

Wishford Road, Wilton

1930s end of terrace house, well-insulated, with multi-fuel stove, grey water recycling and PV.



Key features

- Cavity wall/loft insulation
- New double glazing
- Porch
- Condensing combination boiler
- Multi-fuel stove
- Solar PV panels
- Grey water recycling

Story

Sarah and Julie have lived in their 1930s end of terrace house for 11 years and during that time have made many energy saving improvements to their home. Having initially insulated their loft and cavity walls, they then decided to install a wood burning stove followed by the installation of double glazing and solar PV panels which, although not south facing, have substantially reduced their utility bills and will have paid for themselves in 7 years.

Introduction

As Sarah says: 'We waste so much. We are slaves to energy companies. My roof can make electricity and I don't need drinking water to flush my loo.' It is very important for Sarah and Julie to be able to recycle as much as they possibly can, from wood for the multi-fuel stove to grey water for the garden. They have also draught proofed their doors and windows and try to use low energy bulbs throughout the house.

Cavity wall/loft insulation

Warmfront came out to install cavity wall insulation but they found that it had already been done (prior to 2002). The loft has been insulated with 270mm of insulation.

Solar PV

The 8 panel 2 Kw system was installed in February 2012. It faces mainly west, but 10 degrees south. The inverter is a Sunny Boy and was installed in February 2012. In the last year the panels have generated enough power to reduce Julie and Sarah's electricity bill by over 40%. They have a Sunny Beam monitor which displays how much energy they are making.

Porch

The porch in front of the front door is being built and insulated by the owners, resulting in much less loss of heat when the door is opened, and in fewer draughts. The windows come from Salisbury Glass.

Condensing combi-boiler

An energy efficient Worcester Greenstar 25 combination gas model was installed in October 2012. Savings have been immediately apparent, although they have not been quantified. Thermostatic valves ensure efficient heating management through individual radiator control.

Multi-fuel stove

A multi fuel burning stove heats the whole house and means that they only have the gas heating on for one hour in the morning. They are able to gather waste wood to fuel the stove, meaning that they do not have to buy firewood.

Grey water recycling

Sarah has installed a diverter pipe from the bathroom which takes used bathwater to an outside tank. This can then be used for watering the garden, cleaning and rinsing and because it is situated over the downstairs toilet, it can be used for flushing. Note: a typical bath is about 80 litres of water, enough to flush a toilet 18 times!

Lifestyle

Together with recycling, composting, reducing food miles and car use, Sarah and Julie are keen advocates of washing at lower temperatures and line drying.

Next steps

Sarah's next steps include buying A+++ appliances. She would like to externally insulate the gable end of the property, and is considering a top-up of the cavity wall insulation. She would also like an electric vehicle and solar car port.