



INSTALLATION

HARMONY DIRECT STICK METHOD

PRE-INSTALLATION JOBSITE REQUIREMENTS

- Timber flooring should be one of the last items installed in any construction or remodel project. All work involving water/ moisture should be completed before the flooring installation. Water and wood do not mix. Installing flooring onto a wet sub-floor will most likely cause cupping, tip & edge raising, swelling/ expanding of core and subsequent gapping.
- Store timber flooring in the UNOPENED boxes at installation area for 24 -72 hours before installation to allow the flooring to adjust to room temperature and humidity levels. Do not store the boxes of flooring directly on concrete, wood floors DO NOT need any moisture equalization prior to installation from open boxes and should be installed from just-opened boxes only open enough boxes to ensure a good mix of lengths and colour.
- Prior to installation of any flooring, the installer must ensure that the jobsite and sub-floor meet the requirements of these instructions. Harmony Timber Floors is not responsible for flooring failure resulting from inadequate jobsite and/or sub-floor conditions.
- Carefully examine the wood flooring prior to installation for colour, finish and quality. Ensure adequate lighting for proper inspection. Harmony Timber Floors cannot accept responsibility for flooring installed with visible defects.

INSTALLATION TOOLS

For all installation methods:

- Tape measure
- Wood or plastic spacers (10mm)
- Chalk line
- Tapping block
- Crosscut power saw
- Pry bar or pull bar
- Pencil
- Hammer
- 3M® Blue Tape
- Recommended Flooring adhesive:
Bostik ® Ultra Set or Sika T-55
- 8mm square notched trowel or as per flooring adhesive manufacturer's recommendations.

PRE-INSTALLATION FOR THE SUBFLOOR REQUIREMENTS

Acceptable sub-floor types:

- Existing sub floor - must be smooth, level, when gluing new flooring.

All Subfloors must be:

- Dry and will remain dry year-round. Moisture content of wood subfloors must not exceed 13%, wood flooring moisture content must be within 4% of wood subfloor moisture content, and concrete must not exceed 1.36kgs per Calcium Chloride Test (test method ASTM 1869-89).
- Structurally sound.
- Clean: Thoroughly swept and free of all debris. For glue-down installations, subfloor must be free of wax, grease, paint, sealers, old adhesives, etc., which can be removed by sanding.
- Level: Flat to 3mm per 3m radius.
- Wood subfloors must be dry and well secured. Nail or screw every 152mm along joists to avoid squeaking. If not level, sand down high spots and fill low spots.
- Concrete subfloors must be fully cured, at least 60 days old, and should have minimum 6mm polyfilm between concrete and ground. Subfloor should be flat and level within 3mm per 3m radius. If necessary grind high spots down and level low spots with Ardex or similar Levelling Compound. All concrete should be tested for moisture using a recognised testing method/meter and the result must not exceed 4% Ceramic tile, in good condition, clean and level.
- Remember, a concrete slab on/below grade that measures dry today may become moist in the future due to rising ground-water. Installing a moisture barrier now may be viewed as an insurance policy against concrete becoming wet in the future; this will lead to possible subsequent floor failure. Harmony Timber Floors is not responsible for any site related moisture issues and we recommend that a moisture sealer is used.



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BEGINNING YOUR INSTALLATION

Make sure subfloor is tested for moisture first and is properly prepared. Since timber expands with any increase in moisture content, always leave at least a 10mm expansion space between flooring and all walls and any other permanent vertical objects, (such as pipes and cabinets). This space will be covered up once you reapply base skirting's moldings around the room. Use wood or plastic spacers during installation to maintain this 10mm expansion space.

No area of connected flooring can span greater than 6 meters in width or 15 meters in length. For these larger spans, install T-moldings or other transition pieces that allow the flooring to expand and contract. Begin installation next to an outside wall. This is usually the straightest and best reference for establishing a straight working line. Establish this line by measuring an equal distance from the wall at both ends and snapping a chalk line. The distance you measure from the wall should be the width of a plank plus about 10mm for expansion space. You may need to scribe cut the first row of planks to match the wall in order to make a straight working

line, as most walls are not straight.

Work from several open boxes of flooring and "dry lay" the floor before permanently installing it, but never open more than a 10/15 boxes in advance. This will allow you to select the varying grains & colours and to arrange them in a harmonious pattern.

The flooring may differ slightly in grain and colour from the samples used in selecting the product. It is the installers' responsibility to work with the end user to determine the expectations of what the finished floor will look like. If the range of colour in the shipment does not appear satisfactory after opening a few boxes, do not begin installation. Contact your supplier.

Dry lay a few rows, (no glue or nails), before starting installation to confirm your layout decision and working line. When laying flooring, stagger end joints from row to row by at least 30mm. When cutting the last plank in a row to fit, you can use the cut-off end to begin the next row. If cut-off end is 30mm in length or less, discard it and instead cut a new plank at a random length (greater than 30mm) and use it to start the next row. Always begin each row from the same side of the room. To draw

planks together, always use a tapping block, as tapping the flooring itself will result in edge damage. Fit end joints tightly together before tapping long edges together. When near a wall, you can use a pry bar or pull bar to pry close the side and end joints. Take care not to damage edge of flooring. For glue down & floating applications, use 3M® 2080 Blue Tape to hold any pieces which might have side bow and need to be held straight & tight until the adhesive sets. Do not allow tape to remain on floor longer than 30 minutes and remove tape prior to cleaning floor with a cleaner. Do not apply tape to flooring that has been previously wiped with a solvent.

For the first and second starting rows: lay first plank inside chalk line with groove edge toward the wall. Since it can be difficult to get the stapler in place next to the wall, you may wish to glue down the first rows rather than face-nailing them and leaving unsightly nail holes that must be filled with putty. Make sure the starting rows are straight and drawn tight. After gluing down these rows with an adhesive, set weight on top of them and allow them to set firmly before commencing stapling the additional rows.

DIRECT STICK INSTALLATION - RECOMMENDED

- Carefully review the adhesive manufacturer's instructions for proper trowel size, minimum temperature, adhesive set time and open times before starting installation of the flooring.
- Make sure subfloor is tested for moisture content first and is properly prepared, with a moisture barrier protection, if not your floor is not warranted
- Once the spread adhesive has setup sufficiently per adhesive manufacturer's instructions, lay the first row of flooring with groove facing the wall, and continue laying flooring. Always check your working lines to be sure the floor is still aligned. Use a block to fit planks together, but be careful not to let installed floor shift on the wet adhesive while you are working.
- When first section is finished, continue to spread adhesive and lay flooring section by section until installation is complete. IMMEDIATELY REMOVE ANY ADHESIVE FROM THE FLOORING SURFACE. If adhesive cannot be completely removed with a damp cloth, use the manufacturer's recommended adhesive remover. Never let flooring adhesive dry on the finished surface. Within the adhesive working time, check each section of flooring in order to make sure it is well adhered to the subfloor. Planks on the perimeter of the room may require weight on them until the adhesive cures enough to hold them down.

PLEASE NOTE: When using any flooring Adhesive follow the manufacturers guidelines.
FAILURE TO ALLOW ADEQUATE FLASH TIME WILL RESULT IN CUPPING/BUCKLING.

- Flooring should be one of the last items installed in a project. In order to protect the floors while other trades are finishing their work prior to final cleanup and turnover to the owner, use rosin paper and only use 3M® 2080 Blue Tape to hold the rosin paper to the floor (other blue tapes may damage the finish). Clean the floor thoroughly before laying the rosin paper to ensure that no debris is trapped underneath. DO NOT USE plastic film or other non-breathing coverings as this can cause the floor to become damaged from humidity buildups.
- Remove expansion spacers and reinstall base and/or quarter round moldings to cover the expansion space.
- Dust mop or vacuum the floor thoroughly to remove any dirt or debris.
- Buff the floor with lamb's wool pads in order to remove any loose splinters, residues, foot prints, etc.
- Install any transition pieces that may be needed (reducers, T-moldings, nosing, etc.).
- Do not allow foot traffic or heavy furniture on floor for at least 24 hours.
- Place walk-off mats at all entrances to help collect dirt and debris that could damage or dull the flooring finish.
- Install felt floor protectors underneath all furniture.

READ THESE INSTRUCTIONS THOROUGHLY BEFORE BEGINNING INSTALLATION. IN ADDITION TO THESE INSTRUCTIONS, WE RECOMMEND THAT THE INSTALLER FOLLOW ALL INSTALLATION GUIDELINES SET FORTH by Harmony Timber Floors.



INSTALLATION INSTRUCTIONS FOR HARMONY ENGINEERED TIMBER FLOORS

INSTALLATION GUIDELINES SET FORTH by Harmony Timber Floors.

STEP 1 ACCLIMATISES THE FLOOR By leaving the floor in the area you are about to install for 48 hours before actual installation.

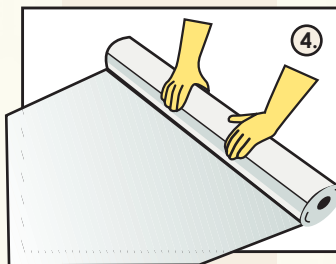
STEP 2 CLEAN AND PREPARE THE SUB FLOOR Scrape off any cement or dirt, check for high and low areas, these may require filling or grinding off.



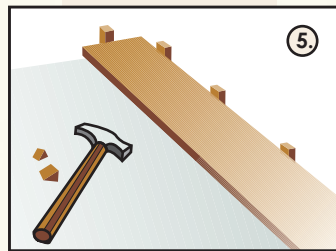
STEP 3 CHECK LEVELS To check you need to lay a straight edge over the floor, the floor should be even; with no more than 2 mm variance over a 2 square meter area, this applies to Harmony or Supreme, for thinner product such as Elite, Evidence or Classic, the floor should have no more than 1mm variance.



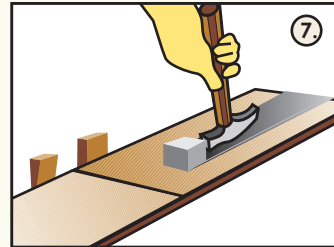
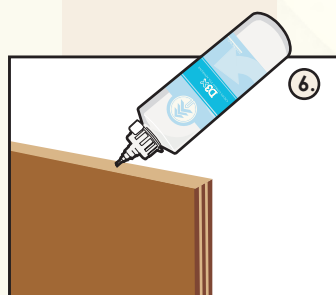
STEP 4 LAY THE UNDERFELT Prepare by rolling out the moisture barrier / underlay, most underlay's incorporate a moisture barrier, tape underlay together, DO NOT OVERLAP, if you do you will have a high spot, there are several types of underlay available, we prefer to use the better ones such as Harmony Silent night.



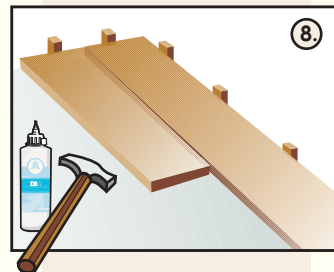
STEP 5 BEGINS TO INTALL THE FLOOR Starting with the first row, ensuring that the groove is facing against the wall. Leave a suitable expansion area between the wall and first row, at least 10mm, best to use spacer blocks, then proceed to second row by using leftover section (off cut) from the first row as your starter for this row.



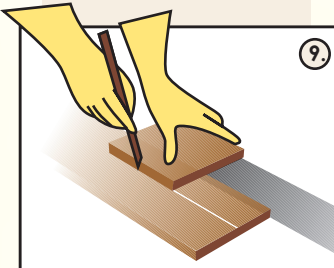
STEP 6 CONTINUE TO GLUE AND FIT THE FLOOR, a firm tap may be required, use a tapping block, best to cut a piece of the timber floor, it is important to start with the first four rows, ensuring that the rows are straight and well spaced from the wall, allow to set for forty five minutes and continue to lay the floor.



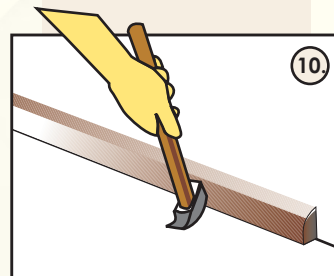
STEP 7 GOOD INSTALLATION PRACTICE; is to space the joins out well, by not having them too close. 300mm space and greater is best.



STEP 8 CONTINUE TO INSTALL, clean excess adhesive while working use a damp cloth and wipe as you go.



STEP 9 PLACE THE SKIRTING OR SCOTIA; fit skirting/scotias and trims to finish the floor



STEP 10 PLACE FURNITURE PROTECTOR allow to dry over-night before placing furniture on the floor, Remember to use floor protectors on all furniture.

CAUTION:

- Always check subfloor for levels, Australian Standards suggest that not more than 2mm over a 2 square meter area is acceptable.
- Always leave sufficient expansion joints, at least 10mm, for normal room sizes, if the span is greater than six meters add an additional 1.5mm per meter.
- When installing floors, never expose your floor to extreme sunlight, windows must be tinted or have necessary blinds
- Timber is a natural; product, it is not perfect, you can expect minor imperfections, with machining, you can expect overwood, this is when you join two pieces together, you may find that there may be a slight height difference.
- Timber can have grain and minor imperfections.
- Be careful not to overclamp when installing as this could cause cupping.