

Viking Woodlands Laminate Installation Instructions

Angle – Fold – Tap Method (Drop Lock): Timbre Collection

IMPORTANT: Installation of flooring constitutes acceptance

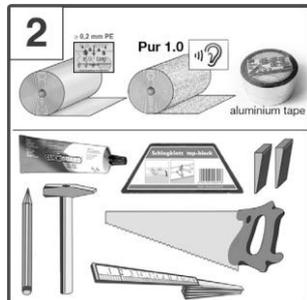
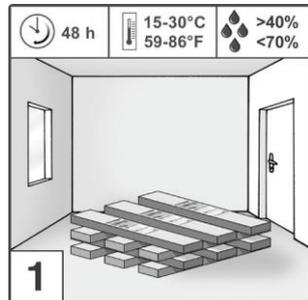
***Illustrations shown are a general visual aid, they should not be relied upon in place of following written directions.

Preparation: Please store the unopened boxes of flooring 48 hours prior to installation under the same climate conditions (temperature and moisture) as the actual installation process [1]. Important pre-condition for proper fitting and long-term durability of the flooring is a room temperature of 15 – 30°C / 59 – 86°F and a relative humidity of 40 – 70%.

Necessary Materials and Tools: polyethylene film (if necessary), joint tape (if necessary), tap block, hammer, separation shims, additional underlayment cushion (optional), saw, pencil, folding ruler [2].

The subfloor that the flooring will be applied to must be furnished in such a way that the flooring can be installed as required by the manufacturer’s instructions. The appropriate subfloors are mineral (such as floor screed, concrete, asphalt), particle-board sheets, and wood floorboards. The subfloor must be even, flat, dry, clean, and stable. Floor irregularities measuring more than 2 mm per 1 meter / 0.08” per 40” length must be evened out by a professional (according to DIN 18202) [3]. The evenness of the subfloor can be best ascertained by means of a straightedge or a spirit level.

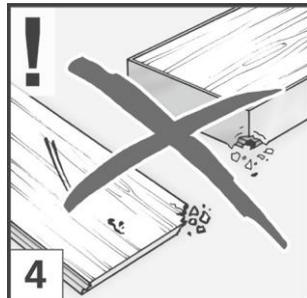
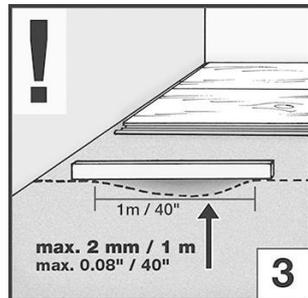
When installing onto a mineral subfloor such as concrete, cement-screed, anhydrite screed or flagstone, a moisture measurement must first be carried out. The following remnant-moisture levels in the screed may not be exceeded, prior to installation:



Cement-screed: without underfloor heating < 2.0% CM (calcium carbide test)
Anhydrite-screed: without underfloor heating < 0.5% CM

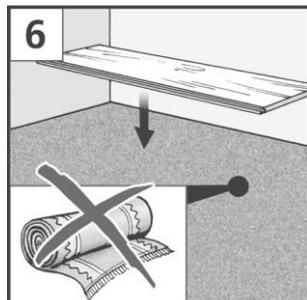
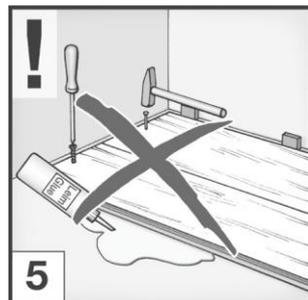
No offsets, steps or similar unevenness must be present. Construction debris such as drywall residue or similar must be removed completely. Cracks in the ground must also be considered critical. The provisions of ATV DIN 18365 and § 4 para. 3 VOB/B must be observed.

Check the panels under good lighting conditions for irregularities. Boards with visible defects outside the applicable tolerances, such as deviations in height, gloss, dimensional and color, must be sorted out and replaced [4].



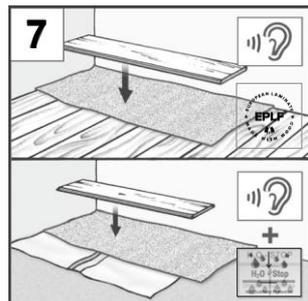
The flooring is laid floating and not fixed to the subfloor (e.g. by screws, nails, glue, etc.). The placement of very heavy objects, such as fitted kitchens, also has a fixing effect. It is recommended to install fitted kitchens and cupboards before laying and to lay flooring only up to behind the plinth panel. In the event of failure complying with these requirements any warranty claims are excluded.

Any carpet must be removed and is not suitable as a sub-surface for the flooring. The carpet under the floor causes a springiness and too much pressure in the edge areas when walking on the floor. This destroys the groove-tongue connection and leads to the formation of a gap. The carpet flooring must also be removed for hygienic reasons. Resulting moisture may result in mold and bacteria forming [6].



In the case of a wooden sub-surface such as installed sheets or floorboards, no vapor barrier is required. Prior to installing the flooring on a mineral-based sub-surface, (concrete, screed, etc.) it is crucial that a suitable vapor barrier sheet (6 mil PE film) is put down (with 1-2 cm/0.40”- 0.80” 90° edging at the sides - like a shallow tub) as a protection against moisture. The PE film is installed overlapping by about 50 mm / 2”, and fixed with aluminum jointing tape. On all substrates, an insulation underlay is recommended to improve sound absorption. The insulation underlay is installed edge to edge, i.e. is not overlapping [7]. It is important to ensure that the joints of the insulation underlay do not lie directly under the floor joints. Follow all manufacturers’ instructions for underlays. Combination vapor barrier and sound insulation underlay cushion may be used.

Your Viking Woodlands floor already has an attached cushion pad. An additional cushion pad for even more improved sound performance and comfort is optional. Additional cushion pad must be no thicker than 2mm and must meet or exceed minimum density requirements of 90kPa of compressive strength per cubic meter. Viking recommends Whisper Step or Eclipse II cushion pad.



Bathrooms

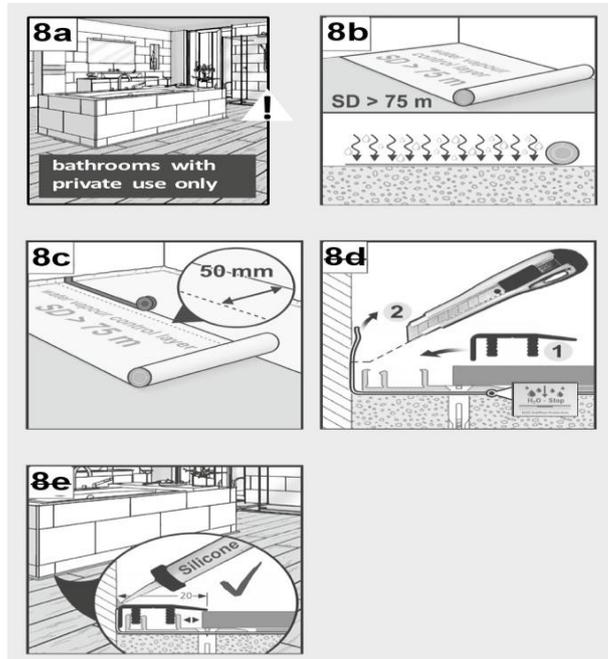
This flooring is suitable for use in residential bathrooms. Follow the installation instructions [8a – 8e]. Additional instructions for water resistance do not comply with the respective national regulations for waterproof coatings in wet rooms.

The water vapor diffusion resistance (SD value) of the installed vapor barrier film [8b] must have a value of > 75 m according to EN 12086. The film must be installed in a way that guarantees an overlap of at least 50 mm. Then the joints are sealed completely using tape.

The requirements made of the tape are identical to those made of the film, and the tape must ensure permanent adhesion [8c]. For hygienic reasons, we do not recommend using underlay material in bathrooms.

The edges need to be sealed by pulling the vapor barrier film upwards to the adjacent parts. After the closing rail with a top profile has been mounted, the film is cut off above the top profile so that it is flush with this part [8d].

Then the joint is sealed with a silicone sealant for bathrooms [8e]. Another edge sealing option (especially around the bathtub, washbasin and toilet) is the use of a PE round cord. To complete the installation, the cord is pressed into the gap between the floor and the edge and then also sealed at the top with silicone sealant.



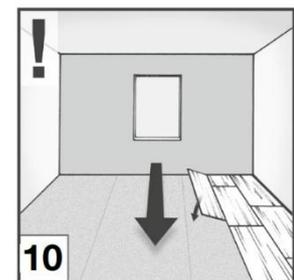
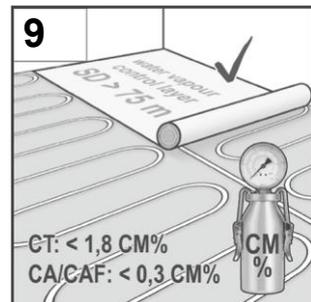
Underfloor Heating

The use of underfloor heating (hot water or electric) is possible if properly installed and provided that the heating operates properly. The supply and installation of the underfloor heating system must be compliant with current building standards and codes, and it must be installed in accordance with the relevant heating criteria. A signed heating-up and cooling-down procedure document must be in place. Underfloor heating must be laid and operated across the full area of the room. Partial underfloor heating is not permitted. A temperature of 80°F on the surface adjacent to the underside of the flooring should not be exceeded at any time anywhere over the area. For subfloors with or without underfloor heating, the specialist installer must perform and record the necessary CM measurement prior to installing the floor. The following limit values apply to residual humidity [9]:

- with calcium sulfate screed < 0.3% CM with underfloor heating
- with cement screed < 1.8% CM with underfloor heating

For floating installation, the thermal resistance of the floor and the insulating substrate must be observed. The total of the thermal resistance of all components must be $\leq 0.15 \text{ m}^2 \text{ K/W}$ in accordance with the requirements of DIN EN 14041.

The recommendations and information given here are to the best of our knowledge in keeping with current industry guidelines. **However, they are intended purely for informational purposes only and as such they do not constitute grounds for any claim under warranty. Viking makes no guarantee or warranty as to the performance or suitability of Viking Woodlands flooring installed over under-floor heating systems.**

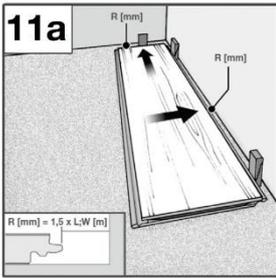


See separate Viking Woodlands underfloor heating document for further information.

General Installation:

It is recommended that you lay out the panels in the direction of the length and the source of light [10].

It is recommended that the panels be sorted according to the desired pattern lines and (if necessary) color variances prior to installation. You should start working with packages of flooring immediately after opening.

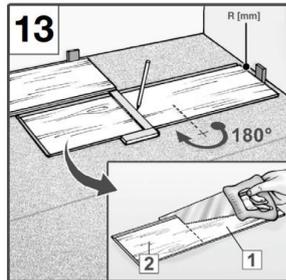
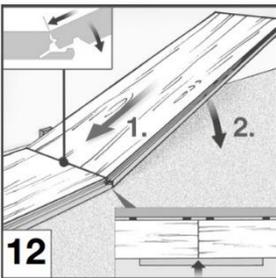


| Length (L) Width (W) | R (min. 12 mm) |
|-------------------------|-------------------|
| 8 m | 12 mm |
| 10 m | 15 mm |
| 12 m | 18 mm |
| 15 m | 23 mm |

For unusual wall angles, you must first transfer the profile of the wall-line to the first row of panels and cut the panels accordingly. Measure the spatial dimensions of the room prior to installation. If the first row of panels proves to have a width of less than 5 cm / 2", you must then evenly partition the remaining length (excess length) among the first and last row of panels in such a manner that both rows are cut to size with the same (symmetrical) panel-width.

Begin your installation in the left corner of the room. Lay out the first panels with the tongue-spring side facing the wall and secure the edge

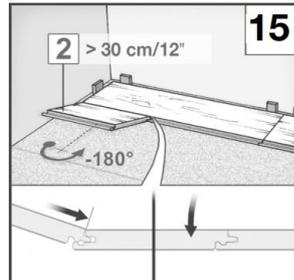
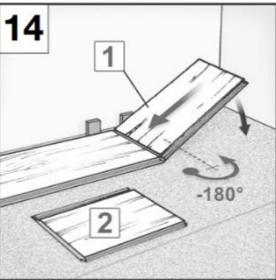
separation (gap) with shims. An edge gap R (expansion gap in mm) to the wall is essential. Maintain the gap around heating pipes, pillars, door stoppers, etc. [11a, 11b]. Use the following formula to calculate the wall gap: $R [mm] = 1.5 \times L [m]$ or $R [mm] = 1.5 \times W [m]$



Insert a second panel with the facing edge (short side) at an angle of 30° into the groove profile of the previously laid panel [12] and then lay flat on the floor. Make sure that the longitudinal edges are aligned. Ensure that they are not offset and form a straight line. This is necessary to insert the panels without gaps into the longitudinal profile when laying the second row of panels.

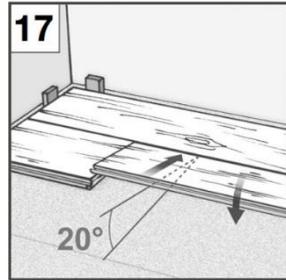
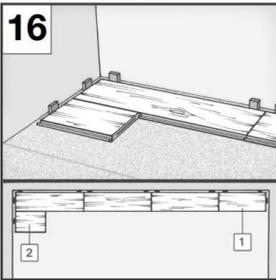
Click in further panels until the end of the first row in the same manner.

Turn the last panel in the row [13] by 180° for adjustment / trimming; place the decorated side up next to the existing row (groove cheek to groove cheek) on the right side of the wall. Take into account the edge gap R (expansion gap in mm) on the front side. Mark and cut the panel lengths. The last panel of the 1st row is also inserted at an angle of 30° into the groove profile of the previously laid first panel and then laid. Make sure that the longitudinal edges are aligned [14]. Ensure that they are not offset and form a straight line.



To avoid splintering of the edges, the decorated side should face down when using electrical jigsaws or hand-held circular saws. Otherwise, cut down from the top of the panel. Begin each new row with the remnants (at least 30 cm / 12" in length) of the previous row [20].

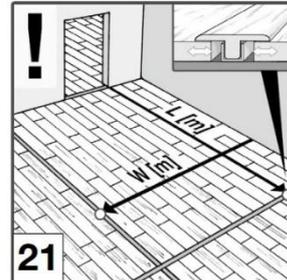
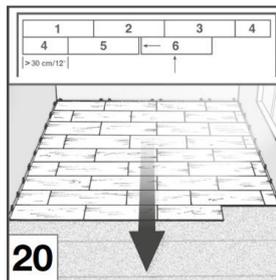
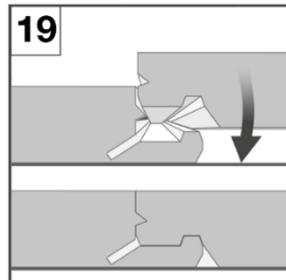
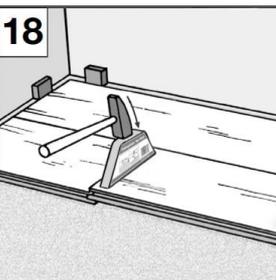
Begin the second row with a half panel (length < 95 cm / 37.40") or with a remnant panel (length > 30 cm / 12") [14, 15]. Insert the panel section lengthwise in the groove profiling in the first row and lock it in place / bend it [15, 16]. The transverse joint must be offset by at least 30 cm / 12" from row to row.



Place a second panel lengthwise in the groove profiling of the panel area and push it to the left at an angle of 20° to the panel already in place [17]. Then push it downwards and press from above until you hear an audible click. In doing so, ensure that the panel is inserted and guided cleanly through the longitudinal profile. Use a hammering block and a hammer [18, 19] to lock the two panels.

Expansion gaps are recommended (at least 20mm wide) for installation areas greater than 50 feet in length or width, in rooms with a lot of corners, and in rooms with different climate conditions. [21]. Larger areas must be separated by expansion joints of at least 12 mm (1/2"). T-moldings are required in any doorways less than 32" wide, or in the case of change in plank direction between rooms, regardless of doorway width. Laminate flooring consists mostly of wood. Wood is a hygroscopic material and always adapts to the ambient humidity, which in

turn can result in a change in dimension. This change in dimension can result in expansion up to 2 mm/m (1/16" on 3'). This fact should be considered from a construction viewpoint when laying the flooring. A minimum distance of 12 mm (1/2") from the wall must be maintained around the perimeter. Expansion joints of at least 12 mm (1/2") must be provided between rooms if doorways are less than 32" wide. These expansion joints can be covered with moldings. A distance of 12 mm (1/2") to fixed objects, e.g. radiators, must also be maintained. As a general guide, 1.1mm of expansion space for every 1 meter (3.3') of flooring is recommended, with a minimum of 12mm (1/2"). This allows the floor to expand or contract during climate changes. Please observe the requirements of ATV DIN 18365.



For heating-radiator pipes, holes that are drilled 3 cm / 1.2" larger than the pipe diameter must be avoided. A "fitting piece" should be cut out, glued, fitted in and fixed in place with a wedge until the glue has dried. Then cover the recesses with a radiator-sleeve [22, 23, 24]

Wooden doorframes should be shortened enough that a panel with additional cushion (if used) including 2 – 3 mm / 0.8" – 1.2" gap can fit underneath. [25, 26, 27, 28]

After installation, remove the separation wedges.

Cleaning and Maintenance

Remove dirt by sweeping or with a vacuum suitable for hard surface floors. [30]

Refer to Viking Floor Care and Maintenance instructions available at www.Vikinghardwood.com
Polish and cleaner containing additives, such as wax, oil or similar, are not suitable for use. The floor must not be polished. For further information, please refer to the Viking Floor Care instructions.

Wipe up footprints and dirt with a thoroughly squeezed and drip-free cloth. Standing water should be avoided in all circumstances. It is recommended to wipe up any spills or liquids immediately. [31].

Be particularly careful with flowerpots, vases, etc. placed on the floor. Use a waterproof base. It is recommended not to dry wet bathroom mats, rugs, floor mats etc. on the floor.

Hardened glue residue can be removed with Acetone. Do not use scouring agents, wax, or polish. Do not apply additional sealants to the floor surface.

Attention! Protect the flooring from scratches or indentations! Use a sufficiently large doormat around the entry areas.

Furniture feet made of wood, metal or plastic must be furnished with felt protectors. Office chairs with soft rollers (DIN 12529) are only to be used [32], or lay down a commercial quality protective mat.

Plank Removal and Replacement

It is possible to replace or remove panels that have been laid as a floating floor without causing damage by first releasing the whole row along the long side by angling it to free it from the locking mechanism [33]. Next, the panels, while lying flat on the floor on the head side, should be bent on the narrow side and released. [34]. Please be particularly diligent and careful when undertaking this work to avoid damaging the tongue-and-groove. Plank replacement work should only be performed by a trained, qualified professional installer. Viking makes no guarantee or warranty as to the performance or suitability of plank removal and replacement.

