



## Features of Thermowood

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ThermoWood is a thermal modified wood, invented and made by the Finnish. However, the technology is not brand new, since our ancestors had already known and used similar solutions. For example, they carbonized piles and pickets before digging them into the ground. Thanks to this method and therefore the lack of cellulose in the wood, feed for insects and pests, the lifetime of these underground parts could be multiplied.

This simple folk method was developed further and later patented by the Finnish wood products manufacturing industry and the Finnish National Research Institute. Final products made by this new technology are called Thermo Wood.

The wood is laid into a vacuum chamber for a couple of hours or even days, with a uniform temperature of 180 - 230°C. This procedure results in the change of the fibers of the wood. Wood is actually a long, jumbled chain of polymerized sugar molecules. The thermal modification demolishes a part of the hydroxyl groups in the cells. Thanks to this method, the wood absorbs less water at the same rate of humidity, change in its size is minimized and its weather resistance is strengthened. This procedure is chemical-free and environmentally friendly. Woods with better features, like Finnish pine and spruce, beech, poplar, birch, alder and ash are used for this purpose.

This is how a cheaper and more available exterior cladding material could replace tropical timber materials.