

# Case Study

Flint Hall Farm  
New Build Development



**Project Value – £120k**

**Completed – October 2012**

## Challenge

With a total resale value of £3.5million the new construction of three bespoke homes at the remote Flint Hall Farm development in Warwickshire was going to be a challenge let alone to offer the specification which this kind of development deserves. This rural site is located in the remote countryside just outside Warwick. The site is ideally located with close motorway links however with its remoteness came a different challenge for the developer, the challenge of bringing main services to the site. It was deemed that a gas main would not be made available to the site therefore the developer as part of their planning permission had to focus on sustainable technologies to heat the three properties.



Our design team at Envirogen were delighted to offer a solution to the problems posed by this project. The development was to be heated by a mixture of radiators and underfloor heating which was designed to operate at 55°C due to the high spec floor finishes being employed.

## Solution

Our design team opted to use an Altherma HT system supplied by Daikin UK Ltd in each of the three properties offering maximum flow temperatures of 80°C and a SCOP of 2.8.



The heating system for each plot was designed using hevacom heat loss software to build a thermal model of the properties. Each property is served by a 16kW Altherma High Temperature System installed with a Daikin 260L Cylinder to ensure the hot water demand of the property is catered for.

Each plot is controlled via a mini BMS system which offers control of each zone of the building individually offering multiple temperature set points for ultimate comfort. The system is integrated with a state of the art home management system as is to be expected from a property of this high specification.

