

## What is Thermowood?

Thermowood, also known as heat treated timber, is a beautiful, sustainable timber material produced using chemical-free heat treatment.

## How is Thermowood Produced?

Thermowood is created by heat treating Scandinavian softwood to temperatures ranging from 180 – 230° in special chamber kilns for up to 96 hours. Steam is used as a protective gas and helps to prevent the wood from splitting and becoming damaged during treatment.

## Thermowoods Characteristics & Qualities

This process causes chemical and structural changes to occur within the timber, which therefore alters some of its characteristics and qualities. Some of the characteristics and qualities that make Thermowood such a popular specie includes:

**Dimensionally Stable** – The intensive heat the wood is exposed to during its production dries out deep into the core, causing all moisture and resin to be removed from the timber. Thermowood therefore doesn't react to changes in humidity as drastically as untreated wood (the risk of swelling, cracking and shrinkage is decreased), allowing it to retain its shape far better. The wood also doesn't secrete sap or resin even in high temperatures.

**Environmentally Friendly** – The softwood used to produce Thermowood originates from well-managed, PEFC-certified forests, and as no chemicals or foreign substances are involved during its production, Thermowood is an environmentally friendly material produced by using only natural methods.

**Resistance to Rot and Fungi** – Due to the heating process breaking down hemicellulose, the wood doesn't contain the appropriate nutrients to allow rot and fungi to grow and develop.

**Increased Longevity** – When wood is treated with heat, its average life span is prolonged. It will depend on the exact heat the wood is exposed to as to how long it is expected to live, but generally the higher the temperature, the longer the life span.

**Improved Insulation** – Wood that has been heat treated is much more porous than untreated wood, vastly improving its insulating properties.

**Can be Recycled** – Unlike pressure impregnated wood, Thermowood can be discarded or recycled as untreated wood when it is no longer required.



## Thermowood Uses

The thermal modification of wood improves the wood's properties, thereby expanding the range of applications in which the wood can be used. Its wide range of advantageous qualities enable the material to be used for both exterior and interior purposes.

### External Uses

Its high resistance to moisture and decay make it an excellent material for exterior projects. Some of its most popular external uses include:

- External cladding
- Decking
- Louvre blades
- Brise soleil

### Interior Uses

Its attractive appearance and removal of resin means that the timber is also ideal for interior projects, such as:

- Interior cladding
- Saunas
- Furniture
- Flooring

## Thermowood Cladding Appearance

The colour of Thermowood is affected by the temperature the wood is subject to and the length of time it is exposed to the heat. There will be a slight variance in colour due to different softwood densities, but generally, the higher the temperature the wood is exposed to, the darker the Thermowood.



## Thermowood Maintenance & Treatment

As Thermowood is expected to have a prolonged life, it doesn't necessarily need a surface treatment applied to it. Some people choose to add a finish, stain or paint to their timber to enrich its colour, but if it's left untreated, the wood will naturally change to a silvery grey (similar to that of cedar or larch).