

**Property Information Sheet**



**Name and Address**

Ruth and Terry  
Lock House,  
Broomfield Road,  
Newport,  
TF10 7PW

**Property Description**

1834 Thomas Telford designed solid brick property. Modern extensions in 1984 and 2016 of brick cavity walls with rock wool infill.

**What changes have you made to your home / what green features did your home come with?**

The house had been extended to give a second bedroom in the 1880s and again in 1984, access to which was made by partitioning off a corridor through the bedrooms. A corridor and bathroom were added on the opposite side of the house in a similar style in 2016. We removed all the plaster from the solid walls and insulated them with 40 and 60mm thick woodfibre dependent on whether they were 2 or 3 bricks thick. All the walls were later plastered with lime plaster to maintain breathability and the loft was insulated with 270mm thick fibreglass. The floors were dug up and underfloor heating installed with a screed on top of 100mm thick rigid foam insulation. Under the 3 suspended floors 50mm thick rigid foam insulation was fitted between the joists. There are temperature controls in each room. 3.9kW solar photovoltaic (PV) panels were installed on the roof. Diverter switch heats our hot water. A NIBE air source heat pump (ASHP) was fitted with storage tanks and controls in our small cellar. We also fitted a mechanical ventilation heat recovery (MVHR) system. 2 Solar Spotlight tubes were fitted in a cloakroom and hall where it was not possible to fit windows. Surprisingly the prism cover collects moon light and even the light from a streetlight, meaning switching on lights is rarely necessary. Lastly, a wood burning stove by Chilli Penguin which has a small oven on the top was installed in the dining room.

**Why did you make these changes / choose a home with these features?**

The house was difficult to heat and was never comfortable. It was inefficient and required huge energy inputs. The previous occupant had a gas combi boiler, but the house was poorly insulated with many leaks. We wanted energy efficiency without losing the character of this historic house.

**What were the approximate costs of each of the changes you made?**

Unfortunately, it is not possible to give accurate costs as we were renovating and rectifying previous poor workmanship whilst also doing a lot of the labouring ourselves such as the plastering and solid wall insulation. The Underfloor heating and floor screed cost £6,221, ASHP and tanks were roughly £10,000 and roughly £7,000 was spent on the solar PV panels. £3,700 was the approximate cost of the MVHR, £712 for the solar spots and cutting off the gas supply cost £1,100.

**What have been the approximate energy savings?**

We have low energy use now that our home is more energy efficient.



What have been the benefits to you / your home?

Before making these changes, heating our home was impossible and the walls and windows would run with condensation often. Now our home is warm and draught free in winter whilst staying cool in the summer. Also, the air is much fresher so we do not need to open windows.

Who undertook the work?

iHeat based in Oswestry fitted the ASHP, they sorted out problems we had with our original installers. The solar PV panels were fitted by Pure Electric whilst EnergyZone of Cleobury Mortimer installed the MVHR.

Would you recommend them?

All of these were excellent and understood what they were doing.

Have you considered any measures but rejected them? Please give details of what and why.

N/A

Any further comments?

We found you need to do your homework and understand what is being done. We realised the initial heat pump installers may have been on courses but lacked experience and did not fully understand what they were doing.

Visiting instructions / information

Our home is open between 10am and 4pm on the 20<sup>th</sup> and 26<sup>th</sup> of October. There is limited parking at our property but plenty of on street parking nearby.