

Välinge DRAFT – Not for distribution – The seller of the flooring product is responsible for the installation instructions.

General and Installation Instructions 2G + 5G with Bristle tongue, i.e 5G-C or 5G Original

A. INTRODUCTION

Wood material acts after the surrounding climate, the main factor is the **relative humidity (RH, %)**. High humidity means the wood - expands; low humidity - it shrinks. So also all your furniture and all wooden floors.

Due to this natural property you **must** attend to the instructions below.

B. CHECKLIST - TOP 10.

You find additional information to each section further below:

- 1. Store the packages in the future room climate and open package after package when you install.
- 2. This floor will be **floating installed**, i.e. keep always a **distance to all fixed construction parts.**
- 3. Check your floor construction it must be dry (measure always!), clean, firm and even, eliminate always wall to wall carpets and investigate the floor.
- 4. Choose underlay materials (read carefully below!) according to your own situation all floors are unique!
- 5. **Measure** the room, decide installation direction

 Note the limitations as per below due to natural behaviour of wood!
- 6. Floor heating see special advices and requirements follow the instructions from the system supplier!
- IMPORTANT 7. <u>Install according to section E below, Work clean!</u>
 Please note panel release method.
 - 8. **Check you floor continuously** during the installation Installed defect boards can easily be replaced cannot be complained!
 - 9. Keep always the right room climate 45-60 % RH at 18-24 °C.
 - 10. Maintain/clean your FLOOR correct and you will enjoy the floor.

C. GENERAL INFORMATION

I Preparations

Store your <u>unopened</u> floor packages well spread (not on a pallet) in the same conditions (45-60 % RH at 18-24 °C) as it must have after installation, for at least 2 days.

Tools needed

Spacers, a hand block, an installation support wedge, a hand saw or an el. jig-saw, a pencil, a measuring tape, a drill, a chisel + hammer.

Investigate your sub floor:

Wall to wall carpets must be eliminated. You can install on all kind of construction floors, if they are dry, flat, fixed and clean, for example on old wood floors, cement/concrete floors, ceramic tiles, PVC etc.

If other floor top layers, please contact your distributor.

Rev. Page 080908 2(9)



The floor must be:

i. Dry: Measure and file always cement screed /concrete/anhydrite with adequate test instruments. Cement screed/Concrete need long time dry - in worst cases up to one year.

Requirements, moisture content limits

For concrete sub floors:

Calcium/Chloride test (US market) or

A conservative but generally recommended allowable amount of moisture emission as expressed by the calcium chloride test is 3.0 pounds per 1,000 square feet per 24 hours at the time of the installation of the flooring. A note of caution: Use care in lid dealing and removal of the dish, and weighing as exposure to atmosphere will dramatically effect the results. (www.woodfloorsonline.com).

< 2% CM (CM-method) or

 \leq 95 % RH (in Sweden 90% RH) see table below:

Concrete slab	Measure depth	Marks
On the ground	0,4 H	Single sided drying
In beams	0,2 H	Double sided drying
H = thickness of the concrete construction screed excluded		

It is recommended to contact a certified company (in SE RBK-Inspector) for a correct test of the RH-humidity

For anhydrite < 0,5 % CM

PLEASE note that all types of cement screed/concrete/tiles sub floors <u>require</u> a <u>moisture barrier</u> - an ageing resistant PE - plastic film, min. 0,20 mm thick. (sd-value ≈100m) overlapping minimum 20 cm and taped.

<u>For wood floors</u> the moisture content must be ca 8 % (equivalent to ca 50 % RH and 20 °C. Measure and file.

Please note that sub floor construction boards, for example particle board/plywood at installation may have a too high moisture content. Measure, file. and let dry, if necessary.

ii. Flat: Measure always with a vertical positioned floor plank.

Unevenness + 2 mm over 2m must be levelled.

Tip: use flooring paper or newspapers to level your sub floor – never use foams or other soft materials. Check always the floor afterwards.

iii. Firm and Clean: Cross check old wood floors, nail/screw to eliminate squeaking. Brush or vacuum clean your floor - work clean!

II Sound insulation

Sound insulation material must be installed (over the PE-plastic film, if so required). Use flooring paper, 2 mm cork, HD-foams (over 30 kg/m3) max 2mm or other approved underlay materials.



Page

3(9)

III Floor heating

Installation over sub floor heating - some important issues.

Max allowed temperature on top of the wood floor is 27 °C.

Please note that normal loose carpets insulate i.e. increase the floor surface temperature about 2 $^{\circ}$ C!

Do not install Beech/ Maple/Ash over floor heating, These wood species are, due to their natural properties, sensitive to heat, which can cause joint openings, concave warping or squeaking.

Important: Follow the heating regulation recommendations given by the system supplier.

Please note that a 0,2 mm PE-plastic film always must be placed on top of the construction floor either made of cement screed /concrete, etc or also over wood!

Separate floor areas not having sub floor heating with expansion joints.

GBR has provides an english document "Wooden floors over under floor heating".

This can be bought at GBR or downloaded from their homepage www.golvbranschen.se

D. Installation preparations

I. General

Measure the area to be installed and define the installation direction.

It is recommended to install the length direction of the planks parallel to the main light direction. The board width of last row shall not be less than ca 50 mm, If so, adjust the width of the first row to be installed.

When measuring take the **free gap requirement of about 10 mm** of the floor perimeter into account. In narrow hallways, install the floor parallel to the length way.

II Floating installation

Your floor is made to be installed floating without glue:

Leave an open expansion gap of min 10 mm around the whole perimeter (use the distance wedges), i.e also at pipes, stairs, columns, doorframes and thresholds. In large rooms, calculate 1,5 mm/m floor around.

Install maximum 10 m length /width; over this: allow for an expansion gap, to cover with a profile of wood or metal.

The floor must be able to move free – do not connect or install tight to any construction part.

Rooms with off square areas like for example L-,F-, T-, U- shapes, separate the areas with an **expansion joint** and especially always in door openings.

At any question contact your distributor for further information, installation at doors, glue down, etc

Claims re visible defective floor panels must be made prior to installation. Each board should be inspected to ensure that the quality is acceptable. No claims relating to surface defects can be accepted after installation

Page 4(9)

E. Installation method of floorpanels

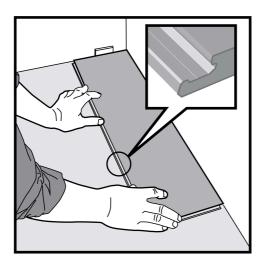


Fig 1.
First plank, first row.
Place a distance ca 10 mm thickness to the left.
and position the plank against the wall.

Later, after 3 rows, you can easily position the flooring against the front wall with distances ≈ 10 mm.

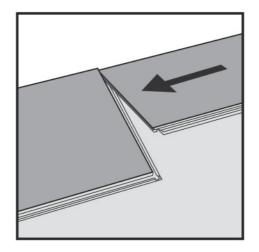


Fig 2.
Second plank, first row
Place this plank gently and tight to the short end of the first one.



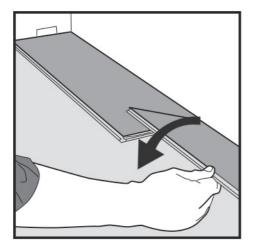


Fig 3.

Fold the panel down in a single action movement. During the fold down, make sure the panels are tight against each other.

Afterwards press or slightly knock at the short end just installed.

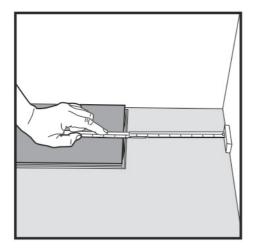


Fig 4.

At the end of the first row, put a distance ≈ 10 mm, to the wall and measure the length of the last plank to fit.

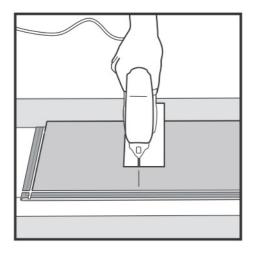


Fig 5.

Cut with a jig saw - hardwood turned down or with a hand saw with the hardwood visible.

Page 6(9)



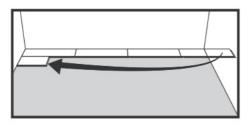


Fig 6. Second row First plank min length 500 mm. Put a distance against the wall.



Fig 7. General. Distances between short ends. Minimum distance between short ends of planks in parallel rows shall not be less than ca 400 mm.

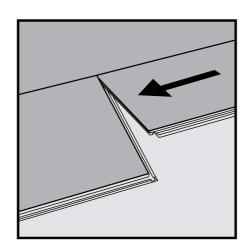


Fig 8a Second plank, second row Place the panel gently and tight to the short end of the previous panel.

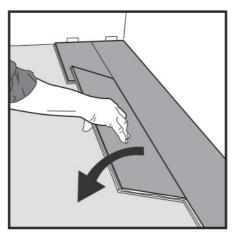


Fig 8b Fold the panel down in a single action movement with a slight press to the left to the short end of the previous panel. During the fold down, make sure the panels are tight against each other.

Page 7(9)

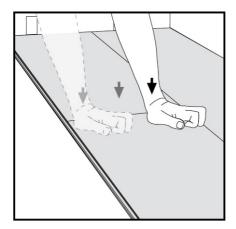


Fig 8c Press or knock slightly along the short end of the installed panel

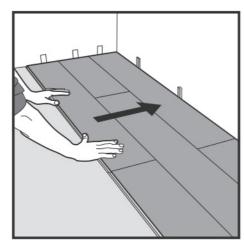


Fig 9. After 2-3 rows. Adjust the distance to the front wall by placing distances ≈ 10 mm.

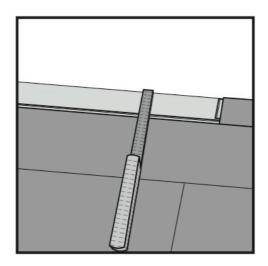


Fig 10. Last row (and perhaps also first row).

Minimum width 50 mm.
Remember distance to wall ca 10 mm.
Tip! Put a distance before measuring
Cut the panels lengthwise and glue the short ends.

Page

8(9)

Disassembling (without tool)

Your floor can very easy be disassembled, which enables replacement during installation and also during use.

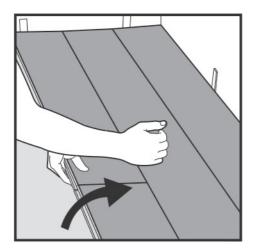


Fig 13. Separate the whole row by carefully lifting up and slightly knocking just above the joint. Fold up and release the whole long side.

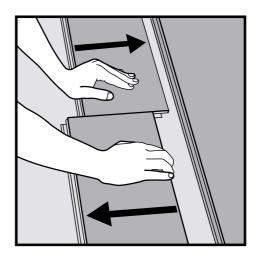


Fig 12. Disassemble the panels by sliding horizontally. (Do **not** fold up!)

Special installations

Small panel widths

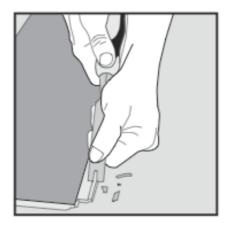
Joining at short ends length cut panels.

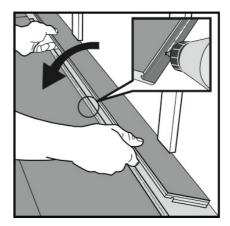
Cut the tongue at the same time you cut the length of the panel and install as shown above.

Please note that the smallest width of a panel is ca 50 mm at the last row – if not - first row must be adjusted.

This can easily be calculated when measuring the room with before installation!

Horizontal installation





Cut off the locking element with a chisel, push the planks horizontally together. If necessary, place some distances between the last panel and the wall to keep the planks together during the curing time of the glue Date modified/printed 14-04-30/ 14-04-30

2G+5G

Doc.no [Doc.no] Rev. 080908 Page 9(9)



Radiator pipes





Installation at radiators. Drill the holes 20 mm larger than the diameter of the pipes.

F. After the installation

You can use the floor immediately after installation.

The skirtings must be fixed to the walls (never to the floor).

Room climate – Humidifier or de-humidifier needed?

At all times, the recommended room relative humidity (RH) of 45-60 % and temperature of 18-24 $^{\circ}$ C should be kept.

If necessary install a humidifier/dehumidifier to ensure the best climate for yourself, furniture and your floor.

If the climate is not kept or correct installed, by natural properties the floor can show fine gaps, at dry climate also concave (cupping boards) or at RH% convex boards.

Cleaning and maintenance

The floor should be cleaned by using a vacuum-cleaner (attachment for wood floors) or brushed. If required, wipe with a damp-dry (well squeezed) cloth. Use a mild soap or similar.

Any water spilt accidentally must be wiped off immediately.

Floor protection furniture, entrances

Stick felt pads to chair and other pieces of furniture legs. Place doormats at out door entrances.