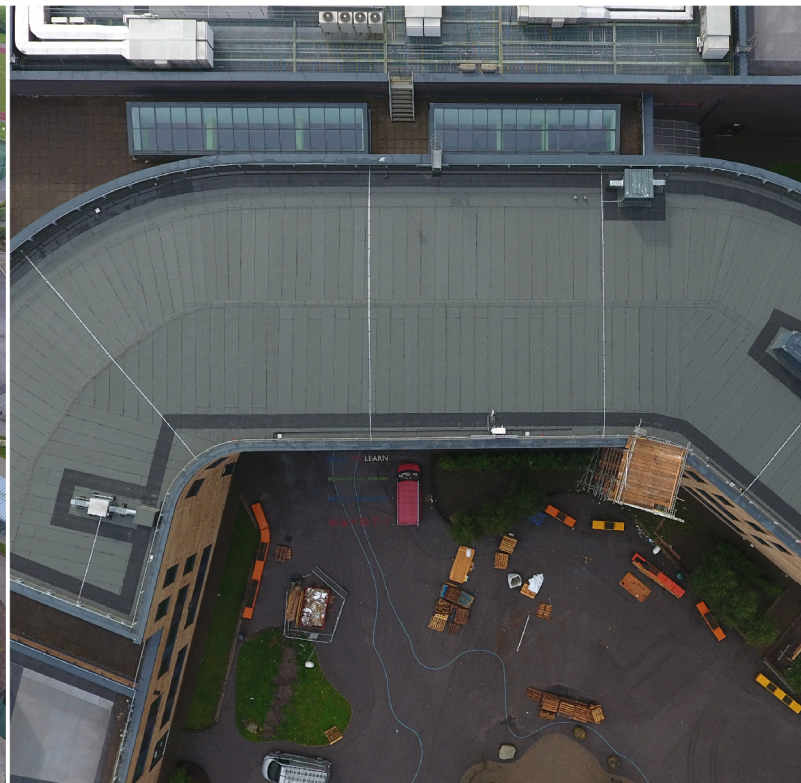




SYSTEM	PRO- FELT® PRO- COLD® PRO- THERM
PROJECT TYPE	REFURBISHMENT
INDUSTRY	EDUCATION
APPLICATION	FLAT ROOF
SIZE	2,600 M²

PROJECT OVERVIEW

Litherland High School in Liverpool suffered the major failure of a new school roof when high winds uplifted the roof system away from the metal structural deck. With the mechanical fixings piercing every layer of the built up roof, including the deck itself, water had reached the metal deck troughs and was entering the building through the fixing holes. The new system therefore had to be installed without being mechanically fastened into the deck below.

KEY CHALLENGES

A fully bonded build up against the wind

With mechanical fixings ruled out, every layer of the new roof had to be bonded to the one beneath it. Proteus Waterproofing supplied 2,600 m² of its Pro-Felt® built up system: the self-adhesive Pro-Vapour SA vapour barrier, 120mm of Pro-Therm insulation bonded with Pro-Bond adhesive, and a self-adhesive underlay, finished with the Pro-Felt® mineral cap sheet. The SBS content allows the membrane to flex with the building, and a wind uplift calculation verified the design against future uplift.

CONCLUSION

Proteus Waterproofing worked in close partnership with its Approved Contractor throughout, ensuring the installation complied with the specification design. The Proteus Pro-Felt® waterproofing system is available with guarantee options of 10, 15, 20 and 25 years, which can also be backed by independent insurance.

Gutters and awkward details

For the internal gutters, a Pro-Felt® Endura root resistant mineral cap sheet was installed as the finish, protecting them from vegetation fixing roots into the system and lifting the felt laps over time. At the awkward details, such as the handrail fixing points, the liquid application of Proteus Pro-Cold® was worked closely around each fixture to keep the waterproofing continuous.