

# Case Study

## Burntwood

### Hard to Treat Cavity Properties

### Project Background:

The Crescent is a leafy suburb near to Burntwood. The properties are cavity wall construction with a mixture of exposed brickwork and light coloured painted render. The cavity width is 20mm and as such these properties were deemed un-suitable for a cavity fill type insulation solution.

Bromford Housing Association, who own 27 properties at The Crescent required a thermal upgrade of these properties that maintained the existing aesthetics of the properties as some of the properties are privately owned and would not be included as part of the scheme at this stage.

The Insuletics Insul-Cryl E™ and Insul-Mace E™ systems were therefore chosen to provide a brick effect and render combination to be sympathetic with the current wall finishes.

The U value of the existing walls is poor by today's standards at 1.67 w/m<sup>2</sup>K and they are therefore ideally suited for this type of thermal upgrade.

Astley Facades (Midlands) Ltd were the chosen installation contractor.

The project commenced in November 2012 and was completed within eight weeks

### Before Photographs



### After Photographs



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## Project Challenges:

In order to verify the existing wall construction Insuletics undertook a boroscope survey of the existing external walls. This confirmed that the properties had a narrow cavity. Fixing pull out tests were also conducted by Insuletics using In-House test equipment and engineers.

In order to ensure that a good colour match could be achieved Insuletics took a wide range of colours to the site to allow the initial selection to be made by the client. A series of sample boards were then prepared to show the colour combinations to allow the client to make the final selection



## The System & Results:

The Condensation Risk and U value calculations provide by Insuletics demonstrated that a 90mm enhanced Polystyrene insulation material would enable the target U value of 0.3 w/m<sup>2</sup>K to be achieved.

By using the Insul-Mace E™ systems it was possible to provide features such as brick headers under windows, brick bands and brick work plinths. The mortar colour selected was Biddulph Stone and the face colour was Burntwood red, a specially formulated colour. The authentic brick effect was completed by using a rustic (drag) effect on the surface of the render.

The Insul-Cryl E system was used with a Insul-Acryl 1.5mm grade acrylic finish in Pearl colour.

The overall finished system provided fresh contemporary aesthetics that blended well with the existing unclad properties.



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