

1.-BEFORE INSTALLING

The importance of reading and properly understanding the information contained in these instructions cannot be exaggerated, since improper handling, installation, use or maintenance of the product could result in cancellation of the warranty.

1.1.-Receipt and storage

All material must be carefully inspected before installation to check for defects, with regard to the type, color, design, quantity supplied, dimensions, appearance, visible defects and any damage during transportation. The warranty does not cover material installed with visible defects. The installer and proprietor are responsible for ensuring that the working conditions and the floor slab of the workplace are in an acceptable condition before beginning to install a laminate floor.

1.2.-Environmental conditions

The laminate must be acclimated to the environmental conditions in the place where it is being installed. Leave the material in its unopened packaging for 48 hours, at normal ambient temperature, in the middle of the room where the floor is being installed. The laminate floor coverings should not be exposed to draughts. The packages should not be stored so that they rest on or are in contact with the walls during the acclimation period. We recommend placing the flat boards on the floor or on four battens that are at least 0.5 m from the walls. The best conditions for storing, acclimating and installation are a temperature of 20-23°C // 68-73°F and with relative air humidity ranging from 40% to 60%.

1.3.- Substrate

Although it is possible to install laminate flooring on various types of floor slab, L'Antic Colonial recommends slabs made of cement mortar, marble, terrazzo or anhydrite provided that comply with the following:

a) Measuring the floor slab (only in the case of mortar or anhydrite): Before starting to install the laminate, measure the moisture content of each floor slab. We recommend taking at least one measurement every 100 m². In buildings with several floors, take these measurements on different floors and in the most unfavorable directions (generally to the north) or in the most poorly ventilated areas (corridors). Do this at a depth that is approximately half the thickness of the floor slab and always at a minimum depth of 2 cm. The moisture content can be calculated using capacitive, microwave or carbide electronic hygrometers. You must follow the manufacturer's instructions for the equipment you are using in each case. The measurements taken with carbide hygrometers are the most accurate and should be used for reference and comparison for all other methods. Regardless of the measurement or calculation method used, always bear in mind that the sample must be representative of the thickness of the floor slabs. A written record should be made of the measurements taken. This record should be jointly signed by the person taking the measurements and the representative of the Site Management/Client (for example, a clear photograph of the measurement can be considered a suitable record). We recommend that the moisture content of the floor is below 2.5%. If it is going to be installed on a floor with a water underfloor heating system, the moisture should be below 2%.

b) Flatness and horizontality: It is advisable to determine the surface flatness of the installation by placing a straight ruler on any surface projections and measuring the size of the largest sag of the surface (vertical deviation). The result of this measurement is expressed in relation to the distance between the projections upon which the ruler is resting (reference points).

At a maximum, the following is permitted:

- for two reference points 1.00 m apart, the permissible vertical deviation is 2 mm;
- for two reference points 2.00 m apart, the permissible vertical deviation is 3 mm;

No vertical surface irregularities exceeding 1.2 mm are permitted. You must take into account the expansion joints of the floor where the laminate is being installed.

c) Cleanliness: the floor slab must be clean and free of objects or substances that could impede proper seating of the boards.

d) Cracks and fissures: any cracks and/or fissures created must be rectified before installing the boards.

e) Wooden supports: the wooden bases should be strong, rigid, level, properly secured and dry. The wood should have

an equilibrium moisture content, i.e. a state of dryness will be achieved in normal service conditions when it is covered. It is important to ensure that the wooden support is properly ventilated and aerated, so it is not advisable to use a vapor barrier with this support.

1.4.-Laying direction

Arranging the boards longitudinally with respect to the main light source is recommended to prevent the joints between the pieces from being highlighted.

1.5.-Planning the installation.

Both the perimeter joints and expansion joints as specified below are designed to absorb the dimensional movements of swelling and shrinkage experienced by the laminate floor as a result of normal moisture variation occurring in the rooms where it is installed. These joints are not designed to absorb abnormal dimensional variations such as those arising from inadequate condition of the premises, flooding, condensation or other similar circumstances.

a) Perimeter joint

Laminate flooring expands and contracts in the plane when it is subjected to climate variations in the place where it is installed. For premises with relative humidity between 40% and 60%, it is necessary to leave a perimeter joint of at least 8 to 10 mm. When the installation is complete, no part of the laminate flooring should be in contact with the building's vertical surfaces.

b) Expansion joints

If the dimensions of the premises exceed 8 metres wide and 12 metres long there must be space left in an adequate place for expansion joints (not to be confused with the perimeter joint) to absorb the movements of distension and shrinkage typical of this type of flooring. These expansion joints must be at least 15 mm wide to work properly. The most suitable places to locate expansion joints are at the beginning of passages, doorways and the tapering between dividing walls that separate different areas within the same space. In houses where the partitioning creates obvious constrictions, expansion joints will have to be arranged at critical points (even if they cannot meet the dimensional specifications in this section). Heavy furnishings may cause discontinuity in the floating behaviour of the flooring.

c) Staggering

Lay the floor so that the end of each board is separated from the next by at least 30 cm.

d) Skirting

Installing the baseboard will cover the perimeter expansion joint. With laminate floor coverings, the baseboards should only be fixed to the wall, not to the laminate flooring. This will allow the laminate floor coverings to move as they expand.

e) Vapor barrier: This is a thin and flexible film, normally made of polyethylene, which is at least 0.20 mm thick. It serves to protect the laminate floor covering from residual moisture.

2.-INSTALLATION

It is advisable only to install the laminate floor covering when the building is free from any risks of water damage, i.e. when the exterior walls, doors, windows and roofs have been installed and any additional work has been completed. And after the necessary measurements have been taken on the support layers.

2.1-Floating system

When laying floating flooring an insulating film must be placed on top of the floor slab. L'Antic Colonial recommends using a damp-proof film plus polyethylene foam with a transparent film glued to one side and a final thickness of 2 mm. This will prevent moisture from rising from the floor slab or frame. It also has other features such as acoustic and thermal insulation and levels out minor irregularities. Depending on the conditions and needs of particular installations, other types of film may be selected, such as the Lámina Suelo Radiante (underfloor heating film). Always begin laying with the female edge facing the wall. Ensure that there is a gap of 10 mm between the edge and the wall. The same laying technique must be used for the third board and the rest for the new rows. The first rows are of vital importance and must be perfectly straight to ensure the straightness of the rows that will be laid parallel to them. Before beginning to lay the first row, measure the width of the area to be covered and calculate the required width of the last board. This must not be less than 5 mm, otherwise the first row will have to be cut to adjust to the aforesaid width measurement. Using wedges, always leave a gap of 10 mm between the boards and any vertical surface. Align the

row perfectly; join the tongues and grooves properly and use a ruler to ensure that the row is absolutely straight. Continue with the same laying technique with the following rows until the area is completely covered. Make sure that the minimum distance between the boards and the walls is respected.

2.2.-Underfloor heating

L'Antic laminate flooring is compatible with water underfloor heating systems. In this case the heating should be running at 25-30 °C for at least 10 days prior to laying the floor to ensure that all traces of residual moisture are eliminated. Once the flooring has been laid, turn on the heating and increase the temperature by 2.3 °C per day until the maximum is reached. Leave the heating on during one day for every cm of thickness of the floor slab, night time included. Finally, reduce the temperature by 2.3 °C per day until 15 °C is reached (approximately 10 days) without exceeding 28 °C. If the heating system was already in use before laying the floor it will not be necessary to perform the initial warm-up, but the rest of the process must be carried out as described. See the UNE 14472/3. standard for further information on this process. When installing it on water underfloor heating systems, it is advisable for the water content of the floor slab to be below 2%.

3. MAINTENANCE

These simple tips will help you to prolong the life of your laminate flooring.

- 1-Avoid stepping on laminate flooring with footwear that has been worn outside (especially if it is wet or contains bits of gravel, soil or mud). We recommend placing a doormat outside the front door to avoid walking in bits of soil, gravel or dirt from outside the property.
- 2-Avoid knocking the laminate flooring with hard objects.
- 3-Put slippery covers or felt pads under furniture legs, especially if the furniture is heavy, to prevent scratching. Be especially careful when moving furniture, do not drag it.
- 4-When any type of liquid is spilt onto the floor, wipe and dry it immediately, as the water may seep between the boards.
- 5-Changes in ambient humidity cause the wood to contract and expand. Prevent or reduce these changes by using a dehumidifier, ventilation or heating.
- 6-Maintain a constant temperature of 20-23°C // 68-73°F in the property.
- 7-Maintain ambient humidity at between 40% and 60% in properties.
- 8-In the case of properties that are going to remain closed for a long period of time, we recommend carefully monitoring these parameters and taking special care to ensure that they are fully insulated against the ingress of water from outside. It cannot be kept as an inert element.
- 9-Do not affix adhesive masking tape or similar onto the floor or baseboards, as the solvents contained in the adhesive act on the surface and may damage them.

3.1 Cleaning The Laminate Flooring

DRY CLEANING

Generally you can simply dry clean the laminate flooring using a mop, broom or vacuum cleaner. For an especially effective form of dry cleaning, we also recommend using any pH-neutral product and a damp cloth for cleaning without water.

DAMP CLEANING

We recommend damp cleaning the floor when the level of dirt so requires, by regularly using Clean & Green Active.