CASE STUDY

PERRY HALL ACADEMY

Academy receives new roof

Perry Hall Academy is a large primary school based in Wolverhampton, with around 460 pupils aged between 3 and 11 years. Built in 1949, the school's original waterproofing was still in-situ and the roofs throughout were suffering from several serious problems. Refurbishment was a high priority. The school wanted a solution that delivered a robust, long-lasting system that could be quickly and safely installed, from a manufacturer that could provide comprehensive technical support throughout the project.

IKO assisted the Academy funding bid by providing a detailed survey report, including intrusive core sample analysis. The roofs were suffering from water ingress, cracks in the mastic asphalt, pooled water and poor heat retention, so decision was made to replace the roofs throughout.

New rooflights were also specified to allow more natural light in while the design chosen reduced the external noise transmission. The project was started in May 2014 and completed in November the same year. IKO worked with specifier Concept Education Services to deliver the project.

Challenges

It was necessary to do some of the work during term time when the primary and pre-school children were on the premises. Strict security measures were put in place to ensure their safety and that of the staff. Access to the school was limited so all timed deliveries were made before 7am to minimise disruption to the school day.

The rear roofs were inverted with tonnes of stone and insulation boards in situ. This meant the work on them had to be carried out during weekends and school holidays, to ensure ballast were safely removed when the children were not on site.

An additional challenge was designing and delivering tapered insulation on inverted roofs at short notice – without holding up the overall project. This was completed successfully alongside checks to ensure excess water could easily be cleared.

Project Sector:	Education
System:	Reinforced Bituminous Membrane
Products Used:	IKO Goldseal Torch-On, IKO Enertherm Insulation, IKO Superlite Pyramid Rooflights
Size:	3000m^2

The Solution

The IKO Goldseal system included IKO Enertherm ALU tapered insulation which increased the school's overall thermal efficiency and reduce heating bills. The tapered insulation was specified to create more falls, assisting in the reduction of ponding water.

Fire-retardant Torch-On Goldseal cap sheet with graphite firewall technology were used with a self-adhesive underlay which reduced the use of flame on-site and for a quick, clean installation.

IKO Superlite triple-glazed structural rooflights were also fitted, to allow more natural light into the classrooms, while reducing glare and noise for a more comfortable learning environment. The design of the rooflights also improved the thermal efficiency of the buildings.

The project was successfully completed on time and on budget, giving the school a BBA approved system with a 20 year single point guarantee.

IKO goldseal – Premier Bituminous Built-Up Roofing System

IKO enertherm – Insulation