

INSTALLATION GUIDE

1. Basics

Please read all instructions carefully before installation.
Improper installation may void the warranty.

Product Use:

Hardfloor may be installed over plywood, particleboard, concrete subfloor or over subfloor equipped with a under floor heating system. Hardfloor can also be installed over existing flooring such as lino, cushion, vinyl, rubber, marble, or ceramic tile if these materials meet the requirements and recommendations set out in this guide. Hardfloor flooring should **NEVER** be installed on carpet or any other soft floor covering. Glue-less installation/floating over concrete require a waterproof underlay.

Installer and owner responsibility

Prior to installation, the installer and owner must ensure that the work environment and subfloors meet or even exceed minimal specifications listed in this guide.

Standard trade practice allows for up to a 5% margin of error for natural imperfections and manufacturing defects. Prior to installing the installer & owner should conduct a final inspection of grade, colour, manufacturing and finish quality of boards to ensure that the floor conforms to purchased product.

Once installed, any board is considered as having been accepted by installer and owner, even if owner is absent at the time of it being installed. When ordering hardwood flooring, it is recommended to add a minimum of 5% as an allowance for cutting waste.

2. Tools

Recommended tools, materials & accessories

- Vacuum cleaner or broom
- Level
- Spacers
- Waterproof adhesive tape
- Handsaw
- Measuring tape
- Scraper
- Levelling bar
- Recommended underlay
- Mitre saw
- Claw hammer
- Chalk line

Accessories such as underlay, transitions, reducers, stair nosing and others are available from your Hardfloor, authorised dealer.

3.Preventative Measure

Expansion space required

Wood needs a certain amount of room to expand and contract with variations in humidity. No part of the floor must be attached to any surface. A 12mm space must be left for expansion around all room fixtures. Such as mouldings, columns, pipes, steel door frames, heavy objects and others. Attach spacers to each wall to ensure enough space is left.

The maximum raft of each floor space should not exceed 8m x 8m. unlike solid timber flooring engineered floors move equally in both directions so please ensure adequate expansion joints are installed.

Irregularly shaped spaces such as (L - F or U) shaped, use a 'T' moulding for intersections

4. Preparation

Preparation

Hardfloor installation requires a little more time and precaution than other unfinished flooring. Handle with care to avoid board surface, component and finish damage.

Pre-Installation checklist

Basic requirements

- Hardfloor flooring installation should be the last step of any construction or renovation project.
- Prior to installation, the heating or cooling system must be in operation, and room temperature must have been maintained at 22°C for at least one week.
- To avoid any moisture rated damages, subfloor must be dry and well ventilated.
- Relative humidity should always be maintained around 45% (between 30 and 70%)
- Radiant heat performance.
- The radiant heat system should have been tested and in operation for a few weeks prior to installation.
- The wood surface temperature must never exceed 27°C.
- If the radiant heat pipes are visible or exposed in the subfloor, you must cover them with 12mm plywood to spread heat more evenly.

Subfloor moisture level check

Wooden subfloor such as plywood, particleboard or old floorboards- The differential between boards and subfloor must be less than 2%. If moisture reading is too high, postpone installation, find moisture source and correct it if needed, raise heat and increase ventilation until proper conditions are met.

Concrete Subfloor- Prior to installation, concrete subfloor should preferably be 45 to 90 days old. **30 days being the absolute minimum.** Concrete moisture meter must be used to check subfloor moisture level. The concrete subfloor moisture content is suitable if the reading is 4.5% or below.

Owner and installer are solely and jointly responsible for pre installation for the subfloor moisture level check. They both must ensure that all conditions and specifications listed in this guide have been thoroughly met prior to installation of the Hardfloor flooring.

Subfloor Preparation

- **Sound** – particleboard / plywood subfloor must be securely screwed down to joists to prevent any movement or squeaks. Thoroughly inspect and replace existing floor or subfloor that shows evidence of water damage or structural weakness. Concrete subfloor must also be structurally secure and inspected for sound before installing hardwood floor.
- **Flat-** Subfloor surface must be flat and maximum tolerance is 3mm per 3 meters. If necessary, flatten down any irregularities, by grinding high spot and fill in and uneven spots with a levelling compound.
- **Dry-** Subfloor must be dry and within 2% variation to moisture reading of the Hardfloor boards.
- **Clean-** vacuum and free subfloor from any debris or obstacles such as cleats, nailheads, dried glue or any other materials.

it is recommended that you sketch out your installation to avoid surprises.

- Decide on the starting point or wall
- Decide on the layout angle that suits best
- Boards in the last row best be at least 38mm wide to be attached properly. If the last row is to be less than 38mm wide, you must reduce the width of the first row so that both the first and last row meet this requirement.
-

INSTALLATION GUIDE

- Remove any skirting boards, doorsill and old flooring covering if necessary.
Trim bottom of the door stops with handsaw to insert boards underneath.

5. Installation

Helpful advice

It is very important to start off straight and square. Use the chalk line to draw a line parallel to the starting wall and perpendicular to the adjacent wall.

Leave the boards in their original packaging until ready for use

To enhance the floors, look use several boxes at once and mix boards to ensure variations in colour and shade.

Never force boards into place. Clear away or remove anything that could get in the way of the tongue.

Procedure

- Cover the entire subfloor as well as the base of walls (approx. 50mm), with the recommended underlay. Place the underlay in the opposite direction to the boards, which is to be installed without overlapping. The recommended underlay includes a self-adhesive flap. Use waterproof tape to attach the strips on the short side.
- While facing the wall, start on the left corner leaving a gap at both walls with the groove facing you. Leave a 12mm gap between the wall and the edge of the board. This gap will be covered by a skirting board attached to the wall rather than the floor.
- Moving right, put the next board in place. Moving vertically, insert the end tongue into the end groove of the first board, continue this way until it is time to cut the last board to finish the first row.
- The board chosen to finish the first row should be long enough to start the second row with the trimmed end, to minimise trim waste. Leave a gap for the boards to expand in all directions.
- Start the second row with the trimmed end of the board. It should be at least 150mm longer or shorter than the board used in the first row.
- Cross joints must be staggered by at least 150mm from one row to the next. Avoid lining the joints up or having them follow in a pattern.
- Insert the tongue at the side of the board into the groove of the first row at a 30° angle. Line up the flat left side, set the board down and apply slight pressure to lock in place. If the board requires more than slight pressure, the locking joint is not correctly aligned and may be damaged if forced. Disconnect the board and insert ensuring the correct angle. Install subsequent rows in the same way.
- As the floor can still be moved after the second row has been installed, it is recommended that you measure and realign with spacers, if it is necessary.
- The boards on the last row must be at least 38mm wide, remember to leave at 12mm gap for the expansion space.
- If an obstacle prevents the last board sliding into place, cut the latch of the grooves locking system with a chisel.
- Apply wood glue to the groove and insert the last board.

Finishing touches

- If necessary, install the transition mouldings, stair nosing's and reducers.
- Remove the spacers
- Re install the skirting board and quad as required, through the underlay (illustration 12). Nail them to the walls and not to the floor so that the floor can move naturally.
- Cut the underlay that goes beyond the skirting board.

Maintenance

- Set a few boards aside in case future repairs are required.
- When installation is completed, vacuum the floor thoroughly, spray a light mist of cleaner on a terry cloth mop and clean the floor.

ATTACHING MOULDINGS

Choose a moulding wide enough to cover the required expansion space and overlap at least 10 mm. The moulding must be attached to the wall to enable the floor to shift naturally. It is very important to make sure that the moulding covering the expansion joint must be attached to the wall, whereas the T moulding must be attached to the floor.

PLEASE NOTE – This is a guide only, please refer to the ATFA's Engineered Flooring industry standards publication for full details and procedures for installing engineered floors.

