

# Case Study

Brinklow, Warwickshire

## Hard to Treat Cavity Properties

### Project Background:

RMS Ltd. a Coventry based contractor via the Renewable Energy Technology Alliance (RETA) to thermally upgrade two existing “Hard to Treat” cavity wall bungalows. The bungalow cavity walls have an existing U value of 1.5 w/m<sup>2</sup>K which is poor by today’s standards and are therefore ideally suited for thermal upgrade. The bungalows had a duo pitch tiled roof with gable ends and the windows have a sloping brick cill detail. The bungalows have elevated ground floors and therefore a ramp access to the front elevation.

The clients brief was to achieve a U value of 0.3 w/m<sup>2</sup>K and provide a light coloured fine textured acrylic finish. The Insuletics Insul-Cryl E™ system was therefore selected to meet the brief.

The project commenced in March 2013 and was completed within 3 weeks.

### Before Photographs



### After Photographs



Solid Wall Insulation  
Guarantee Agency



**Insuletics Ltd**  
Genesis Centre, North Staffs Business Park  
Innovation Way, Stoke on Trent, ST6 4BF

Tel: 01782 366090

Email: [enquiries@insuletics.com](mailto:enquiries@insuletics.com)

Web: [www.insuletics.co.uk](http://www.insuletics.co.uk)

For further information on Insuletics Products & Services, contact Technical Support on:  
01782 366090  
[enquiries@insuletics.com](mailto:enquiries@insuletics.com)  
[www.insuletics.co.uk](http://www.insuletics.co.uk)

## Project Challenges:

Before the cladding could be applied the existing brick cills were cut back to allow the insulation to fully encapsulate the existing wall.

As the existing window frames were recessed and 20mm phenolic foam insulation was fitted to the brickwork reveals to limit the thermal losses.

The existing external features such as grab handles, external lights, satellite dishes and door signs were removed.

Due to the ramp access the system was designed to follow the level of the ramp up to the front door threshold.



## The System & Results:

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

The Insuletics BBA approved Insul-Cryl E™ system was used with an Insul-Acryl 1.5mm grade acrylic finish in cream colour (Wheaten).

The overall finished system provides a fresh modern look to the bungalows and has significantly reduced the thermal losses from the properties.



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Web: [www.insuletics.co.uk](http://www.insuletics.co.uk)