

## JUNCKERS CLIP SPORTS FLOOR SYSTEM

### Sport

#### JUNCKERS CLIP SYSTEM

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Fig. 1

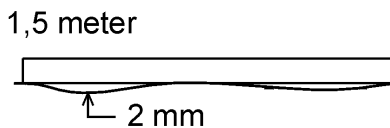
### BEFORE LAYING THE FLOOR

The building must be weather tight. The heating system must be installed and tested, and during the heating season there should be a constant heat supply. Cast concrete elements, including casting of sockets for fixtures and fittings, screeding and other wet trades which can contribute moisture to the building, e.g. priming of paintwork, must also be completed.

The relative humidity in the building must be between 35 - 65% RH (UK) and the temperature approx. 16-20°C. The residual moisture contained in the concrete or screed must not exceed 90% RH. (UK: 75% acc. To BS 8201). In wooden based sub floors the moisture content should not exceed 12%.

Solid boards should always be laid immediately after arrival at the building. The packing on the bundles must not be removed until just prior to laying the floor, i.e. no acclimatising of the boards on site must take place.

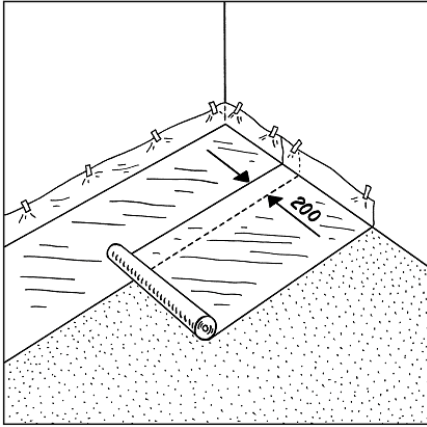
NB: Read these instructions carefully before laying begins. In case of doubt please contact your Junckers distributor before installing the floor.



### 1. SUB-FLOOR CONDITION

The sub-floor must be levelled to a tolerance of no more than 2 mm gap showing under a 1.5 m straight edge (UK: No more than a 3 mm gap showing under a 2 m straight edge).

The surface must be smooth with no roughness. Local irregularities, e.g. above day joints, must be levelled.

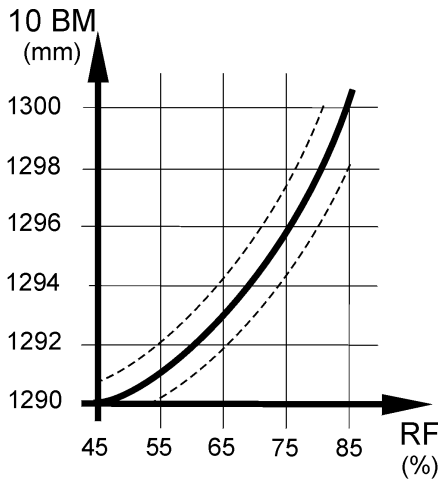


## 2. MOISTURE BARRIER

A moisture barrier of min. 0.20 mm PE membrane is laid, e.g. Junckers Moisture Barrier.

The moisture barrier is laid with an overlap of 200 mm at all joints, continuing up walls, etc.

The polythene has to be taped at all lap joints.



## 3. INSTALLATION CLIPS

Please check that you have the the correct clip size, before starting the installation.

Installation Clips are available in different sizes according to various air humidity ranges. The clip size is selected primarily on the basis of the expected maximum relative humidity (RH) in the building during the year.

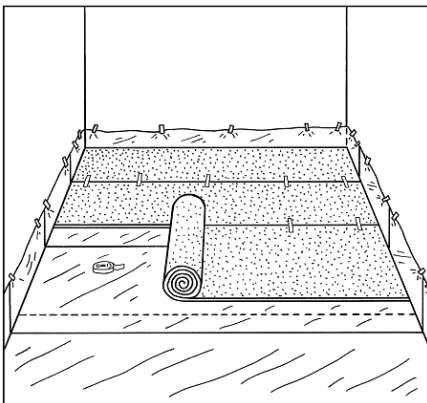
However, in order to minimize the overall movements of larger floor areas, it may be necessary to choose a larger clip size than normally corresponding to the expected maximum RH.

For sports floors < 500 m<sup>2</sup>, use clip size 129.4 mm (Yellow, 2-holes)  
For sports floors > 500 m<sup>2</sup>, use clips size 129.6 mm (Black, 2½-holes)

This rule apply only when the expected maximum relative humidity level is between 35 - 65 %.

We ask you to contact Junckers for advice, if the expected humidity range does not match this interval.

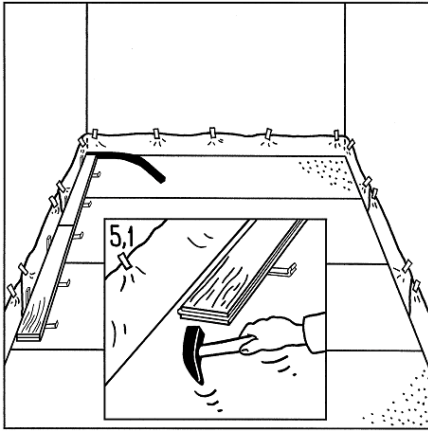
Number of clips per m<sup>2</sup>: 17 pcs



## 4. INTERMEDIATE LAYER

Junckers Sports Foam is laid at right angles to the laying direction of the boards with joints fully closed and taped in place.

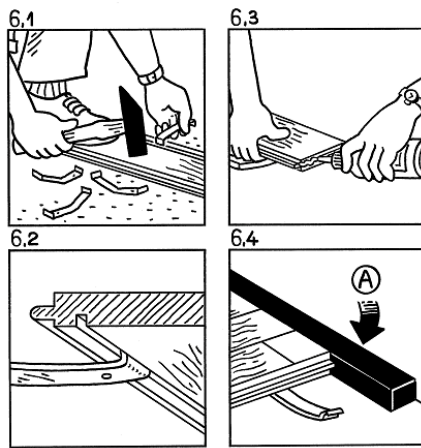
NB: If part or all of the subfloor is inelastic a 10 mm foam mat is used, while for elastic subfloors, e.g. existing sports floors with certain sports-related properties, a 5 mm foam mat may be used. Consult Junckers for advice.



## 5. LAYING OF BOARDS

It is recommended to lay the boards parallel to the longest sides of the room.

NB: It is recommended to lay the boards with the end tongue pointing forwards, so as to avoid any damage to the boards during laying, see Fig. 5.1.



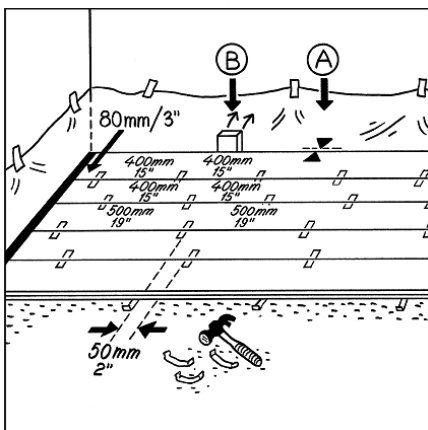
## 6. LAYING OF BOARDS

With the underside of the board facing upwards the clip-end with hole(s) is knocked down into the clip groove, so that the free end of the clip points in the direction of the tongue, which is also the laying direction, see Fig. 6.1 & 6.2.

All board header joints are glued, see Fig. 6.3. Never apply glue to the longitudinal sides of solid boards.

Junckers expansion strip (A) is mounted tautly between board ends and walls, see Fig. 6.4.

NB: Where the floor surface is broken by columns, etc. extra clips must be placed at a distance of 200 mm.

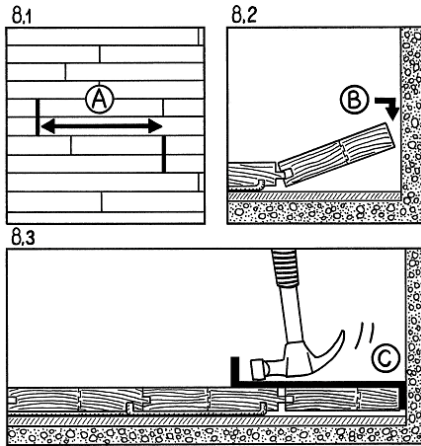


## 7. LAYING OF BOARDS

The distance (A) between the floorboards and walls/vertical fixed installations is calculated as 2 mm per running metre of floor width on each side and for floors over 12 m wide a minimum 30 mm on both sides. Concerning the expansion gaps at end walls see section 6.

The first and last clips are placed maximum 80 mm from the board end adjoining the end wall. The spacing of the clips on the outermost 3 rows of boards on each side must be 400 mm. In all other rows the spacing must be 500 mm. Ensure that the clips do not touch each other by alternating them (in line) at approx. 50 mm intervals.

NB: Make sure the free end of the clips comes up properly in the groove on the neighbouring board. Since this can be difficult due to the elasticity of the mat, use e.g. a small metal plate or the like as a load spread sheet. The metal plate is moved as work progresses.

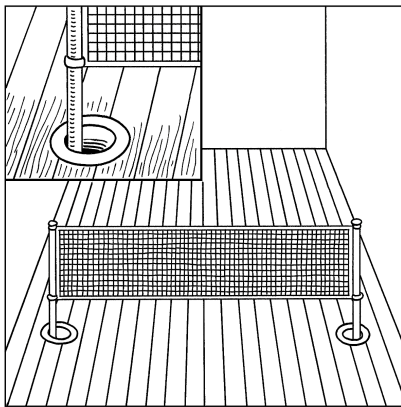


## 8. LAYING OF BOARDS

Lay the boards in an irregular pattern, spacing board joints as evenly as possible. The distance (A) between board joints in two consecutive rows should be at least 450 mm, see Fig. 8.1. Stave joints in one row may not adjoin stave joints in the adjacent row, but must be spread as widely as possible and minimum 50 mm.

Adjust the boards in the last row, and remember the correct expansion gap (B) to the wall, see Fig. 8.2. The last row of boards is glued on the longitudinal side and laid against the boards in the previous row (NB: Only the boards in the last row may be glued on the longitudinal side). Use a joint puller (C) to knock the last board into place, see Fig. 8.3.

Remember to remove spacing blocks before skirting is mounted



## 9. BUSHINGS

On mounting of bushings in the surface of the floor the internal diameter of the bushing must exceed that of the pipe, i.e. the external diameter of the net pole, by at least 40 mm. At the outermost zones of the floor all bushings are mounted eccentrically towards the middle of the floor in relation to the sockets in the concrete, see Fig. 9.1.

NB: Floor rosettes must be mounted to allow both vertical and horizontal movement of the floor to take place unimpeded.