LAYING INSTRUCTIONS for FLOATING INSTALLATION

Tools Required for Laying

A few common tools are required

- a wood saw
- hammer (at least 500g)
- measuring tape and pencil
- square
- striking block
- drill and pinch bar.

And, of course, the essential materials - PVA adhesive to join the boards, and small wooden wedges to set the expansion gap between floor and walls must also be provided.

Preparation

The flooring boards should remain their packaging until ready to be laid. This will protect the product from humidity and damage prior to laying.

Each board should be inspected before installation to ensure that it is of acceptable quality. No claims relating to surface defects can be accepted after installation.

Before commencing work, ensure that the floor will fit under doors, as well as the skirting board. It may be necessary to remove the skirting board whilst the floor is being laid so as to allow a suitable expansion gap around the perimeter.

Determine which way the strip should be laid. For best results, the boards should be installed along the longest dimension of the room and in square rooms, the best effect is achieved if the long joints follow the path of incoming light.

Sub-Floor

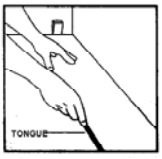
Sub-floor surfaces must be dry, level and sound. Most surfaces are suitable including concrete, timber flooring, particle board, vinyl or ceramic tiles and various screeds. (Concrete slabs must be tested to ensure that the moisture content is acceptable, preferably in accordance with the Australian Standard. All green or damp slabs must be treated with a suitable moisture barrier to prevent migration of moisture to the wooden flooring.)

Whatever the sub-floor, it is recommended that a 2mm thick closed cell polyethylene underlay be used to assist with bedding of the floor and to reduce transmission of impact noise.

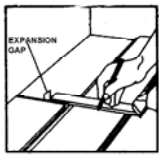
The floor should be flat with any abrupt variations levelled out. For concrete or stone floors, a cement based levelling compound should be used and timber floors should be sanded. Old timber surfaces should also be checked for squeaking and fixed as necessary to give a sound sub-floor surface.

The floating floor system should not be applied to heated sub-floors.

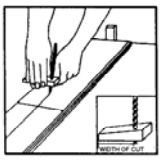
2) Place the first board in the corner with the groove facing the wall and place wedges to establish the expansion tolerance at the end of the board. Join other boards according to the room length but without initially gluing them together.



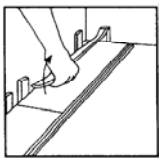
3) Turn over the last board of the first row so that the two tongues face each other and mark the cut point on the back. Again set the board correctly leaving an expansion gap at the end without gluing.



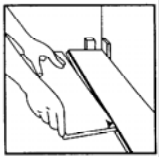
4) It is important that the boards follow the direction of the wall. If the wall is not straight, mark its profile on the first row of boards and cut these length-wise accordingly.



5) Now place the first row of boards with the groove against the wall and introduce wedges to establish a uniform expansion joint along the length. Apply adhesive to the grooves and tap the boards together with a mallet and striking block. The last board is levered into position using a pinch bar and secured with a wedge. Use a damp cloth to wipe off any excess adhesive squeezed onto the board surfaces.



6) Take the off-cut from the previous row and place it at the opposite end of the room always ensuring that board ends are randomly staggered - at least 250mm apart.

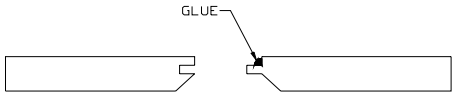


Perimeter Expansion Joints

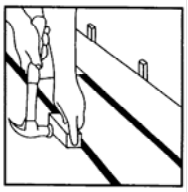
As a natural material, timber is prone to movement with variations in moisture content - variations which may be caused by exposure to radiant heat sources and/or changes in relative humidity. To allow for expansion at the perimeter of the floor, it is therefore necessary to leave a gap of at least 12mm at all walls and fixtures (including pipes and columns). A general allowance of 2mm at each end per running metre of floor is desirable. That is, an 8 metre floor would need 16mm expansion joint at each end. When laying the floor, these perimeter spacings are set by the use of wedges placed between the edge of the board and the adjacent wall.

Installation Tips

When gluing tongue and groove joints the adhesive should be applied in an even bead to the upper surface of the tongue, both along the side and the end of the board - as shown in the illustration. The tongue and groove joints have been machined to fit precisely together to form a seamless connection.

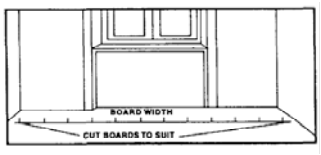


Where boards need to be tapped into place, **always use a striking block** - do not strike the board directly with a hammer.



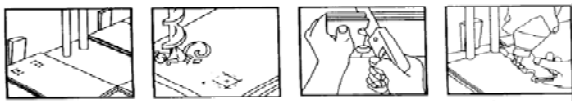
Laying the Floor

1) Measure the room to determine the correct quantities of material needed, remembering that if a length wise cut is required to fit the last board, it is preferable that this last board should not be too narrow. It may be preferable to install ripped down boards on both sides of the room to achieve a balanced appearance.

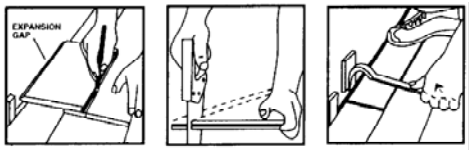


7) Apply glue to the longitudinal and end grooves and use striking block and hammer to fit the boards seamlessly together.

8) Proceed similarly with all remaining boards. Use of striking block and hammer is important so that any damage to the boards is avoided. Always use a damp cloth to remove excess adhesive as each row is laid. Where heating pipes or pillars protrude from the floor, their position should be measured and the board cut as shown in the figure. Remember to leave room for expansion around such fittings. Other protrusions such as door architraves should be cut out in a similar manner, always using wedges to ensure that the appropriate expansion capacity is maintained.



9) Determine the precise width of the final row of boards which can be cut as shown in the diagram, remembering to allow space for the expansion joint. Apply the glue in the groove of this last board and place it using a pinch bar as a lever. Wedges should be installed in the gap to hold the flooring tight until adhesive has dried.



10) If skirting boards have been removed, they should now be replaced and if necessary, a further bead should be fitted to cover the expansion gap. Remember to remove the wedges if these have been used as this will allow the floor to expand as required.

Installation on Radiant Heated Concrete Slab

All engineered timber floors can be installed using either the floating or direct stick installation method, using an approved adhesive for radiant heating.

When you follow the “installation on Radiant heated concrete slabs” installation instructions, engineered timber flooring is fully covered under warranty for use over radiant heat. However, failure to meet **all** the requirements specified will void the warranty. Please note that in engineered timber flooring moderate surface checking, cracking (especially at board ends and around knots), shrinkage, slight gapping between boards and minor cupping are normal and do not indicate a product failure or defect.

- Only White Oak (European or similar) is approved for use on radiant heat applications. **Do not** use Australian Hardwood or other Exotic hardwood species. Warranty will be voided if anything other than the approved specie or correct installation method is used.
- Radiant heating systems used must be designed by the system manufacturer for hardwood flooring, specifically controlled for hardwood flooring and must include an outside temperature probe and surface temperature controls.
- A moisture test of the flooring must be performed and documented prior to installation.
- At the time of installation, the concrete subfloor must be 18 - 20°C.
- Use an adhesive approved by the system manufacturer for edge and end joins.
- Do not change the radiant heat setting for 48 hours after installation.
- Gradually increase the heat in 2-3°C increments daily to adjust the heating system temperature up or down to allow the flooring to adjust to the temperature changes.
- The maximum temperature of the concrete subfloor under normal use should not exceed 29°C (Check with the heating system manufacturer)
- Check with the heating system manufacturer’s guidelines for the correct water temperature inside the pipes.
- Heating pipes must be covered with 30mm of concrete.
- Room temperature should be maintained between 16-27°C and not vary more than 8°C from season to season.
- Relative humidity must be maintained within the range of 35-55% humidity in the home for radiant heated rooms.
- Always refer to the manufacturer of the radiant heating system for detailed instructions.