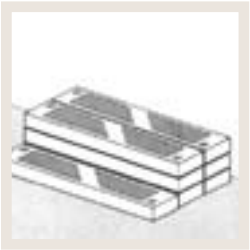

Before installation

Leave the floor boards to acclimatise for 72 hours in its original packaging and in the room where they are to be installed. Store them horizontally and flat.

Adapt the doors

Check if after putting in your sub-floor and floor boards the doors still open and close properly.

Apply a moisture-isolating PE-foam underlay

The seams need to be absolutely watertight. Apply the foam up to plinth height behind the skirting boards.

Don’t forget the expansion seams

if the floor is larger than 6 m and/or longer than 12m, make sure you provide expansion seams of +/-11 mm.

Use the spacers

They are necessary to keep equal distances between the floor and the walls. Provide expansion seams of 11mm all around the floor. Remove the spacers 24 hours after installation.

The crowbar

Use the crowbar to connect the heads of the boards.

The tapping block

Use the tapping Block to connect the floor boards without damaging them.

Fitting the last row

lay the boards with the decor side under and the groove against the wall. Then mark and saw. Do not forget the prescribed expansion seam.

Laying instructions:

1. What you have to know before starting the installation

- Wood is a natural product:
- It lives and keeps working under the influence of differences in moisture (it shrinks when dry and expands when wet). This process never stops.
- Colour differences are normal, because no two planks are the same.
- Exposure to direct sunlight will cause discolouration.
- Before installing the floor boards, check the relative air humidity in the room. It has to be 50% to 60% all year through. During the winter months the air in a room can be very dry. To assure constant air humidity humidifiers can be positioned on the radiators. In summer and fall, when the humidity is high, the room has to be well ventilated. In case the room is subject to substantial climate changes, there is a risk to permanent damage because of the bending or shrinking material.

The supplier is not responsible for any defects arising due to climate changes in the room.

- If you lay a wooden floor in a new building, make sure that the floor moisture is measured before installation. For measuring concrete or anhydrite floors the measurement has to be executed following the CM-method. Ask the advice of a specialist.
- For laying wooden flooring on under-floor heating special instructions apply. Ask the advice of a specialist.
- Never lay wooden floors in wet rooms like bathrooms and saunas.
- Ask the advice of a specialist if your situation does not correspond with these conditions.

2. Responsibilities of the owner/installer

- As owner/installer you accept the responsibility to establish whether the sub-floor and the circumstances of the work location are structurally and environmentally suitable for laying the floor.
- The use of suitable products to correct spaces in the sub-floor is seen as normal work practice. Take the following basic principals into account
- Preparation of the surface for laying the sub-floor:
  - The sub-floor (screed or wooden floor) has to be dry, clean and level before putting in a wooden floor.
  - Remove all irregularities larger than 2mm.
  - A high relative humidity can have a negative influence on the floor. The critical value for the degree of relative humidity of the sub-floor is:
    2% for concrete sub-floors
    11% for wooden sub-floors
    0,5% for anhydrite sub-floors.

    Concrete sub-floors:
    Concrete sub-floors need to be dry, level (max. difference of 5mm in a perimeter of 3000mm and 3mm in a perimeter of 1800mm) and free of structural flaws. Remove loose, flaky concrete by scraping it off by hand or sanding it with sandpaper grain 20#3-1/2. Choose a high pressure equalising paste (min. 2000N/cm²). The concrete sub-floor needs to be cleared of all paint, oil, glue, grease, wax, dirt, sealants and hardening paste. You can remove these products chemically or mechanically, but never use caustic products on a solvent base. Residues of solvents can deteriorate the correct binding of floor glues. It is very important to make sure that the glue, concrete and wood adhere perfectly. When you doubt that the floor will remain sufficiently dry, always apply a moisture-isolating foam underlay and make the seams absolutely watertight. Apply the foam up to plinth height behind the skirting boards.

    Wooden sub-floors:
    Wooden sub-floors have to be nailed down properly or to be fixed with screws. Choose ring type nails and sunken screws. Assure yourself that the wooden sub-floor is dry and structurally sound (this means without loose boards, vinyl tiles, OSB-boards or plywood). Its relative humidity must not be higher than 11%. Wooden sub-floors need to be cleared of all paint, oil, glue, wax, grease, etc. Chipboard is not suitable as a sub-floor when it is nailed or screwed down, but can be used when glued. When laying the floor on an existing wooden floor, lay it crosswise. This intermediate floor needs to be covered with a floor insulation underlay of about 3mm thick.

- The moisture content of the sub-floor needs to be measured using a correct testing method. The test results need to be recorded.
- The importer does not accept any responsibility for damage to the floor, caused by or resulting from problems with the sub-floor or surface. All surfaces need to be dry, clean, structurally sturdy and level.

- As owner/installer you accept all responsibility for the last quality control of our products. Check the material before laying the floor.
- Check the floor carefully for problems with quality, damage, finish, differences in form or size and (extreme) colour differences.
- Remove any pieces with defects or cut them off, no matter what the cause may be. If you should have doubts about the classification, the manufacture or the finish of the product, do not start the installation and contact your dealer immediately.
- When ordering a floor, allow a margin of 5% for sawing and very pronounced colour differences. Any complaints about visible defects will not be treated after the installation of the floor.

3. Prepare the installation

- Make sure that all the conditions mentioned above are fulfilled before starting the installation.
- Make sure the room temperature at the moment of installation is between 18° and 20°C and the relative air humidity between 50% and 60%.
- Leave the floor boards to acclimatise for at least three days in the room where there are to be installed. This way the floor boards can adapt to the temperature in the room and the risk of deformation afterwards gets considerably smaller.
- Never store the floor parts vertically, but always put them down horizontally on an even surface.
- Open all the boxes before you start and check the floor boards for colour differences. This way you can mix and match to avoid noticeable colour differences.

4. Laying instructions

The floor boards can be installed in two ways, floating or fixed:

Laying a floating floor:

When using the floating method, always apply a moisture-isolating PE-foam (of at least 0.15 mm thickness) and water tighten the seams using tape. Then apply a soundproofing layer. This material also has an equalising function. Start the installation against a long, straight wall. For floors with tongue and groove system, put the first floor board down with the groove against the wall. For floors with clic system, put the first floor board down with the tongue against the wall.. Place a 11 mm spacer between the wall and the board to keep the expansion seam open. This expansion seam needs to be maintained all around the room, including doorways, pipes, etc. 24 Hours after the completion of the installation, the spacers should be removed. Dot water resistant PVAC wood glue (D3 wood glue) on the tongue of the second floor board. Wipe any glue residue with a dry cloth before the glue has dried. For floors with tongue and groove system, lay the second floor board in the extension of the first and push the short sided tongue and groove together. Tap the second panel into the first and make sure the seams are completely closed. For floors with clic system, slide the second panel into the first with a gentle swirling motion and tap it gently into position with a tapping block. The last floor board of the first row has to be sawn to size. Complete the row with the sawn part and start the second row with the left over part of the floor board. The short pieces of two adjoining rows have to be spaced out as far as possible. In order to get a stable floor the absolute minimum is 50cm. Make sure that the first two rows are perpendicular and well connected. Keep a tightly strung cord above the seam to see if the floor is straight. Carefully tap the short and long sides together, using a tapping block and mallet. Never hit the tongue or groove directly with the tools. The final row is installed by sawing the floor boards to size lengthwise. With the help of the crowbar you push the boards of the last row into place.

Laying a fixed floor:

Cemented sub-floors:

Check if the quality of the cement sub-floor is good. That means the there is a sturdy cement sub-floor composed of +/- 300 to 320 kg of cement per m³ sand. If that is the case, you can glue the floor boards immediately to the sub-floor. If in doubt, ask the advice of your point of sales.

If the cement sub-floor is of poor quality, you need to use an intermediate floor out of wood panels (plywood, OBS-board of 12 or 18 mm, no fibreboard). Glue the chipboard to the floor and nail it down in strips of 15cm (horizontally and vertically). Lay the panels in stretching bond. If the cemented floor is of poor quality, you should drill the boards into the concrete. Gluing will then not be necessary. The floor boards can now be glued to the chipboard sub-floor (glue the bottom side of the boards completely and evenly, avoiding to get glue into the tongue and groove. During gluing, hammer a small nail aslant into the side of the boards. Space the nails out evenly every meter. This avoids the boards to slide while the glue is still drying.

Expansion gap:

Because the floor lives like any wooden floor, the possibility exists that the floor might shrink or expand according to the changing climate in your home. This is a natural process that you need to take into account, but if the values and conditions explained in point 1 are respected, there is no danger for your wooden floor.

Therefore, the floor needs to be kept a small distance away from walls, sills, pipes, etc. Furthermore, an expansion gap of about 11 mm needs to be maintained. This gap can later be covered by a plinth, skirting board or expansion strip. Around heating pipes the gap may be covered using rosettes. Because different rooms may have different temperatures or climates and because if you lay the floor over different rooms the surface covered may get too big, you should provide an expansion gap for floors over 6 meters wide and/or 12 meters long. This is necessary to correctly span size changes in larger floors.

5. Under-floor heating

Lalegno® floor boards have an extremely stable construction and are suited for installation with under-floor heating. However, for this installation there are a number of special rules that have to be observed. The type of heating is very important, as is the insulation underlay and the wood flooring that you choose. We advise you at all times to discuss the possibilities with your dealer before buying a floor. As installing a wooden floor on under-floor heating has to be done in a professional way, observing certain regulations according to the type of under-floor heating you choose, the responsibility for such an installation lies entirely with the installer.

6. Maintenance

- Remember to check the relative air humidity (between 50% and 60%) of your room regularly.
- Sand and dirt have the effect of sandpaper. Therefore, remove all sand and dirt regularly with a soft broom or vacuum cleaner.
- Provide a good rug at the entrance.
- Fit felt caps under furniture legs to prevent damage.
- Never mop the floor with too much water.
- Check before cleaning if the maintenance products that you want to use are not harmful for the oil or lacquer used to finish your floor.
- For more information concerning our maintenance products, please consult our website: **www.lalegno.be**

7. Repairing damaged floor-boards

Lalegno®-floors are very tough, but if something should go wrong, the individual panels can always be repaired. Adjust your circular sawing machine carefully to the depth of the board you have to replace. Saw into the middle part of the damaged board, being very careful to stay 2cm away from the sides! Break away the damaged part by hand. Remove the tongue of the new board, on the long side as well as on the short side. Apply mounting glue to the bottom of the new board and push it firmly into place.

8. Storage

If you should store the floor boards for a certain amount of time, it has to be done in closed packaging and at room temperature. The storage area needs to have a level of relative air humidity of 50% to 60%. The moisture content of the air can be measured with a hygrometer.

9. Take care

These installation instructions are aiming to describe the possibilities and uses of the product as correctly as possible. However, because individual circumstances (specific uses, surface and processing) are no part of our delivery and outside our influence, these instructions cannot be legally binding.