

Willows project disproves myths surrounding heat pumps in older buildings

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A 180-year-old home's heating system has been revolutionised with the introduction of an air source heat pump, combating concerns that heat pumps are unsuitable for older buildings.

Leading manufacturer of renewable heating technology, STIEBEL ELTRON UK, provided its knowledge, support and heat pump hardware to transform the building's heating system.

The project saw The Willows, which was built in 1840 in Leominster as a former farm workers cottage, renovated so it could adopt sustainable heating technologies successfully.

Challenging the misconception that heat pumps are unsuitable for older structures, the project saw a new underfloor heating system implemented in The Willows, powered by STIEBEL ELTRON'S WPL 25 air source heat pump.

Supported by STIEBEL ELTRON's expertise in the renewable heating sector, the installation was led by underfloor heating specialist, Roth UK, who set about changing the building's infrastructure with a view to maximising the efficiency of the heat pump which would be implemented.

As a result, the team dug up the home's earth floors and relayed them, installed modern insulation into the building, replaced the dwelling's original windows with new ones, and installed a new roof.

Following this, Roth UK introduced underfloor heating as a single heating system for the property, with the modifications to the building reducing the potential for heat loss.

The successful implementation of the new system to accommodate STIEBEL ELTRON's heat pump ensures



the building will be powered by renewable energy, while at the same time maintaining the aesthetics of the building which make it unique.

"The heating system we have applied marries the old with the new, allowing us to keep the character of the building while using modern technologies and design to ensure it runs efficiently," Graham Moore, Roth UK General Manager, said.

The project was based around an all-encompassing approach to keeping the building's heat loss to a minimum, such as introducing new insulation and windows, to ensure it was a success.

He said: "A building is always going to have heat loss, but it's about minimising that as much as possible. When reducing heat loss in buildings you need to take a holistic approach.

"There needs to be education around bringing the building up to scratch and there needs to be knowledge shared about what measures will bring it up to code so the building can fully utilise technologies such as heat pumps."

The sentiment is shared by STIEBEL ELTRON, who have been a driving force for the adoption of heat pumps in the UK.

Mark McManus, STIEBEL ELTRON UK Managing Director, said: "One of the biggest myths around heat pumps is that they are unsuitable for older buildings, but this couldn't be further from the truth.

"The Willows is a prime example of how an all-encompassing approach, which looks at all aspects of a home's heating, will see it adopt sustainable technologies effectively. Graham and the team at Roth UK have done a fantastic job in doing this.

"The building had fairly major measures undertaken to reach the highest efficiencies, which is what everyone aims for. But where this is not possible, heat pumps can still be applied to save carbon and reduce bills with solutions available, such as using bigger radiators.

"With modern advances in technology, heat pumps should always be considered when boiler systems need replacement or an upgrade – no matter the age of the home."

Providing the most innovative technologies, STIEBEL ELTRON also delivers comprehensive training to installers, empowering them to share knowledge and advice with their customers during installation, as well as being able to find solutions when problems arise.

With STIEBEL ELTRON galvanising the UK heat pump market, Graham said that they chose the WPL 25 air source product based on the company's longstanding reputation in the renewable heating technology sector.

He said: "We decided to use STIEBEL ELTRON's air source heat pump because it is the best on the market and it comes back to the simple fact that you cannot beat quality, which STIEBEL ELTRON's products have in abundance."

Mark added: "We were delighted to support Graham in implementing our heat pump in The Willows. Roth UK and their ability to advise customers with their knowledge of underfloor heating systems with a view to getting the best results is second to none.



"For anyone who is thinking about implementing a heat pump in their own home, we will happily talk them through how this can be done."

For more information regarding implementing heat pumps or underfloor heating in your home visit: www.stiebel-eltron.co.uk or https://www.roth-uk.com/.