

solid hardwood floors & **clip laying**



| SIMPLE - FAST - INVISIBLE LAYING SYSTEM | FLOATING
FLOORS WITH LOW IMPACT NOISE ON ALL TYPES OF SUBFLOOR
| FOR LARGE AND SMALL ROOMS | FOR NEW BUILDINGS OR
REFURBISHMENTS | ASSURANCE OF GOOD RESULTS | FOR
BOTH DIY AND PROFESSIONAL APPLICATION |



1

The flatness of the floor is measured using a straight edge. The floor must be flat with a deviation of not more than ± 2 mm per 1.5 m straight edge.

The building must be dry, closed and warm. The floor must also be dry.

Examples:

- 1) For concrete, the residual pore humidity must not exceed 65% RH (relative humidity).
- 2) For wood-based floors, max. 6-12% RH.



2

The underlay is rolled out. On concrete, where a moisture barrier is required, the underlay is taped to the walls. See Underlay Guide (page 5) regarding choice of underlay.

Note that there are special rules for laying over underfloor heating (see page 6 – and, if required, order Junckers brochure on under-floor heating).



3

For 22, 20.5 and 14 mm floors, there are 3 different clips. See Clip Guide (page 5) regarding choice of clip.

The end of the clip with the hole(s) is fastened into the clip slot on the underside of the boards. The free end of the clip points in the same direction as the boards' joint tongue – i.e. the direction of laying.

To prevent the clips touching (in adjacent boards), they are staggered by approx. 50 mm.



4

REMEMBER that there must be a gap between boards and fixed installations/walls. As a rule, for 14 mm floors the gap on any side must be 3 mm per running metre of span (min. 15 mm) to accommodate board expansions. For 20.5 and 22 mm floors, the gap must be 2 mm per running metre of span (min. 15 mm).

In the first row of boards, the clips are fitted at intervals of 400 mm.

In subsequent rows, at intervals of:

- 1) 700 mm for Residential, and
- 2) 500 mm for Commercial.

The first clip in a row of boards is placed max. 80 mm from the wall.



5

Lay the first board with the grooved side towards the wall. If required, use a temporary spacer between the board and the wall (NB: remove before fitting skirting boards).

Keep a 15 mm gap between the ends of the boards and walls. To prevent open end joints against walls, insert Junckers expansion strip along the ends of the boards.

Note that there are 2 different expansion strips:

- 1) For Junckers 14 mm, and
- 2) for Junckers 20.5 and 22 mm products.



6

All end joints are glued using Junckers end joint glue, Sylvafix. Remove any surplus glue immediately with a damp cloth.

NB: Never glue along the length of the boards!

For further information

You should use the following **tools**:



HAMMER



TAPPING BLOCK



PENCIL



7

Make sure that the clip is securely in place in the clip slot. The free clip end from the previous board snaps into the clip slot in the new board when you tap the tongue.

NB: Always use a tapping block!



8

Tread lightly on the boards as they lock together.

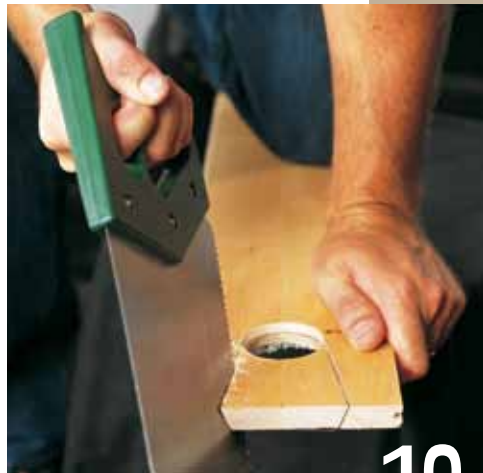


9

Once the first 2-3 boards have been laid, you can stand on the boards during further laying.

Note:

- 1) The boards are laid in an irregular pattern.
- 2) End joints are staggered by min. 250 mm in relation to the adjacent row.
- 3) Strip joints in one row of boards must not line up with strip joints in an adjacent row but should be spread out as much as possible.



10

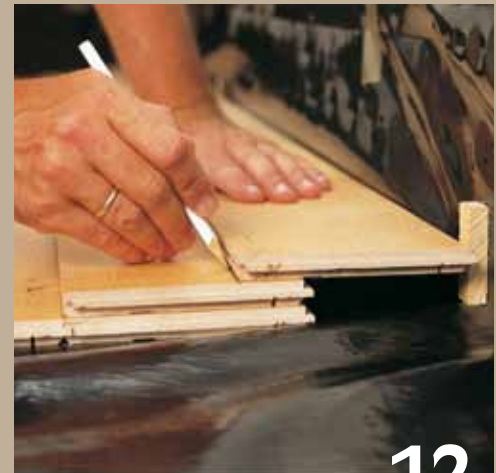
At pipe penetrations, a gap of min. 15 mm is left around the pipe (e.g. 10 mm pipe + 30 mm gap = 40 mm hole). Drill the hole and saw as shown.



11

Lay the board and glue the sawn-out piece using Junckers Sylvafix.

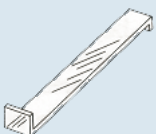
NB: Remove any surplus glue immediately with a damp cloth!



12

The final board is adjusted to fit as shown in the picture. Always remember the min. gap to walls of 15 mm (step 4).

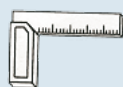
visit: Junckers Technical Information at www.junckers.com or call



FLOOR IRON



DRILL BIT



TRY SQUARE



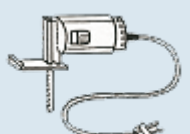
ZIG ZAG FOLDING RULE



SYLVAFIX



DRILL



COMPASS SAW

NB



13

The final board is laid. If the clip slot has been cut away, the board is glued to the previous board along the full length of the groove. This is the only exception to not gluing lengthways in the tongue and groove.



14

Once the final board has been laid, it is pressed carefully into place using a floor iron or a crowbar until the boards lock together.

NB:

- 1) Protect the floor with a cloth when using a floor iron!
- 2) When using a crowbar, place a tapping block in between to protect the wall!



15

Fit the skirting boards. As shown, you can use your body weight to press the skirting board down onto the floor surface.

REMEMBER to cut away any underlay that is visible above the skirting boards.

16

Door frames can be dismantled and adjusted for size. However, it is easier to shorten them while they are mounted.



1

If the boards are supplied with a plastic backing, this should not be removed.

2

The boards should always be laid parallel to the room's longest wall.

3

Junckers' Polyfelt is laid with the fibre side down and the plastic side up.

4

Do not glue lengthways in the tongue and groove.

5

The boards must be laid staggered. This means that strip joints in one row of boards must not line up with strip joints in an adjacent row but should be spread out as much as possible.

6

If you have any questions, contact Junckers Distributor Department.

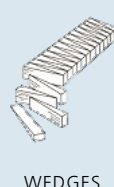
Junckers Distributor Dept. on +45 56651895



STRAIGHT EDGE



SAW





















WEDGES

General information on **choice of clip**

Junckers clips are available in different sizes. The choice of clip size depends on the anticipated relative humidity throughout the year. Clip consumption (number) is calculated on the basis of the chosen board thickness and type of building (see Clip Guide).

Clip guide

NB: If you are in any doubt about the choice of clip, contact Junckers for advice.

| CLIP TYPES: | | RESIDENTIAL | COMMERCIAL | Shipsdecking | NB ! | |
|---|----------------------------------|--|--|--|--|--------------------|
|  | GREEN 1-hole (10-BM = 129.1) | clip consumption | | clip consumption | areas where moisture and heat are critical factors | |
|  | YELLOW 2-hole (10-BM = 129.4) | number/sqm. | clip type | number/sqm. | clip type | underfloor heating |
|  | RED 3-hole (10-BM = 129.8) | | | | | |
| BOARD THICKNESS | 14 mm | 13   | 17   | 17  | Seek special advice! | |
| | 20.5 mm | 17   | 17   | 17  | | |
| | 22 mm | 13   | 17   | 17  | | |

General information on **underlays**

| Underlay guide clip laying | UNDERLAY | Junckers Sylvafelt (w.out moisture bar.) | Junckers Polyfelt (with moisture bar.) | Extra 0.20 mm moisture barrier | 500 g floor felt |
|---|----------|--|--|--------------------------------|------------------|
| SUBFLOOR | | | | | |
| Old wooden floors (boards, parquet, lamella) | | ● | | | ● |
| Chip-/fibreboard floors (w./w.out cork, vinyl, lino.) | | ● | | | ● |
| Concrete floors | | | ● | | |
| Clinker floors | | | ● | | |
| Underfloor heating - with concrete | | | ● | ● | |
| Underfloor heating - w. polystyrene (see p. 6) | | | | ● | ● |

The clip laying system has been specially developed for Junckers solid hardwood floors in thicknesses of 22, 20.5 and 14 mm. The clip laying system allows the floor to be laid over existing dry, flat underlays/ subfloors such as old wooden floors, concrete, vinyl and linoleum.

The choice of underlay depends on what the floor is to be laid on (see chart). Junckers Sylvafelt is a fibre matting with a good impact noise damping effect for floating floors and is used where a moisture barrier is not required. Junckers Polyfelt is a plastic membrane with 'sewn' fibres and an overlap of 200 mm free plastic on one side. Junckers Polyfelt serves both as an impact noise damping, elastic underlay and as a moisture barrier.



Junckers lacquered floors are approved by the Danish indoor Climate Labelling at Danish Technological Inst.

Clip laying of Junckers

Shipsdecking

It is worth noting that the clip laying system can also be used when laying shipsdecking with neoprene strips.

A 3-hole clip must be used, which gives the 10-board measure of approx. 129.8 cm. The general laying guidelines also apply to shipsdecking, but with the following exceptions:

- 1) The clips are fitted at intervals of 500 mm, but only 400 mm in the outermost board (step 4).
- 2) A 1 mm gap (but max. 10 mm) is established on both sides per running metre of span (step 4).
- 3) Between the board ends and end walls, keep a gap of 15 mm (step 5) and insert Junckers expansion strip along the board ends.

Shipsdecking is especially suitable for rooms with underfloor heating because the neoprene strips that create the ship effect accommodate the natural movements of the floor surface.



Clip laying of Junckers

over underfloor heating

Junckers solid hardwood floors in thicknesses 22, 20.5 and 14 mm are suitable over underfloor heating, although solid hardwood floors in themselves are an insulating material that provide warmth and comfort without underfloor heating.

Underfloor heating systems beneath wooden floors are executed as water-based or electricity-based systems. For both types of system, there must be even heat distribution under the whole wooden floor surface and the surface temperature of the floor must not exceed 27°C.

The clip laying system can be used where heating pipes or cables are embedded in concrete or putty. In this case, 0.20 mm PE foil with 200 mm overlap is used as well as Polyfelt. Both underlays are taped at the joints and led up behind the skirting boards.

When using polystyrene plates with PEX tubes, in order to ensure sufficient stiffness of the floor surface it may be necessary to incorporate a pressure-distributing plate underneath the clip system (depending on board thickness, load class and polystyrene plate density).

The wood's special characteristics mean that the underfloor heating must be regulated slowly both up and down. It can be beneficial to have the underfloor heating system turned on throughout the year since the thermostat controls heat regulation.

Read more about underfloor heating at www.junckers.com (under 'technical information'), or order our brochure on underfloor heating.

