

Scandia-Hus Adelia Show Home, West Sussex



Building type:
High-end eco-friendly show home

Technology used:
geoTHERM heat pump



Project background

- Energy efficient timber frame, self-build show home in West Sussex
- Demonstration of renewable heating system in action
- Eco-friendly, reliable and achievable

System specification

The 2,799 sq. ft. Adelia show home with its ski chalet design, sleek fittings and furnishings and underfloor heating would not naturally be associated with the words sustainability and environmentally friendly. However, this timber frame Scandia-Hus show home based in West Sussex combines energy efficiency with all the comforts of a stylish, modern home.

According to Government figures the UK self-build market is worth £4bn per annum; however, for most the idea of an eco-friendly self-build home conjures up ideas of seventies sitcom 'The Good Life' coupling compost toilets with becoming totally self-sufficient.

Therefore, to actively demonstrate the reliability and potential of renewable systems in a modern self-build home,

Vaillant has partnered with Scandia-Hus, the UK's largest designer and supplier of self-build Swedish energy-saving homes.

Self-builders often choose rural, isolated locations to build their homes, away from built up areas with the opportunity to go off-grid. As a result the specification of a Vaillant geoTHERM ground source heat pump is a practical example of how renewable technology can be the perfect answer when it comes to heating a home of this type.

Installing a geoTHERM ground source heat pump is a practical way of reducing a home's carbon foot print by using energy from the ground to provide heating and hot water. Combine this with a highly insulated timber frame structure; the stylish self-build home becomes very energy efficient.



Outcome

Integrating ground source heat pumps into a new build property is straightforward when the ground works are underway, while system optimisation - courtesy of Vaillant's weather compensated controls - ensures the heat pump will always perform at maximum efficiency to minimise energy consumption.

Scandia-Hus can now offer its prospective clients a tangible example of how a timber-framed home can work in perfect harmony with an energy efficient, reliable and environmentally-friendly heating solution.

The geoTHERM ground source heat pump is recognised by the Noise Abatement Society and awarded a 'Quiet Mark' accreditation for its exceptionally quiet operation. It is also eligible for funding via the Renewable Heating Incentive (RHI), which can provide homeowners with an additional income source from the sale of excess energy production.

Why Vaillant?

Derek Dawson
Managing Director Scandia-Hus

"The aim of the show home is to ultimately provide inspiration to self-builders looking to create their bespoke energy-efficient home. By having a fully functioning ground source heat pump which clients can see in action and ask questions about, we hope to encourage the increasing numbers of self-builders to consider renewable solutions as an ideal answer when it comes to their heating and domestic hot water needs. Vaillant's wide range of domestic renewable solutions, technical expertise and service support made them the ideal partner for this initiative."



John Bailey
Sales Director - Commercial and Renewable Systems, Vaillant UK:

"The Scandia-Hus show home highlights the many features of an eco-friendly, renewable heating system. Easy installation, reliable performance, optimised control and energy savings are just some of the clear benefits which self-builders can now take advantage of."

