

Answers to frequently asked questions

Is it possible to build a wood home anywhere ?

Like any other type of construction, a wood home must conform to local building codes, planning controls and comply with Local Development Frameworks (LDF). These legal documents generally provide detailed information concerning the type of architecture and exterior aspects that any construction in a given area must comply with : pitch of roof, type of roof covering, color of facade...

If the project complies with these regulations, it is possible to build a wood home anywhere. Certain difficulties which may arise in obtaining a construction permit rarely concern the structure of the house but rather the use of wood as an exterior cladding. This is because a wood house is often mistakenly compared to a mountain chalet by the local authorities or the administration delivering the permits, for being an architectural style which may not fit in with the other local building styles.

In order to avoid any misunderstandings, we suggest you first consult with the authorities who deliver the building permits.

The longevity of wood homes

The oldest constructions in the world were mostly built in wood : Japanese temples of the 7th century, Norwegian churches of the 12th century as well as half-timbering Middle Age constructions.

In France, half-timbering houses can be found in the historical centre of most towns; in the countryside or in mountainous areas the oldest houses are build with a timber frame : half-timbering in Normandy, Alsace, Brittany, the Aquitaine region and in Paris; and log houses (beams or logs) in mountainous areas.

At any latitude and under diverse climate conditions, the wood house has proven worldwide its capacity to resist time passing and harsh weather conditions.

However, just like any other construction, it needs regular upkeep in order to age well. This concerns mainly the wood exposed outdoors, whereas the "hidden" structure in wood-framed houses doesn't need any particular care.

Thermal & phonic insulation

Most wood constructions and particularly wood-frame constructions are unanimously notorious for their high thermal performances, due to the combination of the wooden frame and insulating thermal material inserted between the vertical posts.

Its excellent thermal insulation efficiency is fully compatible with contemporary architecture's large glass surfaces. A well insulated wood building is also phonetically efficient, insulating against exterior or impact noise (footsteps, falling or displaced object) coming from the inside.

An insulating material inserted between each framing post will absorb aerial noise, and allow for high acoustic efficiency.

High-performance technical solutions, compliant with acoustic regulations (NRA), are available to reduce impact noise and also permit wood flooring in apartment buildings or hotels.

Wood and fire

Just like any other construction technique, wood-frame constructions are subject to rules and regulations, particularly concerning fire hazard security. Classification concerns different categories : individual dwellings, apartment buildings, public buildings or high-rise buildings.

As far as individual homes are concerned, security regulations require resistance to fire of at least 15 minutes in order to allow for the safe evacuation of residents.

Wood constructions totally comply with this regulation. And, contrary to popular belief, wood has an excellent resistance to fire. In fact, when attacked by flames, wood smoulders slowly maintaining its mechanical properties for minutes on end.

A revealing fact is that fire fighters' regulations authorize intervention in buildings with a wooden roof structure during several minutes whereas it is prohibited in structures of other sorts of material.

Wood treatment

Certain types of wood are naturally durable, but most species require protective treatment against insects and humidity to guarantee their longevity. Although in some countries where the weather conditions are particularly harsh (notably in Scandinavian countries) it is not customary to treat the wood (wood boring insects don't survive in severe cold), milder continental climate conditions require preventive treatment with fungicides, insecticides and in some areas anti-termite treatments.

Fungicide treatment prevents outbreaks of fungi, which only develop when the wood contains a humidity rate above 20%. However, this situation is exceptional and only occurs accidentally provided the wood structure is properly designed.

Insecticide treatment protects the wood from being attacked by various insects and it might be necessary to apply an anti-termite treatment in certain areas. In case of a new construction it is recommended to treat the soil before laying down the foundations, but it is also possible to treat the wood structure with an anti-termite product.

Good house design and the use of treated or naturally durable wood will guarantee the durability of wood constructions.

Exterior Coating

The combined effect of weather conditions (rain, snow and wind...) and the ultraviolet rays of the sun on natural wood will give a grey aspect to the beams, logs, half-timbering structures or any other exterior cladding. The grey colour is merely an aesthetic effect and does not affect the durability of the wood.

Although certain people may appreciate this grey shade, others may prefer to keep the original colour of the wood, or may even want to give it a different colour. There are several finishing products available to choose from.

If you chose **not to apply a treatment**, the wood turns a greyish colour. For those who don't wish to upkeep the exterior and accept to see the aspect of the wood change with time, turning to a shade of grey, we would advise the choice of naturally durable species which need no complementary upkeep (red cedar or larch). The wood can also be treated by class 3 or 4 autoclave (a treatment consisting of the injection of fungicide and insecticide under high pressure in order to totally impregnate the wood fibres). This treatment at first often procures a greenish tint to the wood.

Exterior Coating

If you wish to **keep the initial colour of the wood**, there are transparent or slightly tinted coatings (wood stains) to choose from, which leave the grain of the wood visible. We recommend applying this type of coating on naturally durable wood or wood treated to class 2 minimum standard.

Transparent wood stains require some periodic upkeep (on average every 2 to 5 years) depending on geographical situation, style of architecture and local climate (sun, rain...).

If you chose a more **colourful aspect**, apply wood stain or opaque paint. Whether it's an aesthetic choice or to comply with local building codes (see construction permit), we recommend choosing a covering product which colours the wood and conceals the grain aspect.

There is an extremely wide choice of colours available, ranging from black to white, including pastel shades, which are very popular these days.

A high-quality opaque stain will preserve its initial aspect for more than 10 years without any upkeep; a frequency comparable to that of plaster coating on a masonry house.

New products :

Lately new types of exterior coatings are available :

- pre-painted cladding-boards
- clapboards made of composite material with a wooden aspect
- wood panels...

These are high-performing products over time and require very little upkeep.

Wood-frame homes can also be covered by masonry on the exterior (stone or bricks cladding, rendering... or any other type of cladding).