

Thermowood / Thermisch behandeld hout

Bois Thermo-Traité

Scandinavië / Europa

Scandinavie / Europe

On behalve of the supplier that is doing the Thermal Modification :

Heat treatment involves heating wood material to a temperature of 180–220 °C while at the same time protecting it with steam. The steam protects the wood, but it also influences the chemical changes taking place in wood. 100% natural – only heat and steam are used in the manufacturing process and no chemicals are added. Thermally modified wood is an environmentally friendly and fully recyclable product, the manufacture of which does not include any harmful chemicals. Thermo treated wood remains dimensionally stable as equilibrium moisture content is also permanently reduced. After thermal modification, the moisture content of the wood decreases to around 4-6 percent. As a result of this lowered equilibrium moisture content, thermally modified wood does not react to changes in humidity as drastically as untreated wood. The seasons change – better than corresponding untreated or chemically treated wood. The dimensional stability of wood due to

varying air humidity clearly decreases in heat treated products. This is due to the reduction of wood shrinkage, lower equilibrium moisture content and slower absorption of humidity because of heat treatment. The higher the heat treatment degree is, the more the dimensional instability of thermally modified wood is reduced.

During treatment the cells of wood are modified and that causes the changes in wood characteristics:

- the color darkens, new color is from light brown to very dark brown
- equilibrium moisture content is reduced 20-50%
- increased dimensional stability
- decreased water absorption
- less deformations and tensions caused by humidity changes
- heat conductivity lowered up to 20-30%
- wood density decreases
- resin is removed from the wood during the thermal modification process

Thermo-Wood can be used for interior- or outdoor-applications, but always use stainless steel nails (INOX) or if glued use PU-glue. Thermo-wood stability is improved but remains a natural product and can show a crack or burst and a wood board can sometimes show some cupping.



De data is informatief en indicatief.
Bijzondere technische eisen moeten opgevraagd worden en bevestigd door de fabrikant.

All data is informative and indicative.
Specific technical requirements must be requested and confirmed by the manufacturer.

Les données sont informatif et indicatif.
Des exigences techniques et spécifiques doivent être demandées et confirmées par le fabricant.