

# Case Study Hanse Haus - Oddington, GB



John Guest Ltd.





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Located in the picturesque valleys of rural Oddington, the new Hanse Haus is a remarkable piece of contemporary architecture. Equipped with JG Speedfit underfloor heating using a PB-1 layflat piping system, the development holds truly outstanding energy-saving properties. Designed by Hanse Haus Ltd., the newbuild Oddington dwelling is defined by its high sustainability credentials and great aesthetic value.



#### **The Oddington Project**

The house is a four-bedroom, two-storey building with total quadrature of 235.94 m<sup>2</sup>. Given the size of the property, choosing the right heating system is of crucial importance for ensuring efficiency.

The main source of heat for the Oddington Hanse Haus is a ground-based heat pump, which as a concept is gradually proving to be the renewable technology of the future. The system is using a vapour compression cycle, where pumps take low-grade warmth and concentrate it to a higher temperature that is then used to heat up the building.



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Due to the low temperature flow at which the heat pump operates, UFH (under floor heating) made from Polybutene-1 is the ideal technology for distributing warmth throughout the house.

#### JG Speedfit's involvement

Being the sole plumbing and heating contractor of Hanse Haus for the UK, Synergy PHR has appointed JG Speedfit as the exclusive supplier of the underfloor heating system installed.

Darren Farley, director of Synergy PHR commented – "Since partnering with Hanse Haus in May 2012 Synergy have carried out installations in seven properties in the UK all with full ground and first floor UFH by JG Speedfit. We have used both staple and over fit systems that proved to be very easy to install, saving time and effort. The cooperation with the push-fit people was very satisfying from the initial contact with their sales representative, through to CAD specification, delivery and installation. On completion, the JG Speedfit engineers and technical support were always there to help with system setup, testing and control."

JG Speedfit offered Synergy PHR comprehensive after-sales support, assisting throughout all project stages with a particular focus on pipe layout design and installation advice.

Darren continued – "Synergy currently have seven new jobs to complete with JG Speedfit in 2013 covering the UK, Scotland and the Channel Islands. I am looking forward to these and more successful projects in collaboration with Speedfit, using their superb products and services!"

#### The advantages of the JG Speedfit UFH system

The technology behind the JG Speedfit UFH model is similar to the philosophy behind the Hanse Haus concept – innovation towards energy preservation and efficiency, comfort, aesthetics, long service life and value for money.

#### **Benefits**

- Operating at much lower temperatures compared to conventional radiator circuits, the PB-1 UFH system helps reduce energy consumption, resulting in lower heating costs.
- Installation is simple and requires no clumsy tools due to the flexibility of the PB-1 layflat pipe.
- Even distribution of temperature is ensured as the whole floor acts as a radiant heat source.
- The circuit is unobtrusive and discreet, which gives more freedom to interior design, allowing for additional spaces to be decorated accordingly.
- The system makes use of multi-zoning, which means that each room benefits from individual time and temperature control. That flexibility alone brings significant value for money as no 'paid-for' energy goes to waste.

The compatibility of the JG Speedfit UFH model with other renewable heating technologies such as condensing boilers, solar power and heat pumps makes it the sustainable heating solution of the future.

## Polybutene-1 Case Study



#### **Technical Info**

Project: Upper Oddington, Gloucester

Developer: Hanse Haus

Tech Support: Andy George, JG Speedfit

Project Type: New Build

Project Size: 235.94 m<sup>2</sup>

Application: Under Floor Heating

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