pur natur Floorboards Full-surface Bonded

The full-surface bonding of pur natur floorboards to floor screeds with or without underfloor heating is the only sensible solution.

Fully Bonding Floorboards to Floor Screed

The following instructions have been written assuming installation on floor screed as a substrate. This also applies to OSB (Oriented Structural Board) as substrate in the event that you decide to bond on OSB instead of screwing. There are certainly advantages in full-surface bonding on OSB. We will be happy to advise you about this.

Preconditions

Basically the board floor can only be laid when the following conditions have been satisfied:

1. The indoor climate is suitable: Room temperature approx. 20° degrees and approx. 50% relative humidity.
2. The residual moisture content of the screed is below or the same as the maximum residual moisture content value.
3. The screed has been sanded and is level: +/-2mm flatness tolerance with a 2m straightedge (the Standard for this is DIN 18202, Table 3, Line 4). If the unevenness is greater than this, hollow areas can occur later.
4. The screed has been vacuumed and, where necessary, primed.
5. The floorboards have reached room temperature.

For professional installation; all conditions must be satisfied, no just only one of them. If these conditions have not been met, the floorboards must not yet be installed.

Preparation

Full Length Floorboards:

1. Divide the floorboards up into three stacks and in doing so take into account the colour, the number of knots and the grain pattern. Through this a uniform mixing and a harmonious appearance is achieved later. Naturally, before laying, every board should be checked individually for its suitability to the laying pattern.
2. Floorboards which are not required should be stored in another room or on another storey. Attention: Do not store out in the open!
3. Set up all work material in accordance with our checklist.
4. Set up a work station.
5. Choose the starting point of the laying, respectively the laying axis.
6. Specify the start point and accurately measure the room or area to be laid.
7. Draw the laying axis on the screed.
8. Thoroughly vacuum the area to be laid with a vacuum cleaner.

Random Lengths:

1. Make a separate stack for each board length. This will help you to quickly find a suitable length or the desired length in each case.

2. Floorboards which are not required should be stored in another room or on another storey. Attention: Do not store out in the open!

3. Set up all work material in accordance with our checklist.

4. Set up a work station.

5. Accurately measure the room or area to be laid.

6. Specify the start point and accurately measure the room or area to be laid.

7. Draw the laying axis on the screed.

8. Thoroughly vacuum the area to be laid with a vacuum cleaner.

Carrying Out the Installation

Full Lengths:

1. Start the installation at the previously defined point. If you have to start at a wall, the groove must lie towards the wall. In doing so, take into account the edge clearance to the wall. If you have to start at a drawn laying axis, for example in the middle of a large room, it is irrelevant (practically) whether you start with the groove or the tongue side as you must lay in both directions.

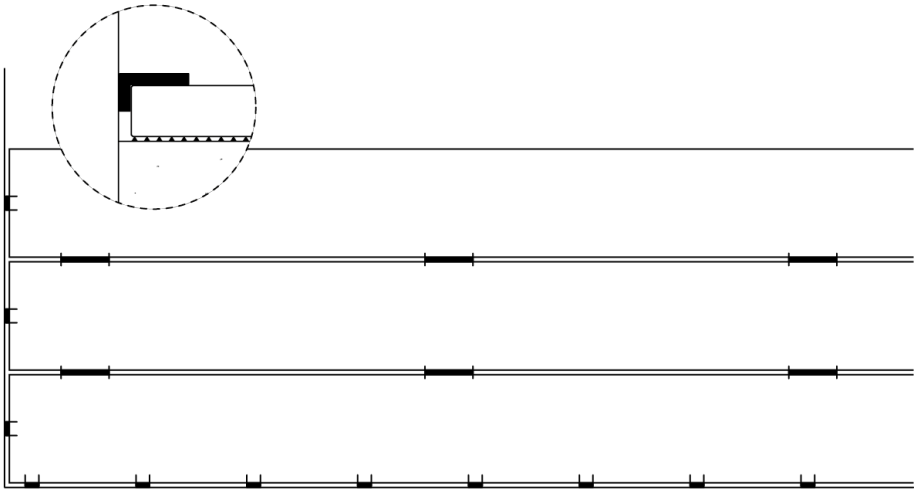
2. Accurately measure the room and saw the first board to length. Generally applicable here is: Board length = room length – 2x edge clearance.
   Example: The room length measured is 4830mm, edge clearance should be 10mm.
   Board length = 4830 – 2x 10mm = 4790mm. If the walls run very straight, 2-3 floorboards can be cut straight away to the exact length, this saves time. If the walls are "crooked" (for example, in old buildings) the boards should be measured and cut to length board by board.

3. Lay the board(s) dry in order to check that everything fits. If you start at a wall, the groove must lie towards the wall. Fit the wall distance pieces. The clearance to be maintained is dependent on the room width and whether you are laying with visible joints or not. For this see Table XXX.

4. Remove the floorboards in order to be able to apply glue.

5. Apply – either by hand or using an glue application machine – glue for 1 up to a maximum of 3 floorboards. With boards of 150-200mm widths, 3 runs are recommended (= 45-60cm working width), with 250, 300 and 350mm floorboards two boards (50/60/70cm working width), with 400, 450 und 500mm board widths always only one board. In doing so, always take into account the open time / working time of the glue (30 minutes at 20° C room temperature). For solid floorboards use a toothed spatula No. 14, with 3-layer floorboards a toothed spatula No. 5. When applying the glue on to the substrate ensure that it does not get onto the walls or the floorboards.

6. Place the board in the glue bed. Fit the wall distance pieces so that the board cannot slip.



7. Press the board firmly into the glue bed, for example, by walking on it.

8. Weigh down the board, for example, with sandbags or full glue tubs.

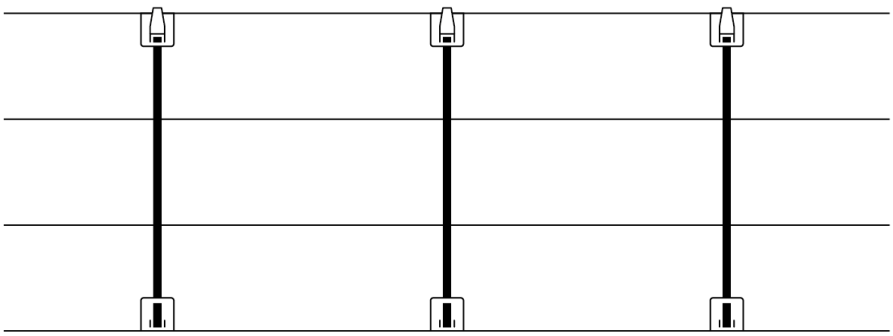
9. Prepare the next board(s) (measurement + cutting to length).

10. Prepare the glue for the next board(s).

11. Place the groove of the board over the tongue of the previous board and lower it slowly into the glue bed. **ATTENTION**: Do not first lay the board in the glue bed and then push it against the previous board – otherwise the glue can be pushed together and lead to "clogging" or get into the tongue-and-groove joint.

12. When laying with visible joints (obligatory for all floorboards from 350mm, optional for all other floorboards) distance pieces must be placed between the floorboards when laying the boards.

13. Clamp the floorboards with parquet flooring clamping belts to close the joints, respectively to create a uniform joint appearance. Floorboards with heavy stresses ("bananas") can occasionally occur and do not represent a defect. Such floorboards can be clamped using parquet flooring clamping belts. Leave the floorboards until the glue is set (guideline approx. 1 hour.) – then the laying can be continued. Alternatively such floorboards can be laid towards the end of the laying in order not to cause too much waiting time.



14. Carry on until you have reached the opposite wall.

15. If the last board cannot be laid in its full width, it is recommended to already prepare and apply the glue for the last board at the same time as the second last board.

16. Measure the last board. Also measure the room length as well as the distance of the already laid area from the wall. From this deduct the necessary edge clearance. Cut the board to the required length. Then make the longitudinal cut: saw the board along its length to the required width. In the process, stresses in the wood may be released and the board can become warped. This can be bent straight again by laying with clamping belts. With the longitudinal cut – for easier insertion – sawing at an angle of 3-4° is recommended.

17. Place the last board in the glue bed. Fit all distance pieces / wedges on all wall sides. Firmly press the board into the glue bed.

18. Clamp the area with parquet flooring clamping belts and leave it clamped overnight.

19. Weigh down all the floorboards.

20. After the curing time of 24 hours, the floor can withstand loads. The floor should not be walked on during the curing time.

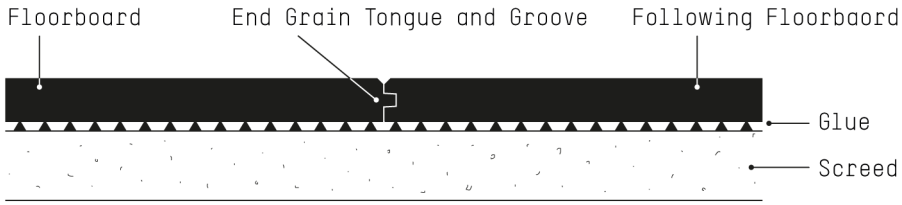
21. Cover the floor to protect it against soiling, damage and discolouration (UV light).

Random Lengths:

1. Start the installation at the previously defined point. If you have to start at a wall, the groove must lie towards the wall. In doing so, take into account the edge clearance to the wall. If you have to start at a drawn laying axis, for example, in the middle of a large room, it is irrelevant (practically) whether you start with the groove or the tongue side as you must lay in both directions.

2. Fetch the floorboards to be laid from the respective stacks. For example, if a run length of 15 metres is to be laid, there are different possibilities for which lengths can be used, for example, 5+4+4+2m, or 4+5+3.50+2.50m, or with shorter lengths 3.3+3+3+2.7+2.1+0.9m. Here not only must the available lengths be taken into account but also the spatial situation.

3. If the floorboards have not been ordered already with factory-cut end grain tongues and grooves or groove-groove and separate tongues, every board must now at the latest be sawn with an accurate 90 degree angle at both ends. The end grain joint can be made with one of the outlined techniques (for example, with Lamello dowels). With floorboards with factory-produced tongues and grooves all round or groove-groove and separate tongues, only the respective first or last board of a run need be cleanly sawn at an angle of 90 on the "wall side".



Cross-Section

⚠ Do not put any glue in the tongue!

If the floorboards need not be end-grain joined, the floorboards must be "undercut". The saw blade for the cut must be inclined at an angle of at least 3° so that the floorboards are pressed together on the upper surface only:

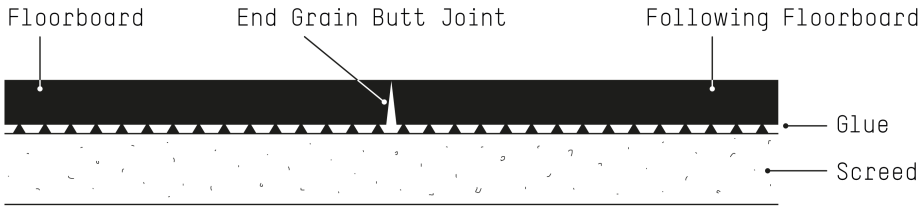


Illustration: Undercut Floorboards

4. Using a vacuum cleaner, thoroughly vacuum the area to be laid.

5. Lay the first run "dry". Thereby it is checked and ensured that all dimensions and the floorboards fit together and into each other. In doing so, the last board of the first run can already be sawn to the exact length. Take up the floorboards again in order to be able to apply the glue.

6. Apply – either by hand or using a glue application machine – glue for 1 up to a maximum of 3 runs. With boards of 150-200mm widths, 3 runs are recommended (= 45-60cm working width), with 250, 300 and 350mm floorboards two runs (50/60/70cm working width), with 400, 450 und 500mm board widths always only one run. In doing so, always take into account the open time / working time of the glue (30 minutes at 20° C room temperature). For solid floorboards use a toothed spatula No. 14, with 3-layer floorboards a toothed spatula No. 5. When applying the glue on to the substrate ensure that it does not get onto the walls or the floorboards.

7. Lay the first run exactly along the laying axis.

8. In doing so, lay board by board onto the glue bed. Tap the floorboards together with the hammering block and crowbar. Use wide distance blocks or wedges between the board and the wall in order to maintain the edge clearance and not to create pressure points in the board or the wall. Work accurately and cleanly. Otherwise deviations add up which first become noticeable on "arrival" at the opposite wall. Be careful that the glue does not get into the tongue and groove!

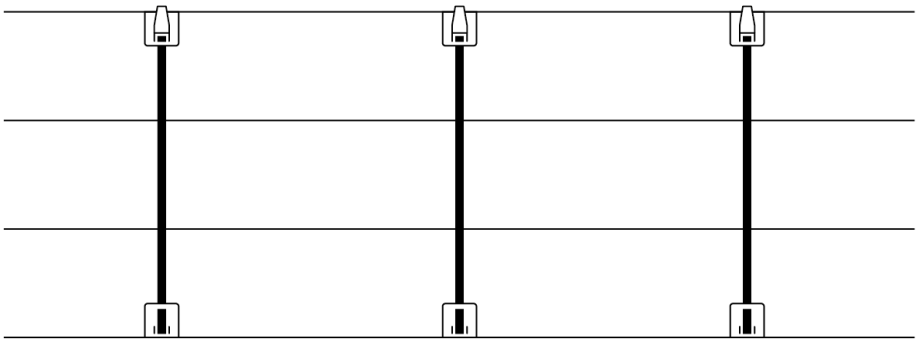
9. The last board of each run usually needs to be sawn accurately to length; Measure the remaining length. In doing so, don't forget the clearance from the wall. Cut the board to the exact length. Place the board on the glue bed. Use the crow bar to bring the last boards of a run firmly together.
10. After laying, press the floorboards firmly into the glue bed (for example, by slowly walking on them). Weigh down the floorboards, for example, with sandbags or still full glue tubs in order to ensure pressure on the glue during the curing time.

11. If the remaining piece of the sawn last board is longer than 30cm it serves as the first piece of the next run. If this is ignored (for example, for reasons of aesthetics), then logically the number of scrap offcuts increases.

12. Always start the second and subsequent runs on the side on which you laid the first run. Place the board with the groove over the tongue of the previous board and slowly lower it into the glue bed. **ATTENTION**: Do not first lay the board in the glue bed and then push it against the previous board – otherwise the glue can be pushed together and lead to (clogging) or get into the tongue-and-groove joint.

13. Lay the further runs in compliance with the above stated instructions. Ensure that the joints are at least 30cm apart from each.

14. Clamp the floorboards with parquet flooring clamping belts in order to make the joints tight.



15. Once the opposite wall has been reached, measure the width of the last run to be laid. In most cases the floorboards must be trimmed to a suitable width along the entire length. In doing so, pay attention to the necessary edge clearance from the wall.

16. Using the parquet flooring clamping belts, leave the floorboards of a room clamped overnight.

17. After the curing time of 24 hours, the floor can withstand loads. The floor should not be walked on during the curing time.

18. Vacuum the floor and cover it to protect it against soiling, damage and discolouration (UV light).

For surface finishing, please see our document "Surface Finishing Instructions".