



CASE STUDY

Investment in building estate delivers long-term savings



APPROVED CONTRACTOR:

CWG Group

CONSTRUCTION CONSULTANCY:

Currie and Brown

CLIENT:

Erith and East Ham Fire Stations

The purpose:

Energy savings of £¼million over 20 years at just two of its sites are predicted to be achieved by London Fire Brigade through effective roof refurbishment using our Roofing Solutions.

The brigade identified that the roofs at Erith and East Ham Fire Stations were in need of refurbishment. Numerous intermediate repairs had already been undertaken. An efficient solution was needed to help London Fire Brigade optimise best value in its asset management and reduce its requirement for planned- or unplanned-maintenance.

London Fire Brigade therefore turned to Currie & Brown construction management consultants to oversee the design and execution of the refurbishment projects under a contract management framework agreement in place between the two organisations. We were called in to assess the roofs and advise on a course of action. Data driven roof condition reports from surveys were taken across the two premises. We highlighted that the roofs were beyond economical repair and needed new waterproofing and insulation- a U value of 5.00W/m²K was discovered in one roof area, against the Regulatory threshold of 0.35W/m²K and best practice 0.18W/m²K.



Cured seamless membrane with quick installation times

Our solution:

We advised that in the main, overlaying of the existing roof covering with CP-20 Paracoat Cold Polyurea Liquid System (warm roof) application was the most-efficient and cost-effective solution.

The over-laying using the CP-20 system satisfies London Fire Brigade's policy of preference for flame-free, with no roof replacement needed this minimised waste to landfill.

Our Approved Contractor CWG Group won the contracts to undertake the upgrading, working to Langley's detailed individual specifications for each site.

At East Ham Fire Station, four main roof areas plus a separate ancillary building were addressed.

LangGuard free-standing safety rail was installed around the perimeter of roofs 1 and 4.

The final touch for the field roof area was provided with Paracoat Fast SF slip-inhibiting finish to agreed walkway areas.

At Erith Fire Station, the refurbishment involved upgrading two roof areas including a rooftop tank room and adjoining canopy of corrugated PVC over the Station building, and a separate stores roof.





The result:

The use of the CP-20 and the upgraded replacement rooflights further delivered the added benefit of improving the stations' energy efficiency. Insulation Payback Calculations in line with Building Regulations Approved Document L1B conservation of fuel and power in existing buildings indicated that, over the predicted 20 years' lifespan of the roofs, the insulation upgrade would deliver energy cost savings of £250,000 across the two Stations.




“We have a long-standing relationship with Langley, built on a proven reputation for quality and professionalism. Its single source of accountability, from initial survey to supply, installation and guarantee, yields a best value solution for our client. For us and our client, it adds value that Langley has a network of Approved Contractors: CWG delivered quality results for us.”

Harry Rowe, Building Surveyor at Currie and Brown

For more information get in touch with our specialists

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