

CASE STUDY

COTLANDSWICK, HERTS

Residential blocks receive a Part L upgrade



The Issue

The roofs on a number of 1960's housing blocks in the Cotlandswick area of London Colney had reached the end of their useful life. They had been patched and overlaid as a response to leaks over a considerable period of time, however a roof renewal plan was now required. The existing roofs were also poorly insulated and therefore required upgrading to meet current Building Regulations Part L.

The residential blocks at Cotlandswick were originally constructed using prefabricated materials, and precast concrete panels bolted together were used to construct the roofs. The client, St Albans City & District Council Housing Department specified that the existing overlay systems be stripped off, back to the original asphalt and then a new insulated roof be built up from this point.

The works were also to include the installation of an integral guttering system. However when the stripping back of the overlay felts commenced, it was found that the gutters were not part of the concrete structure as originally thought at survey stage. The timber gutters had just been nailed to timber grounds in the side of the precast panels and many years of leaks had caused a considerable amount of timber to rot away. A solution therefore had to be found to rectify this problem.

St Albans Council has a policy of primarily using flame free roofing systems in particular for their housing refurbishment for health and safety reasons.

The Solution

The client chose IKO's Polimar EC/UV cold liquid applied waterproofing solution to refurbish the roofs of the eight residential blocks. Polimar EC is a high build polyurethane embedment coat which incorporates moisture triggered curing technology that forms the base layer. Polimar UV provided a stable topcoat which formed a seamless durable waterproof barrier which provides excellent thermal and UV stability for all climatic conditions. IKO Systems S-A vapour control layer and a 120mm IKO Enertherm PIR insulation board to meet Part L requirements, completed the specification.

Project Sector: Local Authority/Social Housing

System: Cold Applied Liquid

Products Used: IKO Polimar EC/UV

IKO Systems S-A VCL

IKO Enertherm PIR Insulation

Contractor: Tower Asphalt

Size: 2000m²

The design of the perimeter detailing was changed to accommodate the removal and replacement of the rotten timber gutter. IKO's in house technical team in consultation with the client, decided that the best course of action was to remove the internal gutter configuration altogether and upgrade the existing design by draining the water completely outside the building to new external uPVC half-round gutters. This not only improved the long term waterproofing capability of the roofs by removing the problematic internal gutters, it also improved the aesthetic appearance of the roof configuration.

IKO PLC worked closely with approved contractor, Tower Asphalt to formulate a planned maintenance schedule, which was provided by St Albans City & District Council. The roof was successfully installed whilst the tenants and leaseholders were in residence. The contractor worked with both the residents and St Albans Council to minimise disruption and resolve any problems quickly and efficiently.

The completed roof provided a high grade, seamless waterproofing solution with a 20-year single point guarantee. The thermal performance of the roofs was upgraded to achieve Building Regulations Part L compliance, giving a finished U-Value of 0.18W/m²K, a significant upgrade from the original roof U Value of 1.5W/m²K.

