

CASE STUDY

BEACON ACADEMY, CROWBOROUGH FLAT ROOF REFURBISHMENT



Client: Beacon Academy

Location: Crowborough, East Sussex

Contractor: Richard Soan Roofing

PROJECT OVERVIEW

At Beacon Academy in Crowborough, Ashley Consultants were appointed to address significant and prolonged water ingress affecting multiple flat roof areas across the school estate. Persistent leaks had resulted in disruption to teaching, health & safety concerns, and the enforced closure of affected areas.

The extent and severity of the issues meant that a comprehensive solution was required, with works of sufficient scale to necessitate a successful Condition Improvement Fund (CIF) application.

A full condition survey and detailed technical specification were therefore undertaken by Ashley Consultants, which subsequently led to the successful procurement of funding.

Due to the size and complexity of the project, a carefully considered programme of works was essential in order to achieve a successful outcome. The sheer volume of roof areas requiring intervention meant that works needed to be delivered across both the summer holiday period and term time, requiring meticulous planning to minimise disruption to the school's daily operations.



WORKS IN PROGRESS



SOLUTION PROVIDED

Ashley Consultants developed a phased programme of works, prioritising critical health & safety risks and high-impact activities during the summer holidays, with remaining works carefully sequenced during term time to ensure the safe and continued operation of the school.

A detailed pre-contract moisture mapping survey was undertaken to identify areas of saturated insulation requiring full strip, and areas suitable for overlay. This enabled a targeted and efficient approach on site, delivering significant programme and cost benefits.

Roof falls were also evaluated across all areas. Where existing falls were compliant, flat insulation was utilised. Where ineffective drainage or ponding was identified, cut-to-falls insulation was specified to improve water run-off and mitigate future leak risk.

A holistic approach was adopted, recognising that long-term roof performance is heavily influenced by surrounding building elements. Associated fabric repairs were therefore incorporated to ensure a robust, long-term solution.

Throughout the project, Ashley Consultants provided full contract administration and project management, ensuring effective coordination between all parties, maintaining programme efficiency and upholding the highest standards of site safety.



Roof refurbishment and associated works on this project consisted of:

- Replacement and refurbishment of defective flat roof areas to eliminate water ingress
- Phased delivery across summer holidays and live term time environment
- Pre-contract moisture mapping to inform targeted strip and overlay strategy
- Evaluation of roof falls with tailored insulation solutions (flat and cut-to-falls)
- Repairs to lintels and window surrounds to ensure structural integrity
- Re-pointing and making good of degraded masonry and walling
- Improvement of adjoining details to prevent premature failure of new roofing systems
- Upgrading of roof access arrangements to ensure safe, compliant maintenance



THE RESULT

The completed works have successfully eliminated ongoing water ingress, removing the need for area closures and restoring a safe, functional learning environment for pupils and staff. The use of moisture mapping and a tailored insulation strategy ensured that works were delivered in the most efficient and cost-effective manner, avoiding unnecessary replacement while addressing all areas of risk.

By combining roofing works with wider building fabric repairs, a far more robust and durable solution has been achieved, significantly reducing the likelihood of premature failure and future maintenance requirements.

Overall, the project demonstrates the value of a proactive, intelligence-led approach which ultimately delivered long-term performance, improved drainage, and best value for the school.

