PROJECT CASE STUDY

Bolingbroke Academy

Flat & Pitched Roof Refurbishment Including Full Roof Level MEP Upgrade







BACKGROUND

This re-roofing project at Bolingbroke Academy, in London featured a large-scale refurbishment of the Grade II listed school building. The £1.7 million project, scheduled over 38 weeks, involved re-roofing eight flat roofs and one pitched roof, along with the replacement of all existing roof-based mechanical plant.

On the flat roofs a Garland built-up felt roofing system was specified, incorporating a mixture of strip, tapered, and flat board overlays. Elsewhere, the mansard roofs were renewed using Terreal's Canalaverou Evo tiles in Red to maintain the historical integrity of the building.

Due to the academy's listed status, the project required strict adherence to planning regulations and careful coordination with local authorities. Works were also carefully planned to minimise disruption, with critical works scheduled around school term dates to ensure the kitchen supply and extract systems remained operational.

Beyond the roofing works, the project also required road closures and crane lifts for the mechanical installations, as well as the temporary relocation of roof-level telecommunications equipment, which fell under our responsibility as Principal Contractor. This required coordination with the telecommunications providers to align their installation schedule with our roofing programme, and a significant scaffold loading deck was also required to temporarily house the antennas, ensuring uninterrupted service throughout the works.

CLIENT Bolingbroke Academy

SECTOR Education

LOCATION Wakehurst Road, London

SOLUTION PROVIDED

Garland Insulated BUFR to Flat Roofs. Mansards Renewed with Terreal Canalaverou Evo in Red





THE WORKS

The works on this project were split into three key phases as follows in order to minimise disruption and keep key facilities operational:

INSPIRE

Phase 1 - Enabling Works (School Summer Holidays)

- Dismantling, relocation and / or responsible disposal of all relevant plant (except areas feeding the kitchen supply and extract).
- New ductwork and pipework connected to allow works to proceed with the re-roofing around it.
- Stripping of roof areas to allow installation of new rooflights.
- Installation of all new rooflights with roof made fully watertight prior to start of Phase 2.

Phases 2/3 - Installation Works (Term Time & Holidays)

- Full strip of main roof & installation of new waterproofing system to all areas including all required detailing.
- Reworking of all required ductwork, pipework and connections to accommodate the new plant.
- New plant installed and recommissioned with kitchen supply / extract reinstated for the start of the term.
- Re-roofing of other roofs with final connections and full commissioning of all other plant.

THE RESULT

Throughout this project, there were a number of challenges to overcome. For example, the Grade II Listing status of the school meant that all materials and methods had to be carefully selected in order to comply with heritage requirements and maintain the historical character of the building.

Road closures and crane lifts also had to be meticulously planned in collaboration with local authorities to minimise any disruption to the surrounding community and ensure safety to both site personnel and members of the public.

In addition, it was essential that the school remained functional throughout, and that key systems remained operational such as the kitchen ventilation. Works therefore had to be carefully planned, phased and managed, utilising school holidays wherever possible.

The successfully completed project has provided significant improvements to the academy's roofing and plant infrastructure. This includes enhanced weatherproofing protection and improved thermal performance for the building. Mechanical plant has also been upgraded, leading to improved energy efficiency and reliability.

By carefully planning each phase of the project around school operations and coordinating with multiple stakeholders, the project was delivered on schedule and to a very high standard, providing long-term benefits for the facility. The preservation of the school's historic character was ensured through the use of heritage-approved materials.







