



CASE STUDY – Providing an energy efficient school in Croydon

BUFCA SUPPLIER: BASF Polyurethanes U.K. Ltd
BUFCA INSTALLER: Modern Plan Insulation Ltd



THE SITUATION

The Crescent Primary School is a listed Edwardian grammar school in Selhurst, Croydon. As part of a £5.5 million refurbishment programme the external envelope of the school building needed to be upgraded and insulated to meet the needs of modern day pupils to provide an exemplary environment for education. The school will cater for 630 pupils with three form entries to address the shortage of quality school places in the Croydon area.

SOLUTION

Curl la Tourelle Architects, together with contractors Kier, were aiming to achieve a U-value result of 0.3W/m²K. Guy Shackle, Senior Associate at Curl la Tourelle Architects explained: 'Walltite spray foam injection was the perfect solution for this project as it was the only product that would work well with the cavity wall's structure. A challenge existed for us as the outer leaf of brickwork is tied to the inner with brick stretchers, which ruled out most of the cavity fill products on the market.'

Guy continues: 'As this is not a new build project the only requirement from Building Control was that 10% of the contract sum was expended on improvements to energy efficiency. However to create a learning environment suitable for the 21st century and to reduce future carbon emissions the decision was taken to target significant improvements to the building's energy efficiency. The installation of cavity wall insulation together with the complete window replacement and new roof insulation will result in a refurbished building that is approaching levels of performance required for new build.'

The quick application of Walltite injection grade rigid closed cell polyurethane foam prevents air leakage and air infiltration.

Mike Devaney, Senior Site Manager for Kier adds: 'Walltite spray foam injection allows the insulation to be retrospectively fitted to an existing building. There are many other benefits to this product, for example, it creates an air seal by filling the gaps and as a result, the heating system will work more economically and efficiently. Warmth is increased in the external walls and this will greatly reduce the levels of condensation in the building. The installation will also significantly reduce any noise transfer at Crescent Primary School. All of these benefits are incredibly important for a schools project like this.'