

A one-bedroom, stone-built, detached house, pre-1840s

C.H.E.E.S.E. Survey (Cold Homes Energy Efficiency Survey Experts)

CHEESE is a Bristol-based, not-for-profit CIC (Community Interest Company) that aims to reduce domestic energy losses at low cost. As my home is so small I only paid £135 and it was a very wise investment. Using a thermal imaging camera, the survey showed where cold air was entering the house; where insulation will help and any other improvements are needed. I recommend this to you, especially if you think that your home is losing heat.

Warm roof technology

A warm roof is a roof construction which has an insulation layer above the rafters and immediately below its weatherproof membrane. The benefits over a traditional 'cold roof' is that it is a breathable roof which allows moisture to escape, which in turn prevents damp and associated decay problems. It also conserves heat in my home. My bedroom, which is in the roof, only drops 2 or 3 degrees in temperature during the winter. I'm very impressed with its efficiency.

Chimney, wood burner and fireplace

The house had a very old and inefficient wood burner when I bought it. The central heating struggles to get the house above 18C and so a secondary form of heating is necessary when the weather is very cold. I also found that there were 2 'holes' in the back wall if the fireplace that went back into the thick outer wall and up towards the chimney. Three weeks ago the old burner was removed to reveal 3 holes in the wall which were attached to the chimney. So that is where all my heat has been going for the past 7 years. Chris Clements at Bath Woodburners was very patient and answered all my questions and has filled in the holes; relined the chimney with a modern flue; made a new register plate and placed vermiculite insulation around the flue and fitted new burner that meets the January 2022 efficiency levels. I'm hoping to be warm this winter!

Loft hatch

I improved the insulation of the loft hatch by covering it with layers of wool, polystyrene and foam that I recycled from others 'rubbish' that would have been thrown away. It was the best insulated hatch the CHEESE surveyor had seen through the thermal imaging camera!

Cavity wall insulation

The small, two storey extension at the back of the house has cavity wall insulation. The CHEESE survey showed that this has possibly dropped a little and I intend getting an installer to check if it needs topping up to improve its efficiency.

Windows

The front of the house has wooden, very thin double glazing, due to the stone mullions. The rest of the house is plastic double glazing that I inherited. The C.H.E.E.S.E. survey found that the windows are fine but need resealing or improved sealing. I have tried to find a recommended trader to do this, but so far have been unsuccessful.

Soft furnishings

The bedroom has thick, lined curtains and a blind, which form a good barrier to the cold. I intend to buy similar curtains for the living room as well.

I will also buy thicker rugs to go on the wooden living room floor and I will make a door draught excluder to stop heat transferring between downstairs and upstairs.

Dehumidifier

I use a dehumidifier to reduce the humidity level in the house. One side of the house has soil up against it to about 60cm / 2' and although that wall has been tanked before I moved in, builders had carelessly breached the seal when hammering nails to attach skirting boards. The dehumidifier is very good at removing moisture. It also has a laundry setting which I use very occasionally if I can't dry my washing outside. It is cheaper than using a tumble drier.

Radflek

A few years ago I used a thermal imaging camera to test the efficiency of Radflek to reduce heat transfer from central heating radiators through external walls. On two consecutive winter days, when the night temperatures were very similar, I took readings on the outside walls where radiators were inside. I then fitted the Radflek, which is thick reflective foil, behind the radiators. The next night I again used the thermal imaging camera to see if there was any difference in heat transfer. And there was a noticeable difference. Now the radiators are heating the room, not the walls. The report is available on the Climate Friendly website.

Caulking

I am hoping to have the gaps around my windows; between the floor and the skirting boards and around water and other pipes filled/caulked to reduce the draughts in the house and the loss of heat.