

aroTHERM plus 5kW

Wells-Next-the-Sea North Norfolk



Project reference Retro-fit

Property type:

Victorian two bed property

Requirement:

HFC-free heating and hot water for a family of four

Technology used:

1 x aroTHERM plus 5kW air source heat pump
1 x Heat pump interface
1 x uniSTOR 150litre hot water cylinder
1 x sensoCOMFORT system control

Installer:

Ecoplumb

Client:

The Rose/Wise family

The Challenge

This Victorian home started out as three small terraced cottages which were combined into one property by the time Chris Rose and Sarah Wise purchased it in 2001, as a family home for themselves and their two children. As long standing environmental campaigners, Chris and Sarah renovated and updated the property before they moved in, with eco-friendly products and services at the heart of the renovation. With upgraded loft and additional external wall insulation, solar PV and solar thermal contributing towards the hot water requirements, argon-filled double glazing, a green electricity tariff and PVC-free wiring, the property was as green as they could make it except for their heating and cooking which relied on mains gas.

The Solution

In 2020, having replaced the gas cooker with an electric cooker, the couple decided to replace their condensing gas boiler with an air source heat pump. Chris and Sarah turned to Norfolk based installer Alastair MacEwan at Ecoplumb to design a system for their home. The aroTHERM plus uses a natural refrigerant, R290 which is not only HFC-free but also has a low Global Warming Potential (GWP) of just 3. Ecoplumb worked with Vaillant to design a simple system using a 5kW aroTHERM plus to provide heat to the radiators and the uniSTOR 150litre hot water cylinder for the family home.



Comfort for your home

As the aroTHERM plus is MCS approved, the Rose/Wise family will be eligible for the domestic Renewable Heat Incentive (RHI) where they will receive repayments over the next seven years. Additionally with a high SCOP of 5.03, the family now has one of the most efficient heat pumps on the market.

Why Vaillant?

Chris Rose says: "We both worked on Greenpeace campaigns in the 1990s, aimed at preventing HFCs being widely adopted in heating and cooling systems as they are super-powerful greenhouse gases. Unfortunately, many heat pumps, while great technology for replacing gas boilers, still use HFCs as heat-exchanging gases. As with fridges and aircon systems, HFCs can always leak out into the atmosphere, adding to climate change. So, we wanted a HFC-free system, and when Vaillant's new aroTHERM plus became available in the UK, it was a natural choice for us".



Heating Hot water Renewables

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