



The Crescent Primary School, Croydon

Best Practice Case Study



Project data

Project: The Crescent Primary School, Croydon

Client: Kier

Architect: Curl la Tourelle Architects

Spray Foam Contractor: Modern Plan Insulations

Scope of Project: Refurbishment of a listed

Edwardian grammar school
Year Completed: June 2012
Products Used: WALLTITE CV100

Project description

WALLTITE® CV100 was specified for The Crescent Primary School as part of the £5.5 million refurbishment of a listed Edwardian grammar school in Selhurst, Croydon.

The new school will cater for 630 pupils with three form entries to address the shortage of quality school places in the Croydon area.

Kier began the work in March 2010 on the external envelope of the school building. WALLTITE spray foam injection was specified to significantly upgrade and insulate the walls to meet the needs of modern day pupils by providing an exemplary environment for education.

Challenges

Curl la Tourelle Architects together with contractors Kier are aiming to achieve a U-value result of 0.3W/m²K.

A challenge existed for Kier as the outer leaf of brickwork was tied to the inner with brick stretchers. Consequently, this ruled out most of the cavity fill products on the market.

Solution

The quick application of WALLTITE injection grade rigid closed cell polyurethane foam prevents air leakage and air infiltration. Post-installation, the foam will not shrink or settle over time, providing a sustainable insulation for the building's life span.

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.

Architect quote

Guy Shackle, Senior Associate at Curl la Tourelle Architects explains the developments at the school, "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. 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."

Client quote

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."



