



CASE STUDY—PITCHED ROOF TILING

WEST KIRBY GRAMMAR SCHOOL, WIRRAL

CLIENT:

West Kirby Grammar School

CONSULTANT:

Surveyors to Education,
Coventry

SIZE: 1000m²

VALUE RANGE;
£500,000-750,000



Introduction.

West Kirby grammar school is a 1200 student grammar school for girls with a mixed-sex sixth form, situated on the Wirral coast with views out across the river Dee estuary. The original parts of the school were built in 1913.

On inspection, the school's old clay tile roof coverings were found to have deteriorated and to be in need of replacement. The roof covering consisted of tiles on battens nailed directly to the timber rafters, with mortar torching to the underside. The detailed survey of the roof identified problems relating to; corroded copper nails, weathered clay tiles of mixed sizes, storm damage, mechanical damage, deteriorated and missing lead flashings, fragile wired glass roof lights, and leaking cast iron gutters.

All-in-all, the roof was not only in a state of disrepair, but didn't comply with the current British Standard in respect of it's installation. It also provided no thermal insulation to the building.



WORKS;

Strip and replace pitched roof covering;

- ⇒ Clay tiles, Battens, Underlay
- ⇒ Thermal insulation
- ⇒ Replacement leadworks
- ⇒ Glazed roof-lights

Refurbishment.

BBR Roofing were selected to carry out the necessary major refurbishment of all of the tiles pitched roofs.

The client's specification called for the complete replacement of the pitched roof coverings, together with the associated roof-lights and eaves gutters. They also carried out internal re-alignment works to create an entirely new Reception area for the school.

Having set up crash decking below roof areas for safety, the existing roof covering was stripped and removed from site. As the existing tiles were weathered and of mixed sizes it was not feasible to re-use them. The new Marley clay tile covering was installed on new battens over a vapour permeable underslating membrane complying with the requirements of BS5534, all installed over new polyurethane insulation.

New glazed roof lights, leadwork to dormers, and seamless gutters completed the works on this complex roof installation.



Amongst many other fine details, the cast iron spire over the front main entrance had to be removed, renovated and re-installed.



New structural glazing was installed to replace the old Georgian-wired-glass roof-lights.

