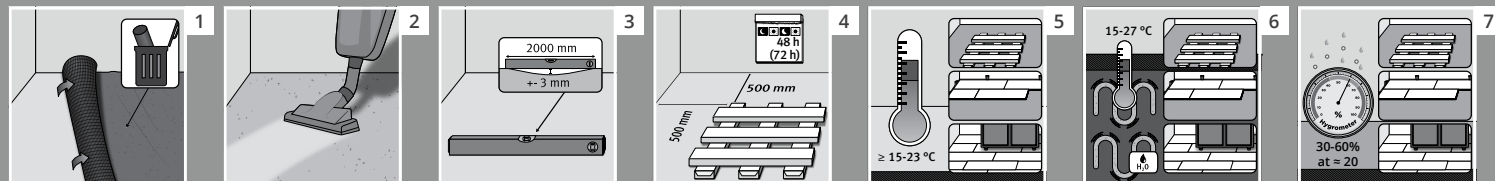


Installation instruction

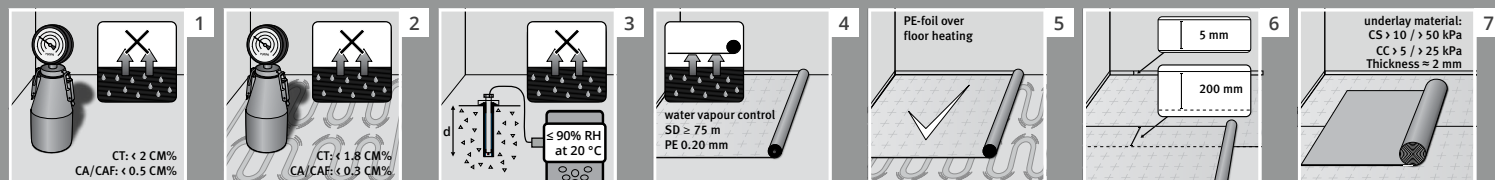
PLANK & 3-STRIP PARQUET
Locking system 2G/5G®

BJELIN

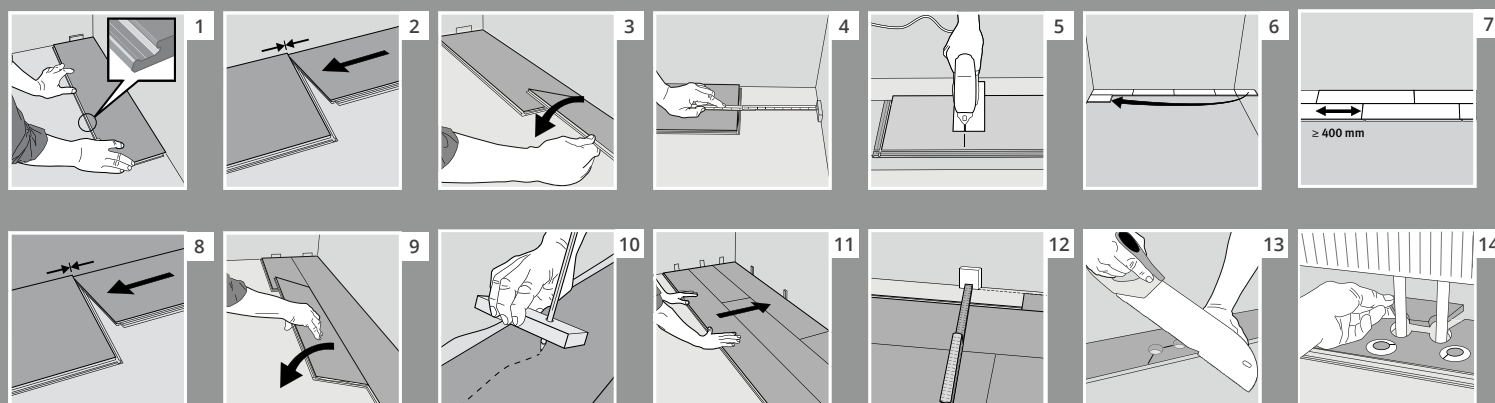
1. Installation preparations



2. Subfloor preparations



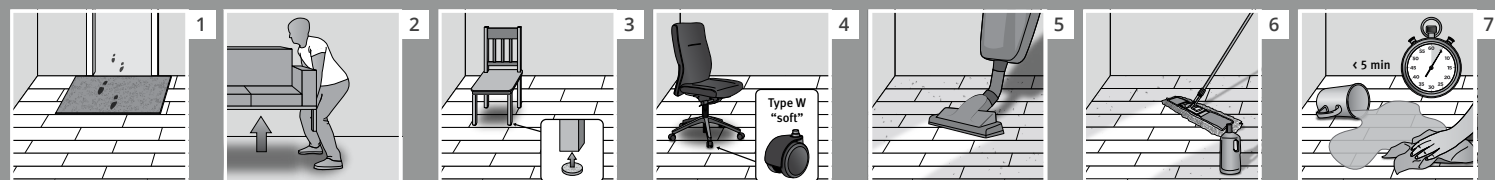
3. Floor Installation



4. Dismantling



5. Cleaning & Maintenance



Installation instructions for floating installation of Bjelin Parquet

Please read the installation instruction carefully. At any question please contact your distributor or Bjelin.

Floor size

Important: Maximum floor size is 225 m² but as wooden floors always move according the changes of humidity and temperature and depending on place, use, design, number of corners, room size, furnishing etc. expansion joints must be installed.

Maximum floor widths: 12 m

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

PUBLIC/COMMERCIAL areas. 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. the floor must be divided into smaller sections by expansion joints and covered with profiles.

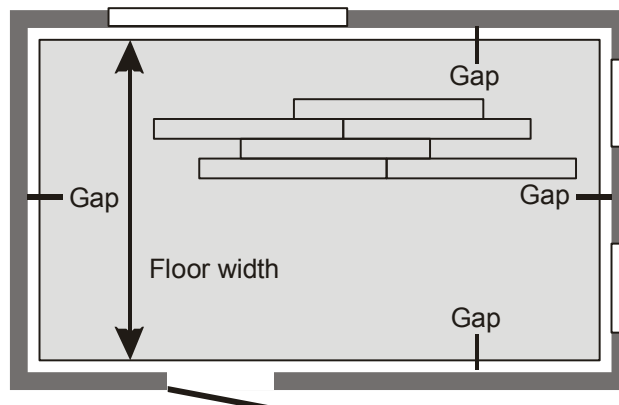
Expansion joint width (gap)

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 as the smallest width of a length-cut panel is 50 mm, see section 3.12 below.

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

Bjelin Parquet [14-15,5 mm]	
Floor width [m]	Gap [m]
0-6	10
7	11
8	12
9	14
10	15
11	17
12	18
13	20
14	21
15	23



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.

The instructions below give a more detailed description to the figures found on page 2.

Installation preparations

- 1.1** The floor installation must be installed after all painting and fixed furniture installations have been made (i.e. kitchen cupboards). Remove all wall to wall carpets and inspect the subfloor. It must be dry, even and firm. All kinds of unevenness such as paint, putty, etc. must be removed.
- 1.2** Vacuum the sub floor.
- 1.3** 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.
- 1.4** Bring your floor packages to the room where to be installed. In order for the floor to acclimatize to the room conditions, place the unopened packages free from each other and at least 0.5 m from any wall for at least 48 hours (72 hours during heating season).
- 1.5** It is recommended to keep the room temperature to 15-23°C before, during and after the installation.
- 1.6** 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 sub floor. Both a room sensor (thermostat) and floor sensor (for maximum temperature limitation) must be installed. Floor heating shall never be installed under kitchen cupboards or similar installations.

For more information about floor heating in buildings, please read the English version: "Wooden floors over underfloor heating 1-2005" at <https://www.golvbranschen.se/publikationer/branschregler-och-standarder>

- 1.7** Ambient climate for wood floors should be 30-60% relative humidity (RH), in 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 heating period.

Mix planks from several packages before installation, in order to achieve the desired floor pattern. Check all planks in daylight before installation for recognizable faults in color and structure.

No claims are approved after the floor is installed.

Ventilation

If an out-and-in air conditioning system is installed in the property, moisture normally must be added. If possible, add moisture to the incoming air during the heating period or install an air humidifier.

Subfloor preparations

- 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%

Installation preparations

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

Borehole test method

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

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 90%

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

Wooden sub floor moisture content maximum 50% RH or 8-10% moisture content at 20°C.

2.4 Vapour barrier must always be installed over:

- 2.5**
- a. Subfloor (ex. concrete) material without or with a floor heating system.
 - b. Wooden subfloor with floor heating.

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 underlay foam ("Combifoam") or similar. Make sure to check the sd-value!)

- 2.6** Installation of vapour barrier. The PE-foil must be folded a 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** A combined sound absorbing / evenness levelling underlay must be installed over the vapour barrier.

Underlay specification

The underlay must fulfil following requirements:

	CC [kPa]	CS [kPa]
Domestic applications	> 5	> 10
Commercial applications	> 25	> 50

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

CS: Temporary exposure caused by loads, Compressive Strength

Recommendable thickness of an underlay is appr. 2 mm.

Floor installation

3 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

3.1 First plank, first row.

Place a spacer with a thickness according to the 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.

3.2 Second plank, first row

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

- 3.3** Fold the panel down in a single movement.
When the panel is folded down, make sure the panels are tight against each other. Afterwards press or slightly knock at the short end just installed.
- 3.4** At the end of the first row, put a spacer to the wall and measure the length of the last plank to fit.
- 3.5** Cut the panel with a jig saw – decor side turned down or with a hand saw with the decor side visible.
- 3.6** Min. length of the first plank is appr. 500 mm. Put a spacer towards the wall.
- 3.7** Min. distance between short ends of planks in parallel rows must not be less than appr. 400 mm.
- 3.8 Second plank, second row**
Place the panel gently and tight to the short end of the previous panel.
- 3.9** Fold the panel down in a single movement with a slight press to the left to the short end of the previous panel. Make sure that the panels are tight against each other both during and after this step.
- 3.10 First row. Adjustment to an uneven starting wall.**
Copy the wall line to the first floor panel row with the shown tool, disassemble the 2 or 3 rows (see instruction below), adjust planks and reinstall. **Note section 3.12**
- 3.11 After 2-3 rows**
Adjust the distance to the front wall by placing spacers.
- 3.12** The final row must be minimum 50 mm wide. Remember the spacers.
Tip! Put a spacer(s) before measuring. Cut the panels lengthwise

Example 1

Floor width (room width - 2*Gap) = 4000 mm. Panel width 223 mm

Calculation $4000/223=17.93$, i.e. 17 rows. Last row = $0.93*223=207$ mm (= more than 50 mm) OK

Example 2

Floor width (room width - 2*Gap) = 3383 mm

Calculation $3383/223=15.17$ i.e. 15 rows. Last row = $0.17*223=38$ mm (= less than 50 mm), NOT OK

Thus, cut the first and last rows to the same width = $1.17*223/2=130.5$ mm

(Control: $14\text{ rows} + 2\text{ cut rows} = 14*223\text{ mm} + 2*130.5=3383\text{ mm}$)

Other installations

- 3.13** Installation at radiator pipes.
- 3.14** 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 (= glued, - at floors with floor heating) to the subfloor (never to the floating floor).

Protection Coverage

After installation of the flooring and/or surface treatment, the floor must be covered if there is a risk of the floors becoming soiled or damaged, eg. by renovations and/or people walking on the surface. The material used to cover the floor must allow for moisture to evaporate from the floor and must not discolour the finished floors. **ATTENTION! Adhesive tape must not be affixed directly to the wooden surface!**

Disassembly

- 4.1** 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.
- 4.2** Disassemble the short ends of the panels by sliding horizontally. Start at the last installed panel.
- 4.3** **DO NOT** separate the short sides by angling.

Maintenance

- 5.1 Floor protection**
Always place a door carpet inside as well.
- 5.2** Move pieces of furniture by lifting to place - do not push/slide!
- 5.3** Protect the floor by using felt pads on furniture legs.
- 5.4** Castor chair wheels must be made of soft rubber material type W.

Cleaning

- 5.5 Daily cleaning**
Daily cleaning by dry mopping/vacuum.
- 5.6 Wet mopping**
Bjelin Hardwood floors can be wet mopped by using an ordinary floor cleaning agent in water. The water finish **must dry within 5 minutes**.

Any spilt water must be wiped off immediately.
- 5.7 Surface maintenance**
For maintenance instruction of the floor surface, please see "Osmo Maintenance instructions":
http://www.osmo-connect.de/images/pdf/Kataloge_GB/COL_LEPO_Innen_Pflege_GB_2016_LR.pdf

Stain removal

For more information, please contact your distributor or Bjelin Sweden AB.

