

Property Information Sheet



Name and Address

St Catherines,
15 High Street,
Clun,
SY7 8JB

Property Description

Grade II listed property built around 1750, extended in 1890s and again in 1970s. The main structure is formed of stone and rendered in lime. The two extensions are built of brick. The structure in the cellar is thought to be Tudor.

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

Starting in 2021 we have carried out a large refurbishment the property, including rewiring and installing a central heating system. The property had many stud partitions formed when it was refurbished by the County Council in the 1970s. We have removed nearly all of these stud partitions and returned the layout of the property to what it likely was in the mid-1700s. The property has no gas supply and no oil or LPG storage. It was heated by many small storage heaters. The new central heating system comprises radiators run off a Mitsubishi Air Source Heat pump positioned in the rear garden area. The radiators were sized to function efficiently with a lower flow temperature and connected with larger diameter pipework to ensure that the radiators can heat the rooms to a comfortable level. We have gradually refurbished on a room-by-room basis and have installed insulation to the inside of all exterior walls. We used a Gypliner system which maintains a 50mm air gap between the external wall and the insulation layer. We have also topped up the glass fibre loft insulation, in areas that can be accessed, by at least 200mm on top of the existing insulation. The windows and door to the rear of the property were all replaced with new high efficiency double glazed units. The rear of the property was re-rendered in lime. All works were discussed and agreed with the County Council's Listed Building Consents team.

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

We bought the property clearly understanding that for it to be a comfortable home we would need to have a functioning heating system, and importantly one that was affordable to run. When we moved in there were about 25 old and inefficient electrical storage heaters. We could not turn all of them on, as some were unsafe, but heating just three rooms was costing in excess of £15 per day, particularly as the storage heaters only stayed warm till about until about 2.00pm. After that time, we needed to supplement heating with other forms of electrical heating. There was no oil or LPG storage and having one of these fuel sources installed would have been costly and have entailed an ugly structure in the garden area. We knew that we would need to install a wet heating system, and so we considered the various options that were available. Namely Oil or LPG or electric heating. Given that each of these systems would need new radiators and pipework our decision on fuel supply hinged on the relative costs of a fuel storage structure and a suitable boiler, or an air source heat pump (ASHP). At that time in 2022 installing an air source heat pump was considerably more expensive than installing storage and a compatible boiler. However, at that time there were government grants available for both Air source and Ground source. We quickly decided to go the electric route mainly due to the anticipation that Oil and LPG prices would increase more than electricity. We had quotes from about 5 companies and in the end, we went with the most expensive. However, the system they quoted for provided a larger heat pump from a leading and well known manufacturer (Mitsubishi), with larger pipework and a larger amount of stored hot water. Some of the other companies quoting were focussed on one type of

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equipment with a cut down specification, and equipment from manufacturers I had never heard of and whom I could find very few reviews. In the end we decided to go for the better bigger installation but with a company that we had more confidence in. The company we chose also agreed to apply for the Government grant and importantly agreed that they would guarantee the installation would be operating before the impending cut-off date for grant applications.

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

The ASHP cost approximately £23,000 although the Government grant covered about 50% of that. The costs we received for Oil and LPG systems were around the £8000 to £10000. The cost for replacing all the 4 rear doors, 10 windows in hardwood (as per the conservation officers request), removing the damaged pebbledash as well as making good the structure and re-rendering in limes. All followed by redecoration to all of the rear of the property was approximately £35,000. The windows and doors were a nonstandard size and so all had to be bespoke manufactured in a thick section of Hardwood. This added significantly to the costs.

What have been the approximate energy savings?

It is impossible to say what savings the insulation and the heat pump have delivered, as we never really used the older system and for the first few years we lived in only 3 rooms. Now we have a system that can heat different zones and so we do not need to heat the whole house. Having an electric car means we get a very good night time electricity rate 7p per kWh. This means that the heat pump and water heating also get this rate. We have been experimenting with running the heat pump at night and reducing the use of electricity during the higher tariff periods during the day.

What have been the benefits to you / your home?

We're much more comfortable. The property can be heated to an adequate level where we can use all rooms during cold periods.

Who undertook the work?

Rural and Country installed the ASHP and heating system. Wyre Valley homes installed the windows, re-rendered and redecorated the rear of the property. David Smith, a bespoke Joinery shop near Wrexham, manufactured the external joinery. As we refurbished rooms gradually, I installed most of the internal insulation, but with the help of a number of local trades people.

Would you recommend them?

I would be happy to recommend all of the contractors mentioned above.

What else would you like to do?

The next project is to have a solar and battery storage system installed, hopefully in the new year.

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

We rejected Oil and LPG mainly as these fuel costs seemed to be rising faster than electricity. Ground source heat pumps, although more efficient than Air Source were fantastically more expensive, and the payback period was 15 to 20 years. This was not helped by the fact that our garden slopes and so we would have needed to bore 6 to 8 vertical 150metre holes for the system.

Any further comments?

I have experimented with directly heating a wall by fixing pipework to the wall in a fashion similar to that used for underfloor heating. We installed this on a very thick internal wall in one room on the ground floor. If I had realised how efficient this system was, I would have used it in more places in the house. Obviously, this only works when there are suitable solid thick internal walls.