

## Thermo Abachi

Abachi is a tropical tree native to Africa. This material feels pleasant to the touch and has a beautiful, smooth, and fine texture. Its subtle growth rings and wood that is almost knot-free make it an attractive choice for your sauna project. The main characteristic of abachi is its low thermal conductivity, meaning it does not heat up significantly through the depth of the wood. Its key advantage lies not only in the fact that abachi benches do not heat up to the ambient temperature (for example, in a hot sauna), but above all in the fact that they very quickly adapt to the body temperature of the person sitting on them. Abachi has excellent thermal insulation properties (when the sauna temperature is 90–110 °C, the surface temperature of an abachi bench does not exceed 40 °C).

Thermo Abachi sauna wood offers a high standard of processing together with a longer service life even in the demanding sauna environment. It has a fine and uniform structure. The dark cream color is usually consistent across the entire surface of the wood. The surface remains pleasant even at high sauna temperatures and does not burn the skin.

Thermally modified Thermo Abachi wood is completely natural – the thermal modification process is carried out using only heat and steam, which makes the wood more durable and stable. This thermal treatment creates an attractive darker brown shade of the wood. We offer it as softline-profile cladding boards with an extended tongue, which visually eliminates the natural dimensional changes of wood caused by humidity variations, as well as planed boards used as bench profiles.

### Region of growth

Tropical West Africa. Main producing countries: Cameroon, Nigeria, Côte d'Ivoire, and Ghana.

### Technical information:

Hardwood species, soft and light wood, color white to yellowish-white

Grade A

Average wood density at 12% moisture content ..... 0.320–0.330 g/cm<sup>3</sup>

Longitudinal shrinkage ..... 0.1–0.2%

Radial shrinkage ..... 1.1%

Tangential shrinkage ..... 1.9%

Volumetric shrinkage ..... 3.2%

Durability class (EN 350) ..... 2

Bending strength ..... 10 MPa

Modulus of elasticity ..... 3340 N/mm<sup>2</sup>

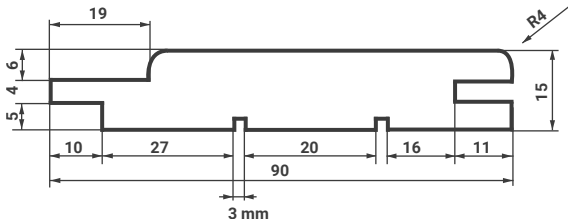
### Sauna cladding – SOFTLINE PROFILE STP

Dimensions: 15 x 90 mm

Lengths: 2400, 2700, 3000 mm

Packaging: 7 pcs/package, 462 pcs/pallet

#### Profile detail 15 x 90 STP:



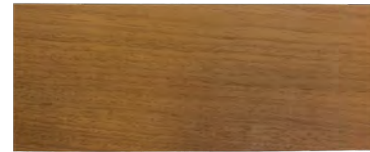
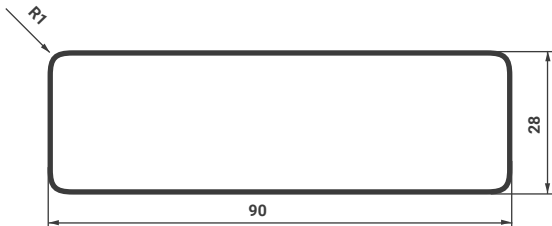
### Bench profile – PLANED BOARD SHP

Dimensions: 28 x 90 mm

Lengths: 2400, 2700, 3000 mm

Packaging: 4 pcs/package, 264 pcs/pallet

#### Profile detail 28 x 90 SHP:



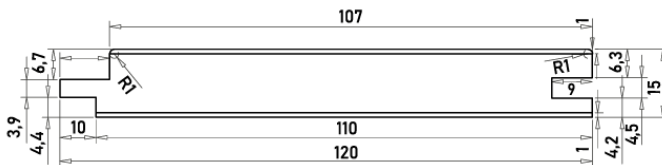
### Sauna cladding – PROFILE STS

Dimensions: 15 x 120 mm

Lengths: 2100, 2400, 2700, 3000 mm

Packaging: 7 pcs/package, 462 pcs/pallet

#### Profile detail 15 x 120 STS:



#### Stability

Does not warp or crack with changes in temperature and humidity



#### Environment

Natural solid material enhanced by thermal modification using only steam, without any chemical processes



#### Aesthetic appearance

Uniform structure and a darker brown shade of the wood create a sense of privacy and intimacy and enhance a feeling of luxury



#### Low thermal conductivity

The surface remains pleasant even at high temperatures – does not burn the skin



#### Lightweight

Low weight, easy handling



#### Hygienic

Does not release resin and does not absorb moisture, making it safe and durable

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## **Biological „Fingerprint“ / Natural Identity**

White spots may occur in Thermowood Abachi wood. These spots are mineral deposits, primarily consisting of silica (silicon dioxide) or calcium oxalate crystals. They are often referred to as „mineral streaks“ or „silica pockets“ within the wood parenchyma. Abachi is a tropical species that grows in mineral-rich soils. As the tree grows, it absorbs minerals through its root system along with water. These minerals travel through the sapwood and eventually crystallize within the cellular structure. These deposits are not a defect or a sign of disease. They are part of the wood's DNA, acting as a natural indicator of the tree's origin and growth conditions.

### **Crystallization during Drying:**

When the timber is dried or undergoes the Thermowood (thermal modification) process, the moisture evaporates, leaving behind these concentrated mineral solids, which become much more visible against the darkened, heat-treated wood.

They serve as proof of the wood's authenticity and natural tropical origin.

### **Non-Structural:**

These spots have no impact on the structural integrity, durability, or strength of the Abachi planks.

### **Finish Compatibility:**

They do not interfere with the adhesion of oils or stains. However, because they are inorganic minerals, they do not „absorb“ pigment like wood fibers do, which is why they remain visible even after oiling.

### **Maintenance:**

Since they are embedded deep within the fiber, they cannot be „sanded away.“ They should be embraced as a part of the natural aesthetic of the material.