

Case Study Ursuline Convent High School



Background:

The St John's Block of the Ursuline Convent High School in Brentwood houses the dining facilities and food preparation areas for the school. Built in 1939, it is a traditional brick building which had new uPVC double glazed windows installed.

Protection for the food preparation area, stopping the penetration of solar radiation and insects entering, whilst ensuring good ventilation.

Challenges

- South facing food preparation areas overheating in summer
- Area required total solar heat block
- Acute glare from the sun
- Insects and pests through windows

The Problem:

As the food preparation area is south facing, during the summer months the rooms were suffering from unbearable solar heat gain through the glazing, together with acute glare from the sun. By its nature, a food preparation area requires a cool environment otherwise it risks a potential food hygiene hazard.

Therefore, a solution was needed which would stop the penetration of solar radiation into the building in the first place. In addition, such an area requires good ventilation, however, previously windows could not be opened without the risk of ingress of insects and airborne contaminants.



THE SOLUTION

The solution was to install Microlouvre Koolshade® screens to the outside of the windows thereby solving all of the problems with an easy-to-fit, cost effective solution.

Microlouvre Koolshade®'s powerful shading capabilities, even at the hottest points of the day, eliminate hotspots allowing the space near the glazing to be fully utilized.

The building now benefits from a reduction of up to 100% in solar heat gain, glare is minimized, and due to the 80% open area, occupants benefit from high daylighting and a clear view to outside.

Microlouvre Koolshade® has up to 700 paper thin louvres in ever metre, making it an excellent barrier for insects, so windows can be left open without the risk of pest entry.



THE RESULTS

- Microlouvre Koolshade® installed and reduced heat gain by up to 100%
- High daylighting levels due to 80% open area
- Area free from insects and pests even when windows left open