

HEAT-TREATED WOOD PROFILES FOR OUTDOOR

FLO.THERMO

GENERAL INFORMATION	
MERCHANDIZE CATEGORY	Thermally modified timber for the outdoors
TIMBER SPECIES	Ash (Fraxinus spp.)
PRODUCTION SITE	Lipovljani Lignum Doo, Croatia
UNIT OF MEASUREMENT	Squared Metre (SQM)
DENSITY	560 Kg/m ³
DURABILITY	Class 1
USE CLASSES	3, of which only 3.1 (for external uses, protected from direct contact with atmospheric agents)

DESCRIPTION:

The elements of FLO.THERMO represent a new type of outdoor wooden floors that are easy to assemble. The floor is treated superficially at a temperature of 180-210°C (Decking), based on the customer's preference. The conformation of the elements provides two types of fastening, based on the presence or absence of the grooves on the sides of the elements:

- mechanical with visible screws (nailing installation) to be drilled on the surface (with the possibility of anti-slip or superficial scratches): it is necessary to drill first because the use of self-drilling screws is not foreseen. This fixing is intended for elements without side groove.
- mechanical with screws + clips, where the screw is inserted into the clip. Normally the clip should be inserted every 35-40 cm, making sure to have one at the head and one at the tail; in general, make sure that the number of clips and the anchorage distance are adequate and adapted to the length of the element. This fixing is intended for the elements with side groove.

FORMAT:

- Length: 625 and 1250 mm
- Thickness: from 21 mm +/- 0,2mm
- Width: 100 mm and others on demand
- Different shape and combination of dimensions are possible

The product complies with the European standard **UNI CEN/TS 15679:2008** "Thermal modified timber, definitions and characteristics".

PURPOSE OF THE TREATMENT:

High temperature surface treatment is a system implemented to increase the biological durability of wood without applying chemical preservatives that can be harmful to health. The high temperature destroys wood nutrients, which are what makes it attackable by micro-organisms. Another benefit of the treatment is the increase in dimensional stability of the material, minimizing the swelling in all directions. One negative element is a slight decrease in the mechanical strength of the material and consequently it might be more fragile. Therefore, it must be oiled and cleaned without using aggressive and abrasive substances, nor methods and mechanical procedures that could damage the surface.

FORMALDEHYDE EMISSION AND PHTACLOROPHENOL CONTENT:

Decking is obtained directly from solid wood planks that do not undergo any chemical treatment or require any adhesive. Even when the product is finished, the material is not installed with adhesives but with mechanical fixing. The product is therefore not subject to formaldehyde emission nor can contain pentachlorophenol.

STORAGE:

If not used immediately, the product must be kept in a dry place, in environments not subject to moisture and condensation, it is advisable not to store it in direct contact with the ground; try to keep it inside the intact package, away from direct sunlight. Different environmental conditions could compromise the product. The boxes containing the floor elements must be placed on a wooden pallet and not in contact with the floor.

INSTALLATION CONDITIONS:

It is necessary that the floor installation is carried out by skilled and professionally trained personnel for the execution of the work, as indicated in the Standard Uni 11538-2: 2018 "Outdoor wood flooring - Supporting and fixing elements requirements and flooring installation".

Before the installation, the following characteristics need to be checked: dimensions, orthogonality, planarity and slope of the support; rainwater runoff points depending on the flooring support and orientation of the flooring covering elements; check that the surface of the support is solid, stable, free of irregularities and clean. In case of installation on cementitious screed, this must be waterproofed and adequately protected at the edges, in order to avoid stagnant humidity.

For calculating the quantity of product to be used, please add up to 15% of square meters to the required ones, depending on the location and the system of the installation. The outdoor flooring must be installed by professional workers, following the following instructions, and on a concrete floor with water drainage. If it is necessary to raise the level of the laying surface, a suitable wood framework has to be used. The framework can be made also by other material, as long as it is rigid, to avoid the bending of the elements.

INSTALLATION METHOD:

Nailing installation system (with visible screws)

The support structure can be constituted by a single or double banding of linear elements (of wood or other materials), connected to the support or fixed to elements with fixed or variable height (jacks), which are anchored to the support where possible. Make sure to avoid direct contact of the linear support structure elements with the support by 10 mm height shims.

The center distance depends on the intended use, on the mechanical stress, on the type of structure, on the materials used, on the fixing methods and on the installation geometry of the flooring.

Generally, the fixing of the element must provide two screws for each intersection with the support element, in order to contain any tension of the wood during the hygrometric equilibrium phase. It is advisable to always pre-drill the wooden cladding element so as not to have cracking. These holes must have a diameter of adequate size in order to perfectly connect the covering element with the support element and also in order to allow the limited absorption of possible dilatation phenomena of the wood itself.

Nailing and clips installation system

This system has to consider the dimensions, the profile and the covering elements processing, the characteristic of the clips. The clip has to be secured at a distance of at least 8 mm from the center of the fixing hole to the edge of the support element. Therefore support elements width has to allow this fixing. Moreover, the thickness depends on the length of the screw during fixing.

The clips (about 35-40 clips per m² are recommended) should be inserted into the profiling, leaving the slot free to insert the screw for a simple installation. The screws (if not self-piercing) must be inserted on a hole that has to be previously made. We recommend using marine stainless steel screws so that they do not form rust and do not rot over time.

All the short sections of the flooring covering elements must lean on the support elements and must have at least one clip on each side.

Anyway, regardless the type of installation, the floor must be treated with specific protective products suitable for decking, in order to preserve its characteristics over time. It is advisable to carry out this treatment before the summer season and before the winter season. For the application methods of the treatment products, follow the manufacturer's instructions. In any case, it is advisable to leave a space of at least 4 mm between the heads and also on the side for a correct installation, to compensate for any wood expansion.

The producer declines all responsibility in case of disputes due to material that has been installed in a (total or partial) incorrect way, not complying with the provisions of this product sheet.

MAINTENANCE INSTRUCTIONS:

Inevitably, signs due to clomping, dents, marks from objects or accidental situations that might change the flooring appearance, will be visible over time.

Daily cleaning must be done using cloths or brooms with non-abrasive bristles, or vacuum cleaners. It is advisable to use neutral and non-foaming detergents specific for outdoor floors. The use of alcohol, solvents, acids, ammonia or different chemicals can irreparably damage the flooring.

Any parts of food left on the surface of the flooring might cause (dark) stains, which are difficult to remove, so it is appropriate to remove these substances immediately. In case of accidental fall of liquid substances such as oil, wine, excrement, urine and guano, liquor, detergents, solvents, paints, stagnant water impregnated with other substances, it is essential to wash immediately with clean water to avoid indelible stains. In any case, all products are fixed with (overlying) screwed installation or with specific concealed clips, so they allow the replacement of the single damaged elements: we suggest therefore to keep an adequate stock of the used batch (5-10%).

At the time of the replacement, the new element will differ in color, but over time and in contact with the light it will level out to the other ones.

PRECAUTIONS:

Avoid concentrating large weights on small portions of the floor, protect the surface with heavy woolen cloths in case there is the need to move heavy objects (furniture, etc.) and place under the furniture (chairs, tables, etc.) suitable felt pads.

Avoid stagnating water. Make sure that there are no residual leaves underneath and that the drains are always effective in draining the water.

Do not use solvents, ammonia, alcohol, acids and / or corrosive or abrasive products. In the event that the purchase of the product is subject to use at places, surfaces, special climatic zones, with considerable thermal excursions and / or lacking or excess humidity, please contact us in order to check if the material is suitable for the prefixed purpose.

An intensive use of this flooring and in highly frequented environments ruins it more and requires more maintenance and a more frequent application of protective products.

DISPOSAL:

The product must be disposed properly in accordance with applicable laws and procedures.

FSC:

FSC® certified products may be available upon request, depending on the manufacturer's stock.



Resinai termékcertifikát FSC®



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