

INSTALLATION INSTRUCTIONS

Flooring with woodura[®] surface

FLOOR SIZE

IMPORTANT. Maximum floor size is 225 m². Expansion joints must be installed, due to changes in humidity and temperature. Placing, usage, design, number of corners, room size, furnishing etc. can also affect.

Maximum floor widths: 12 m

DOMESTIC areas. Maximum floor size is 225 m² in normally furnished symmetrical (square or rectangular) floor areas/rooms. Expansion joints must be installed and covered with profiles between adjacent rooms, at thresholds, in L-, T- or U-shaped rooms, in library rooms, at transitions to corridors, etc. Never place kitchen cupboards, heavy kitchen islands, stoves or similar on the floor.

PUBLIC/COMMERCIAL areas. Divide the floor into smaller sections using expansion joints with covered profiles in public halls and rooms, offices, shops, showrooms, rooms with a lot of corners etc, often with heavier custom furnishings such as counters, bookshelves, heavy product displays, vast product interiors, bookcases, safes, etc.

EXPANSION JOINT width (gap)

The minimum distance to walls and other permanent vertical construction elements, must be at least according to the table below. The floor width (= sum of the panel width in a room, example see figure) decide the gap size.

Important: Before installation, calculate the widths of the first and last row to make sure that the smallest width of a length-cut panel is not smaller than 50 mm.

Please make sure that the distance to adjacent floors is minimum 20 mm.

Cured Wood [10 mm]	
Floor width [m]	Gap [mm]
0-6	10
7	11
8	12
9	14
10	15
11	17
12	18

TOOLS

Spacers, handsaw or jig saw. Fine pencil, folding rule, set square, (white glue - D3, for special cuttings such as at radiator pipes etc.) and knife.

Cutting Cured Wood flooring requires high-quality handsaw or jigsaw with sawblades such as Festo HM75/4,5 T141 HM, Bosch T 130 RF HM or similar.

Circle saw with diamond tipped sawblades (PCD tipped teeth) or laminate flooring guillotine such as Mega STRATICUT 400.

GENERAL INSTRUCTIONS & PREPARATION

- 1.1 The floor installation must be installed after all painting and fixed furniture installations have been made (i.e. kitchen cupboards). Cured wood flooring with Woodura surface can be installed on existing surfaces, such as PVC, linoleum or stone - as long as the old flooring is firmly bonded and there are no loose areas. Textile flooring such as e.g. carpet or needle fleece must be removed, not only for technical reasons but also for hygiene reasons. Inspect the subfloor; It must be dry, even and firm. All kinds of unevenness such as paint, putty, etc. must be removed.
- 1.2 Check the evenness of the floor. Maximum deviation must not exceed ± 3 mm over 2 m length or crosswise. For more information about evenness please read: HusAMA18, Tabell 43. DC/-1, klass A.
- 1.3 Bring the floor packages into the room where the floor will be installed, in order for the floor to acclimatize to the room conditions, place the unopened packages separated from each other and at least 0.5 m from any wall for at least 48 hours (72 hours during the summer season).
- 1.4 Ambient climate for wood floors should be 30-70% relative humidity (RH), on average (45-60%), at appr. 20 °C. At low RH, fine cracks can occur in the joints between the panels, which are best remedied by an indoor air humidifier for temperature and vapor, especially during the heating period. It is recommended to keep the room temperature to 15-25°C before, during and after the installation.
- 1.5 Mix planks from several packages before installation, in order to achieve the desired floor pattern.
- 1.6 Check all planks in daylight before installation for recognizable faults in color and structure.
- No claims are approved after the floor is installed.
- 1.7 On floor heating (water-based or electrical), maximum allowed floor temperature is 27°C. This corresponds to appr. 75 W/m² for a room temperature of 20°C. Recommended interval is 15-27°C.

PLEASE NOTE that the heating system must be flat and well-distributed in the subfloor. Both a room sensor (thermostat) and floor sensor (for maximum temperature limitation) must be installed. Floor heating must never be installed under kitchen cupboards or similar installations.

For more information about floor heating in buildings, please read:

“Wooden floors over underfloor heating 1-2005” at:

<https://www.golvbranschen.se/publikationer/branschregler-och-standarder>

Cured wood flooring with Woodura surface is natural products. Variations are an indication of its natural and genuine quality. Fading may occur with all flooring with direct sunlight or intense artificial lighting.

As a natural product, wood has hygroscopic properties. Dry cracks can appear as the wood expands/contracts and are not due to faulty quality.

SUBFLOOR PREPARATION

2.1 Subfloor moisture content, concrete floors with no floor heating.

CM test method

Material example: Cement screed (CT), Anhydrite screed (CA/CAF)

Requirements: CT: < 2 CM%
CA/CAF: < 0.5 CM%

2.2 Subfloor moisture content, concrete floors with floor heating

CM test method

Material: Cement screed (CT), Anhydrite screed (CA/CAF)

Requirements: CT: < 1.8 CM%
CA/CAF: < 0.3 CM%

2.3 Subfloor moisture content, concrete floors with/without floor heating

Borehole test method

Test holes (depth = d) to be prepared during installation of the heating system and thus before for example concrete.

Ground floor slab: $d = 0.4 \cdot \text{concrete thickness}$

Floor slab between flats: $d = 0.2 \cdot \text{concrete thickness}$

Material RH% at ca 20°C: Normally max 85%

For more information, see e.g.: www.vaisala.com, www.rbk.se

2.4 Wooden subfloor moisture content is 8-10% at maximum 50% RH at 20°C.

2.5 The vapor barrier must always be installed over:

- a. Subfloor (ex. concrete) material without or with a floor heating system
- b. Wooden subfloor with floor heating
- c. Light concrete subfloor (Light concrete subfloor must be equipped with a vapor barrier due to the long dehydration time).

Note that new concrete subfloor is never dry enough at the time of floor laying, so a vapor barrier is always required. A few months after the concreting, usually RH in the floor layer is < 95%, and moisture measurement is usually not necessary.

If the RH in the subfloor is above 85%, the vapor barrier is not sufficient as moisture protection.

REQUIREMENTS

Vapor permeability factor: sd-value must be over 75 [m].

Example: Ageing resistant PE-foil (LDPE) 0,20 mm

(Some PE-foils are laminated to an underlying foam (“Combifoam”) or similar. Make sure to check the sd-value!)

- 2.6** Installation of a vapor barrier: The PE-foil must be folded up about 50 mm along all walls (collar principle) and finally be cut to size along the skirting. Joints must overlap 200 mm and be taped (special tape).
- 2.7** Underlayment material must be installed over the vapor barrier.

UNDERLAYMENT SPECIFICATION

The underlayment material must fulfil following requirements:

	CC [kPa]	CS [kPa]
Domestic applications	> 2	> 10
Commercial applications	> 20	> 60

CC: Long-term exposure caused by static loads (furniture), Compressive Creep

CS: Temporary exposure caused by loads, Compressive Strength

The recommendable thickness of an underlay is appr. 2 mm.

FLOOR INSTALLATION

General

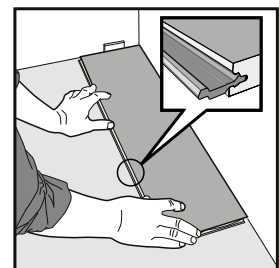
The long sides are connected by angling the tongue into the groove (where the lower lip has a locking tap). The short ends are connected with the Välinge patented 5G® Fold Down locking system as the plank/panel is folded down.

Please watch: www.valinge.se/products/click-flooring-technology

We recommend that you install the planks lengthways to the way the light falls. In narrow or long rooms, choose the installation direction to suit the room's proportions.

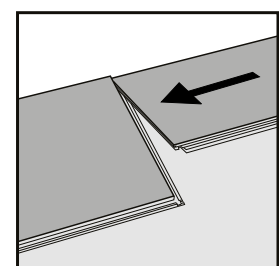
Step 1 First plank, first row.

Place a spacer with a thickness according to the expansion joint diagram on page 1 to the left, and position the plank against the front wall. After 3 rows, you can easily position the flooring against the front wall with required spacers.

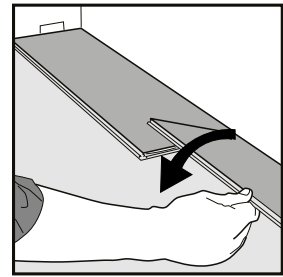


Step 2 Second plank, first row

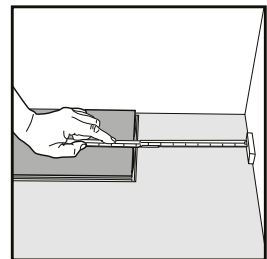
Place this plank gently and tight to the short end of the first one.



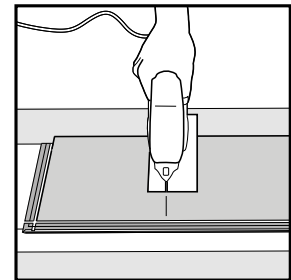
- Step 3** Fold the plank down in a single movement.
When the plank is folded down, make sure the planks are tight against each other. Afterwards press or slightly knock at the short end just installed.



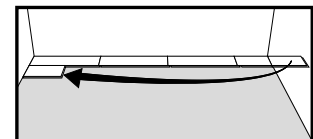
- Step 4** At the end of the first row, put a spacer to the wall and measure the length of the last plank to fit.



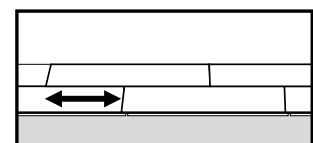
- Step 5** Cut the plank with a jig saw – decor side turned down or with a hand saw with the decor side visible.



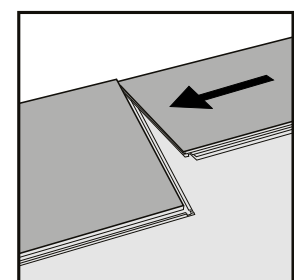
- Step 6** Min. length of the first plank is appr. 500 mm. Put a spacer toward the wall.



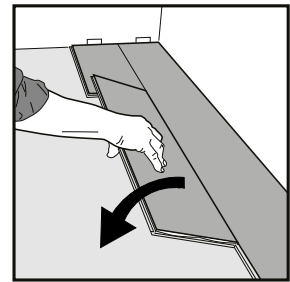
- Step 7** Min. distance between short ends of planks in parallel rows must not be less than appr. 400 mm.



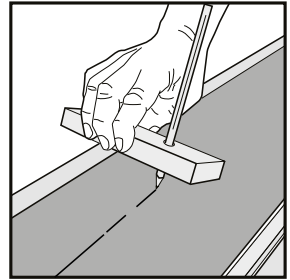
- Step 8** Second plank, second row
Place the plank gently and tight to the short end of the previous plank.



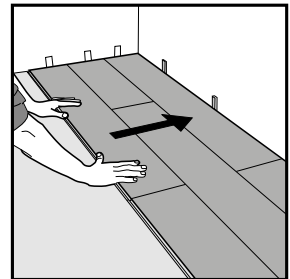
Step 9 Fold the plank down in a single movement with a slight press to the left to the short end of the previous plank. Make sure the planks are tight against each other both during and after this step.



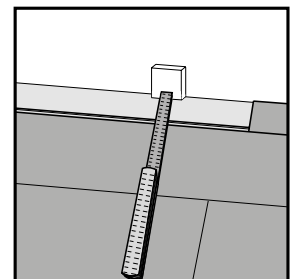
Step 10 First row. Adjustment to an uneven starting wall. Copy the wall line to the first floor plank row with the shown tool, disassemble the 2 or 3 rows (see instruction below), adjust planks and reinstall.



Step 11 After 2-3 rows
Adjust the distance to the front wall by placing spacers.



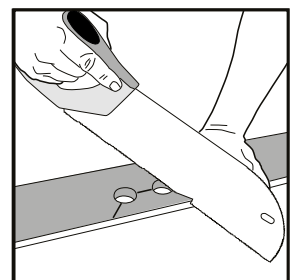
Step 12 The final row must be minimum 50 mm wide. Remember the spacers.
Tip! Put a spacer(s) before measuring. Cut the planks lengthwise



Other installations

Step 13 Installation at radiator pipes.

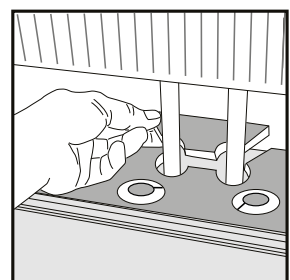
Step 14 Drill the holes 20 mm larger than the diameter of the pipes.



Joints (thresholds/expansion joints/profiles)
Floors move differently depending on floor type and room installation. It is therefore recommended to install a joint between rooms. Don't glue the thresholds or profiles to the adjacent floors! Just to the subfloor.

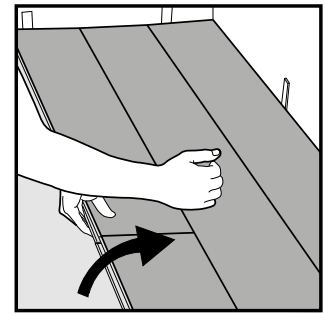
Fixings

Door stoppers, profiles to flexible sliding wardrobe walls/mirrors, etc. shall be fixed to the subfloor (never to the floating floor).

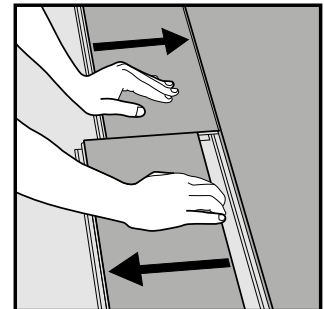


DISASSEMBLY

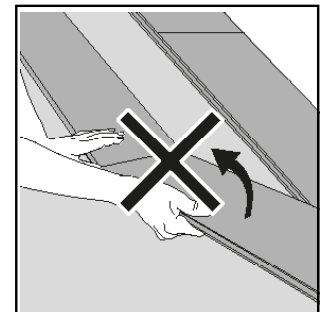
Step 1 Your floor can be disassembled thereby enabling replacement during installation and use. Separate the whole row by carefully lifting up and slightly knocking just above the joint. Fold up and release the whole long side.



Step 2 Disassemble the short ends of the planks by sliding horizontally. Start at the last installed plank.



Step 3 **DO NOT** separate the short sides by angling.



To achieve a smooth surface, carpets should not be placed on the floor during the first months after installation. If there are already lighter parts from rugs etc, they change color quickly when exposed to daylight.