

An experience of... External solid wall insulation



Bristol Home Energy Upgrade helped fund energy saving improvements for homeowners across the city. The spotlight is on **external solid wall insulation**.

The household

This mid-terraced house is home to Matthew Gitsham and Jessica Smith, a couple in their twenties living in Horfield, Bristol. After moving into their home in 2011, Matthew and Jessica were looking at ways to make their home warmer and reduce the cost of their energy bills.

"I was keen to save energy and carbon, reduce my bills but most of all make our sometimes chilly house more comfortable," explained Matthew.

The property

Built pre 1900s	2 bed mid terrace
Gas central heating	Solid brick
Top recommendations	Internal or external wall insulation Floor insulation Solar photovoltaic 2.5kWp

Bristol Green Doors (www.bristolgreendoors.org), a local community group told Matthew about the project and they explained to him the options. This was supported and accompanied by grant and finance documentation from the Centre for Sustainable Energy's (CSE's) Home Energy Team and the Green Deal Advice Organisation.

Finance

The Energy Performance Certificate (EPC) highlighted that solid wall insulation was an option. However, Matthew indicated that there is room for improvement with the

What the EPC told us

Approx energy efficiency rating before	D (65)
Approx energy efficiency rating after	C (72)
Estimated fuel bill savings from solid wall insulation	£96 per year
Estimated carbon savings from solid wall insulation	450kg per year

The savings figures above are discounted to try and reflect the difference between predicted and actual fuel bill savings.



Matthew and Jessica's newly insulated house in the middle of the terrace

Photo: supplied by Matthew Gitsham

way the EPC presents information. He explained, "I felt [the EPC] was superficial and didn't tell me anything I didn't know already, but I feel I am an educated householder when it comes to energy efficiency issues."

Whilst Matthew and Jessica were keen to make improvements to their home, they could not have considered solid wall insulation without financial assistance. Matthew said, "the grant helped massively, we would not have carried out the work without it."

On this occasion the householder did not proceed with the project's pay-as-you-save finance option and decided to fund the shortfall themselves. Had this been a Green Deal Plan, the finance available would have been £1,141.67 (6.96% per annum over 25 years).* Matthew gives an insight to future Green Deal finance, "the pay-as-you-save finance we were entitled to through the project was a seventh of the total cost of works. In my opinion solid wall insulation either needs to get a lot cheaper or utility bills need to get significantly more expensive if the Green Deal is ever going to be a reasonable way to pay for external wall insulation."



For more on the Green Deal see www.cse.org.uk/greendeal

Installation

Householders were given a choice of registered Green Deal accredited installers at the point of application. Matthew describes the relationship he had with his

*Based on current expected Green Deal Finance interest rates

chosen installer, “[it was] a little difficult as they all wanted to quote during working hours, when my partner and I were both at work. I felt there was a lack of communication between staff at times. It is one thing this being the process for a simple job like internal plastering of a ceiling say, but for complicated external rendering etc the detailing is crucial and I really felt not enough thought went into this.”

It is important to make sure questions are put to the installer before work begins. Matthew explains, “one thing that was not explained was that it would be impossible to fix anything to the now polystyrene walls in the future. In order to fix anything the installer had to attach wood to the walls in the locations that would allow me to screw into. I see this as a minus and something the installer should have made clear.”

The issues described above were soon resolved as Matthew explains, “Very fast install. Very responsive to my questions, but I had to ask them. [They] fixed issues I raised quickly.”

 Read more about external solid wall insulation at www.cse.org.uk/ewi

Energy use

The benefit of installing any type of insulation is a warmer home and lower fuel bills as Matthew explains, “we have been in the house 2 years and in the first 6 months from June to November we used 141 units of gas and 433 units of electric. We then got a new A rated boiler installed and over the next year we used 406 units of gas and 1182 units of electricity. Over time we also increased the insulation in the loft and insulated under the suspended timber flooring. The final part was the walls which were completed in April 2013.”

When asked about the benefits of having the insulation Matthew explained, “whilst it is early days and we have no definitive results, the house is far more comfortable, especially in rooms that had two external walls such as the bathroom and kitchen.”

Customer journey

Support from the Home Energy Team was there if needed but the premise was to encourage the householder to project manage their installation. Matthew says, “I thought it was straight forward and easy to follow, especially bearing in mind the time pressures involved.”

Bristol Home Energy Upgrade At a glance



- A scheme to deliver grants for energy saving improvements and test the principles behind Green Deal, with a focus on heating and solid wall insulation.
- Funded by the Department of Energy and Climate Change and Scottish and Southern Energy and managed in partnership with Bristol City Council, the Centre for Sustainable Energy and Wessex Home Improvement Loans.
- The Bristol Home Energy Upgrade adopted an innovative approach to delivery, engaging with the local supply chain and giving the householder flexibility and choice in the Green Deal Assessor and Green Deal Installer they used. This ‘customer led’ approach was supported by CSE’s Home Energy Team and a comprehensive brochure.
- Active between December 2012 and May 2013, grants and loans were calculated based on the data recorded in Green Deal Advice Reports, reflecting Green Deal and Energy Company Obligation policy.

 Read more about Bristol Home Energy Upgrade at www.cse.org.uk/bheu



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Charity: 298740
Founded: 1979

The **Centre for Sustainable Energy (CSE)** is a national charity that helps people change the way they think and act on energy.

Our **Home Energy Team** offers free advice on domestic energy use to householders in Bristol and Somerset (including the unitary authorities of North Somerset and Bath & North East Somerset).



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