

THE ASTLEY COOPER SCHOOL

PROJECT: The Astley Cooper School, Hertfordshire

CLIENT: Camebridge Flat Roofing Ltd

PROJECT SCOPE: New glazing system that must overcome site challenges whilst aligning with the school's eco-friendly ethics

PRODUCTS: em.line Vertical Oversleeve Glazing





School clerestory windows brought up to standard with custom over-sleeving, delivering reduced risk and cost

THE CHALLENGE

The Astley Cooper School is a specialist status school in Hemel Hempstead. It was the first school in Hertfordshire to install a wind turbine to generate electricity. A monitoring system shows pupils how much electricity is generated and calculates carbon dioxide offset.

So, when the school's roofs needed re-waterproofing, Whitesales was keen to help them live up to their environmentally friendly principles. There were several restrictive factors: the work needed to take place during the summer holidays so that term-time was not affected; asbestos was present in many of the façades; and the existing clerestory windows over the school hall, kitchen and atrium area had low upstand heights.

The two existing options were to restrict insulation heights around the perimeter of the windows - which would result in reduced energy efficiency and potentially higher heating costs - or replace the existing windows involving raising the upstands and installing new windows, which would be time consuming, more expensive, and disruptive internally.

THE SOLUTION

Whitesales' solution to these challenges was pragmatic and cost-effective. em.line Vertical multiwall polycarbonate panels were specified with a custom-made upstand to oversleeve the existing glazing. This would increase insulation levels to meet current regulations, without the added risk, cost and time factors of removal and reinstallation. The upstand and glazing were manufactured and supplied in kit form to site with all vents and apertures factory-installed, making installation fast and simple.

The final specification was a 40mm multiwall structured polycarbonate in opal diffused glazing. The outer skin of the polycarbonate was UV-protected to increase the product lifespan and reduce glare into the classrooms, and the metal glazing bars were polyester powder-coated to RAL 9010 matt white.

THE BENEFITS

- The multi-wall polycarbonate glazing achieved good thermal
- The patented connection system of the em.line Vertical creates a frameless glazing panel the width and length of the window, transmitting maximum light into the rooms.
- Because the removal of the existing clerestory windows was avoided, there was minimal internal disruption and no need to disturb the asbestos. This kept costs low for our client, as well as reducing installation time and the health and safety risk.

