

Important Notice Regarding Warranty

Any faults that occur as a result of failure to comply with these installation instructions will not be covered by the product warranty.

The products must be inspected prior to installation and any faults must be reported back to the store of purchase for an immediate replacement prior to the flooring being installed. Dunlop Flooring will not be responsible for installation cost claims where flooring was installed with obvious defects.

In order to enjoy the peace of mind of this product's warranty and ensure the optimum performance of your floor, you must comply with all instructions relating to preparation, subfloor, installation environment, installation method, and ongoing care and maintenance of the floor.

APPROPRIATE SETTINGS

Wood flooring is a natural product, which will mature with age, and every board is unique in design. The planks may change shade over time as a reaction to exposure to sunlight and this is perfectly normal. It is recommended that you occasionally relocate rugs and furniture once installed to ensure even shading. This product is not to be installed in wet areas that have a potential for flooding, such as bathrooms, laundries, saunas or outdoor areas. Engineered timber floors are suitable for all rooms other than those that are subject to excessive moisture and high levels of humidity. All wood is hygroscopic, meaning it will react to moisture in its environment, and expand or contract as a result.

Before You Start

- All sources of moisture must be rectified prior to the installation of the floor, and moisture levels in rooms fitted with timber flooring should be maintained at a stable level; in line with normal living conditions. Any construction dampness (such as recently laid concrete slab, or wet paint) must be completely dry.
- If using an underlay, choose a recommended product from the Dunlop Hard Flooring Underlay range.
- Calculate the total square meters of the space you are laying the floor and add 7% for cutting and waste.
- Measure the area to be installed. For a floating installation, the board width of the last row across the installation should not be less than 150mm in width. If possible, adjust the width of the first row to be installed, to avoid having to adjust the width of the final row later on. For other installation methods, the final row should be no less than 100mm.
- The cartons of boards should be stored in a protected, dry place.
- The timber boards should be placed in the room in which they are to be fitted to acclimatise for 48 hours and planks should be carefully stacked (removed from packaging) to allow air to circulate.
- The product must be stored, installed and maintained in a protected and dry place, with room **temperature between 14°C – 28°C, and relative humidity between 40 – 65%**. Rapid and significant temperature fluctuation must be avoided.
- Check each plank for any manufacturing defects prior to installation. Any faults must be reported back to the store of purchase for an immediate refund or replacement prior to the flooring being installed.
- The boards in this pack are of random lengths and should be laid randomly across the floor to create the best effect. We recommend opening a few cartons at a time to mix boards from each carton as they are installed.
- The boards should be fitted so as to run the length of the longest, straightest wall. In narrow hallways, install the floor parallel to the length of the hallways.

ALL SUBFLOORS

The below requirements apply to all subfloor options detailed throughout this document, and must be paid careful attention in order to minimise the risk of problems occurring with your flooring post-installation.

All substrates must be: structurally sound, flat/even, clean and dry:

- **Structurally sound:** Engineered timber flooring can be installed onto concrete subfloors and existing wood, vinyl or tile floors provided they are dimensionally stable.
- **Flat/Even:** Deviations in any subfloor level must not exceed **3mm under a 2 lineal metre** straight edge. Raised points must be sanded/ground down and depressions filled using a good quality cementitious levelling compound. Please engage a professional installer's services for these matters.
- **Clean:** Ensure the subfloor is clean and free from all contaminants and loose material by vacuuming prior to installation. Do not wash subfloor or expose it to water prior to installation.
- **Dry:** It is essential that the moisture content of any subfloor complies with the relevant standard. For Australian conditions the recommended standard is a maximum of **75% relative humidity for concrete subfloors and 10 – 15% moisture content for wood subfloors**. All potential sources of moisture (e.g. walls, drains, damp proof courses, plumbing, fridges, washing machines etc.) must be thoroughly checked and rectified if found to be an issue. The final responsibility for determining if the subfloor is dry enough for installation of the flooring lies with the floor covering installer.

MOISTURE BARRIERS

- For a floating installation, we recommend the use of Dunlop Timber underlays with a built-in moisture barrier: Timbermate, Thermoacoustic Timbercushion, and Aquacoustic.
- For underlay without a moisture barrier, like Advantage 3 and Technics 5 we recommend a 200 micron plastic sheeting.
- For a glued-down installation, we recommend the use of a topically applied liquid moisture barrier, where a moisture barrier is required. Please follow all manufacturer's instructions in regards to application.

IF INSTALLING ON A CONCRETE SUBFLOOR

- The moisture content of a concrete subfloor must not exceed 75% relative humidity.
- Freshly laid concrete bases require adequate curing time in order to avoid moisture related problems with your floorcovering. In good drying conditions allow one day per 1mm of the depth of the concrete to ensure it is dry. Further curing time may be necessary depending on site conditions.
- Existing concrete subfloor's moisture content should be checked using an industry recognised test method. Your floor must not be fitted until the moisture content reading complies with the above guidelines.
- For a glue down installation, please consult your adhesive manufacturer for recommended adhesives for adhesion to the sub floor and for the timber flooring.

IF INSTALLING ON WOOD, VINYL OR TILE SUBFLOOR

- The moisture content of a wood subfloor must not exceed **10 – 15%**.
- Engineered timber flooring can be fixed directly onto pre-installed wood (particle board, yellowtongue, or conventional timber), vinyl or tile subfloors, provided this subfloor meets all of the requirements detailed at the beginning of the Subfloors section. If the subfloor is not flat and even then you will need to overlay it with structural grade plywood (min 20mm thick). All existing floorcoverings must be securely fixed to the subfloor, to minimise the risk of squeaking. Where poor adhesion between the subfloor and existing boards, planks or tiles exist, secure if possible, otherwise remove the existing floorcovering completely.
- On a wood subfloor, your new timber boards should be laid in a direction that is 90 degrees (perpendicular) to the direction of the boards below. If this is not possible, then plywood sheets (minimum depth 6mm) should be nailed, stapled or screwed to cover the existing floor, allowing a 15mm perimeter gap (against walls) for expansion. The new floor can then be laid directly onto the plywood sheet.
- If nails, staples or screws are being used, care must be taken not to damage pipes or electrical cables beneath.
- For a glue down installation onto a conventional strip timber, vinyl or tile subfloor (provided all boards/tiles are securely fixed) you will first have to lay a Masonite, particle board or yellowtongue underlay before the product. Once you have ensured that the subfloor is flat/even, and provided the moisture content of the subfloor does not exceed the specified 10 – 15%, you may

glue down a rubber underlay onto the Masonite. We recommend the use of Dunlop Advantage 3. Your timber floor is then glued to the rubber underlay.

- For a floating installation, follow the same process as above, but in lieu of a rubber underlay, you will have to use a MPU. We recommend Dunlop Aquacoustic underlay. Your timber floor will be floated on top of this underlay.

IF INSTALLING ON SUBFLOORS WITH RADIANT HEAT

- Due to the speed of sudden temperature change, which has the potential to negatively affect your floor, **it is not recommended to install over an electrical radiant heating system.** This will not be covered by the manufacturer's warranty. The instructions below are for radiant heating systems using water. Ensure the radiant heat surface temperature never exceeds 28°C. Before installing over newly constructed radiant heat systems, operate the system at maximum capacity to force any residual moisture from the cementitious topping of the radiant heat system.
- Before installing over a newly installed radiant heating system, the system should be run at maximum capacity to remove any residual moisture and turned off 48 hours prior to the installation day. Once the flooring is installed, the heating should be turned on and the temperature increased by approximately 2°C per day until desired temperature is reached.

Installation Methods

1. FLOATING INSTALLATION

Tools Required: (not supplied) knee pads, goggles, square, tape measure, pencil, saw, utility knife, hammer.

Suitable Subfloors: Concrete or pre-installed wood, vinyl or tile subfloor (see Subfloors section for further detail on suitability and preparation of subfloors).

Preparation:

Ensure you have undertaken all necessary steps as detailed in the Before You Start section. Ensure your subfloor is structurally sound, flat/even, clean and dry as per the Subfloor section.

If laying the floor in several adjoining rooms or in a space in excess of 50m², expansion joints must be installed. It is recommended that installations over 10 lineal meters in length, and 9 lineal meters in width, utilise expansion joints. For your moisture barrier and underlay needs, we recommend Dunlop Aquacoustic, as this product will provide both a foam underlay and a 200 micron polyethylene vapour barrier.

For a floating installation, an **expansion gap of 15mm** around the entire perimeter of the floor needs to be maintained. This also applies around pipes, pillars, frames and fixtures. The 15mm between the first row of boards and the wall should be maintained using spacer wedges regularly along the length of the wall. When measuring for the layout of the floor, remember to factor in this expansion gap.

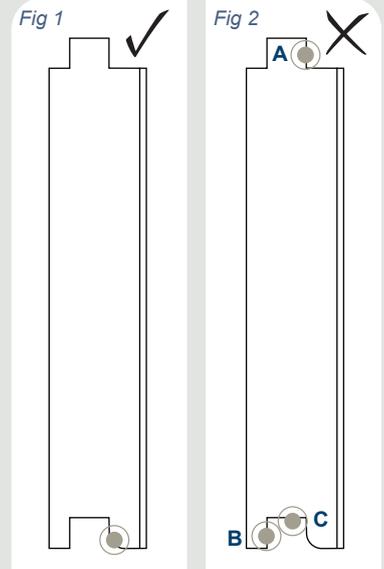
4.1 Begin your installation against a sound, straight wall, starting in the left corner and working right. It may be necessary to scribe the first row of boards to achieve correct alignment. Always begin the installation with the groove side of the plank facing the wall. Be mindful of the 15mm expansion gap during this step.

4.2 Undercut door frame so that the planks can be installed underneath, being mindful of the requirement for a 15mm gap. Ensure that any underlay being used in the installation is underneath the product when you perform this step, so that cut is at the correct height.

4.3 Use a hard wood block to knock the board joins together but never force them. Never hit the floor board directly with the hammer as this will slow down the work and will increase the risk of damaging the board (with a hard wood core or not).

4.4 Begin the next row with the piece left over from the previous row (not from the first row of shaped boards). The end joins of the joining boards should be staggered or stepped by at least 500mm (avoid installing according to the brick laying method)

4.5 Use only a PVA D3 cross linked wood adhesive with a pointed tubular applicator to apply the glue to the top inside edge of the groove of the board (including the groove of the head



Instructions for Gluing Joints

Correct Glue Placement: (Figure 1)
Use only the approved adhesive (cross linked PVA Adhesive) Do not use ordinary PVA. This is the correct place to apply the adhesive glue to gain a strong, tight & secure bond between the tongue & groove as well as assisting to water proof the join, yet at the same time allowing the boards to be installed easily.

Incorrect Glue Placement: (Figure 2)
A) Do not apply glue to the tongue. This will cause glue to be squeezed out of the join onto the surface of the board & make your installation messy, it will not give a strong tight secure bond.

B) Most of the adhesive will be squeezed out under the join & will not be of any use at all resulting in a poor join & virtually no bond between the tongue and groove.

C) Too much adhesive causes poor joins as the excess glue will not allow the tongue to fit into the groove properly.

Correct Glue Placement Technique: (Figure 3)

Hold the board with the bottom of the board facing upwards, apply a continuous bead of glue to the top edge of the groove, along the length & end of the board.

join) in a 5mm continuous line. Never apply the adhesive in a broken line as this can cause your floor boards to squeak. Any excess of adhesive should be immediately wiped off with a damp cloth and then a dry cloth. (See Glue Down Instructions)

4.6 When installing the timber, use a hammer and tapping block to tap the joints together. Take great care not to use more force than is required to help the boards join together as this can damage the board edge, and compromise the installation or appearance of your floor.

4.7 The last row of boards should be sawn to a suitable width of no less than 150mm. Apply the adhesive in the groove and lever the boards into place with the tightening bar and wedges. Using a protective piece between the wall and the tool. Be mindful of the 15mm expansion gap when installing the last row of boards.

4.8 See *Finishing Off section*.

2 GLUE DOWN INSTALLATION

Tools Required: (not supplied) knee pads, goggles, square, tape measure, pencil, saw, utility knife, hammer, a one component solvent-free moisture curing polyurethane timber flooring adhesive (please refer to adhesive manufacturer's instructions in relation to further materials required)

Suitable Subfloors: Concrete base or pre-installed wood, vinyl or tile subfloor (see Subfloors section for further detail on suitability and preparation of subfloors).

Preparation:

Ensure you have undertaken all necessary steps as detailed in the Before You Start section. Ensure your subfloor is structurally sound, flat/even, clean and dry as detailed in the Subfloor section. For a glue down installation on a concrete subfloor or an existing wood, vinyl or tile subfloor, you will need to apply a DPM (Damp Proof Membrane) or a MPU (Moisture Proof Barrier) (see Moisture Barriers section). Please note that if you opt for a MPU, you will need to glue it to the subfloor, and your timber will in turn be glued to your MPU. Should an underlay be required for acoustic reasons or improved comfort underfoot, we recommend Dunlop Advantage 3 and Technics 5.

If laying the floor in several adjoining rooms or in a space in excess of 20 lineal meters in length, and 10 lineal meters in width, expansion joints must be installed.

INSTALLATIONS:

An **expansion gap of 10mm** around the perimeter of the floor should be maintained where easily accommodated, e.g. Under skirting boards. This also applies around pipes, pillars, frames and fixtures. The 10mm between the first row of boards and the wall should be maintained using spacer wedges regularly along the length of the wall. When measuring the layout of the floor, remember to factor in this expansion gap.

In doorways against solid flooring i.e., ceramic or stone tiled floors, a c-channel is preferable. (As it protects the exposed end grain of the board from damage.) However, against solid flooring i.e., ceramic or stone tiled floors, a 3mm gap with flexible caulking is acceptable. For doorways with soft flooring i.e. Carpet, a L trim flush to the timber is acceptable.

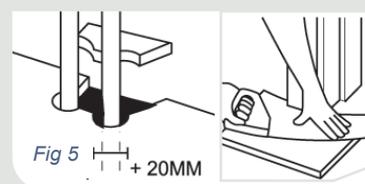
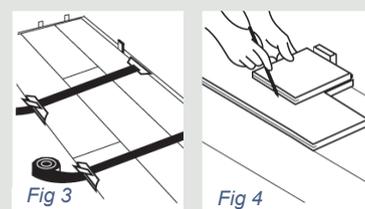
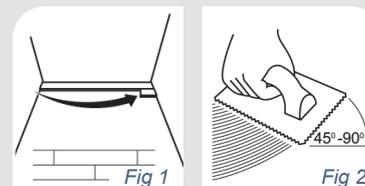
On glued down floors the kitchen and island benches can be built on top of the flooring, unlike in the floating applications.

3.0 The Dunlop Advantage 3 and Technics 5 should be laid at 90 degrees to the direction of the timber with the joints taped. Please consult your adhesive manufacturer for recommended adhesives for adhesion to the sub floor and for the timber flooring.**3.1** Begin your installation against a sound, straight wall, starting in the left corner and working right. It may be necessary to scribe the first row of boards to achieve correct alignment. Always begin the installation with the groove side of the plank facing the wall. (*Figure 1*)

3.2 With this system use a one component, solvent-free, moisture curing polyurethane timber flooring adhesive for gluing your timber boards to the subfloor. When applying, comply with all instructions provided by the adhesive manufacturer. (*Figure 2*)

3.3 Once the first row of boards is correctly aligned and glued in place, weigh them down while the glue sets (or use wedges against the wall). Any surplus glue that may seep out onto the surface of the wood must be removed immediately with a damp cloth. The glue should not be applied in the groove or the tongue of the flooring.

3.4 Continue to fit the boards from left to the right. Always stagger the end joints by a minimum of 150mm and a maximum of 300mm. Measure and trim the last board to fit. Where possible, use cut offs to start the next row.



Tools Required: (not supplied)

knee pads, goggles, square, tape measure, pencil, utility knife, one component solvent-free moisture curing polyurethane timber flooring adhesive, PVA wood glue, fitting straps.

Please Note:

Regardless of whether you are gluing or floating your timber floor, it is extremely important that you follow the guidelines laid out in the **Subfloors** section.

3.5 Flooring straps can be used to pull boards together and hold them in place whilst the glue dries. (Figure 3)

3.6 For the last row of boards you can use the **sandwich technique** to measure the width of board required, ensuring that the row is not less than 100mm in width. Place the board for the last row on top of the previous row. Using a full width off-cut board and spacer wedges placed up against the wall, scribe the last row to mark the correct cutting line. (Figure 4)

3.7 See *Finishing Off* section. (Figure 5)

It is recommended that you use felt pads under chairs and furniture, and plastic mats under office style chairs with wheels. When shifting furniture, never drag heavy items across the surface of your floor.

Finishing Off:

Once installation is complete, any spacing wedges used can be removed. If a plastic moisture barrier has been used, the edges that have been turned up the wall can now be cut off; it is recommended to leave approximately 20mm extra to put behind the scotia or skirting to prevent moisture penetrating the material through the wall.

The expansion gap around the perimeter of the floor can be covered by re-fitting the skirting boards, either by nailing, screwing or gluing directly to the perimeter walls. Never fix them directly to the installed floor. If the skirting boards were not removed for installation, you can cover the expansion gap using moulding trims that attach to the skirting with glue or panel pins. At doorways, a door threshold strip should be used to protect the edges of the floor and provide a decorative transition from one floor type to another.

Any visible joints or gaps should be filled with a non-silicon based filler (e.g. *Fuller Caulk In Colours*) to match the colour of the timber.