Case Study Optoelectronic Clean Room Southampton University

Background:

Southampton University is one of the largest universities in the UK, with a leading Optoelectronics Research Centre and Clean Room.

This Integrated Photonics Cleanroom (IPC) is designed for scientific experiments and for planar processing of a very wide range of materials not normally found in silicon processing facilities.

Acceptable ambient temperatures are crucial to maintain an acceptable working environment.

The problem:

Due to the high rate of air exchange, air conditioning as a retrofit solution was completely impractical.

The view to the outside was considered a critical design feature of the lab and could not be altered.

The design that covered the glazed façade also holds special significance to the lab as it reflected a significant milestone in the lab's history.

A solar control solution was needed to be complimentary and not obscure the design from view.

Results:

- Significant reduction in internal temperatures
- Light and easy to install
- Compliant with all standards and regulations
- Maintained ability to view out

KoolShade®
The Ultimate In Passive Solar Shading

he Project Managers recommended Microlouvre Koolshade® solar shading in order to significantly benefit their building with an integrated solution which was quick, non-intrusive and did not interrupt work inside.

Microlouvre Koolshade® screens were quickly and easily installed direct onto the glass using the famous 3M VHB adhesive tape to fix the tracks, top and bottom, directly to the glass panels.

University of Southampton

Immediately, significant reductions in temperature were experienced, such that you could feel the difference when touching the glass on the inside before and after the screens were fitted.