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COLLECTION

Engineered Herringbone Flooring Installation Instructions

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Engineered Herringbone Flooring Installation Instructions

Before you start

It is understood that;

- It is the owner's/installer's responsibility to read and be aware of the entire installation instructions before proceeding with the installation.
- Always follow the manufacturer's instructions for any additional compound or material you use.
- The installer assumes all responsibility for the final inspection of product quality. An inspection of each board should be carried out prior to installation. Carefully examine the flooring for colour, finish, and quality before installing. Use reasonable selectivity and hold out or cut off pieces with glaring defects, whatever the cause. All such inspections should be conducted in finished lighting conditions, particularly in areas that will be exposed to sources of natural light. If the flooring is not acceptable, contact your retailer immediately.
- Before beginning installation, the installer must determine that the environment of the job site and conditions, and the type of subfloor involved are acceptable. Thus, ensuring that it meets or exceeds all requirements, stipulated in the installation instructions that follow. The manufacturer declines any responsibility or job failures resulting from, or that are associated with inappropriate, or improperly prepared subfloor, or job site environmental deficiencies.
- In addition to this set of instructions, we suggest installers refer to the ATFA (Australian Timber Flooring Association) Engineered Flooring industry standards technical publication (Version 1 – Feb 2012), for moisture content & humidity guidelines prior to installing the timber floors.
- All sources of moisture must be rectified prior to the installation of the floor. In addition, all moisture levels in the rooms fitted with hardwood flooring should also be maintained at a stable level, in line with normal living conditions.
- In almost all flooring installations, a moisture barrier will be required. The form of Moisture Barrier Membrane you should use will be dependent on the subfloor and the installation method used.
- Any on site dampness (such as recently laid concrete slabs, or wet paint) must be completely dried prior to installation of the timber flooring. Please refer to our installation instructions in the 'subfloor' section for more information.
- The carton of floorboards should be stored in a protected dry place.
- The boards should be placed in the room in which they are to be fitted, to acclimatise for 48 hours on site in a protected area and should be carefully stacked in their packaging to allow air to circulate. DO NOT OPEN CARTON UNTIL COMMENCEMENT OF THE INSTALLATION.
- 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. DO NOT USE any individual board which may be doubtful as to grade, manufacture, or factory finish.
- We recommend opening a few cartons at a time and mixing boards from each carton during installation.
- The boards should be fitted lengthways towards the main incoming light source and, where possible, down the length of the room. In narrow hallways, install the floor parallel to the length of the hallways.
- The installer must use reasonable selectivity and remove or cut off pieces with deficiencies. **DO NOT INSTALL** sub-standard, nonconforming, or faulty boards.
- The use of stain, filler, or putty stick for the correction of defects during installation should be accepted as normal procedure.
- When Engineered Herringbone flooring is ordered, allow approximately 10-20% for wastage and offcuts, depending upon size or layout of the room or installation area. (Please note diagonal installations will require additional wastage allowances).
- Please note that Engineered Herringbone flooring must be installed in a regulated environment to prevent possible damage not covered by warranty. As such, engineered flooring should not be installed more than 2 weeks prior to occupation of the home. The floor is designed to perform in an environmentally controlled structure.
- Please contact your retailer and adhesive manufacturer immediately if you have any questions regarding these guidelines.
- Warranty exclusions include, but are not limited to:
  - surface checking resulting from low humidity
  - cupping or convexing (doming) of boards
  - the presence of mildew/moisture
  - discolouration from extreme subfloor moisture and/or exposure to direct sunlight
  - poor cleaning/maintenance regimes

Job site inspection & acclimatisation

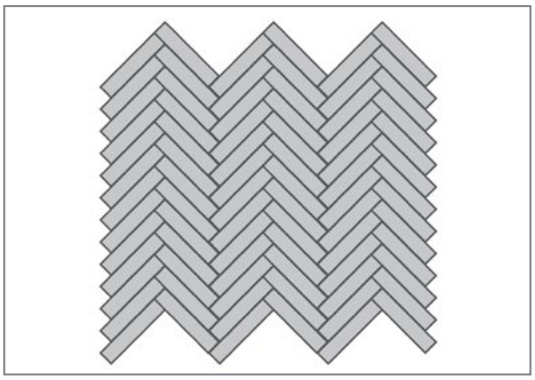
- Engineered Herringbone flooring can be installed below, equal to, or above ground level. Engineered Herringbone flooring must be installed in a regulated and liveable environment to prevent possible damage not covered by warranty.
- **DO NOT INSTALL** in bathrooms, laundries, toilets, saunas, or areas subject to regular moisture, or water.
- In a new construction building, Engineered Herringbone flooring should be one of the last items installed. All work involving water or moisture (plumbing, acoustic ceilings, wall lining, etc) should be completed prior to flooring being installed. Heating and air systems should be fully operating maintaining a comfortable room temperature.
- Flooring should not be delivered until the building has been closed in and cement work, plastering, painting, and other materials are completely dried. Concrete and plaster should be cured and at least 60 days old. Check basements and underfloor crawl spaces to ensure they are dry and well ventilated to avoid potential damage caused by moisture.
- Always handle with care. **DO NOT STAND** packs on their ends.
- **DO NOT STORE** directly on concrete or near outside walls. Cartons should be placed in the installation area and remain unopened until commencement of the installation.
- Extremes in humidity levels in the home must be prevented all year round. Engineered Herringbone flooring is a living product that reacts to humidity level variations. During summer, when the humidity level is usually at its highest point, the Engineered Herringbone flooring is expected to expand as it absorbs moisture from the air. These variations must be dealt with using the adequate dehumidification equipment. As for winter, when the heating system is working, the humidity level is lower. It is then recommended to use a humidifier to minimise the extreme effects of shrinkage.

Installation tools, accessories & materials

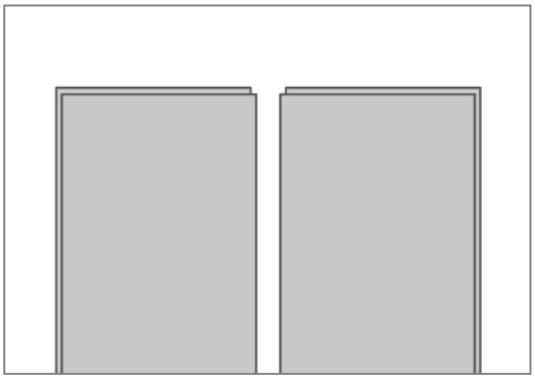
- Safety glasses
- Dust mask
- Measuring tape and square
- Sharp ‘Stanley’ type knife
- Pencil
- Pull bar
- Hammer
- Tapping block
- ‘V’ Notched trowels
- ‘Table type’ power saw with dust collector, or a circular saw with carbide-tipped blade, or a power jigsaw, multitool, drop saw, and undercut saw
- Small hand tools associated with woodworking
- Expansion wedges (Suitable sized spacer blocks of plastic or wood)
- Suitable adhesive, moisture barrier, and residue remover
- Suitable underlay
- Trims
- Scotia
- Stair Nosing
- Suitable floor protection

Board references

Inspired by classic French design, the Engineered Herringbone flooring highlights the natural and enduring beauty of engineered oak from modern contemporary to classical heritage spaces.

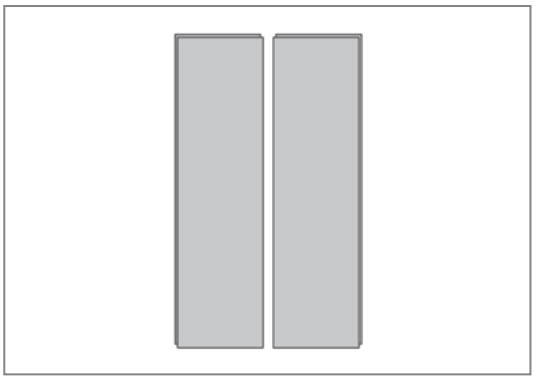


Herringbone pattern



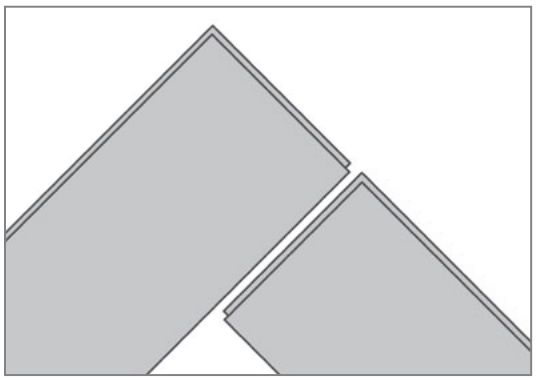
Herringbone tongue

Herringbone packs come with 6x left-tongues and 6x right-tongues.



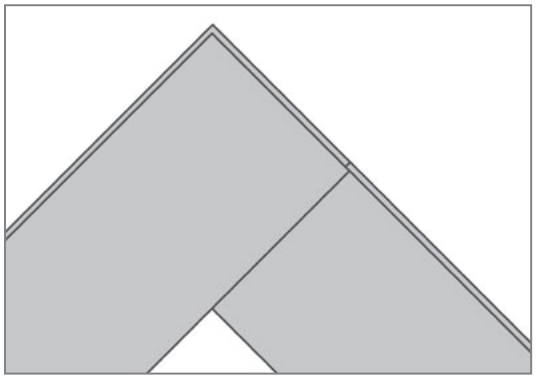
Herringbone boards

Full length Herringbone boards come in 600mm x 120mm



Herringbone tongue placement

A left-tongue board and a right-tongue board will be required to form a join.



Herringbone pattern placement

Example of the board placement.

Engineered Herringbone Flooring Installation Instructions for Direct Stick/Glue Down

IMPORTANT: Engineered Herringbone flooring is made of engineered oak which is bonded onto a multiply core base to ensure stability. They are all prefinished in an extensive range of colours.

Colour variation occurs with all-natural timbers; it is expected that tone and grain variations of Engineered Herringbone flooring are greater than artificial flooring such as laminate flooring.

Precision is the key when installing Engineered Herringbone flooring. Verify measurements and check row alignment frequently to ensure the pattern is being laid accurately and symmetrically.

Installing Engineered Herringbone flooring requires high-degree technical ability and should be only performed by qualified, experienced professional installers.

During installation, remove any remaining adhesive residue on the floorboards surface immediately, by using appropriate adhesive manufacturer's approved wipes.

Allow 12-24 hours for adhesive or compounds to cure. We recommend using a suitable floor protection to cover the installed floor. Before installing a suitable floor protection, you must clean, sweep, or vacuum the finished floor so that it is free of dirt and debris. This limits the potential surface damages that may occur on-site.

Proceed with a visual inspection of the boards before installation. Once installed, the boards are considered accepted by the installer and the homeowner.

Always follow the manufacturer's instructions for any additional compound or material you use.

DO NOT USE duct tape and/or any other industry's tapes during installation. Low tack masking tape is allowed for a maximum of 72 hours on the floorboards.

Each carton of Engineered Herringbone flooring contains 6 x left and 6 x right reverse tongue planks. A left-tongue plank and a right tongue plank will be required to form a join.

Engineered Herringbone flooring can be installed over under-floor heating system, please refer to and follow our Engineered Herringbone flooring Heated Slab Instructions.

ENGINEERED HERRINGBONE FLOORING SHOULD BE INSTALLED AS DIRECT STICK/ GLUE DOWN METHOD ONLY.

The floorboards are directly adhered on to the concrete/ wood-based subfloor via glue, this is trowelled onto the subfloor.

A successful installation will rely heavily on adherence to these instructions. The two most common causes of failure are uneven subfloors and inadequate expansion to the perimeter of the floor.

When installing Engineered Herringbone flooring via a direct stick method, you must leave an expansion gap around the perimeter of the room of 3-5mm to allow for expansion of the flooring.

Installations greater than 20m in width or those with separate rooms will require the use of transition moulding to provide proper expansion space.

Expansion Moulding

If the Installation areas are greater than 20m in length and/or 20m in width, you will require the use of transition moulding to provide proper expansion space.

Preparation - Subfloors:

IMPORTANT:

- Subfloors must be checked prior to installation.
- Please DO NOT USE the direct stick method on any unstable/unsuitable concrete slabs.
- Should the moisture content of the concrete slab be above 4.8%, flooring should not be installed.

Before installing the flooring, you must clean, sweep, or vacuum the subfloor so that it is free of dirt and debris. Verify the moisture content of the subfloor using a moisture meter or another approved method.

Please ensure the subfloor or surface that the flooring is being installed over is levelled. Deviations in any subfloor level must not exceed 3mm under a 3 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.

Timber subfloors can be sanded level and concrete subfloors can usually be levelled using a cement based self-levelling compound.

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 4.8% for concrete/screed subfloors and 14% 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 installer.**

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

- The flooring can be installed onto concrete/screed subfloors and existing wood provided they are dimensionally stable.
- Ensure the subfloor is clean and free from all contaminants and loose materials by vacuuming prior to installation.
- Existing concrete/screed bases' moisture content can be checked using a moisture meter, or alternatively sheets of polyethylene approximately 1m x 1m squared, taped onto the screed with a heavy weight placed on top for 24 hours. Presence of moisture in the screed will be confirmed if the screed is discoloured, or moisture is apparent on the underside of the polyethylene sheet. Your floor **MUST NOT** be fitted until the problem has been rectified. If installing on wood, the moisture vapour content of a wood subfloor must not exceed 14%.
- Flooring can be fixed directly onto preinstalled wood (particleboard, yellow tongue, or conventional hardwood) 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. 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.

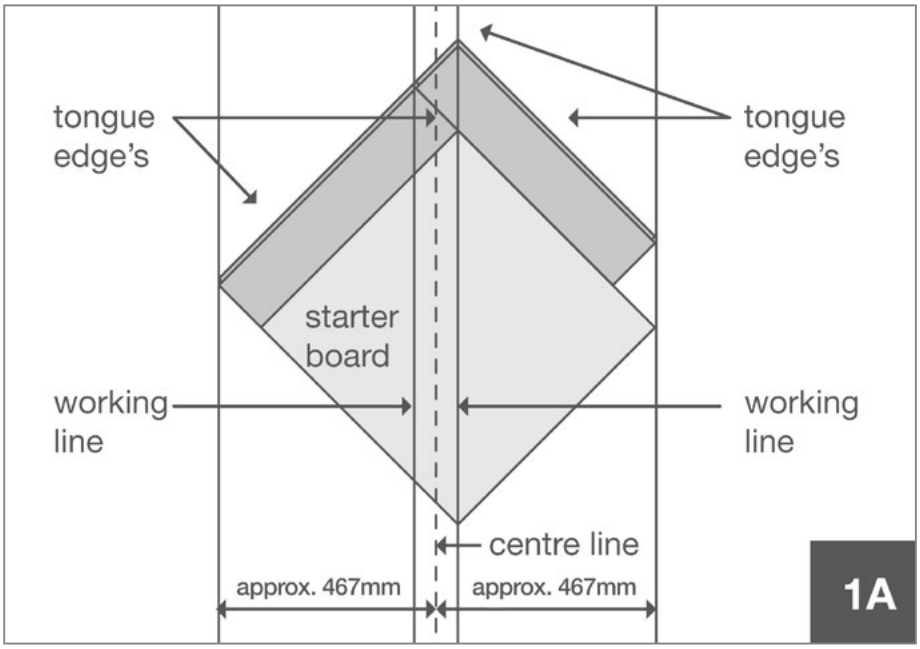
Floor installation

Getting started:

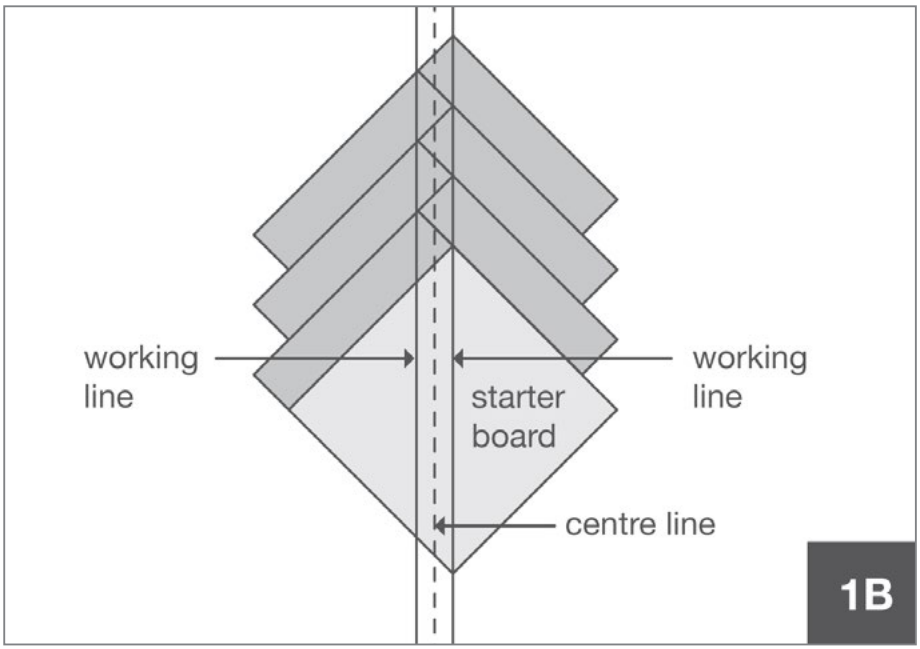
- **Moisture Barrier Membrane** The levelled subfloor must be allowed to dry out completely before applying a suitable liquid **Moisture Barrier Membrane**. Comply with all instructions provided by the adhesive manufacturer.
- Inspect your **Moisture Barrier Membrane** to ensure it is dry and clean prior to beginning of installation and take moisture readings to ensure levels are correct.
- Determine the layout for the floor and the direction the pattern will run. Typically, the pattern will follow the length of the room.
- Determine the centre line for the pattern. The centre line should be in the middle of the installation area. Snap a chalk line along the entire length of the installation area as centre line.
- The next step is to snap a parallel chalk line approx. 42 mm to the left of the centre line and another approx. 42mm to the right. **These will serve as guides for the Working Lines (WL).**
- The next step is to snap a parallel chalk line approx. 467mm to the left of the centre line and another approx. 467mm to the right. **These will serve as guides for the outer edges of the first two rows.** The corner of each board should be checked once installed to ensure it is parallel to the chalk guideline. You may need to snap additional lines as guides for the outer rows as you proceed with the installation.
- Prepare a perfectly square piece of plywood as starter board, 600mm x 600mm size.
- Select your starting point in the middle of the installation area, position the plywood in a diamond shape with the top and bottom points aligned with **RIGHT WORKING LINE** close to the centre line.
- It is recommended to open a few packs to sort the herringbone planks into left and right tongue piles before installation.
- It is recommended to use a professional direct stick adhesive that is specially formulated for engineered wood flooring. Strictly comply with all instructions provided by the adhesive manufacturer.

Installing the first three rows:

- Begin your installation in the selected area (in the middle of the room). Spread the professional direct stick adhesive out from the edges of the starter board and over a reasonable area (using a 6mm 'V' notched trowel or as specified by the adhesive manufacturer).
- Set the first left-tongue plank to the left-hand side of the starter board. The grooved side snug must be towards the starter board and the tongue side facing out towards the room. Please ensure the upper butt ends are aligned with the centre line. Press the left-tongue plank down to the subfloor over the **Moisture Barrier Membrane**.

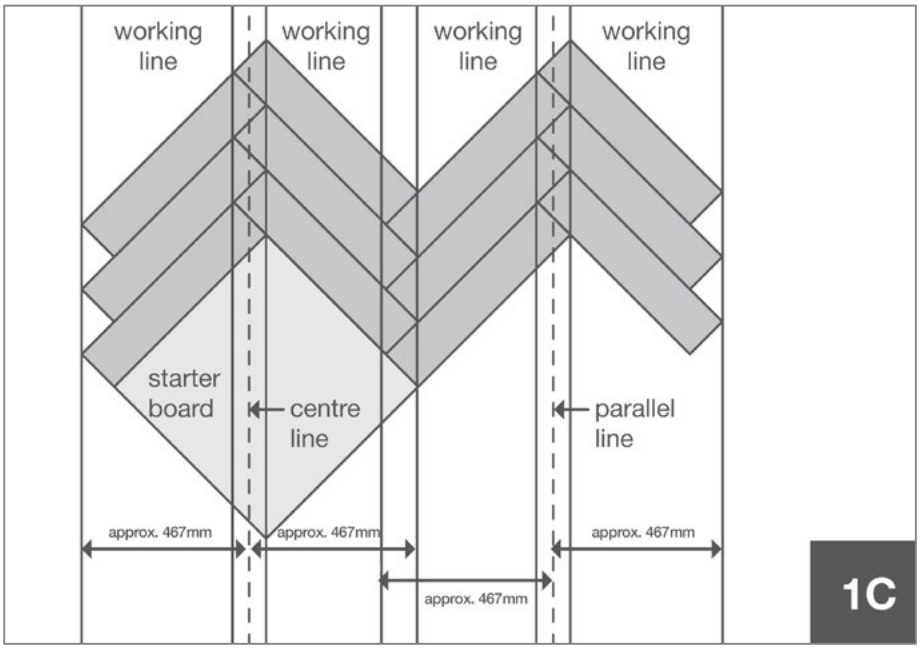


- Set the first right-tongue plank to the right-hand side of the starter board. The grooved side snug must be towards the starter board and the tongue side facing out towards the room. Please make sure the upper butt ends are aligned with the centre line. Press the right-tongue plank down to the subfloor over the **Moisture Barrier Membrane**.

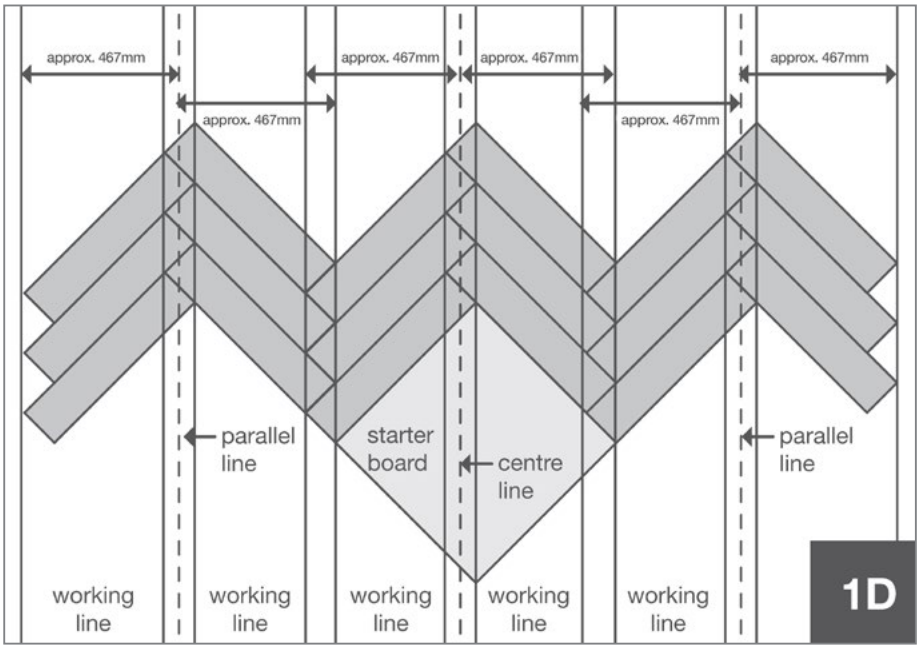


- Avoid pushing the board into place across the subfloor as this may unevenly redistribute the adhesive. Instead, hold the new board above the subfloor at an angle. Furthermore, engage the tongue and groove joint, then press the board directly down to the subfloor.
- Starting the second left-tongue plank, place the new plank with the groove side snug to the tongue side of the first board. Make sure the upper butt ends are aligned with the centre line, press the board down on the subfloor over the Moisture Barrier Membrane.

- Continue the second right-tongue plank, place the new plank with the groove side snug to the tongue side of the first board. Make sure the upper end butt is engaged with that second left-tongue board. In addition, the tongue end of the right-tongue plank must line up with the tongue side of the left-tongue plank. Press the right-tongue board down on the subfloor over the **Moisture Barrier Membrane**.



- Install the first 3 boards and allow time for the adhesive to cure before continuing with the installation in the section.
- Begin the next row, place the new left-tongue plank against the previous row. Ensure it is engaged with the previous right-tongue plank and press down. Continue the second row with the right-tongue plank, make sure the upper butt is engaged with that of the left-tongue plank down. Snap a new parallel chalk line through the upper end, this is the centre line of the new row of flooring.



- Continue working forward until the first two rows of flooring are complete to the far wall. Cut the final row to fit, allowing 3-5mm expansion space at the room's perimeter. Remove the plywood starter board and work back to complete the first two rows.
- Start the new rows from repeating the above instructions until the installation is completed. Measure and cut the final row planks to fit, allowing 3-5mm expansion space at the room's perimeter.
- Check measurements and row alignment frequently to ensure that the rows are staying true and square. If necessary, you can strap the boards by using the low tack masking tape.

DO NOT USE duct tape and/or any other industry's tapes during installation. Low tack masking tape is allowed for usage of a maximum of 72 hours on the floorboards.

- Always snap a new chalk parallel line with every row to serve as guidelines.
- Spot weight across the floor plus weight of any hollow or drummy areas, to ensure floorboard and subfloor contact.
- When installation is complete, remove all the low tack masking tape from the floor. **(DO NOT LEAVE THE LOW TACK MASKING TAPE ON THE FLOOR LONGER THAN 72 HOURS)**. Wait at least 24 hours before moving furniture or appliances onto the floor.
- Ensure no direct stick adhesive is forced into Tongue & Groove joints during installation. Avoid getting direct stick adhesive on the flooring surface, ensure any seepage or spills are cleaned up immediately as per to the adhesive manufacturer's instructions.

When installing Engineered Herringbone flooring by direct sticking to the concrete slab with acoustic matting, an acoustic underlay system is required in multiresidential developments to reduce noise transfer. Over a prepared slab – see above subfloor preparation - the suitable acoustic matting will need to be applied to the slab with a professional direct stick adhesive using a 3mm 'V' notched trowel or an adhesive manufacturer's specified, allowed to dry according to the adhesive manufacturer's specifications. Glue the boards directly to the matting with a professional direct stick adhesive, also using a 6mm 'V' notched trowel (or an adhesive manufacturer specified). Spot weight across the floor plus weight of any hollow or drummy areas, to ensure floorboards. and subfloor are bonded.

Removal of Glue Residue/Compounds:

- **It is vital that all glue residues are removed immediately after laying each prefinished board.**
- **Make sure to use the professional wipes (or a solvent suitable) recommended by the adhesive manufacturer to remove the glue residues.**
- **Always test solvents first on an offcut to establish that the solvent does not affect the colour or finish.**
- **Use a damp cloth to wipe away any solvent residue during installation.**
- **Always follow the adhesive/compounds manufacturer's instructions.**

Finishing:

- Any spacing wedges used can now be removed.
- 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 or where boards meet tiles or carpet, 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-silicone-base filler to match the colour of the timber.

After completing installation, visually inspect the finished floor to ensure that there are no glue residues or compounds left. Allow 12-24 hours for adhesive or compound to cure. We recommend using a suitable floor protection to cover the installed floor. Before installing the suitable floor protection, you must clean, sweep, or vacuum the finished floor so that it is free of dirt and debris. This limits the potential surface damages that may occur on-site.

Installation Instructions - Over Heated Slab

Engineered timber flooring, due to its great stability, can be installed over hydronic heated slabs (ONLY). It needs to be installed as per the guidelines specified below to avoid compromising your flooring warranty, other floor heating systems are not covered by our warranty.

The floor must be installed by a professional installer, and always follow all the manufacturers' guidelines to make sure your warranty won't be compromised. Please also note that the heating system being used must be installed and operated in compliance with the guidelines of the heating and/or other manufacturers guidelines. Refer to our Engineered Timber flooring installation instructions or contact us for more information.

1. The in-slab under floor hydronic heating needs to be started and run at desired temperature for at least 14 days prior to installation.

NOTE: The slab surface temperature must not exceed 26°C at any time.

2. After 14 days, turn off the slab heating and allow 4 days to pass in order to allow the subfloor to cool down and reach room temperature before installation.
3. Please note that the total timber floorboard thickness must be no greater than 20mm.
4. After floor installation is complete, your engineered timber flooring requires gradual acclimatisation in conjunction with the heating system. The heating system temperature is to be increased by 2 degree increments each day until desired temperature is reached (not exceeding 26°C) and when turning your heating off, also decrease by 2 degree increments each day until it is off.
5. Using an in-floor temperature sensor is important to avoid overheating.
6. Shrinking between boards, cracking and minor cupping can be expected when installing over heated slabs and does not constitute a product defect.

For floating method

1. Install 200UM plastic sheet overlapping joins by 300mm and taping the joins securely using waterproof tape. Plastic sheeting must run up the walls 100mm, then be cut off at floor height (after installation).
2. Installation of a premium quality 3mm moisture barrier underlay. We highly recommend using our suitable underlay together with all our engineered timber products.
3. Boards must be glued at the joins. A bead of glue needs to be applied to the top and bottom edge of the groove.
4. Leave expansion gap (10-12mm) as per normal installation guidelines.
5. Please refer to our Engineered Timber flooring Installation Instruction Guide for finishing instructions.

For direct stick/glue down method

1. Please refer to our Engineered Timber Installation Instruction Guide for Direct Stick/Glue Down Method.
2. Direct stick adhesive must be applied via full-trowel in conjunction with the use of crosslinking PVA in the groove joins. Make sure to consult the glue adhesive manufacturer to ensure the appropriate adhesive is used in conjunction with a heated slab installation.

Please always visit our website www.asttimbers.com.au for the most up-to date version of our installation instructions, warranty, technical data sheet and care & maintenance as it may have been revised and updated.

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