

Healthy living in a timber house



Barbara Fischer-Clark of Stommel Haus UK explains the health benefits that can come from living in a timber-framed Stommel Haus

Building with timber has many advantages, in particular its thermal properties. Timber buildings provide excellent energy efficiency if well designed and constructed.

However this article concentrates on one of the less well-known benefits, the **health aspects** of living in a timber house.

Timber has the wonderful property that it can bind pollutants, toxic substances, bacteria and fungi from the air we breathe. Have you ever wondered why a butcher's block is made of wood – it's exactly because of these properties. The variation of air humidity in a house is influenced by the use of water in the bathrooms and kitchen, the weather conditions and, of course, the living and breathing of those living in the house.

Wood has the ability to regulate humidity to a level which is beneficial to the human health, by absorbing excess water and releasing it again when the air humidity in a room gets low. This leads to constant air humidity and a hygienic atmosphere in the house throughout the year.

These verifiable properties of timber do not wear off during the entire lifetime of the house and the life of a timber house is unlimited if properly constructed; they always provide a healthy climate and an unrivalled feel-good atmosphere. Experience and great skill is required to make the best use of these wonderful natural properties of timber. The contemporary timber houses from Stommel Haus are built with solid heartwood polar spruce from certified forests. A diffusion open sandwich wall construction is used, devoid of any plastic membranes, which in combination with the expert skills of qualified craftsmen guarantees a healthy "breathing" home.

House owners' experience

Besides all the technical and scientific arguments for the healthy atmosphere in a well designed and skilfully built modern timber house, at Stommel Haus we regularly receive letters from our clients about their improved health, for example from Michaela Dahn who writes: "I have had asthma

for 20 years and had to take cortisone in small doses every day to control the effects of mould and bacteria. I also had to take bronchodilator medication; that is until we moved into our new house on 15th May. In the following weeks I found I could reduce the cortisone and at the moment live almost without it. My symptoms have decreased so much that I further reduced the use of the bronchodilator medicine..."

Another example is our client K. Görlitz who writes: "I always wanted to tell you how much our son Michel enjoys living in our Stommel Haus timber home. His skin is much healthier now, clear and soft. His predisposition for eczema remains, but since we moved in we can see a definite improvement. Our worry about the eczema has gone and we live a normal life without itching skin, diets, visits to the doctors..."

Breathability and air-tightness of a timber house: A contradiction?

Current Building Regulations require improved air-tightness of a building, which is important for the energy efficiency. Does air-tightness not contradict the claim of breathability? Not at all – when talking about air-tightness we speak about avoiding air leakages, for instance by providing high quality windows and properly sealed openings to the outside such as vents, outside lights and taps. Also the skilful sealing of openings for electricity cables and water pipes is important, as well as the correctly sealed connections of walls and windows. Stommel Haus homes are typically 3 times more airtight than British Building Regulations require.

When talking about breathability, we refer to the design of the wall construction, the materials used in the walls and the property of being diffusion open. By avoiding the use of any plastic membranes or any other materials that could cause condensation or the accumulation of moisture, the air humidity in the house stays at a perfect level. This natural control of humidity is a key feature of a well-designed timber house and provides a healthy atmosphere for living.

For more information, visit www.stommel-haus.co.uk