

ThermoWood is a thermal modification procedure that preserves wood in its most natural and flawless state for a life-long journey. The ThermoWood process involves heating wood material to temperatures of up to 180°C and preserving it with steam. Besides the preservation, ThermoWood process also causes certain chemical changes in wood making the boards more stable and suitable for all weather conditions.

The colour of the ThermoWood changes due to caramelisation of glucose inside the wood, while its stability, decay resistance and insulation increase. Bending and swelling characteristics of the material are also greatly decreased.

ThermoWood method, brand and logo can only be used by members of the International ThermoWood Association.



25 Year Biological Life



100% Natural



High Quality



In simple Terms:

ThermoWood is a thermal modification procedure that preserves wood in its most natural and flawless state for a life-long journey. This modification makes the timber a more stable and more durable product.

Factual Terms:

Wood is composed of 50% cellulose, 23% hemicellulose, 20% lignin, and 7% other organic compounds, called extractives. Heat treatment removes resin, other extractives from the wood.

The thermo process reduces water absorption of wood, consequently increasing decay resistance while decreasing swelling and shrinking. Another factor that contributes to the high durability of wood is the crystallization of cellulose.

The change in hemicellulose increases the durability. Hemicellulose is separated into furfural and carboxylic acid. Caramelisation of lignin, caused by heat, results in a darker colour.

How old is the ThermoWood technology?

Actually, heat treatment is a method used since the Vikings. First heat treatment studies were made by German scientists in 1930's and ThermoWood technology was introduced in the 90's. Then heavily used and further perfected by the Scandinavians. Nowadays leading European companies apply this technology to non tropical Hardwoods to allow specific timber species to be used externally as well as internally.

What types of timber can be thermally treated?

In principle Thermal modification process can be performed to each type of wood. Some of them are "Pine, Spruce, Ash, Oak, Beech and Iroko". However, best efficiency may not be obtained from each tree. Considering best colour, texture, price and customer appreciation we perform the ThermoWood process to most suitable materials. 95% of our production constitutes of ThermoWood Pine, ThermoWood Ash and ThermoWood Iroko.

Do I need to maintain ThermoWood?

Any products used in External space are in need of care and maintenance. Maintenance period for the ThermoWood treated materials are much longer than the regular wood. Regular untreated wood will face problems such as rotting, fungal growth, insect holes, bending, etc. and therefore will require more frequent maintenance. ThermoWood products will not face the same problems above and therefore the maintenance period is much longer.

Why use a thermally treated board?

We would recommend using a thermally treated deckboard or cladding board due to its behaviour. Twisting, bending and warping has been minimalised in the process. Decay and infestation has been prevented. The board now has long lasting durability as well as protection against weather conditions. Other reasons may be that the timber is 100% natural, sourced from sustainable forests and preserved without any chemicals.