

## FINISH

Listone Giordano® Natural Genius Medoc filo di lama is available with the following finish.

## OLEONATURE

Air-dried natural oils-based finish. The oils-based finish incorporates colour pigments in some products. Before finishing is applied, some wood species undergo a brushing treatment, to remove the soft parts, highlighting the wood pores and fibres. Thanks to the industrially applied final protective coating, the Oleonature finish ensures easy maintenance compared to other oil finishes and better resistance against household liquids' penetration.

Products with natural oil finishing tend to get a yellowish colour tone, should these products be kept, for instance, in the boxes for a longtime or not being exposed to light and air. It's an utterly natural and transitory phenomenon.

This effect is reversible within a few days and the wood can restore its original appearance, once the boards are exposed to air and direct sunlight whilst in an environment with artificial light it may take up to few weeks.

Wood is a natural material, therefore colour tone and absorption of the finish may vary from one board to the other, or even in the same board according to the variation of its fibre. These colour tone variation is visible even after the application of colour pigments proving the authenticity and the uniqueness of each board.

## GRADE

Varied grain figure and colour tone. The boards have a widespread presence of large knots adherent, firm or partially filled; sometime partially filled or open cracks and typical characteristics of the wood species may occur.

## DIRECTIONS FOR LAYING

### INTERIOR CONDITIONS

Before the installation make sure that all work on site (decoration, installation of sanitary fixtures, etc.) has been completed. Maintain the humidity level between 45% and 65% and the temperature between 16 and 25°C because outside of these ranges the boards may suffer deformation and adhesives and other products used for the installation may not work correctly.

### SUBFLOOR CHECK

The subfloor on which the hardwood flooring is to be installed must be smooth, level, and have a compact surface so as to guarantee the best possible contact between the underside of the planks and the subfloor itself.

Carry out the following checks before installation:

- **Smoothness/Flatness of the subfloor:** a 2 metre long straight edge should be placed on the subfloor, the maximum allowable tolerance is 2-3 mm.
- **Concrete subfloor superficial structural strength:** when hammering the surface no marks or deep cracking should appear.
- **Concrete subfloor superficial compactness control:** it should not be possible to create deep scratches or excessive dust when scrapping the surface of the subfloor with a nail.
- **Fissuring:** small fissures created as a result of the normal shrinkage of the cement are allowable, but excessive cracks, in particular those which permeate throughout the complete thickness of the subfloor, must be properly consolidated by suitable and permanent means.
- **Cleaning:** before the installation begins it is very important to carefully clean and check the surface of the subfloor.
- **Moisture content:** the moisture content of the subfloor has to be within the recommended limits for the specific type of subfloor. The subfloor residual moisture control has to be executed only using calcium carbide hygrometer (other tools could give wrong measurements in certain conditions) and the maximum values allowed for the installation are:
  - 2,0% for a concrete slab (max. thickness 80 mm);
  - 0,4% for anhydride slab;
  - 10,0% for wooden panels.

In case of thick subfloor this control has to be done on the total thickness, not only on the surface.

In case of installation on underfloor heating system the maximum values allowed are lower (see paragraph "Installation on underfloor radiating system" below).

Should these requirements not be fulfilled, implement proper operation before installation.

The laying of Listone Giordano® can also be carried out on pre-existing flooring, provided that they are checked all the conditions of flatness, solidity, compactness, cleaning of the surface, absence of cracks and of residual moisture or lift necessary to ensure proper contact at every point of the surface and the protection from external side. For installation over existing hard flooring (ceramic, stone, etc.), should in particular ensure that the surface is likely to ensure proper bonding. Where necessary action must be taken with a preliminary treatment of deep cleaning, degreasing, scratch the surface by mechanical means and/or suitable chemicals.

The glued installation is not compatible with pre-existing type textile floor coverings (i.e carpets) or resilient (linoleum, pvc, etc.), which must therefore necessarily be removed.

### MATERIAL STORAGE

We recommend the boxes of hardwood flooring are stored in secure, dry and weather proof rooms and not placed directly on the ground. Open the boxes only as the flooring is being installed and no more than what is needed.

### INSTALLATION SYSTEM

Listone Giordano® Natural Genius Medoc can only be installed by fully adhering it to a suitable subfloor.

It must not be installed as a floating floor: the head alignment, in the absence of adherence to the subfloor, may create gapping on these head joints.

### GLUE DOWN INSTALLATION

During the glued installation we recommend that suitable weights are placed on the header joints after interlocking the boards in order to improve their adhesion to the subfloor.

Choose an adhesive that is compatible with the characteristics of the sub-floor and that won't transmit humidity to the wood (do not to use adhesives that contain water).

Ecolfit® Listone Giordano® is the one component adhesive recommended for all the range of our hardwood floors.

The glue is to be applied homogeneously onto the whole subfloor surface (do not apply it on individual strip/board or discontinuously). Do not apply the glue directly underneath the boards.

Spread the adhesive on the subfloor only using a suitably notched trowel and lay the boards on top by interlocking them, if possible, using only a little pressure.

The boards have to be joined only by hands avoiding the use of other tools (for instance the mallets) that can create damages on the surface and the corners of the boards.

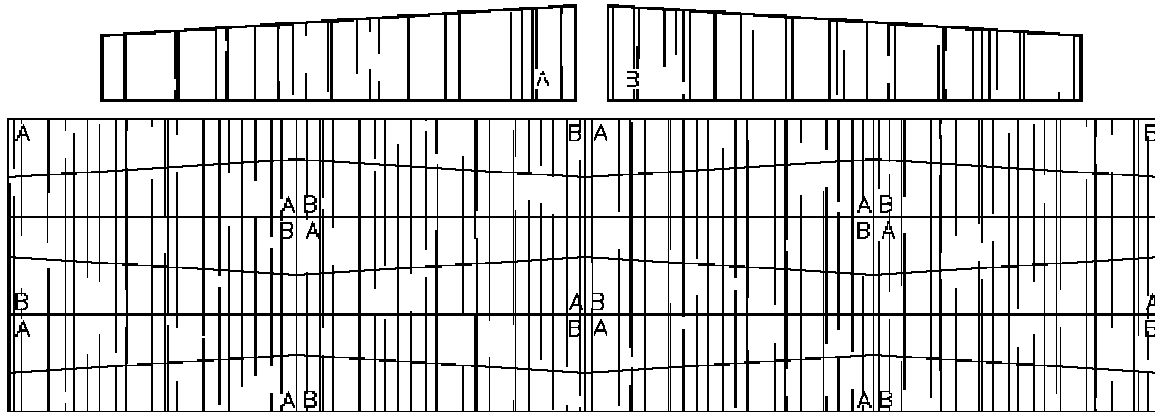
During this operation take care not to allow adhesive into the joints or on the surface.

It's forbidden the use of Pulplus® Listone Giordano or aggressive solvents to remove adhesive residues on oil finished hardwood floor especially if stained.

Around the entire perimeter of the interiors, including the point of junction with thresholds of other flooring materials, it is compulsory to form an expansion joint amplitude of about 10 mm to be filled with appropriate skirting along the vertical walls and thresholds in connection with other joints in the floors.

The specific shape of Listone Giordano® Natural Genius Medoc floor boards creates a certain amount of waste during the installation process somehow higher compared to rectangular wood boards.

INSTALLATION PATTERN



A = right handed (DX) – B = left handed (SX)

INSTALLATION ON UNDERFLOOR RADIATING SYSTEM

When the glue down installation is over an underfloor heating system, it is necessary first of all check that:

- the distance between the wood and the heating pipes or cables embedded in the screed is at no point less than 30 mm;
- the heating system is one that functions at a low temperature
- the system is provided of proper regulation tools in order to avoid that **the contact temperature of the hardwood floor surface will exceed 27°C.**

Should these indications not be fully complied the floor could suffer not only dimensional deformations and gapping between the boards but also permanent damages.

The construction characteristics of the sub-floor have a greater importance in case of installation on underfloor radiating system; particularly **the maximum residual humidity that cannot be more than 1.7% CM.**

The glue down installation on an area with an underfloor heating system is strongly advisable to reach best performances both regarding the best conduction of heat into the rooms and because it confers greater dimensional stability on the planks (the variation of interior conditions creates minor deformations).

The thermal resistance of the Listone Giordano® Natural Genius Medoc filo di lama is 0,077 m²K/W.

For any further information about installation see the sheets PO 1 - Listone Giordano® over underfloor heating system.

**AFTER THE INSTALLATION**

At the end of the laying remove the dirt and dust found on the floor's surface by cleaning with a vacuum cleaner equipped with a brush suitable for hardwood floors.

For *Oleonature* finish wash the floor with Green Listone Giordano® diluting half a cup (approximately 100 ml) of product in a 5 l bucket of water.

INSTRUCTIONS FOR USE

Maintain the humidity level of the atmosphere between 45% and 65% and the temperature between 15 and 30°C. This is also the same environmental conditions recommended for ensuring people's comfort and health.

The use of humidifiers or dehumidifiers is highly recommended in order to keep the above mentioned conditions.

Temperature or air humidity level not complying to the conditions above may cause deformations, cracks and sometimes permanent damages of the hardwood floor.

Use protective felt pads for furniture, chair legs, etc.