PENTARCH FORESTRY®

ENGINEERED FLOORING

INSTALLATION GUIDE

Thank you for purchasing Pentarch Forestry Engineered Flooring. Please read these instructions carefully prior to installation. We strongly recommend that these instructions are read in full prior to beginning your installation.

1. In General

Pentarch Forestry Engineered Flooring is a floating timber floor meaning that the edges of each board are joined to each other using the glueless UNICLIC® joining system, and are not fixed to the sub-floor. Pentarch Forestry Engineered Flooring floats over an approved 2mm foam underlay or ecoCORK Insulation Acoustic Underlay and can be installed over any sound, dry and level surface. An expansion gap is left to the entire perimeter of the floor to allow for initial and seasonal expansion. The boards are generally installed along the length of the room with the ends of boards laid with a natural random stagger.

A successful installation will rely heavily on strict adherence to these instructions. The two most common causes of failure are uneven subfloors, and inadequate expansion to the perimeter of the floor. An uneven subfloor may lead to movement of the flooring underfoot and within the joining system, resulting in excessive noise, which often sound like “crackling” or “creaking”.

Pentarch Forestry’s Engineered Flooring floor can also be direct stuck using a full trowel method to a prepared subfloor.

2. Tools Needed

An installation kit containing expansion wedges, a pulling iron and a tapping block. You will also require a jigsaw, pencil, hammer, tape measure, sharp “Stanley” type knife and small hand tools associated with wood working. Along with your Pentarch Forestry Engineered Flooring you’ll need a quality underlay, and enough trims to complete your floor. Trims are available in a range of shapes, profiles and colours from your local retailer.

3. Preparation

The first step is to ensure the subfloor or surface the engineered wood floor is being installed over is level. Using a 1 metre straightedge, the subfloor level should not exceed +/- 3mm over 1 lineal metre in any direction. Remember, uneven floors may lead to movement and noise, so it is necessary to assess the levelness and get it right. Timber floors can be sanded level and concrete floors or existing floor coverings can usually be levelled using a self-levelling compound. Pentarch Forestry Engineered Flooring cannot be installed over carpet or carpet underlay but can be installed over well bonded vinyl, cork, ceramic tiles if sufficiently level.

3a. Using 2mm Foam Underlay

Pentarch Forestry Engineered Flooring must always be installed over a continuous damp proof membrane. This continuous damp proof membrane can be provided by 200uM builders plastic, overlapped 300mm at the joins and taped with a vapour tight tape or using an approved 2mm foam underlay. Foam underlays are manufactured with a plastic damp proof membrane on one side and are conveniently fitted with a 100mm overlap and peel and stick tape. The underlay is rolled out along the starting wall with the plastic down, peel & stick side to the wall. Additional rows are rolled out with tape down over the extended clear overlap. The wax tape can then be peeled away forming the continuous damp proof. Cut ends must be taped with a waterproof tape.

In the instance of knowingly or logically wet subfloors, always use 200uM builders plastic sheeting, overlapping joins by 300mm, taping joins with waterproof tape and turning up at walls or vertical fixtures.

Door frames and architraves should be undercut prior to commencing installation using a scrap of flooring and a long, flexible hand saw (Fig 10). Undercut saws may be available from your local retailer and are specifically designed for this purpose. Work out the trims to be installed as some trims are easier to install prior to the flooring. This will be dependent on the direction of the trim to the flooring and the type of trim to be installed.

3b. Using ecoCORK Insulation Acoustic Underlay

Begin laying sheets from one end to the other of the room(s), lengthways. It is generally easiest to start on the longest, straightest wall and work your way across and where possible in the same direction as the floor. Always lay sheets in a brickbond pattern between each row – do not line up the sheets. Sheets can be laid either side up. Cut sheets with a utility knife or blade to finish each row, laying each sheet tight up against the next. If any errors are made in the row, ensure any gaps are filled with cut pieces of ecoCORK. For floating floor installations, tape the joins of any pieces smaller than 20x20cm or recut a new sheet.

4. Installing the First Three Rows

Select a starting wall that is long and visible, the first three rows will be installed parallel to this wall. Install the first row of plastic and/or underlay as required then install the first row, tongue (male) to the wall to assess the straightness of the starting wall. If the starting wall is undulating or uneven, square this row off to the other side of the room using a tape measure and scribe the first row of boards to cater for the undulations while accommodating a uniform 10-15mm expansion gap.

If scribing is not required, remove the tongue along these starting boards (Fig 4). In terms of the required expansion gap, a minimum of 10mm is required in lower relative humidity environments like Melbourne or Hobart. A 15mm gap is required in areas of higher relative humidity like Queensland or Darwin.

Remember that Pentarch Forestry Engineered Flooring may expand up to 4mm per LM in the width, as such the wider the

floor, and the higher the humidity, the larger the perimeter gap should be. Now we will assemble the first 2 rows in a staggered formation as per diagram 5.5. This will provide a foundation for additional rows, it can be assembled away from the wall, then slid into position with minimum 10mm spacers installed along the wall and at the ends. The off-cut from the first 2 rows can now be used to start the 3rd row, providing it is longer than 300mm.

If not, a new board will need to be cut to begin the 3rd row. Now install the 1st board of the 3rd row by rotating the long join into position (Fig 1) and install the 10-15mm spacer at the start of this row. Continue installing the floor left to right using the off cut from row 3 to begin row 4. (Note: Remember to ensure that you stagger end joins by greater than 300mm.) Any small gaps in the first three rows can be filled using a caulking compound in an appropriate colour.

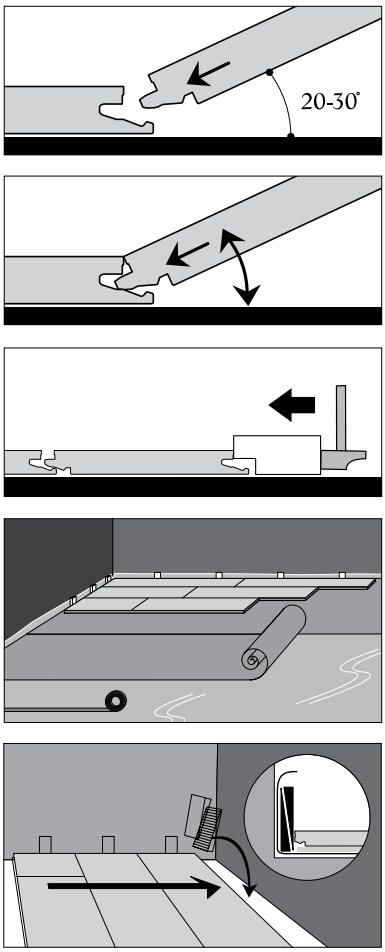
5. The Body and the Final Row

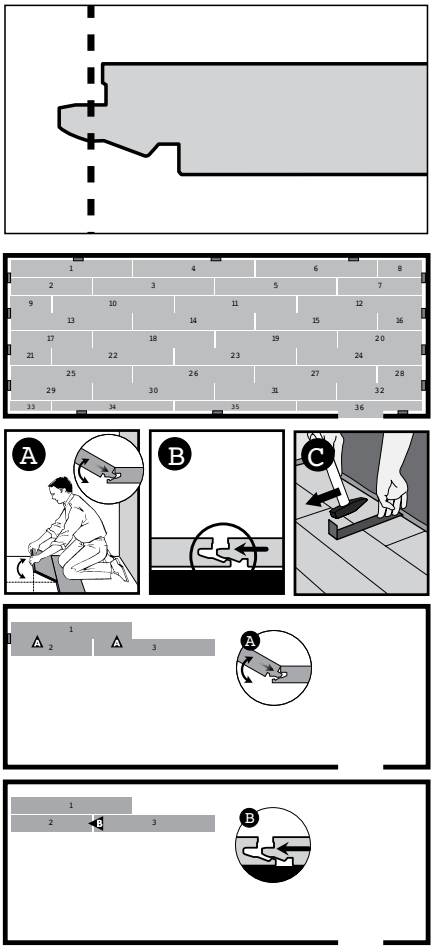
Continue installing the floor left to right. The final row will need to be trimmed to fit using a jigsaw and bought into place using the pulling iron (Fig 6). Remember to allow 10-15mm for your expansion gap at all walls and vertical surfaces. This gap will be covered last of all.

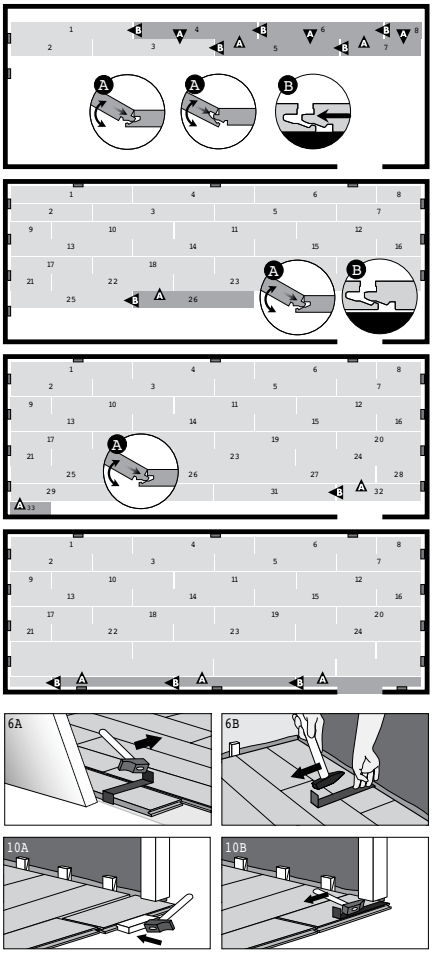
6. Finishing Off

Where skirting boards have been left in place, it is now time to fit scotia moulding to the perimeter of the floor to cover the expansion gap. Scotia is to be pinned to the skirting only so as not to inhibit the free movement of the floor. If skirting boards have been removed or are yet to be fitted, they will usually cover the expansion gap well.

Install any End, Connector or Adapter profiles that have not been fitted during the installation process. These trims must hold the floor in place and provide for full and free expansion of the flooring. They should be anchored with adhesive and mechanically. Finally, any gaps at the floor perimeter that could not be covered with skirting or profiles, can be filled with a caulking compound in a matching colour. Any gaps between boards can also be filled at this time. Your engineered wood floor can now be cleaned and enjoyed.







7. Special Notes

- 10mm is the minimum perimeter expansion gap for all applications. Larger floors or floors that will be exposed to higher levels of relative humidity will need larger expansion gaps. Some multi-room or very large installations will need expansion joints installed throughout the floor. In most cases, multi-room installations will need to be separated at doorways using connector trims, a range of which are available from your local retailer. Your retailer will be able to advise you in this regard.
- Pentarch Forestry Engineered Flooring floor can be direct stuck to a prepared subfloor. We recommend the use of Mapei Ultraset adhesive used as instructed, along with their recommended ancillary products.
- When installing Pentarch Forestry Engineered Flooring on stairs, glue both tread and riser using a recommended flexible timber flooring adhesive. No underlay should be used on tread or riser. Special stair nosing trims are also available for this application.
- It is the installer's responsibility to check each board for faults or defects, in appropriate finished lighting conditions, prior to installation.
- Pentarch Forestry Engineered Flooring is not designed to be exposed to extremes of humidity or temperature.
- Pentarch Forestry Engineered Flooring is not recommended to be installed over heated subfloors.

  It is important to note that floors exposed to such conditions may fail. Sensible protection of the flooring from such extremes, particularly in unoccupied homes, must be afforded. Measures can include curtains, awning, blinds, window tinting, and early commissioning and/or regular use of air conditioning or humidity control devices.

  Protection of the flooring from any radiant heat source should also be provided, eg: around combustion heaters and other heaters, as these generate extreme low humidity.

  Pentarch Forestry Engineered Flooring should not be installed until these measures are in place, and should not be installed more than 2 weeks prior to occupation of the home. It is important to understand that any warranty, expressed or implied, may be voided if the floor is exposed to extreme conditions.
- It is the homeowner's responsibility to provide a moderate indoor environment to prevent cracking and distortion of the flooring, even when unoccupied.
- All permanent cabinetry and joinery should be installed prior to the floorcovering. It is important such cabinetry does not impair the free expansion or contraction of the timber floor. Kickboards can be installed last of all, "Waterfall" style bench tops set up to allow flooring to slide underneath and other technics used for a discrete installation.

8. Care & Maintenance

Like all timber floors Pentarch Forestry Engineered Flooring will mark and scratch. However, it can be re-coated or re-sanded as required, just like traditional wood flooring to maintain your floor;

- Sweep or vacuum (bristles down) your floor regularly to remove stones and abrasive grit or dirt.
- Install dirt trapping mats at external entrances.
- Apply felt floor protectors to the underside of all moving furniture to reduce marking or scratching.
- Damp clean using a barely moist mop. For best results, add one capful of Timber Cleaner to your water and towel off any excess moisture immediately after damp mopping.

Full Maintenance Instructions can be obtained from your local retailer.

Available Colours

Spotted Gum

Blackbutt

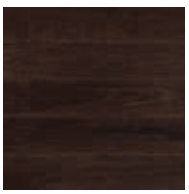
Sydney Blue Gum

Aztec White

Copper

Quicksilver

Sterling



Tungsten

Note: Not all engineered flooring profiles are produced in the full colour range. For more information, please refer to our Product Selection Guide.

Responsible Wood RW/1-31-217

PEFC PEFC/21-31-217

Sustainably Grown. Australian Made.

Note: Variations within a timber species are normal, therefore photographs, samples and displays can only be indicative of colour and should not be used for final selection. It is normal for natural timber products to react to changes in atmospheric and environmental conditions such as humidity and temperature.

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