

CASE STUDY

Teamwork triumphs to protect pupil wellbeing





APPROVED CONTRACTOR:
Milestone Contracting Ltd



CLIENT:

Richmond & Wandsworth Council
and Alderbrook Primary School

The purpose:

Richmond & Wandsworth Council identified that the roof over the main hall at Alderbrook Primary School was failing and commissioned Pellings LLP to deliver the refurbishment.

Pellings LLP instructed Langley to undertake a roof condition survey and our Approved Contractor Milestone Contracting Ltd won the work.

It was found that the inset atrium roof and 16m long self-supporting rooflight running centrally along the centre of the roof had deteriorated. It was also found that the roof structure itself was unsound, particularly near the rooflight.

Therefore, both the roofing and rooflight needed to be upgraded, to protect the building fabric and the staff and pupils using the hall. However, there were numerous problems to overcome:

Firstly, access for remedial works was limited as the atrium was inset between the surrounding school buildings preventing use of a crane to lift material into place. This meant all materials had to be carried through the school, up flights of stairs, and through a window.

The refurbishment was further complicated by abnormally wet summer weather which prevented use of liquid waterproofing, the preferred option.

Finally, the arrival of Covid and the high number of key worker children at the school meant pupil numbers were at almost normal capacity. Therefore, the school hall roof had to be kept watertight whilst the upgrade works were undertaken, as the hall was still in daily use.



Peace of mind with works independently guaranteed for 25 years

Our solution:

Milestone removed the existing waterproofing and laid a new plywood deck, building up the new roof with our TA-25 Flat Roofing System. The TA-25 system is independently certified by the BBA (British Board of Agreement) confirming Broof(t4) classification allowing unrestricted use regardless of proximity if adjacent structures and at least 40 years' durability; it also has LABC assured accreditation. Inclusion of insulation as part of a warm roof solution further ensured the new roof achieved a U-value of 0.18W/m²K in line with current Building Regulations.

A new 16-bay rooflight was designed to provide light and air into the main school assembly space below, glazed with SunGuard SN70/35 to give 69% light transmission with a 1.0W/m²K U value and including 18no electrically operated openings for natural ventilation. This specification balanced solar heat gain with natural light and insulation.

This included laying a new plywood deck, transferring 10 tons of reinforcing steelwork to bring the replacement roof up to strength and new concrete pad stones for the new Langley Paradome thermally enhanced self-supporting lantern light.

In partnership with the school and Milestone, we created a strict project timeline to ensure minimal disturbance to the learning environment.





The result:

The upgrade of the roof and rooflight at Alderbrook Primary School means that staff and pupils have a school hall that is warm, dry and light.

The school leadership team also has peace of mind for decades to come with our 25 year independent insurance-backed guarantee for design, materials and workmanship.


“We know from previous experience that partnering with Langley through the lifecycle of a project-not just to completion, but beyond, ensures peace of mind for all stakeholders. Alderbrook was such a complex job, with so many moving parts and elements, it was re-assuring to have a single source of supply and accountability including design, supply, install and guarantee for both the roof and rooflight.”

Chris English, Senior Associate, Pellings





For more information get in touch with our specialists

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