

Timber is building our future...

Wood has always been the raw material used by humans to build and protect them over the centuries. Thanks to its qualities and new technologies it is still one of the finest materials available to protect us and our environment.

Timber building affords a number of huge advantages in comparison to other construction products and we are proud to promote it through our Svenkhomes range of products.

Wood as a sustainable product

- Wood is a natural, renewable and inexhaustible raw material. European forests provide us with timber from well managed sources such as those in Sweden where our timber houses are made. Basically at least one tree is planted for every tree that is felled.
- To reinforce our commitment to the environment, during 2005 we attained chain of custody PEFC certification which assures that our timber comes from sustainable forests.

Environmentally-friendly construction

- Trees absorb carbon dioxide (CO₂) and emit oxygen. Harvested trees used in wood construction continue to store CO₂ throughout their product life- around 1 tonne per cubic metre- while sustainable forest practices mean they are replaced by even more trees.
- Processing a raw tree-trunk to a usable wooden log uses less energy than the processing of other raw materials. Concrete needs 5 times more energy to produce than timber and steel 6 times! Finally using 1 cubic meter of timber make possible to avoid 2 tonnes CO₂ , in comparison with many other building products.

Timber house durability?

- Houses made from timber last longer than other traditionally built house. We have some proof of this in the well preserved old houses or churches several centuries old.
- Nowadays timber house building benefits from our wood selection, treatment, painting and also Swedish timber building skills.

- Moreover, our Svenskhomes range is made from slow grown Swedish forest which gives to the wood very good durability.



Scandinavia 15th century

High thermal and acoustic insulation

At the same time structural part of the home, timber plays a large part as a thermal and acoustic insulator.

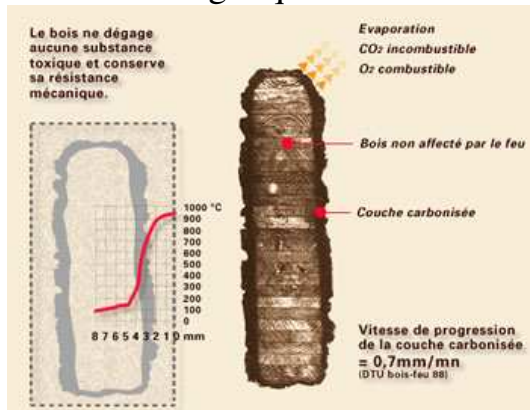
- For the same thickness, wood is a better thermal insulator than other structural building material; 15 times better than concrete, 400 times better than steel and 1770 times better than aluminium. A wood log wall about 30 mm and a mineral wool of 10 mm insulate both equally.
- A wooden house makes it possible to reduce the operational cost of the house with about 25-35 %, due to its thermal efficiency and also to the construction model avoiding thermal bridge.
- The dwelling comfort is increased by the remarkable phonic insulation of the house. The mass of the wall construction, together with the separation and air cavity which helps to prevent the airborne transmission of sound, provides a **very good level of sound insulation** in our modern homes.

Thermal coefficient

Material	Lambda (W/m°C)
aluminium	230
steel	52
Granit	3.5
concrete	1.75
Platter	0.5
oak	0.23
spruce	0.12
cork	0.10
wool	0.040

Fireproofing

- Contrary to most people's expectations, timber used in construction performs well in fire. It will not flake, buckle or explode.
- During the fire charcoal is formed on the surface of the timber, which serves to insulate and protect the core. Our Svenskhomes log houses meet all building requirements relating to fire regulations.



Healthy home and Comfortable

- Wood is natural and healthy, it's a clean material. It doesn't keep dust and dust mites and doesn't produce any allergic or chemical elements.
- Thank to its properties wood makes it possible to control the hygrometry, it balances the humidity rate in the house and avoid condensation and pollution associate, improving quality of the inside air and the comfort for the inhabitants.

Solidity and elasticity

- Timber buildings are often referred to as 'lightweight construction' but it's a precision engineered structure that is remarkably strong and durable.
- The wood elasticity allows facile installation for the water, gas and heating. It affords excellent technical and design flexibility and is increasingly used by architects and designers.

Construction efficiency

- Timber frame has 30% shorter, more predictable construction time than brick and block. A typical timber house can be weather-tight in less than 10 days
- This means a faster return on investment, reduced disruption to local communities, and tidier, safer and more efficient sites.