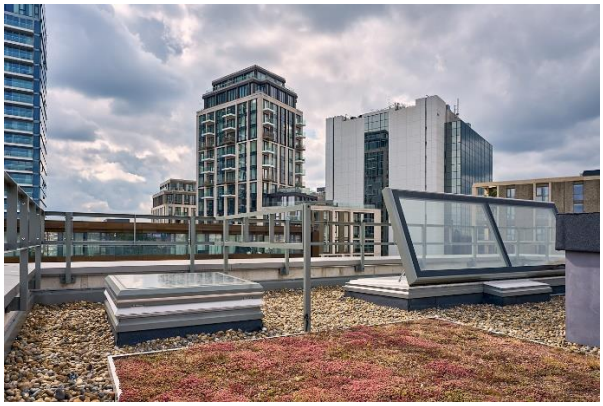
Project reference: Mulberry Academy London Dock



Architect: **Architype**
Main Contractor: **Kier Construction (London)**
Roofing Contractor: **Alltech Roofing Ltd**
M&E Contractor: **Edmundson Electrical Ltd**

Products:
LAMILUX Flat Roof Access Hatch Comfort Swing – Product webpage
LAMILUX Glass Skylight FE Passivhaus – Product webpage
LAMILUX Smoke Lift Glass Skylight FE – Product webpage

Newly certified Passivhaus school equipped with LAMILUX solutions for daylight, roof access, and smoke ventilation.

Mulberry Academy London Dock is a brand-new secondary school that opened in September 2024 in the borough of Tower Hamlets, London. Built in a dense urban redevelopment of former docks, the building has been built using Passivhaus technologies, to make it one of the first Passivhaus certified Schools in London.

LAMILUX worked with the roofing contractor to supply four Flat Roof Access Hatch Comfort Swings and four Glass Skylight FE Passivhaus rooflights. Both products bring daylight into the school building, whilst the Roof Access Swing also allows access to the rooftop via staircases. Two Smoke Lift Glass Skylight FE rooflights were also installed to enhance safety during a fire and to provide comfort for daily use.

Due to the vigorous criteria that Passivhaus certified buildings require, LAMILUX was able to furnish the contractor with the required airtight, thermally broken products to bring in daylight and enable access to the roof. Whilst the Glass Skylight FE Passivhaus rooflights are a certified Passivhaus component, with its technical data pre-loaded into PHPP energy modelling software, the Access Swings and Smoke Vent rooflights, although not Passivhaus certified products, also met the stringent requirements with their triple glazing Ug value of 0.6W/(m²k) and airtight and water testing both certified to Class 4*.

*EN 12207 – Air tightness and BS EN 12208 – Water tightness.

LAMILUX provided two Access Swings with left-hand openings and two with right-hand openings to guarantee accessibility to the roof space.

All access hatches were constructed with dimensions of 1000 mm by 3500 mm to provide sufficient headroom for entry, while the smoke vents were designed with measurements of 1200 mm by 1200 mm to achieve a certified aerodynamic free area of 1.02 m^2.

Since the installation of this project, LAMILUX have now launched the world's first Passivhaus certified Smoke Vent Rooflight, which is founded on the design of the Smoke Lift Glass Skylight FE and is now available with PHPP energy modelling data pre-loaded. This simplifies the data analysis required for Passivhaus projects with similar strict air tightness requirements.

Mulberry Academy London Dock was established by Housing Developers to address the disparity in pupil-to-place ratios within the London Boroughs and to meet the urgent demand for new educational institutions. The design of the building adheres to Passivhaus standards, which ensures the provision of clean, fresh air, thereby safeguarding both students and educators from pollution in central London.