mayfair and Piccadilly and also redevelopment of the gallery spaces.

The new space showcases numerous exhibitions including that of famous architect Renzo Piano, providing an overview of his work and follows his career, from the influence of his Genoese heritage and his rise to acclaim alongside friend and collaborator Richard Rogers, to current projects still in the making.

As part of the design process, consideration needed to be given to the comfort of visitors and protection of the exhibits within the new space. One of the concerns Arups projects team highlighted was the potential problems associated with excess visible daylight, also UV transmitted through the large upper roof lights above the gallery space.

Solarshield were asked to install **3M daylight redirection window film** to ensure visitors and exhibits were not affected by the direct sun light. This product is designed to help redirect and evenly distribute daylight within the roof lights and space of galleries 9 and 12.

Solarshield worked with the contractor on site to ensure this highly specialised installation was completed safely and effectively whilst the redevelopment was in progress.



# RA

## Royal Academy of Arts

**3M Daylight Redirecting Film is a simple, effective daylighting solution which comfortably brings natural light deeper into buildings. The film is designed to move excess light close to the window and redirect it deeper into the building to increase the daylighting penetration.**

### **Benefits of Daylight Redirection Film**

Bringing natural light deeper into a building provides the many benefits of natural light for more occupants as well as reducing the need for artificial lighting.

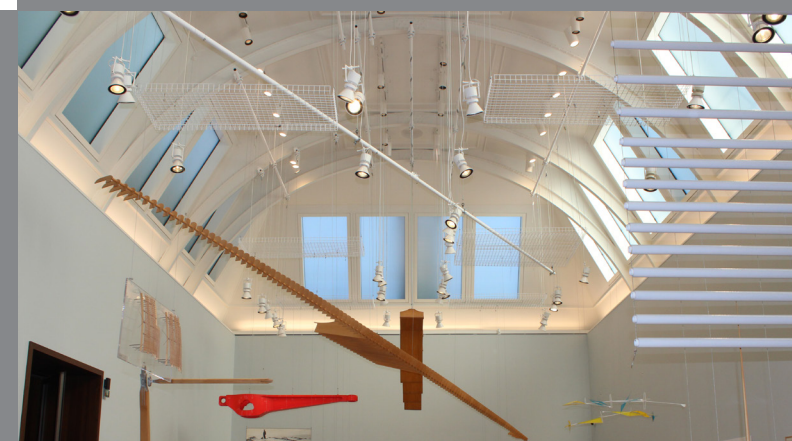
- Reduces glare and discomfort caused by direct sunlight on occupants
- Redirects natural light as much as 40ft or more into the building
- Extends daylight zone up to 8ft into the interior for every 1ft of treated window
- Can provide up to 52% lighting energy savings compared to baseline usage
- Helps reduce dependence on electrical, artificial lighting
- Winner of Architectural Record “Record Products 2014” Facades Winner

Compared to existing light re-directing strategies, Daylight Redirecting Film is easily integrated into new or existing windows. It requires no extra hardware or infrastructure, and no additional maintenance or special cleaning. It works during daylight hours, even when the sun is at a low angle. It is also more cost effective than many existing daylighting solutions.

**Solarshield are the 3M™UK Master Window Film Dealer.** We are happy to answer any of your questions regarding films, the installation process or any specific concerns.



**The Art of Making Buildings | Renzo Piano**

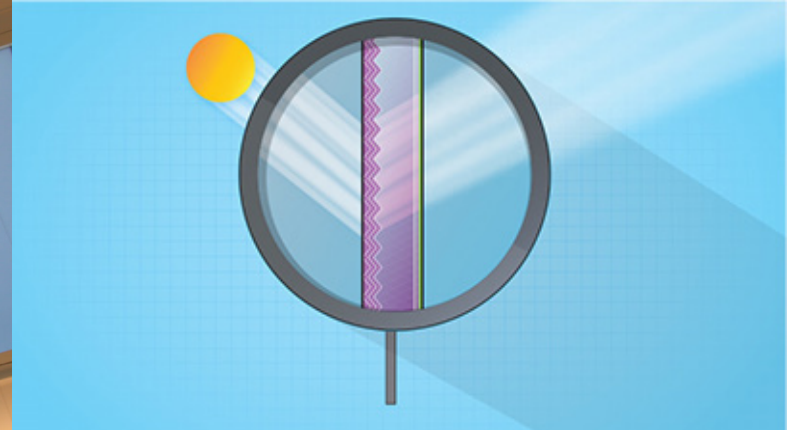


**Royal Academy of Art - Galleries 9 / 12**



**Optimise Natural Light**





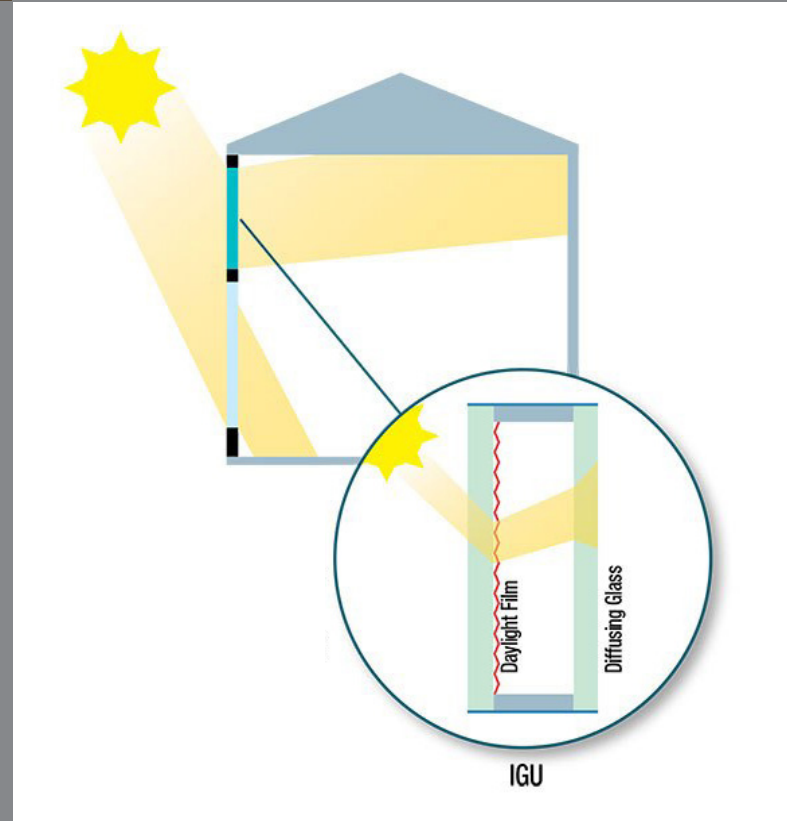
How it works

## HOW DAYLIGHT REDIRECTION FILM WORKS

Daylight redirecting film is installed in the upper portion of the window. Daylight is redirected upwards towards the ceiling allowing natural light to comfortably penetrate deeper into the building. Daylight redirection film is made of micro-structured prisms. Many factors affect daylighting performance, such as building design, time of day and year, weather, location, and orientation.

3M™ Daylight Redirecting Film utilizes micro-replication to redirect incoming light. This sunlight that would have originally hit the floor a few feet from the window, now gets directed up onto the ceiling, helping to light the room as deep as 40 feet from the window and also minimising the impacts of glare to occupants.

The technology “micro-replication” refers to microscopic structures that are able to redirect as much as 80% of light up onto the ceiling, providing more natural light, which has been linked to increased productivity and purchasing behavior, and helping to reduce your dependence on electric lighting. Announcing 3M™ Daylight Redirecting Film as the winner of Architectural Record “Record Products 2014” Facades Winner.



Optimise natural light in buildings with 3M daylight redirection film, supplied and installed by Solarshield