

Case Study: Combating Fuel Poverty in the Social Housing Sector.

Description: Terraced House retro-fit heat pump

ThermaSkirt Profile: Urban LT in Cricket White

Client: St Vincents Housing Association



ThermaSkirt enabled an air-source heat pump to be retrofitted with minimal disturbance and loss of wall space.

The Challenge:

Combating fuel poverty is a major challenge for Housing Associations and RSLs as they often have stocks of older properties with hard-to-treat characteristics, and many tenants in need of lower fuel bills. When St Vincents HA decided to commence a programme of renovation on their terraced houses, they considered all aspects, including the use of an air-source heat pump to reduce running costs. When it came to the choice of emitters, they faced a dilemma. Fitting under-floor heating was impractical as it would entail major disturbance to the property and require the tenants to 'de-camp' to hotels during the building works. Similarly, the over-sized radiators that heat pumps need to deliver enough heat, would steal even more space from properties already struggling for room, as the outside solid walls were re-insulated on the inside, losing on average 4" off the room.

Following a visit to the GreenBuild Expo show in Manchester, Sustainability Manager immediately saw the opportunity to retrofit heat pumps with minimal disturbance and loss of space by using the ThermaSkirt system. ThermaSkirt replaces the skirting boards and radiators in one, and thus provides the extra surface area to provide sufficient heat at the lower flow temperatures of heat pumps, and very often can use the existing radiator pipework. A trial installation was quickly organised.

The Solution:



As Seen on Dragons Den, ThermaSkirt is a radiant panel designed to replicate a skirting board providing a gentle and comfortable heat, all around the room at low level – just like UFH. The skirting boards are made from a very energy efficient aluminium polymer, with the hot water pipes ‘moulded’ into the back. When the water from the Air Source Heat pump passes through the aluminium panels, they heat up and radiate warmth into the room. Being above ground, the system was installed with the minimum of fuss and disturbance using the original pipework, and responds very quickly whatever the floor covering – just like a radiator.

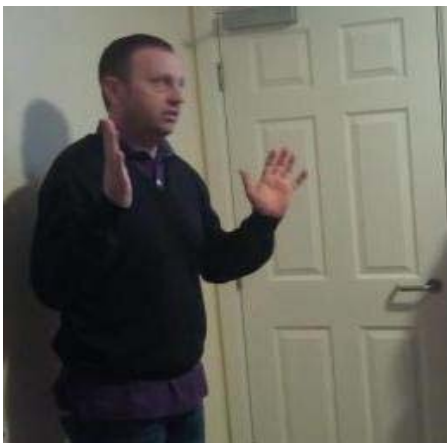
When ThermaSkirt was installed, the installers could utilise the original radiator pipework and therefore installation was completed in a couple of days. Under normal circumstances, the occupants could still inhabit the house, as the furniture need only be moved into the middle of the room to access the walls to re-skirt them.

If a house is undergoing a major refurbishment, as ThermaSkirt provides the pre-finished skirtings and heating in one, the system can be surprisingly cost effective compared to traditional radiators and new skirting boards. As a result, ThermaSkirt won ‘Product of the Year’ at the National Heat Pump Awards.



Despite using an air-source heat pump, useable space was actually increased by using ThermaSkirt in all the rooms.

The Result



Patrick McKendry explains their Eco House

"At St Vincent's, we are fully retro fitting properties with the very latest sustainable and energy efficient products. After investigating ThermaSkirt we thought it would lend itself perfectly to what we are trying to do. Upon fitting an air source heat pump, we found that ThermaSkirt worked well, both in terms of improved performance and energy efficiency and thus potentially easing fuel poverty and reducing CO2 emissions.

ThermaSkirt carried out the installation with military precision; they kept us informed throughout the install and once complete, the system at first glance looks like any new well-fitted painted skirting but has the added benefit of effectively heating the rooms efficiently and economically."

Patrick McKendry
Sustainability Manager, St Vincents Housing Association