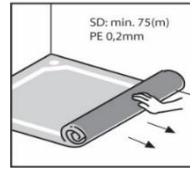
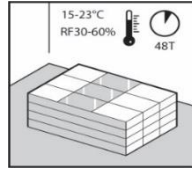
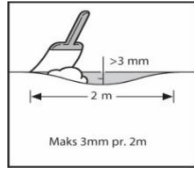
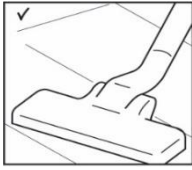
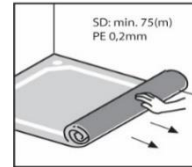
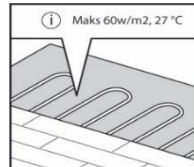
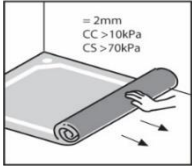




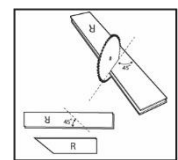
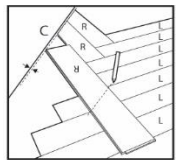
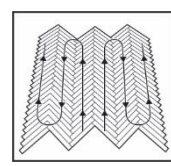
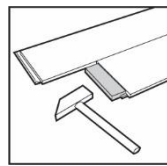
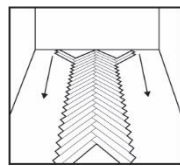
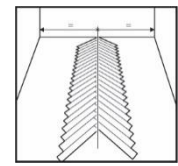
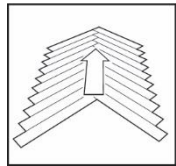
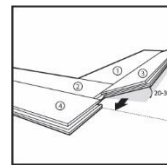
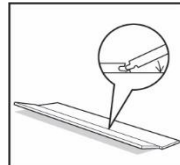
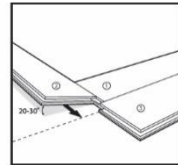
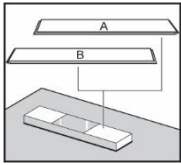
### Installation preparations



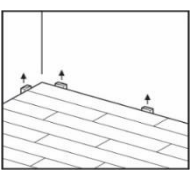
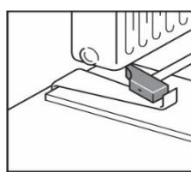
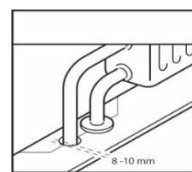
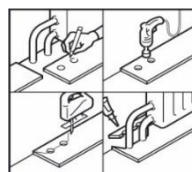
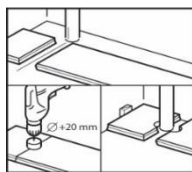
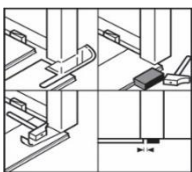
### Sub-floor preparations



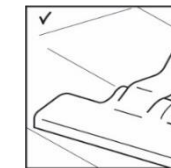
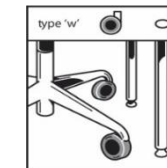
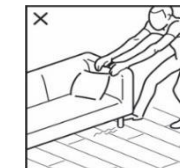
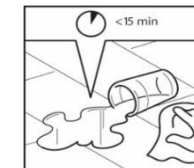
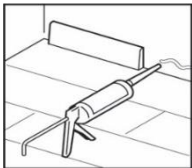
### Installation of the floor



### Completion of the floor



### After installation and maintenance



## **Installation instructions for floating installation of the Linia-Eco Herringbone Collection.**

The installation instructions must always be read before installation and followed during the installation process to ensure a good and correct result, as well as for guarantees to be maintained.

### **Faults or defects in the product**

Any obvious defects should not be installed and discarded as part of waste allowances.

When a floor is installed, regardless of whether it is laid by a private person or a professional craftsman, you as the buyer are considered to have approved the product when it is installed. **An installed floor panel = an approved floor panel.**

### **Assumptions and expansion space**

Maximum permitted continuous floor area: 12 (L) x 12 (W) meters.

In normally furnished rooms that are symmetrical (square or rectangular), a maximum of 144m<sup>2</sup> of continuous floor space can be installed floating. If the floor is to be installed in several adjoining rooms, these must always be divided with an expansion joint, and a transition strip or threshold must be used. This is to ensure that the floor can move freely on all sides - 360 degrees around the floor surface.

Kitchen installations and kitchen islands or other heavy and permanent furniture should never be mounted directly on the floor. This will prevent the floor from being able to move freely (swelling and compression with the seasons).

### **Distance to wall - expansion room**

It is important to ensure that the floor has sufficient distance / expansion space to the wall to ensure free movement 360 degrees around the floor surface. The main rule is 1.5mm expansion space per. width meter in the room where the floor is to be installed. If the floor is, for example, 4 meters wide, there must be at least 6mm distance to all four walls (4m x 1.5mm = 6mm). Use spacer wedges to ensure proper expansion space. If floors are installed in small rooms, the expansion room must never be smaller than at least 6 mm.

There must always be at least 20 mm of expansion space between adjacent floor surfaces.

### **Recommended tools for assembling the Linia-Eco Herringbone Collection**

- Spacers
- Ruler
- Hand saw / jigsaw
- Cutting saw
- Timber pencil
- Angle
- Knife
- Pulling iron
- Tapping block

For cutting Linia-Eco floors; fine-toothed saw blade is recommended to ensure clean cuts.

## **1. Installation preparations**

**1.1** The floor must be installed after fixed furniture constructions have been installed, such as, kitchen installations. It is important to remove old wall-to-wall carpets or vinyl flooring to access the sub-floor. The sub-floor must be clean, dry and firm before installation is initiated. Any kind of unevenness in the sub-floor, dirt, loose particles etc, must be levelled and removed. If the sub-floor consists of concrete, the sub-floor must have a relative humidity of 90% or less at 20 degrees Celsius before installation.

**1.2** Always vacuum the sub-floor before installation.

**1.3** Go over and check the evenness of the sub-floor. Unevenness exceeding 3mm per 2 meters must be fixed so that the floor is flat.

**1.4** The floor must always be acclimatized before installation. Place the packages with the floor in the respective room to be laid, at least 48 hours before installation. The packages are stacked so that there is air between them, and at least 50 cm from the outer wall. The packages must be left unopened until the time of installation. This point is just as important summer as winter.

**1.5** The recommended room temperature for maintaining the floor must be always between 15-23 degrees Celsius (before, during and after installation).

**1.6** If underfloor heating is installed, an age-resistant moisture barrier must always be installed between the heat source and the floor. This must have an SD value of at least 75 (m). The moisture barrier can be integrated in a floor underlay (ensure the correct SD value) or laid separately (moisture barrier 0.2 mm).

**1.7** The Linia-Eco Herringbone Collection is a real wooden floor - and will depend on a well-balanced indoor climate. For the floor to retain its properties, a relative humidity of between 30-60% at 20 degrees Celsius is required at all times. If the humidity is too low, the wood can dry out and lead to cracks and concave shapes. In new buildings with balanced ventilation, dry humidity can be a challenge. In such cases, the use of a humidifier is recommended to ensure a good and correct indoor climate. On average, the humidity should be between 45-60%.

## **2. Sub-floor - preparations**

**2.1** An underlay must always be installed under a floating floor. When installing in a room without underfloor heating, or where there is no requirement for a moisture barrier, a floor underlay must always be installed under the floor. The recommended underlays have a thickness of 2 mm and satisfy the requirement for compressive strength of >10kPa (1 ton). With thicker underlays, the requirement for compressive strength increases.

**2.2** The Linia-Eco Herringbone Collection is suitable for installation over underfloor heating. A moisture barrier (0.2 mm plastic) must always be installed between the heat source and the floor. The underfloor heating system must be limited to a maximum of 60W. per m<sup>2</sup>, or the maximum permitted surface temperature of 27 degrees Celsius. The recommended average temperature on the floor surface is between 18-23 degrees Celsius.

The underfloor heating must always cover as large a proportion of the floor area as possible, so that an even heat is ensured over the entire floor surface. Be careful not to put heat under fixed installations, and thick carpets that can lead to heat accumulation exceeding 27 degrees Celsius.

**2.3** There are different sub-floors and situations that determine whether a moisture barrier is required under the floor. Moisture barrier must always be installed above:

- Joists with or without underfloor heating system
- Ventilated crawl space
- Wet rooms where a membrane is missing - for example a sauna.
- Lightweight concrete joists
- Joists over particularly hot or humid rooms.

**2.4** The main rule is that a moisture barrier must always be installed in rooms where there is a risk of moisture accumulating. Remember not to trap moisture inside the joist. Please contact us if there are questions or uncertainties about when and if to install a moisture barrier.

**2.5** The requirement for the moisture barrier is that it must have an SD value of more than 75 (m). The moisture barrier can be laid separately or as an integral part of the floor underlay (combination underlay).

**2.6** When installing a moisture barrier, it is important that it covers the entire floor surface, and that it is angled 3-5cm up along all walls so that it forms a «pool». The moisture barrier will then be hidden behind the skirting's so that it will not be visible. The joint between the rows of moisture barrier must overlap at least 20 cm, or be taped with an aging-resistant moisture barrier tape that ensures tight joints. If a floor underlay with an integrated moisture barrier is installed, the side with a moisture barrier must always be turned up and into the room.

### **3. Installation of the floor**

**3.1** Before starting the installation, measure the length and width of the room to plan a precise and balanced appearance of the floor. This will also ensure that you do not end up with the last row being too narrow. The smallest pieces should always be wider than 10cm, to ensure this adjust the row in the middle of the floor.

**3.2** The Linia-Eco Herringbone Collection consists of right- and left-oriented planks. This means that the packages come as A and B, and you need both to assemble your floor. Place the A and B planks in separate piles and mix them well for a natural result.

**3.3** The first process of installation consists of creating a center row. You can do this by assembling the first three planks, marked as "1", "2" and "3" in the drawing. Plank "3" is used as an aid to adjust plank "1" and "2" correctly. Mount the planks "1" and "3" together (at a small angle of 20 to 30 °, insert the groove on plank 2 into the spring on plank 1) with the short side of plank "3" approx. 0.5 cm outside the short side of plank "1". Now mount the long side of plank "2" in the short side of plank "1". Slide plank "2" until it is stopped by plank "3". Now fold down plank 2.

**3.4** Now install plank "4", which takes over the role that plank "3" had. Lift plank 3 at an angle of 20 to 30 ° and push it upwards until it hits plank "4".

Follow this method until you have finished the first centered V-row on your floor. Always work in the direction of the arrow.

**3.5** After installing the first V-row, it is very important to make sure that this row is perfectly centered in the middle of the room. Check this carefully. It may be helpful to mark the tip and end of the V-row to make sure the V-row is still in the correct position. Tip: Make the marking at the bottom of the wall. This will remain visible throughout the installation. Marking on the floor disappears under the installed planks.

**3.6** Furthermore, continue to install the next rows with whole planks. It is recommended to install the first new row on the left side of the first V-row, followed by installation of the first row on the right side of the first V-row. To install the next row, always click the long side of the new plank in the long side of the previous plank. While holding the new panel at an angle of 20 to 30 °, slide this panel until the short end hits the installed V-row. You can now lay down the plank, followed by hitting the plank (with a tapping block) on the short end until it locks into the installed V-row. To strike the plank in place must always be done with a rubber hammer and a suitable block.

**3.7** Complete all rows with whole planks, according to the direction of the arrow. Make sure that you always strike / knock in the direction you are sitting on the planks. This will prevent you from building up tension in the floor.

**3.8** After installing all rows of whole planks, the final step in the installation of the Linia-Eco Herringbone floor is the installation of custom planks along the walls of the room. To draw the cut line; place the plank turned 180 ° down on the floor. The corner "C" must be in line with the expansion space. The expansion space is necessary to allow the floor to move freely after installation. To determine the correct expansion space, refer to the preparation section of this installation instruction. After installation, the expansion space will be hidden by the skirting's. Draw the line at an angle of 45 ° with the length of the plank starting at the angle of overlap with the already installed plank. Install the plank after sawing by following the explained installation method above.

#### **4. Completion**

**4.1** To get a nice finish where the wooden floor meets a threshold, we recommend cutting the door frame. To ensure the correct cut, turn a plank upside down and lay it on the floor up to the frame. Then place the hand saw flat against the plank and simply cut through the frame as shown. Remove the cut piece and vacuum to keep it clean. Then you can slide the floorboard under the frame and get a perfect finish.

**4.2** To install the floor around pipes, carefully measure and mark the planks with the exact center of each pipe. Drill holes at each of the marked points corresponding to the pipe diameter + 20mm. If the pipe hits the long side of a plank, cut 45 degrees from each hole to the edge of the plank, then cut between the holes as shown. If the pipe is placed on the end of a plank, make a straight cut across the plank. Then install the plank. Then use regular wood glue along the cut edges of the piece you have cut out and glue the piece in place where it belongs. Make sure that there is no glue between the cut piece and the sub-floor, this will prevent the floor from flowing freely. Use spacer wedges to secure a tight glue point and remove glue on the floor surface immediately with a damp cloth. The distance you have created between the pipes is to ensure that the floor can move properly

from season to season. In a floating installation, these cannot be filled with sealant, silicone, or other glue. Use radiator sleeves to hide holes in radiator pipes in this case.

**4.3** Inspect the floor surface when the floor has been laid and remove spacer wedges. Then mount skirting's.

## **5. After installation**

When the floor has been installed, it is especially important that it is protected - especially in connection with moving in furniture and other work. Use a suitable protective product (cardboard, felt or similar) that prevents the floor from being scratched. The protective product that are used must be able to let through air and any condensation to avoid discoloration of the floor. Note, never attach tape directly to the floor surface.

## **6. Maintenance**

The Linia-Eco Herringbone Collection is delivered exclusively in matt lacquered design.

For everyday cleaning use the following product:

Always follow the instructions of the detergent regarding the mixing ratio and use extraordinarily little water - only a slightly dampened cloth. Stains and other "spills" are wiped / washed off by hand immediately after spills. The main cleaning of the product is vacuuming, and periodic washing 3-4 times per. years or as needed.

The floor must always be protected against abnormal load or damage to keep it nice for a long time. Preventive measures that are needed to protect the floor and maintain it includes:

- Protect the floor by using a doormat or carpet at the entrance or other exposed areas. The floor may be damaged if water spills or moisture are left over time - for example under wet winter boots.
- When moving furniture and other interiors that are on the floor, this must always be lifted. Never drag or push furniture over the floor surface as this could cause unfortunate scratches.
- Protect the floor with the use of furniture knobs. Make sure that the furniture knobs are large enough, that they are clean - and feel free to replace them twice a year.
- Under office chairs or other similar movable furniture, always place a protective floor mat and wheels with soft rubber of the type 'W'.
- Never leave steel, nickel or similar in direct contact with the floor surface as this may lead to discoloration.

**The Linia-Eco Herringbone Collection is a real wooden floor and must be considered in that way. The floor should never be sanded down.**