



# Passivhaus home on the Isle of Man

## Four-bedroom Manx vernacular cottage



### Project Description:

To develop a unique Passivhaus standard residence with the external appearance of a typical Manx vernacular cottage in an elevated, conspicuous location with breath-taking views overlooking the south coast of the Isle of Man.

Having been approached by a client with planning permission to build a house using traditional construction methods, Complete Construction Services (CCS) offered the Beattie Passive Build System at a comparative price, even providing a developed roof space. The client embraced the idea and the revised Building Regulations were fast tracked through by Building Control within a week, such was their delight at the specifications of the system.

The build progressed quickly and smoothly with the structure being manufactured on the Isle of Man by CCS operatives who had undertaken the course at the Beattie Passive Training Academy.

### Interview with the client, Kevin Kniveton

#### 1. When and why did you start out planning to build your own home?

We have always wanted to build our own home and we were fortunate enough to have land in the south of the Island where there was an existing ruin, which was knocked down and replaced by a Passivhaus.

#### 2. What were your first impression of Passivhaus when suggested by James Vickers at Complete Construction Services?

Having an engineering background I was very interested in the idea of Passivhaus and the potential benefits. Initially I had to convince my wife but she is a convert now!





### 3. How did you find the initial Beattie Passive design process / working with SNX and James Vickers?

It worked very well as the original construction drawings were changed from a traditional build to Passivhaus but took no longer and we had no concerns about the change in construction method.

### 4. What impressed you most about build process?

We were struck by the attention to detail such as every joint and seal is 100% accurate throughout the entire build. The speed of the on-site manufacture and delivery was similar to a traditional build but the quality and level of detail provided by CCS was impressive.

### 5. What were you most looking forward to about your new home?

As this was a Passivhaus project we were most looking forward to seeing just how much energy savings we would enjoy. This was our family's first proper home (having lived in a small flat previously) and as an engineer, the technical side interested me from the outset.



### 6. What has been the experience of living in a Passivhaus and how does this compare to a traditional house?

**Minimal level of external noise** is noticeable; we live in a windy spot overlooking Port St.Mary and the triple glazing and overall insulation has been a revelation! Furthermore, the solar panels provide us with very hot water and we've noticed a **better level of air quality** within the home.

### 7. Is there anything that has been a surprise about living in a Passivhaus?

The **overall performance and warmth** of the house **stays constant throughout the year**, regardless of seasons. Despite being a traditional style of home, the Passivhaus element takes it to another level.



"My experience of my new passive system home has **surpassed all my expectations**. I knew that my utility bills would be a fraction of what I would ordinarily pay in a traditionally built home, but even I was **surprised at how low my quarterly bill** over 3 of the most demanding months up to the end of December has actually been. Knowing that future bills will decrease much further still when the solar thermal takes over the domestic hot water production and with lower demand generally, I just can't understand why all homes are not built this way."