



Case study

**Underfloor Heating
& Air Source Heat Pumps**

Rue des Pres, Jersey

OMNIE^o

Underfloor Heating
For every floor.
For every home.

Underfloor heating and heat pumps form the perfect partnership in Jersey.

Very quick and easy to install thanks to unique serpentine pipe channels

A custom residential build in the Channel Islands has been completed where the heating and hot water will be provided by an air source heat pump from our high performance OMNIE range. Its output and efficiency will be optimized by coupling it to our very own underfloor heating system.

All of the building services work on the Jersey property, at Rue des Pres, was carried out by a local building contractor. This included the laying of the OMNIE pipe and staple system, fixed at 150mm centres across the ground floor, and the equally popular TorFloor system installed on first floor level. The heat pump selected to serve the needs of the three bedroom house, each with its own en-suite bathroom, is an LWD70A/SX. This heat pump is manufactured by hand in Germany and is exclusively available in the UK through OMNIE.

The four zones upstairs contain a total of 392 metres of pipework connected to a 7-port manifold, which is also part of our independently tested OMNIE range. While this arrangement

High performance heating solution for timber floors

offers a flow rate of 275 litres an hour, a similar sized manifold located downstairs, off the hallway, can deliver 450 litres per hour. This feeds the kitchen-dining room, the living room, study, hall and cloakroom. Once the continuous lengths of heating barrier pipe were clipped down over the insulation laid on the ground floor substrate, a three-inch sand and cement screed was spread throughout. This provides a good thermal transmittance and is an ideal means of helping a heat pump to run at a continuous low temperature, which maximizes the energy efficiency.

Upstairs, 12mm pipe was pushed directly into the unique serpentine pattern of the 22mm thick TorFloor panels with their foil diffuser layer and thermal or acoustic insulation filling the space between the joists. The unique pattern in the TorFloor panel allows for super-fast installation and reduces costs as it forms part of the certified floor deck.

This highly environmentally friendly self-build project in a very desirable location underlines

Renewable heat source – Heat Pump specified by OMNIE

the ability of our OMNIE range to offer affordable and energy efficient solutions for both bespoke and mass market developments. OMNIE systems span not just air and ground source heat pumps along with the different underfloor delivery systems, but also advanced thermostat and control options. Every client and project always benefits from our free design service and project management assistance from order to installation and aftercare.



Talk to a project expert today.

A local OMNIE expert is ready to answer your project queries.

Call us on **01392 36 36 05** or visit **omnie.co.uk** and enter your postcode.

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