

# HIGHFIELD - CHOLESBURY

One of the most energy-efficient self build homes in the UK

Project: Highfield, Cholebury

Company: Frame Technologies

Sector: Self Build

Technology: TechVantage™ T



## Overview:

Following extensive research, an environmentally conscious couple appointed Frame Technologies to develop a sustainable timber frame home which has recently been hailed as one of the most energy-efficient self build homes in the UK.

The family purchased Highfield, a 1930s unattractive dormer bungalow with potential. In an excellent location with amazing views overlooking the Chiltern Hills, the decision was made to replace the lacklustre property with an energy-efficient new home.

## Meeting the Brief:

The objective was to create an energy-efficient home without the excessive use of bolt-on technologies. On top of this, the ecological impact of the development was of great importance.

Plans were passed for a traditional style six-bedroom new-build home, using timber frame to its full potential to create a revolutionary living space that doesn't rely on any space heating or cooling. This ultra-low energy home was based on the unique TechVantage™ T system – a solution designed to deliver superior thermal and airtightness properties that is ideal as the basis of a modern energy-efficient building. The 310m<sup>2</sup> space only took three weeks to make watertight from delivery.

## Achieving The Optimum Performance:

The client wanted to build the most thermally efficient house possible and Frame Technologies was able to offer all the options they required. The TechVantage™ T system fitted their needs perfectly and helped to achieve a U-Value of 0.11W/m<sup>2</sup>K. Alongside the Twin Frame System, the house also shows off the best of timber design with vaulted and semi-vaulted ceilings in each room that have exposed glulam purlins. The home uses the latest in sustainable materials and building design to create an aesthetically attractive, warm and cosy, modern family home.

The homeowner commented: "This self-build project has been pretty straightforward. We have been lucky to have engaged with contractors and suppliers who have been great to work with, but more importantly understood our objectives and have had an active input into many aspects of the build."

