

## Important Notice

The installation instructions are intended to assist in achieving an optimal installation. Imagine Floors by Airstep recommends installation be carried out by a professional installer. Any variation to these instructions by installers or a person installing will adversely affect or void the warranty. Should you require clarification of any instructions, please contact your place of purchase prior to commencement. If you are reading a printed version of these instructions, please know that things change from time to time and that the latest version of this document will be found at [www.imaginefloors.com.au](http://www.imaginefloors.com.au).

- o Imagine Floors by Airstep Laminate floors are to be installed using a floating floor system method and must not be adhered, nailed, or pinned in any way to the subfloor or structure. Scotia, skirting or any finishing trim must have a 0.50mm gap between the bottom of the trim and the top of the floating floor around the entire perimeter of the installation to allow free expansion or contraction of the total raft area. Failure to do so will result in open joints, separating planks, cupping, peaking or spring in most cases.
- o Floating floor installation systems are not advised if any type of load is likely to exceed 180kg per object. If desired, heavy objects must be installed first and not placed on top of any floating floor installation. The floating raft must be able to move around heavy/fixed objects to avoid open joints, separating planks, cupping, peaking leading to most cases in floor failure. The perimeter gap must be respected around all heavy/fixed objects. A floating floor installation must ALWAYS stay floating!
- o On site acclimatisation must be undertaken for at least 48 hours prior to the installation in unopened packs at a temperature range between 18°C to 28°C with relative humidity between 35% to 70%. This temperature and humidity range is to be maintained before, during and after installation within a climate controlled environment. Laminate flooring is not designed to be exposed to extremes of humidity or temperature and is important to know that floors exposed to such conditions will fail.
- o Silicon or caulking compounds must not be used in relation to any Imagine Floors by Airstep floating flooring installations as this inhibits free movement of the total raft area. Imagine Floors by Airstep has a range of accessories to compliment the Laminate flooring.
- o Note Laminate lock system type on specification data sheet prior to commencement of installation.
- o Imagine Floors by Airstep recommends that batches are not mixed. In a circumstance where the installer has 2 or more batches, they must check to ensure they are compatible in design, colour, surface texture, gloss level, dimensions and locking system.
- o Uneven subfloors will cause the lock system to break and/or the floor to sound drummy, or become noisy, and will cause early deterioration and failure of the floor. Refer to Subfloor Testing and Preparation.
- o Most installations will require approximately 5% - 10% cutting allowance added to the total square meterage of total area. This does not include any extra flooring required for repairs etc.
- o Imagine Floors by Airstep Laminate has been designed to be installed in a climate controlled environment preferably at a normalised indoor room temperature (18°C to 28°C). Imagine Floors by Airstep Laminate cannot be installed in solariums, seasonal porches, holiday units, relocatable housing or any other application where the temperature cannot be controlled. Installation must not be undertaken if the premises will be unoccupied for more than 2 weeks post installation.

**NOTE:** It is the installer's responsibility prior to commencing installation to verify that the product and accessories supplied are the correct product, colour, pattern and quantity. Prior to installation, each plank must be carefully checked in optimal lighting for any obvious visual defects to the surface or lock system. Never install defective product. If the product is incorrect or has any visual defects or damage, contact your place of purchase. Imagine Floors by Airstep will not be responsible for any visible defects after the flooring has been cut and/or installed.

## Site Testing and Conditioning

Concrete subfloors must be tested in accordance with the current AS1884 installation practices standard for moisture using the relative humidity in-situ probe test with results recorded. RH levels can be up to but not exceed 75% for concrete subfloors and  $\leq 14\%$  moisture content for wood-based subfloors such as plywood, structure board, OSB etc.

Imagine Floors by Airstep Laminate flooring requires 48 hours acclimatisation on site with room temperature between 18°C to 28°C with relative humidity between 35% to 70% in unopened boxes stacked flat and no more than 3 high and separated 200mm to allow proper air circulation. Post installation temperature range for optimal performance must be within a climate controlled environment and maintained between 18°C and 28°C including in front of large windows or doors. Window coverings must be used to reduce exposure to direct sunlight and heat on the floor's surface before, during and after installation.

## Excessive Temperatures & Humidity

Laminate floors must be installed in a "Laminate friendly" environment. Laminate flooring is not designed to be exposed to extremes in humidity or temperature. The optimal temperature performance range is 18°C to 28°C with relative humidity between 35% to 70%. It is essential to understand that floors exposed to such conditions outside these parameters may fail and will not be warranted. Measures that must be considered to avoid possible failure from such extremes are curtains, blinds, window tinting, temperature and humidity control units or awnings. In smaller areas and cooler, lower humidity climates, an expansion gap of 10mm to 12mm is recommended. In areas of higher humidity, a gap of 14mm to 16mm (or greater) needs to be afforded against all vertical surfaces.

## Subfloor Testing and Preparation

All subfloors must be clean, dry, flat and structurally sound. All floors must be checked with a straightedge 1m long. When the straight edge is placed at rest on the subfloor, no part of the surface shall deviate more than 2mm from the underside length of the straightedge in any direction. Depressions and cracks must be filled using a suitable approved levelling compound in accordance with the manufacturer's instructions. All irregularities must be levelled and free of old adhesives, contaminants or building debris prior to installation.

Concrete subfloors. Test the subfloor by using a hydrometer and with a reading no lower than 75%, the substrate is deemed dry. If after three tests within the first 50m<sup>2</sup> or one additional test thereafter per 50m<sup>2</sup> the subfloor is obviously or knowingly wet (insufficiently dry), ascertain where the excessive moisture is coming from and remedy. Once treated, installation can take place by first installing a builders 200µm black plastic sheeting remembering to overlap and tape (use a vapour proof tape) the joins by 600mm and upturning around the perimeter by 50mm to create a "well".

Timber, plywood, OSB or particleboard subfloors, must be checked for any loose boards/panels or excessive deflection or movement. If loose boards are found or deflection is identified, the subfloor must be repaired and damaged boards replaced, then if required, sanded to a level, smooth and dust free surface. Cross flow ventilation must be uninhibited on all sides of the building within the crawl space under the subfloor and ensure there is no standing or flowing water or damp smells emanating from this space.

Flooring can be installed over most existing floor coverings (e.g. ceramic tiles, linoleum, PVC etc.) provided the floor is flat, dry and in the case of ceramics in a residential installation, grout line tolerances are no more than 3mm wide and 3mm deep. Otherwise grout joins must be filled to the level of the tiles with a suitable leveller. Carpet, any textiles or carpet underlay and/or existing floating floors are not a suitable subfloor.

## Underfloor Heating

Imagine Floors by Airstep Laminate flooring is suitable for installation with underfloor heating provided the heating system selected is a hydronic in-slab radiant system and is installed and operated as per the heating system manufacturer's installation and operating recommendations. See further pre-laying instructions below.

Imagine Floors by Airstep Laminate Flooring must never be installed over any electrical radiant heating system - the speed of sudden temperature changes having the potential to negatively affect the floor.

## Hydronic In-Slab Radiant Underfloor Heating System

Before installing Imagine Floors by Airstep Laminate flooring with underfloor radiant heat systems, operate the system at maximum capacity for a minimum of seven days to force any residual moisture from the cementitious topping of the radiant heat system. The moisture content of the screed prior to installation must be less than 1.5% (CM method). Shut down the floor heating at least 48 hours prior to installation. Make sure that the temperature in the room is at least 15°C during installation. It is recommended that the radiant heat be applied in a gradual manner (no more than 2°C per day) after installing the Laminate Flooring. After installation, ensure the surface temperature of the subfloor never exceeds 27°C.

## Underlay

Underlay is essential for all Laminate installations. Imagine Floors by Airstep selection of underlays is ideal to provide you with protection from subfloor moisture with an SD value of  $\geq 75$ . If an alternative is to be used, ensure that it at least meets all performance values of an approved underlay. The smooth top surface makes installing the Laminate easier and allows the flooring expansion post installation.

## Wet Areas

Imagine Floors by Airstep Laminate cannot be installed in wet areas that include, bathrooms, laundries, toilets or areas that will be subject to constant moisture or pooling of water.

## Perimeter/Expansion Gaps

For installation of larger areas or in between multiple rooms that exceed a total continuous run of 12m in length or 10m in width, a  $\geq 14$ mm expansion gap is required with control joints where the hallway meets the open plan area. The requirement for control joints is called "compartmentalisation" which allows the entire raft area to expand and contract freely.

A full perimeter expansion gap of no less than 10mm to 12mm must be left against all fixed vertical surfaces (e.g. walls, kick plates, cabinets, sliding doors, island benches, plumbing fixtures etc.) A trim, skirting or scotia can be used to cover this gap, ensuring the floor is not pinned to the substrate or vertical surfaces. Scotia, skirting or any finishing trim must have a 0.50mm gap between the bottom of the trim and the top of the floating floor around the entire perimeter of the installation to allow free expansion or contraction of the total raft area. Silicone or caulking compound must not be used.

In smaller areas and cooler, lower humidity climates, an expansion gap of 10mm to 12mm is recommended. In areas with higher humidity, a gap of 14mm to 16mm needs to be afforded. As a guideline, allow an extra 1-2mm in additional expansion gap for every additional 1m exceeding the standard recommended raft size, (12m x 10m).

**NOTE:** It is easier to undercut any door frames using an undercut saw or a flexible blade hand saw and an offset of flooring. Removing the bottom of the door frame and approximately 40mm of adjoining skirting boards allows the floor to expand freely under the door frame and finish neatly at the floor junction.

## Tools Required

Safety glasses, Dust mask, 10mm to 12mm Spacers, Jig Saw, Utility Knife, Straight Edge, T-Square, Pull Bar, Pencil, Tape Measure.

As a floating floor, the floor should not be adhered, nailed or pinned in any way to the subfloor or structure.

## Installation

**NOTE:** All environmental factors need to be considered— including temperature, relative humidity and direct sunlight (all windows within the installation area must be covered) to minimise risk during the installation period and thereafter. These factors must be within designated parameters prior to installation of your new Laminate Flooring. Installation must not commence if the prior factors do not meet conditions.

- o Plan the direction of the area to be installed to maximise the visual appearance once installed. The direction of the plank grain should be confirmed, and the installation should be balanced from the centre of the area to minimise waste. To minimise shade variation, mix and install product from several different packs alternating your selection. After laying a small quantity of product, view from a distance that allows you to clearly see the overall effect. If there is any doubt cease installation immediately and contact your place of purchase
- o Measure the room and estimate the number of rows required. If the last row is not at least 50mm wide, the first row should be cut so that the first and last rows are similar in width.

1. Install the first row of 200µm builders plastic and/or underlay as required (Fig 1). Firstly, remove the short and long side tongue of the first board followed by only the long side tongue of the remaining first row boards then install the first row 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 10-12mm expansion gap. (Fig 1).

From the left corner of the room put the first plank in place using spacer blocks against the wall to maintain a uniform expansion gap so both the end and side seam grooves are facing outwards. Planks are to be installed from left to right. To assist in laying the first row straight, the use of masking tape across each short side locking system is recommended. Continue this for the first two rows and remove after completion of installation. (Fig 2).

2. Install the second plank in the first row by angling at 20 to 30° and laying the short-side tongue onto the previously installed plank short-side groove. Care must be taken to properly line up the end join and NEVER force the join to lock while out of alignment, otherwise this could result in permanent damage to the end groove or surface finish. (Fig 3).

3. Continue in this manner for the rest of the first row. The last plank in the row must be cut to length while maintaining the recommended expansion gap along the perimeter of the room or all vertical surfaces. (Fig 4).

4. Use the offcut from the last board in the first row (min length 300mm to 500mm that improves raft stability) or cut a plank that is at least 300mm to 500mm shorter than the first plank to start the second row. Install the first plank in the second row by inserting the long side tongue into the long side groove of the plank in the first row at a 20 to 30° angle to the installed plank. Then lower the plank while maintaining a slight pressure toward the installed plank. Use a tapping block to gently engage the short side lock if required. The planks should fit snugly together and lay flat maintaining the appropriate expansion gap along the perimeter of the room or all vertical surfaces. (Fig 5-6).

5. To install the remaining planks in the second row, first align the long edge tongue into the long edge groove of the previous row at an angle. Slide the plank to the left until it meets the previously installed plank. Lower the plank while maintaining a slight pressure towards the installed piece. Use a tapping block to gently engage the short side lock if required. The planks should fit snugly together and lay flat maintaining the appropriate expansion gap along the perimeter of the room or all vertical surfaces. (Fig 6, 7, 8)

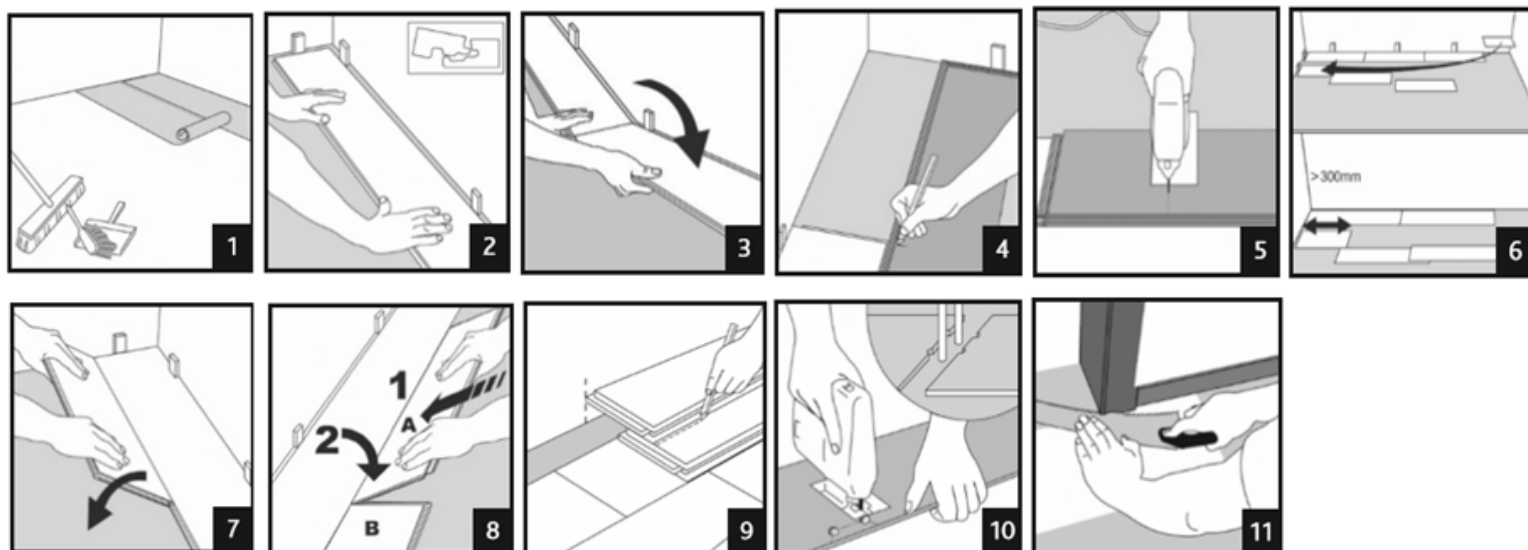
6. Work across the length of the room installing all planks in the second row. It is critical to keep these first two rows straight and square, as they are the “foundation” for the rest of the installation. Check often for squareness and straightness while installing the floor as failure to do so can result in gapping.

7. Continue installing, being certain to maintain a random pattern repeat, assisted by offsetting end joins by at least 400mm whilst maintaining the appropriate expansion gap against all vertical surfaces.

8. The last row (possibly the first row) plank width must be no less than 50mm on the long side. Remember to allow for the appropriate expansion gap to the wall. Use a crosslinked PVA glue when fitting last row to secure the end join. Additionally, under door jambs remove the tongue on the plank and apply glue before installing. Use of the pull bar may be necessary to ensure a good join. (Fig 9-11)

9. Install wall mouldings and door floor transition mouldings last. Be sure that all mouldings are fastened directly to the wall or subfloor; do not place any fasteners through the floating flooring. Care must be taken when fitting wall or floor mouldings that they do not push down on the floor surface as this will affect the floors ability to have free movement and may lead to product failure and visual defects.





## Special Notes

- o Our Laminate flooring products are manufactured from natural wood-based materials that will expand and contract in shape if moisture or humidity is elevated and may also shrink if moisture or humidity becomes extremely low. As a natural wood-based product changes from these circumstances, this may lead to irreversible damage if the interior temperature and humidity is constantly exposed to extremes. Please adhere to the requirements within this guide and familiarise yourself with our Cleaning, Care and Maintenance Instructions to enjoy a well maintained Laminate floor installation.
- o Laminate floors are not designed to be exposed to extremes of humidity or temperature. It is important to note that floors exposed to such conditions may fail either structurally or aesthetically. Sensible protection of the flooring from such extremes, particularly in unoccupied homes, must be used. Measures can include curtains, awning, blinds, window tinting, and early commissioning and/or regular use of air conditioning or humidity control devices.
- o Protection of the flooring from any radiant heat source should also be provided, e.g. around combustion heaters and other heaters, as these generate extreme low humidity. Imagine Floors Laminate floors must not be installed until these measures are in place, and must not be installed more than 2 weeks prior to occupation of the home or premises. It is important to understand that any warranty, expressed or implied, may be voided if the floor is exposed to extreme conditions.
- o Cleaning, Care and Maintenance Instructions must be followed to maintain the product optimal look and warranty.

## Post Installation

It is possible to remove or replace planks that have been laid as a floating floor raft without causing any damage. First release the whole row along the long side by angling it up to free it from the locking mechanism. The planks can then be disengaged by sliding apart carefully or fold up slightly on the short side to release.

If construction works are still underway, the floor must be protected from all site debris, dirt, soil, traffic etc. by use of a protective surface (e.g. sheet plastic, hard boards).

Please be careful to ensure no condensation occurs and any adhesive tape or protective material does not affect the aesthetics of the finished installation. Use window coverings to protect the floor from heat and fading under direct sunlight. Dramatic temperature fluctuation of the floor will cause joins to lip or gaps to occur.

These instructions are intended to assist in achieving an optimum installation. Any variation to the recommendations above may affect any warranties. For further information, please contact your local Imagine Floors by Airstep Flooring Representative.