



Custom Built Passivhaus Standard Homes

Graven Hill | MMC | Energy Efficient



01953 687332 | beattiepassive.com





The UK's largest custom-build housing project

Graven Hill is a large self-build and custom-build housing development in Bicester, Oxfordshire. It is the largest project of its kind in the UK, with over 1,900 individual plots available for people to design and build their own homes.



We built 48 properties to the Passivhaus standard at Graven Hill. Of these, 27 were officially certified by the Passivhaus Institut in Germany. All the homes we built are energy efficient and sustainable, with low environmental impact.

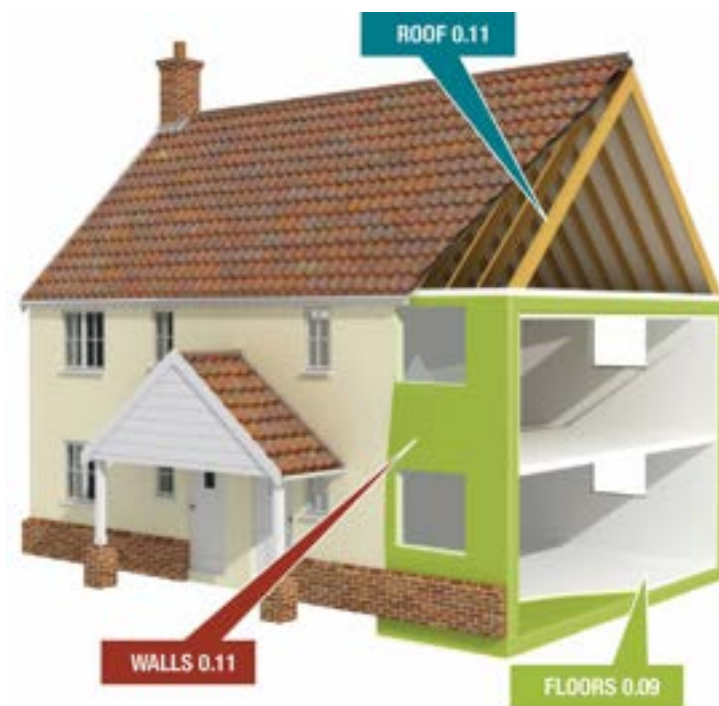


Your proven partner for large Passivhaus projects

Over the past decade, Beattie Passive has built over 450 low carbon and Net Zero homes to the Passivhaus standard. We have the knowledge, experience and expertise to deliver Passivhaus at pace and scale.

Building Passivhaus at Graven Hill

Imagine an energy efficient home with a low or even Net Zero carbon footprint, a constant supply of fresh, filtered air to breathe and high levels of thermal and acoustic comfort. You're imagining a Passivhaus.



Passivhaus - the gold standard of energy efficiency

Beattie Passive has developed an award-winning, certified timber frame build system that simplifies the delivery of Passivhaus.

Our system creates an airtight structural thermal envelope that can reduce heating demand by up to 90%.

Here's a few of our other Passivhaus projects...



A Passivhaus needs as little as 10% of the energy required by a typical central European building. Homeowners benefit from lower heating bills and social housing providers specify the standard to tackle fuel poverty.





Client	Graven Hill Development Company
Location	Graven Hill, Oxfordshire
Brief	To build 48 homes using modern methods of construction (MMC)



Net Zero is your vision. Passivhaus is our solution.

One of the simplest ways to achieve Net Zero is to build a Passivhaus and then add a source of renewable energy. Because the energy demand is so diminished, it only takes a small amount of renewable energy to balance it out.

Working with our clients to deliver Passivhaus homes

At Beattie Passive, we work in partnership with you to deliver Passivhaus homes.



3-Bedroom Terrace

Our 3 bed terraces are perfect for those looking for flexibility in terms of layout and finish.



2-Bedroom Terrace

Our 2 bed terrace homes provide flexibility and Passivhaus certification as standard.



1-Bedroom Coach House

The perfect starter home. Intelligently planned to provide the best in space and comfort.



2-Bedroom Coach House

A 2 bed detached house, built to Passivhaus standard. Intelligently designed and open plan.



Custom Build

A selection of custom build homes delivered to Passivhaus standards specifically for Graven Hill.



Golden Brick

We'll work with you to make your Passivhaus dream a reality with a Golden Brick plot.

Local Homes. By Local People. For Local People

We set up a Flying Factory to deliver all the homes at Graven Hill. By manufacturing offsite and employing local labour and supply chains, we're able to dramatically speed up delivery and reduce our carbon footprint.



In Focus: The Coach House

A contemporary 1-bedroom Coach House designed to make the best use of available space and deliver Passivhaus performance in terms of energy efficiency and comfort. All our modular homes are capable of achieving Net Zero.



Q&A

Erlind Hoxha

We talk to our client about their experience of designing and building a Passivhaus using the Beattie Passive build system.

What made you choose Graven Hill?

I was initially attracted to Graven Hill because the close proximity of the train station made it very convenient for me.

What attracted you to the Coach House?

I loved the modern design and the contemporary aesthetic - it's the building style of the future! It was much more interesting to me than the boring, old fashioned red brick houses. It was also under budget for me and I feel it was a fantastic offer for the price.

What do you like best about your new home?

The MVHR system - I like it a lot. I really appreciate the cleaner air! I also love how energy efficient the house is, as this was an important factor for me. It's much bigger than I thought as well. It's a one-bedroom house, but I could very easily turn the office into a second bedroom if I ever need it.

Did you know anything about Passivhaus prior to enquiring about the Coach House?

I'd heard about eco-houses and things like that before but, to be honest, I didn't know much about Passivhaus or the Beattie Passive system. However, after doing my research, I was very impressed with how energy efficient a Passivhaus is, and so become more interested in owning a Passivhaus home.

Have you noticed any of the benefits of Passivhaus since you've been in your new home?

The bills! I've not been here for long, but already I've noticed a significant reduction in my gas bill. The new triple-glazed windows are excellent for noise cancellation - I shut my windows and I can't hear anything from outside, even with builders all around the house! I've also noticed that, with the MVHR, bad smells from cooking and condensation in the bathroom are removed so quickly and they are never a problem anymore.

Any additional benefits you have experienced?

At some point in the future, I would like to build an extension onto my home. That's why the Beattie Passive system is so good - I know the house was built in such a way that it will make any future work like this easy to accommodate.

"I love the modern design and the contemporary aesthetic - it's the building style of the future!... I feel like it was a fantastic offer for the price."



Volumetric Modular

We've combined all the energy efficiency, comfort, and carbon-saving benefits of the Passivhaus standard with the speed and versatility of volumetric modular technology



BOPAS

Buildoffsite Property
Assurance Scheme



The Benefits of Timber

Designed and modelled in the Passivhaus Planning Package (PHPP) and constructed around a sustainable timber frame, our patented build system maximises airtightness and minimises thermal bridging to dramatically improve energy efficiency.



Above: our patented Passivhaus certified timber frame build system.

"We use timber because it has the lowest embodied carbon of any mainstream material"

Ron Beattie, Founder and Managing Director, Beattie Passive

With over 100,000m² of manufacturing space, we can deliver large offsite projects.

Our offsite operations are uninterrupted by external factors - such as the UK's notorious weather!





Let's build a better future, together

Passivhaus can reduce the nation's energy bills and help us build a brighter and more prosperous Net Zero future for everyone.



"I attended a Graven Hill event where I heard Ron Beattie presenting about Beattie Passive and, since moving in, I have learnt more about the benefits of living in a Passivhaus."

Q&A

Sandra Dunn

We chat to our client about all things Passivhaus and the experience of working with Beattie Passive.

What made you choose Graven Hill?

I heard about the development on the news and thought that it sounded like a very exciting project. It is a great location and I really liked the idea of living in a mixed community with an array of different architecture.

What attracted you to the Coach House?

The contemporary look of the Coach Houses really appealed and the fact that they are super energy efficient is a big plus. We particularly like the fact that when buying the tailored finished Coach House, we had a choice of two layouts and choice of all the fixtures and fittings, meaning that we could make the house our own right from the beginning.

Did you know anything about Passivhaus prior to enquiring about the Coach House

I am a big fan of Grand Designs, so had some understanding of Passivhaus and the benefits. I thought this is something I would love to be a part of. I attended a Graven Hill event where I heard Ron Beattie presenting about Beattie Passive and since moving in I have learnt more about the benefits and living in a Passivhaus from both the Beattie Passive and Graven Hill teams.

How was the process?

Buying and moving into my new home at Graven Hill was all very easy. The sales team at the Graven Hill Plot Shop - Marian, Sarah and Gemma - have been brilliant and very professional all the way through. Steve, and the Beattie Passive construction team, have been great - very helpful with any questions and proactive in making sure that the house meets all our requirements.

What do you like best about your new home?

I'm really pleased with the internal and external finish. I particularly like the look of the exterior cladding combined with the render. We love the triple glazed upstairs doors with the Juliette balconies which, along with the windows, keep our house at a constant comfortable temperature. I'm looking to buy a two-bedroom Coach House next!

Have you noticed any of the benefits of Passivhaus?

I have definitely used the heating a lot less, even with the colder weather coming in November. If it's very cold outside and I have been out and about, I only need to put the heating on for a very short period of time to take the chill off.



Accreditations & Certifications



Our Patented Passivhaus Build System

Beattie Passive is the first UK company to be certified by the Passivhaus Institut in Germany for a complete build system.

We're certified by BOPAS (the Buildoffsite Property Assurance Scheme) to give you complete confidence in our offsite manufacturing capabilities and the overall quality of the modular homes we build.

