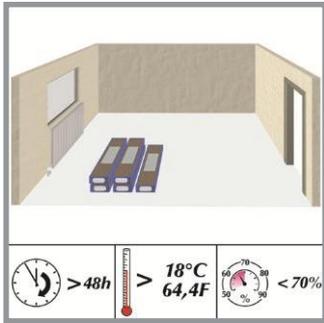


# Viking Woodlands Laminate Installation Instructions: Angle Tap Method

Cadence, Nocturne, Rhapsody, & Serenade Collections

## IMPORTANT: INSTALLATION OF FLOORING CONSTITUTES ACCEPTANCE

NOTE: Illustrations shown are only provided as a general reference visual aid, dimensions and specifications shown are not exact and should not be relied upon in place of following written directions and taking proper measurements for your installation.

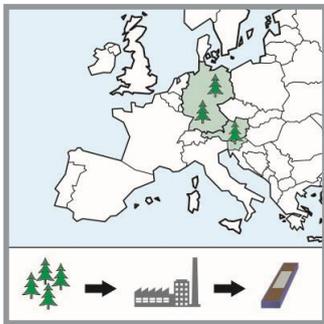


### Storage:

Store in the rooms which the product will be installed for a minimum of 48 hours before installation. Flooring should be stored in moisture free, dry rooms. During transportation it is necessary that the cartons are protected from the weather.

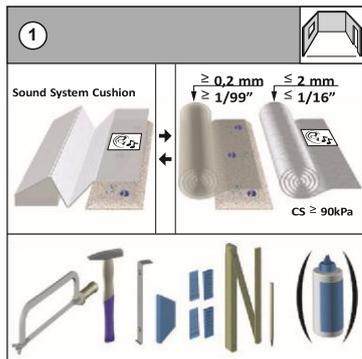
### Storage before installation:

The flooring boxes should be stored unopened in the middle of the room. Please store the unopened flooring boxes at a room temperature of at least 18°C (64.4°F) and a relative humidity of ≤ 70% for minimum of 48 hours before installation.



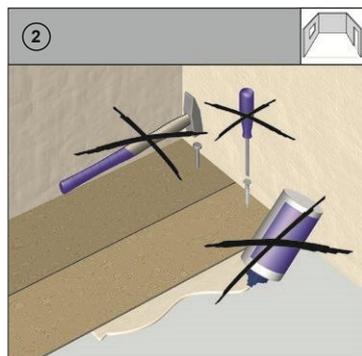
### Raw material

The flooring is manufactured exclusively from timber which is a product of sustainably managed forests. Raw materials are sourced from an area within approximately 500 km from the factory.



### Needed installation tools:

- PE vapor barrier (if installing over concrete or below grade): Floor area +10%, ≥ 0.2mm (6mil) thick
- Additional sound cushion (optional): Floor area +5%, compressive strength (CS) > 90 kPa, ≤ 2mm thick
- Saw
- Hammer or mallet: at least 500 gr (1.1 lbs)
- Pull Bar
- Spacer
- Measuring device
- Pencil



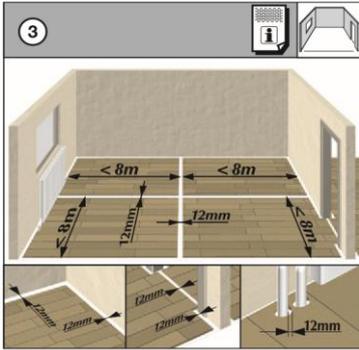
### Do NOT affix any part of the flooring to the subfloor or any other object

The flooring should be laid without the use of any adhesives or other means of attachment - the tongue and groove are designed to be mechanically locked together. Under no circumstances should the flooring be glued, nailed, or otherwise affixed to the subfloor. No heavy objects should be placed on top of the floor that would prohibit the floor from floating and expanding/contracting naturally.



### Maximum span without expansion gap, expansion joints around perimeter and fixed objects

The largest possible continuous installation area without a transition molding is 15.24m (50') in the direction of the panel width and 15.24m (50') in the direction of the panel length.

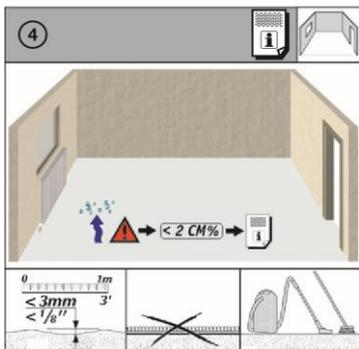


Larger areas must be separated by expansion joints of at least 12 mm (1/2") . T-moldings are required in any doorways less than 32" wide, or in the case of change in plank direction between rooms, regardless of doorway width. Laminate flooring consists largely of wood. Wood is a hygroscopic material 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") .

### Subfloor requirements

Dry, level, firm and clean sub floor.



#### Evenness

The sub-floor must be even to a maximum of 3 mm/m (1/8" on 3'). Small differences in floor level can be adjusted with an underlayment. Unevenness in floor level of more than a maximum of 3 mm/m (1/8" on 3') must either be sanded down or filled in with filling/leveling compound.

#### Existing Subfloors

Carpet is unhygienic and too soft for installing laminate flooring over and must be removed. An installation over PVC (vinyl) and linoleum floors can only be done if the existing floor is glued down and has no loose areas, and if there is no underfloor heating.

#### Clean

The subfloor must be clean before installing the floor and free of any debris.

### Installation on concrete/mineral compound subfloor

As the duration of drying depends on climate conditions, the stated drying periods are to be considered only as guidelines. Calcium Carbide testing method should be used to insure concrete dryness. For safety purposes, two weeks should be added. Absolute certainty can only be guaranteed by adequate measuring:

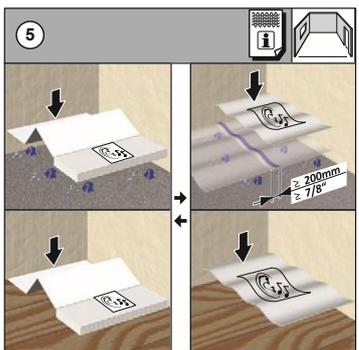
- CM method (calcium carbide method). Base Drying Period Remaining Humidity CM-concrete c.f. 1 week/cm 2.0%
- Anhydrate c.f. 2 weeks/cm 0.3%
- Poured asphalt from 18 supu/supC
- Magnesia c.f. humidity balance
- Mineral filler product instructions

### Installation on wood subfloors

Wood construction must be sufficiently ventilated (4cm<sup>2</sup>/subfloor ventilation area per each m<sup>2</sup>/subfloor of flooring). Subfloors consisting of wood must not be covered with airtight materials as microorganisms can find ideal conditions to exist and potentially create problems. Moisture content of the wood subfloor must not exceed 12%.

Crawlspaces must be a minimum 18" from the bottom of the floor joist to the ground. The crawlspace must have a minimum 6 mil thick polyethylene film covering the entire crawlspace ground area, with seams overlapping 6-8". Crawl spaces and other areas under the flooring must be dry and well ventilated. Basements must be conditioned with HVAC. Grading should be sloped to drain water away from the foundation. Crawl spaces should have adequate cross ventilation and be ventilated using 1.5 square feet of vent per 100 square feet of floor surface.

### Subfloor Underlayment

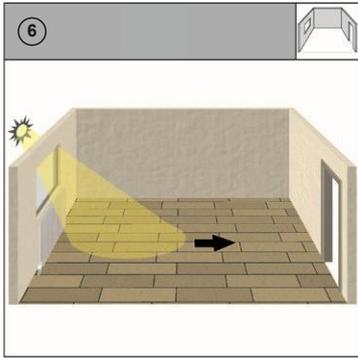


#### 1. PE Film over concrete (mineral) subfloors or below grade

A PE film (polyethylene film) or similar of at least 0.2mm (6mil) thickness must be laid as a vapor barrier against rising moisture. Allow the PE film to overlap by at least 20 mm (1"). Tape joints together. Pull the film 4-5 cm (1-1/2 - 2") up the wall.

#### 2. Additional Cushion for Sound Insulation and Comfort (optional)

Your Viking floor already comes with a high performance eco cushion attached. An additional cushion can be used for additional sound reduction and more comfort under foot. The additional cushion must have a sufficient Compressive Strength and be no more than 2mm thick. The requirement is: CS  $\ge$  90 kPa  $\pm$  9to / m<sup>2</sup> (psi greater than 14). Viking recommends Whisper Step or Eclipse II, both of which include a vapor barrier for applications that require one.

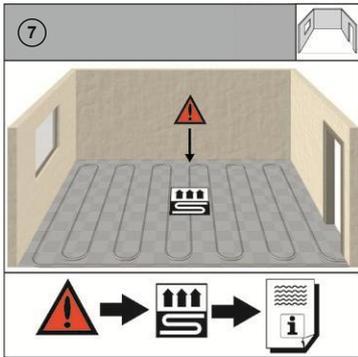


### Laying Direction

Recommended installation direction is lengthwise to the main light source.

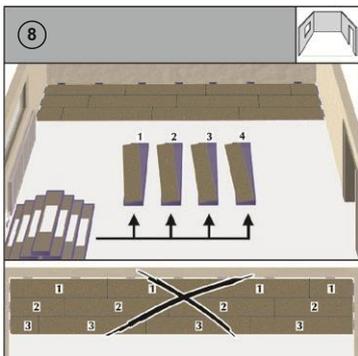
The joints are more visible crosswise than lengthwise to the light source.

Because of the panel format there are less joints in the length than in the width. This is only recommended because there are also other circumstances that may influence the laying direction of the flooring.



### Installation in conjunction with underfloor heating

Viking Woodlands flooring can be installed in conjunction with underfloor heating systems. Use the separate information sheet for guidelines on underfloor heating installations for these applications.

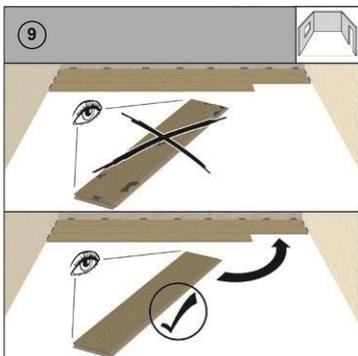


### Panel mixing

Prepare at least 4 packs of flooring. Mix panels from different packs during installation.

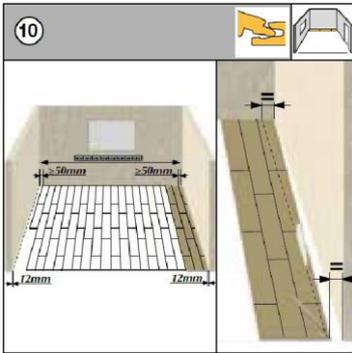
We recommend alternate fitting of the panels from four different packs at the same time.

Keep alternating the panels across the entire floor area. This guarantees the best possible appearance.



### Check for defective panels

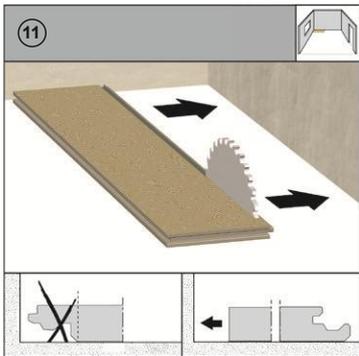
Always carefully inspect the panels for damage before installation. Check for color correctness, décor accuracy, damaged edges or locking profile, or any small damage or possible visual imperfections on the surface. Panels with minor damage can be used where the panels must be cut (i.e. starter boards). The installation should be done using daylight or equivalent good lighting, as it is possible that damage may not be recognized in poor lighting. No claims can be accepted in the case of panels which have already been installed.



### First panel row parallel towards the wall

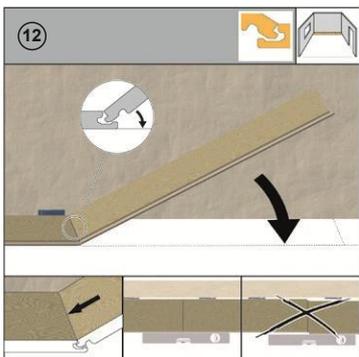
Please ensure a minimum of > 50 mm (> 2") width of the first and last row.

The panels must follow the course of the wall; unevenness 5 mm (1/5") must be marked on the first row of panels using a spacer. The panels must be sawn lengthways following the marking. The last row of panels at the opposite wall should not be less than 5 cm (2") wide, if so, the width of the first row of panels should be cut down lengthways to avoid this. Please make sure that there is a minimum distance to the wall of 12 mm (1/2"). Bear this in mind when calculating the last row.



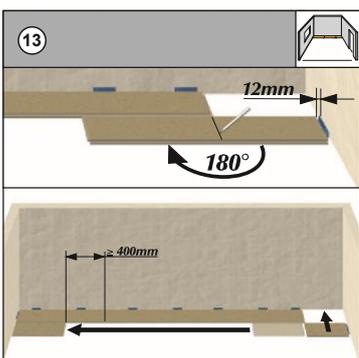
### Installation start

Remove the tongue of the first panel row and lay it against the wall.



### First row

Insert the panel at an angle of approx. 25° degrees and lower the panel to lock into place. Connect the panels of the first row on the short side. Insert the panel into the groove of the first panel at an angle of 25° degrees; and lower the panel to lock it into place. Ensure that the row is straight. Please see also in the installation video.

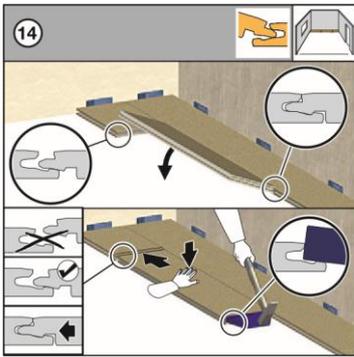


### Offset installation

Mark length, of last panel in each row to allow for minimum offset to the following rows.

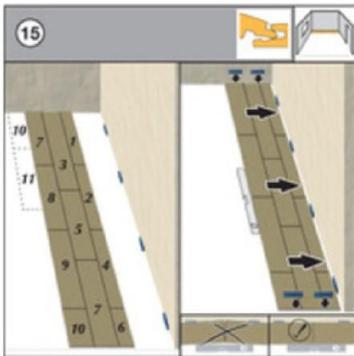
For accurate cutting of the last panel in the row, rotate the panel 180° degrees; and with the pattern side upwards, place beside the already installed row. Allow distance from the wall at the end of panel. Mark out offset and saw off.

Always saw from the upper surface of the panel (to avoid splintering the edges) only when using an electric jig saw or a hand-held circular saw should the patterned side be placed facing downwards. Start each row with the left-over piece from the preceding row. The short-end joints must be set in an appropriate offset (minimum 16"). Because of the offset there is stability in the laying.



**(Long side) Angle / Tap:**

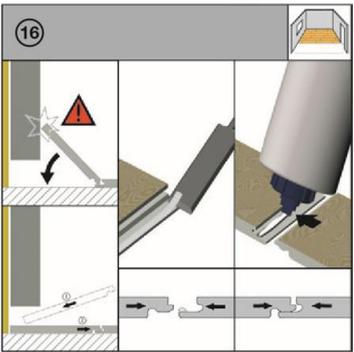
Place the panel lengthwise at an angle of approx. 25° and angle it in. Shift the panel already now to the short side of the first panel. Push the panel down gently so that the prestressed profile locks in neatly. Pay attention to the positioning of the short sides to ensure the profile pieces are perfectly aligned. Once the plank is lying flat, place the tapping block on the profile and use a hammer to gently tap into place so that the tongue and groove have a tight connection. Please note that the tapping block should be positioned properly on the tongue, so damage does not occur.



**(Short side ) Angle / Tap:**

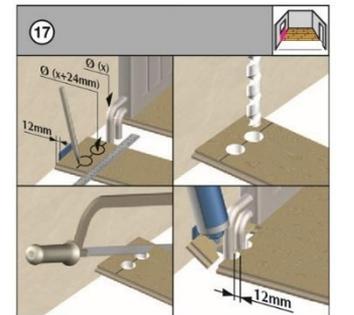
To start the second row, place the plank lengthwise and angle at approx. 25° before dropping the plank down. Install the next plank by angling the long side at approx. 25° and dropping down, keeping in mind the short side should be 2-3mm away from the end of the previous plank. Pay attention to the positioning of the short sides to ensure the profile pieces are perfectly aligned. Once the plank is lying flat, place the tapping block on the profile and use a hammer to gently tap into place so that the tongue and groove have a tight connection. Please note that the tapping block should be positioned properly on the tongue, so damage does not occur.

The panels are laid according to the numbering in the image. (Trim the first row, if necessary, as described



**No possibility to angle the panels**

Special cases: If you are not able to angle the panels (e.g. under a door frame or low fitted radiator) you must cut away the locking edge of lip of the bottom groove by using a wood chisel or a small block plane. Run a bead of glue on the modified tongue and groove. Tap the panels tight together by using a hammer and push block or pull-bar. If necessary, affix it with an adhesive tape.



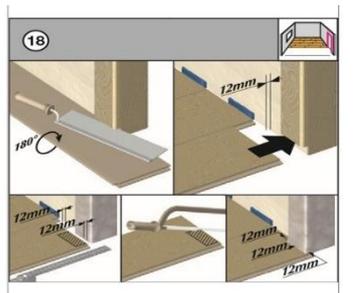
**Installation towards heating pipes (Minimum distance 12 mm (1/2"))**

Position the panel row so that a transverse joint coincides with the pipe.

Join up the sawn-off piece again tightly behind the heating pipe (using the spacer).

Position the panel row so that a transverse joint coincides with the pipe.

First cut the panel to the correct length. Then lay the panel section beside the actual position, measure the recesses with the ruler and draw in.



**Installation towards wooden door frames**

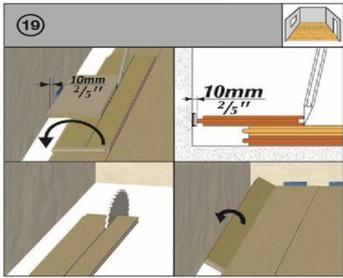
Minimum distance 12 mm (1/2")

Lay a panel next to the door frame (with the patterned side facing downwards) Cut into the door frame with the straight back saw. Then slide the panel under the frame with the patterned side upwards Don't forget to allow for expansion space minimum of 12 mm (1/2").

**Installation towards metal door frames**

Minimum distance 12 mm (1/2")

Lay a panel next to the door frame (with the patterned side facing downwards) Cut into the door frame with the straight back saw. Then slide the panel under the frame with the patterned side upwards Don't forget to allow for expansion space minimum of 12 mm (1/2").



### The final panel row

Lay a panel exactly on the previous row. Lay a second panel (original width) on the top of it and draw an exact line for cutting. Cut away excess wood. Join the panel lengthways. Minimum expansion gap 1.5 mm/lm (1/16" on 3') of 12mm (1/2"). Insert the panel lengthways and lower down.



### Care and Maintenance

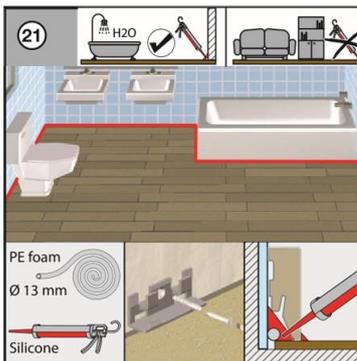
No wet cleaning. Use felt protectors under furniture feet.

For daily care, sweeping or dust mopping is sufficient. Footprints and dirt can be removed with a damp cloth. Under no circumstances should the floor be cleaned with a wet cloth or mop soaked with liquid.

Hardened glue-residue can be removed with acetone. Do not use scouring agents, wax, or polish.

Put flowerpots on water resistant mats. Furniture legs should be fitted with felt pads. Rolling furniture should have soft rubber rollers (type W) in accordance with DIN 12529.

Full care and cleaning guidelines can be found at [www.vikinghardwood.com](http://www.vikinghardwood.com)



### Installation in an area that is susceptible to spills or liquid

If the installation is to take place in an area that is susceptible to spills or liquid getting behind skirting (molding) boards, the perimeter of the room must be completely sealed. A 13mm (3/8") compressible polyethylene (PE) foam backer rod should be inserted to fill all expansion spaces. The backer rod should be completely covered with 100% silicone sealant around the entire perimeter of the installation.

An acrylic sealant should not be used. A small silicone bead should be applied where the skirting (molding) meets the floor, creating a perimeter barrier to prevent any spills or liquids from getting underneath or behind the skirting. Any fixed objects, door frames, etc. should be sealed in the same way using a 100% silicone sealant.