

**Building type:**

Three-storey detached property with five bedrooms and five bathrooms

Requirement:

Efficient and eco-friendly heating system providing heating and hot water for a family of four

Technology used:

- 1 x aroTHERM plus 12 kW air source heat pump
- 1 x Heat exchanger module
- 1 x Hydraulic module
- 1 x uniSTOR 300 litre hot water cylinder
- 1 x 40 Litre buffer tank
- 1 x sensoCOMFORT system control

Installer:

FDG Group

Client:

The Mistry Family

The Challenge

Local architect Mr Mistry was searching for a new heating system to replace a gas boiler for his five bedroom home in Leicestershire. After conducting extensive research into renewable heating options, Mr Mistry set his heart on an air source heat pump as he was keen to find a more eco-friendly and efficient way of heating his home.

Built in 2000, the client's home was well suited for a renewable heating solution, having previously invested in renovation works within the home along with solar PV panels and underfloor heating. However, with a high hot water demand due to the property having five bathrooms, a high-performance solution was required to comfortably meet the homeowner's needs. After reviewing renewable options further, it was clear that Mr Mistry didn't want a glycol filled system used within the internal heating system.

The Solution

The client turned to renewable installer's FDG Group who upon undertaking a site survey and performing heat loss calculations, FDG Group specified the aroTHERM plus alongside Vaillant's heat exchanger module as the mechanical separation for the system, ensuring that glycol was not used within the home as requested.

To support the system flow temperature design, FDG group also recommended upgrading the radiators.

With the aroTHERM plus' high efficiency, green credentials and the ability to create a high-performance system solution meant it was the perfect solution for the homeowner. Not to mention the added bonuses of its ultra-quiet operation and slick design.

After installing the aroTHERM plus system, the homeowner now benefits from a highly efficient but low-cost heating and hot water solution. The system is complemented by Vaillant's sensoCOMFORT controls, allowing for seamless communication with the unit to deliver weather and load compensation technology, further improving the efficiency of the entire heating system. Additionally, the energy generated from the solar PV is used once a week during the legionella cycle when a higher flow temperature is required, minimising energy cost.

By choosing Vaillant Renewable Partner, FDG Group, the homeowner benefits from a free extended guarantee and can apply for the Renewable Heat Incentive (RHI). Thanks to the aroTHERM plus' MCS approved status, the client will be eligible for RHI repayments over the next seven years, achieving even greater savings on their energy bills.



Comfort for your home

Why Vaillant?

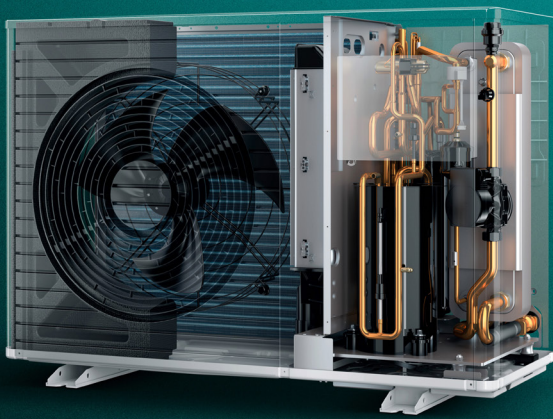
Stephen Allan, FDG Group says: "At FDG Group, we choose to partner with Vaillant for our renewable heating division because their products are first class and the technical support is on point. As a top-rated installer on Checkatrade and endorsed by Which? as a trusted trader, we require the best for our clients. We have installed many heat pumps previously but Vaillant is superior. Their products are high quality, quiet and efficient.

"We were honoured to be able to install one of the first aroTHERM plus heat pumps in the UK. It's fair to say this is a game changer!"

Mr Mistry, Homeowner says: "The aroTHERM plus has now been running for one month and its been simple to adapt to and use the heat pump. We know we are choosing a product that is great for the environment reducing our carbon footprint and its also reducing our heating bills and reduces our reliance on gas.

"The heating came on in early September for the first time which was unexpected, but the external weather sensor monitoring the outdoor temperature noticed a drop in temperature, automatically turning on the heating making sure we didn't wake up to a cold home.

"Overall a great system, the free extended guarantee is also a reassurance and gives me confidence knowing that I don't have to worry about an independent policy to cover the heating and hot water system."



Heating Hot water Renewables

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