



ROOFLIGHTS & ROOF GLAZING

Case Study

2-Tier glass mono-pitch rooflight
Westcliff High School for Girls, Essex

Architect: Peter Emptage Architects
Main Contractor: Brooks and Wood
Glazing Subcontractor: SEH Commercial



Westcliffe High School for Girls, located in Southend-on-Sea, Essex, has benefited from major building programmes in recent years, the most recent of which saw investment in a new three storey CDT Block. The new building was designed with a large mono-pitched rooflight to incorporate vast amounts of natural daylight into the surrounding building.

LAMILUX were chosen by the appointed façade contractor, SEH Commercial, to undertake this specialist element within their glazing package. By using 220mm deep mullion profiles, LAMILUX were able to design and install a system structurally capable of completely self-supporting. The 25m X 6m self-spanning mono pitch rooflight removed the requirement for additional internal structural support such as steel beams, thus saving time and reducing the costs for the contractor.



High performance glazing was essential to reduce solar heat gain and heat losses. Pilkington Suncool 70/35 was specified. 40 No fixed glass panels, each measuring 1.2 x 2.9m and weighing 150kg were used to reduce the buildings energy consumption, without compromising the daylight intake.

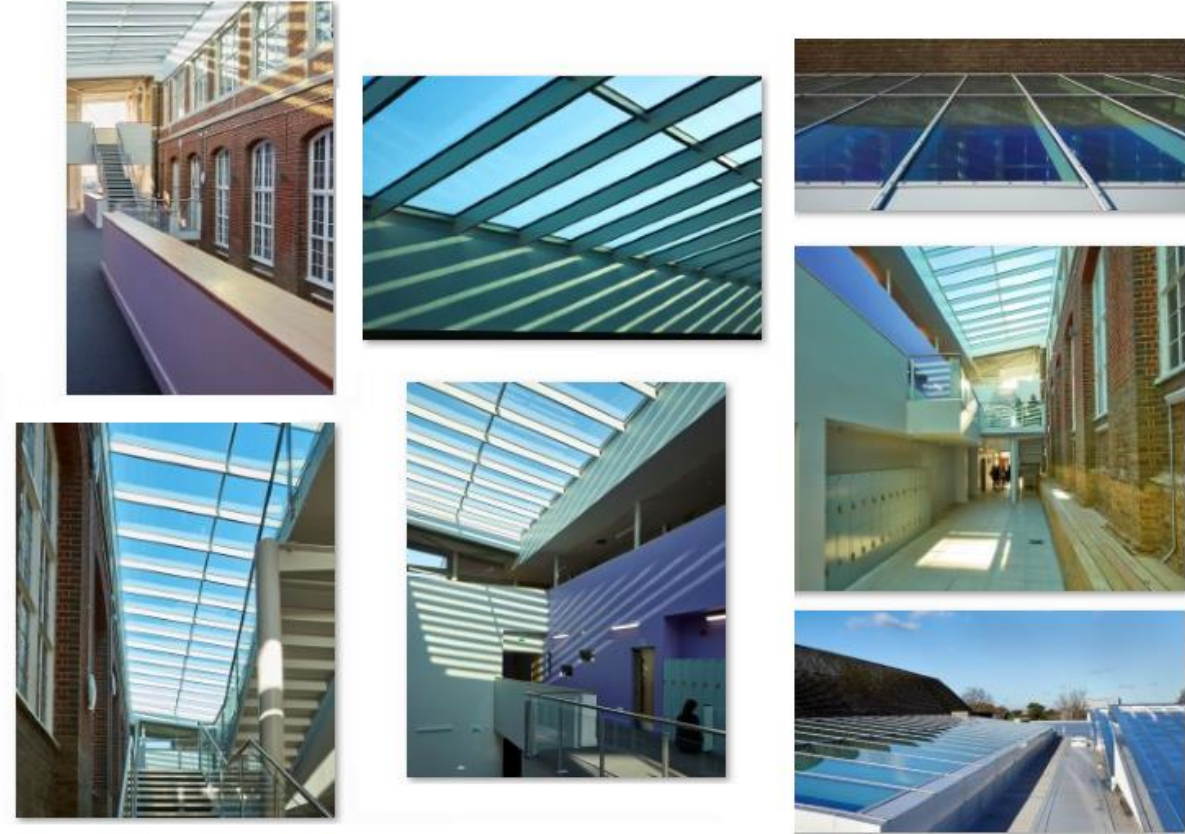
Site challenges of restricted space, alongside working around a live school site meant that a “Just in Time” phased delivery service was required to avoid disruption. The additional constraint of the Schools location being on the runway path to Southend Airport meant that necessary airport permits had to be applied for and emplaced. This then allowed for the appropriate crange permissions for lifting the materials to the roof deck.

In the first instance, the framework was delivered and installed. The second delivery containing the stillages of glass was timed for when the glazing was ready to be inset into the framework. The 40 fixed glass panels were carefully mounted using a crane and vacuum lifter to complete the rooflight installation, all in under 2 weeks.





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The new 3 storey CDT Block at Westcliff High School for Girls, Kenilworth Gardens, was completed in November 2018 with a total value of £3.5 million. LAMILUX are proud to be an integral part of the development at the successful academy grammar school.

