## **21st Century treehouse**

With sustainability already the key phrase in modern construction, Oliver Rehm, managing director of Baufritz UK Ltd outlines the company's unique carbon positive eco-homes

stablished in 1896, Baufritz is a multi-award-winning pioneer in ecological timber house construction. With its headquarters in Germany, and a UK office in Cambridge, Baufritz offers stunning, high quality homes that provide a healthier way of living and an eco-friendly building approach.

Already firmly established as one of the leading timber home companies in Germany, Baufritz creates each house to the client's individual specification. Each house can incorporate aspects of modern and traditional living but always with an emphasis on ecology and wellbeing. Focusing on providing a unique 'healthy' living environment within its homes, Baufritz offers an unrivalled level of comfort and luxury combined with an abundance of natural materials and a healthy room climate.

As timber is the only renewable building material, it means that owners of a Baufritz house will be helping to preserve Nature's cycle. Baufritz combines sustainable ecology and the highest energy-efficiency in all its buildings and has been leading the eco-friendly housing market through its provision of carbon positive homes; which it has been building for the last 15 years.

Fossil fuels and their application are becoming increasingly important with regards to climate protection. Timber, for example, is able to store vast amounts of carbon dioxide, which is absorbed from the atmosphere during photosynthesis while the tree is still alive. Every Baufritz house is carbon positive to the extent that each house locks away at least 50 tonnes more  $CO_2$  than is emitted during its construction and manufacture, including transportation emissions and those from the running of the house for the first five to ten years. It is equivalent to that emitted by a modern family car doing 6,200 miles per year, every year for 20 years.

The CO<sub>2</sub> calculation for each house is measured using a recognised independent German system developed by Professor Koenig, which takes into account carbon emissions from the very start of the process to include the manufacture, construction and transportation of the house. Baufritz was the first German construction company to take the independent 'EU Eco Audit' in 1996, which it has passed four times to date. This audit measures and monitors all emissions resulting from the manufacturing and construction process.

Only the best quality organically forested larch and spruce wood go into making a Baufritz home, logged from sustainable forests to provide resources for future generations. Baufritz undertakes extensive tree planting schemes to mark its active approach to environmental protection. Each home built by Baufritz comes with a unique promise; because the materials used to build it are 100% biodegradable, the home can be completely returned to Nature in several generations if required.

Baufritz believes that contemporary ecology should be economically beneficial too, which is why it uses only the best quality materials to maximum efficiency. All materials used are tested for longevity, functional effectiveness and impact on the environment. Baufritz also implements an environmentally-friendly approach to powering its homes by advocating renewable energy sources such as geothermal energy and solar power.

Health concerns amongst consumers are increasing and people are much more aware as to how a building can impact wellbeing. Many people suffer from allergies and respiratory difficulties and it is predicted that the desire to live in a natural house is likely to increase drastically among families in the future. Over the years Baufritz has focused intensively upon the idea of 'healthy-living homes'. Today all its homes are built entirely from bio-constructive and natural materials that do not cause harm.

The initial structure (a watertight shell incorporating walls, doors, windows and roof) of a Baufritz home can be constructed in as little as one to two days, and the average home is usually completed in around nine to 12 months, from planning and design right through to completion. This is on average a third of the time it takes to build an ordinary brick and mortar house.

Through its own research and collaborations with universities, technical colleges, institutes and the industry itself, Baufritz combines intelligence, competence and experience to develop more truly revolutionary homes that lead the way in terms of health, ecology and building innovation.



Oliver Rehm Managing Director Baufritz UK Ltd

tel: +44 (0)1223 235632

oliver.rehm@baufritz.com www.baufritz.com/uk



Reproduced by kind permission of Pan European Networks Ltd, www.paneuropeannetworks.com © Pan European Networks 2013