

READ THESE INSTRUCTIONS CAREFULLY before starting the installation work. Our warranty requires that you adhere to our installation and maintenance instructions and warranty terms, which can be found on our website.

The 14 mm tongue-and-groove boards should ideally be installed to form a floating floor without attaching them to the subfloor.

These boards are not suitable for use as a self-supporting floor surface.

If preferred, they can be installed by gluing to the subfloor; additional information can be found on the glue manufacturer's website.

Descriptive Installation instruction is to be found in the flooring packages or on www.kareliafloors.com.

#### **PREPARATIONS**

The relative humidity (Rh) of the room air should be 30 to 60 % and the temperature 18 to 24 °C during as well as after the installation.

Store the unopened packs in the installation area for a minimum of 48 hours.

Open the packs as the work progresses. Make sure that the boards are flawless before installing them. Should you find a damaged or defective board, do not install it. You can substitute it for a new one with your retailer or use it as the starting or final piece of a row as the installation progresses. The retailer is not responsible for the installation of defective boards.

#### **SUBFLOOR**

The subfloor should be dry, level, solid and clean. Subfloors are usually concrete or wooden floor.

Please note textile carpets are not suitable as underlay material.

## **CHECK THAT THE SUBFLOOR IS LEVEL**

Use a straight ruler at least 2 meters in length or a board, carefully check that the whole subfloor is level.

Any deviation in the subfloor's level should not exceed 2 to 3 mm per 2000 mm length. If required, the subfloor should be levelled or cut to meet these requirements.

Loose floor boards etc. should be fastened and uneven floorboards sanded. Uneven concrete floors can be rectified using a self levelling compound.

# **MOISTURE BARRIER**

When installing on concrete floors or in connection with floor heating, a durable 0.2 mm polyethylene membrane should be installed between the boards and subfloor, with an overlap of at least 200 mm (max subfloor Rh 80 % or max weight % 3.0 CM). To insulate from impact sound and humidity, you can use a Tuplex underlay (concrete humidity < 85 %) without using a separate plastic membrane.

#### FLOORS WITH UNDERFLOOR HEATING

Floor heating must be distributed evenly throughout the whole floor area. Start up the heating system at least two weeks prior to the board installation. Adjust so that the system reaches a level of 2/3 of maximum power before installation. This should be done regardless of the time of year. Ensure the rooms are well ventilated. The floor heating system should be set to a lower temperature (around +18  $^{\circ}\mathrm{C}$ ) one to two days before the boards are installed and adjusted back to its normal temperature gradually one to two weeks after the installation is finished.

With heated floors, the surface temperature of wooden floors must never exceed  $\pm 27\,^{\circ}\mathrm{C}$ .

The maximum floor surface temperature variation within a day should be 5 °C. Take this into account, especially under carpets and with regard to water-circulated floor heating systems, by measuring the surface temperature at the beginning of the circulation system. Floor heating causes the floor surface to dry up and induces additional wood contraction. The relative humidity of room air should be maintained at 30 to 60 % throughout all seasons to maintain the wooden floor in immaculate condition.

When the relative air humidity drops below 30%, it may cause the boards and surface lamellas to part and chip if the humidity continues to drop.

Beech, maple and jatoba react more intensely to variations in relative air humidity than other wood species, making it inadvisable to install them on top of a floor heating system.

## **EXPANSION GAPS**

Since the floor surface will change in dimension over the year you should allow an expansion gap of 10 millimeters to all fixed objects in the room. If the room's size is larger than 6 m in width you should work on the basis of 1.5 mm expansion per meter of floor.

An expansion joint is required when the floor size exceeds 15 m in width and in open plan spaces.

Expansion joints must be constructed in doorways, angles in the room or other suitable spaces and covered with a separate cover strip. Do not attach cover strip to the parquet. Installing heavy furniture and kitchen appliances on top of floating floors is not recommended, since this may restrict the natural movement of the wooden floor, causing gaps to appear between the boards.

#### INSTALLATION DIRECTION

The boards are usually installed in parallel with the direction of the room's incoming daylight. In elongated spaces, the boards should be installed in the room's lengthwise direction. If the subfloor is wooden, the boards should be installed cross directionally to the existing floorboards.

Covering strips: All strips, skirting and thresholds should be fixed into place so that the floor functions as a floating floor. We do not recommend

using caulking compounds for expansion joints and strip fastening because of their low elasticity. Similarly, you should not place cables, antenna wires etc. in an expansion joint.

Narrow spaces: If the installation direction is crosswise to e.g. a narrow hallway, there is a risk that the floor could bow in high relative humidity. If crosswise installation in narrow spaces anyway is desired, there are two options:

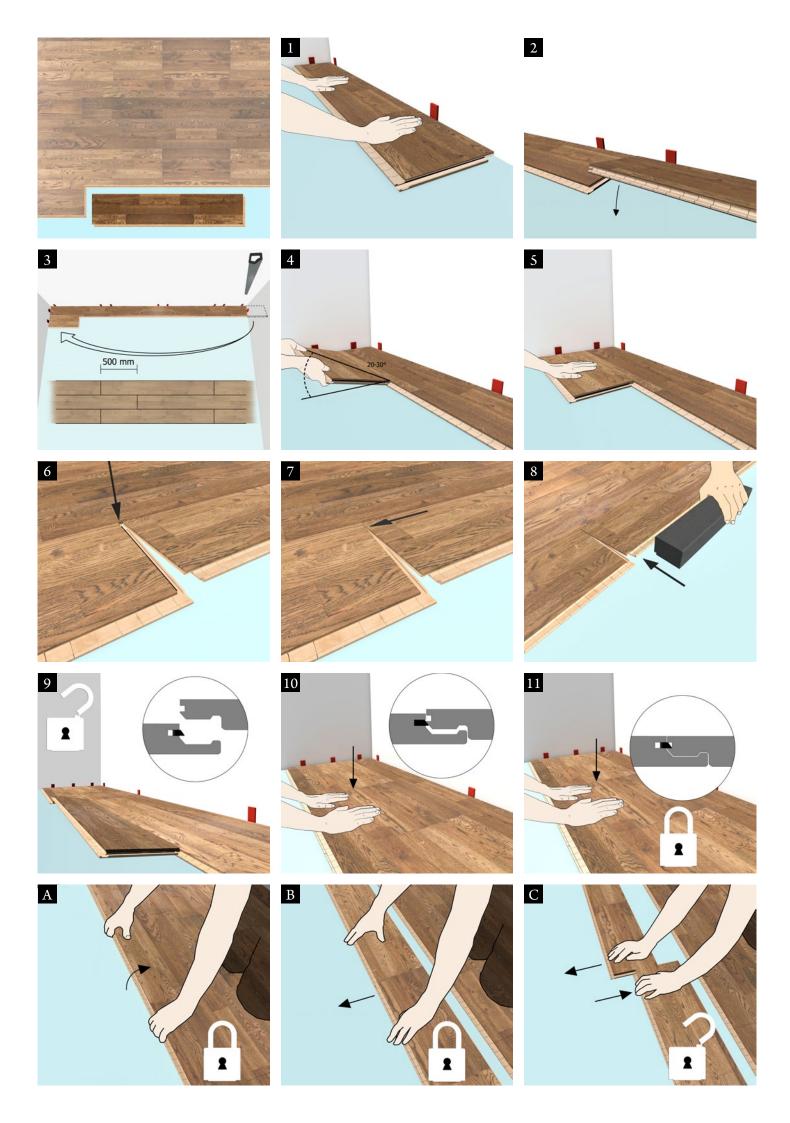
- 1. The floor is glued down to the subfloor. The entire installed surface must then be glued down.
- 2. Cut the bottom veneer of the boards with 3-4 cuts a board, with a distance of 10-15 cm between cuts. The cuts should be placed in the middle of the board. Place the cuts between the lamellas of the middle layer and do not cut deeper than the bottom veneer. For more information, please contact Karelia.

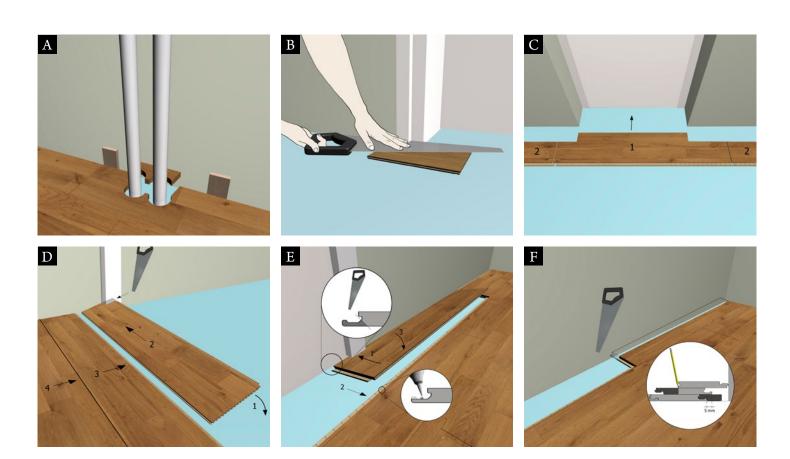
For both options above, the floor must be laid staggered, i.e. all floor areas must have end joints in every row. The end joints of adjoining rows must be staggered by at least 500 mm to ensure that the floor remains flat and level during climatic variations, otherwise there is a risk that the floor could bow in high relative humidity.

# MINIMUM WIDTH AND DISTANCE BETWEEN SHORT ENDS OF THE BOARDS

If the width of the last row is less than 40 mm you have to adjust the first row of the installation to a narrower width.

You should always keep the minimum distance between short ends of the adjoining boards at a minimum of 500mm.





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