



Our Self-Build Column

Healthy living with Passivhaus

When planning a self build project, it is easy to focus on the style and layout ideas that drive our desire to create our own bespoke homes. But when it comes to our own health, this may not be a natural priority, or even part of the initial thought process. However it should be a key part of the decision as Passivhaus living offers so much.

For the vast majority, designing and building their dream home is a long term lifestyle change, thereby creating the opportunity to live in the 'perfect' environment for as long as possible. The main change to this status quo is usually health related hence many self builders plan for the future by incorporating practical elements such as single storey living. But there are other ways to help keep healthy whilst in your home, thereby enjoying it for longer, and this is a fundamental part of Passivhaus and why it offers so many additional benefits than simply a high performance, energy efficient construction method.



So how does Passivhaus help improve your health? Not only will Passivhaus reduce your overall energy demand through increased insulation and high levels of airtightness, it offers a consistently warm, clean and comfortable indoor air environment, reducing respiratory issues, impacts of cold home syndrome and even the effect of radon.

As the solution to the ventilation needs of energy efficient buildings, installing a Mechanical Heat Recovery Ventilation system works quite simply by extracting the air from the polluted sources e.g. kitchen and bathroom and supplying fresh air back to the 'living' areas e.g. bedrooms and reception rooms, all through a central heat exchanger.

Living with fresh, filtered air aids health related illness such as asthma and protects against pollutants such as mould, CO₂, smoke, humidity and hay fever, as well as also reducing the overall level of dust in the house. Respiratory health concerns have long been associated with inappropriate building design with an estimated 29,000 people a year dying in the UK due to air pollution and around 1 in 18 dwellings in England have significant damp and mould issues, so it's evident that things need to change.

It may be little known, but another health related issue to factor into any new self build is Radon. A naturally occurring radioactive gas present to some extent, in all rocks underground foundations, which with prolonged exposure to high levels, can cause lung cancer. Each year approximately 1,100 deaths in the UK are linked to radon exposure in the home, which is why at Beattie Passive we go the extra mile to protect against the effects of radon exposure, regardless of how small the level, with the inclusion of a protective radon membrane as standard in all our homes.

When it comes to designing your dream self build, we passionately believe that a building should offer its occupants more than just a "roof over their heads"; it should protect you from external influences which may adversely affect your wellbeing and actively promote good health.

[Read the blog on the EDP website.](#)