



# Thermally modified wood for professional use

Façade and cladding Yard and garden Sauna and interior decoration Thermally modified timber

www.swm-wood.com



#### YARD AND GARDEN

The decking products of SWM-Wood are well suited for impressive yard and garden construction. Both pine and spruce products are well suited for outdoor use. The end users of our products appreciate environmental friendliness, good decay resistance, improved dimensional stability and the warm colour of the wood. Thermally modified wood makes a professional constructor's work easier, especially in sites were environmental regulations limit the use of other raw materials.

## SWM-Wood, partner of a professional

Oy SWM-Wood Ltd is one of the leading Finnish manufacturers of thermally modified wood. SWM-Wood produces thermally modified wood for construction and carpentry industries, as well as for resellers. We are specialised in Finnish pine and spruce. Our customers know us from high-quality wood products, good service and reliable delivery.

A large portion of our products are made for export. We are the first company in our industry which has been granted the KOMO<sup>®</sup> product certificate. Our products have also been granted the **PEFC™** certificate. We are a member of Suomen Lämpöpuuyhdistys ry (Finland's Thermowood Association), which entitles us to use the registered ThermoWood<sup>®</sup> quality logo.

#### **Ecological alternative**

We strongly believe that a better tomorrow is built of wood. Wood is a renewable natural resource. 90 % of the wood we use originates from certified Finnish commercial forests. In addition, use of wood curbs



climate change, because all wood products store coal and carbon dioxide. Because of its recyclability, wood is also an ecological material at the end of its lifecycle.

#### Thermally modified wood

Heat treatment involves heating wood material to a temperature of 190 - 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. The treatment involves using only heat and steam. Thermally modified wood is an environmentally friendly and fully recyclable product, the manufacture of which does not include any harmful chemicals.

Heat treatment has an impact on several wood properties changing them permanently. The dimensional stability, decay resistance and thermal insulation properties of thermally modified wood are better than those of untreated wood. In addition, the wood is coloured throughout into a beautiful shade of brown. Heat treatment can be successfully applied to several types of wood. However, it is particularly well suited for pine and spruce. Thermally modified wood can be disposed of by incineration.

#### SAUNA AND INTERIOR DECORATION

Thermally modified wood is well suited for saunas and decoration. The focal benefits of thermally modified wood in interior decoration include significantly improved dimensional stability, hygiene, moisture resistance, and a finished surface. The colour alteration caused by heat treatment creates a distinguished, hardwood-like appearance.

For sauna builders, thermally modified wood is one of the most important decoration materials. The Pino Premio sauna products we manufacture are made of heat treated radiata pine.

The benefits of radiata pine in a sauna include absence of knots and resin, a beautiful warm colour, lower thermal conductivity and – when properly looked after – durability.





#### FAÇADE AND CLADDING

Thermally modified wood is a beautiful and durable material for façades. Finnish pine and spruce are well suited for façade material of buildings.

We deliver thermally modified wood for further processing and as finished products planed and processed to the profiles requested by the customer. Several planing mills in Central Europe are producing façade material from the wood delivered by us.



#### THERMALLY MODIFIED TIMBER

SWM-Wood manufactures thermally modified timber for various industries and timber companies. Our raw materials include domestic pine and spruce. The timber we use for raw material has healthy knots and is acquired from PEFC™ or FSC certified suppliers.

### Profiles

#### SWM EXTERNAL CLADDING PRODUCTS THERMO-D



#### SWM SAUNA AND INTERIOR DECORATION PRODUCTS THERMO-D

Pino Premio sauna bench SHP 28x92/140/185

#### SWM THERMALLY MODIFIED TIMBER

Pine 25 x 100 - 125 - 150 32 x 75 - 100 - 125 - 150 - 200 38 x 100 - 125 - 150 50 x 100 - 125 - 150 63 x 100 - 125 - 150 75 x 100 - 125 - 150

#### Spruce 25 x 150 32 x 100 - 125 - 150 38 x 125 - 150 50 x 100 - 125 - 150

Pino Premio panel STP 15x140

The final moisture content of thermally modified wood is 4–7%, and shrinkage 1–10mm, depending on the specified dimension.

Pino Premio panel STS 18x185









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Excellence in thermal wood modification

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