

# General guide for wood flooring installation and maintenance

Site conditions guide	01
Underfloor heating guide	03
Installation guide for engineered wood flooring	04
Installation guide for herringbone wood flooring	10

# SITE CONDITION GUIDE FOR WOOD FLOORING INSTALLATION

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- The site needs to be completely “weather tight”.
- Main entrance door must be fitted and secured with a lock.
- All windows must be fixed shut (not temporarily closed).

## Work to be carried out before floor fitting

- Underfloor heating
- Painting and decorating
- Plastering
- Tiling
- Water testing or any other wet (plumbing) work.

## Kitchen

- It is recommended that kitchen units be installed prior to the installation of wooden floors.
- The kitchen units can be very heavy (and are often unbalanced) and exert considerable pressure on the floor.
- This could lead to the floor buckling and breaking over time.

Additionally, it may interfere with the expansion and contraction of the floor.  
Our warranty may be affected if units are laid on top of our hardwood floor.

## Beginning of the work

- All the floor area must be clean, dry, smooth and level.
- No furniture or any other working tools should be left in the area where the floor is going to be fitted.
- A dry floor must not have more than 2% moisture.
- A level floor must not have any uneven surfaces.

## During fitting time

No other tradesmen should be allowed, or any other work carried out in the rooms where floors are to be fitted until the end of fitting and the floor has been covered and protected.

## Protection of the floor after Installation

- The floor should be covered with “buffalo paper”.
- Masking tape should not be taped to the floor or along the perimeter of the skirtings.
- This is to avoid any condensation or peeling that can damage the wood flooring.
- The second layer of protection needs to be made of a tough material such as plywood or Corex.
- The same conditions are to be met, of not sticking masking tape around the perimeter along the skirting.
- After removing the protection, the first cleaning should be done either by vacuum cleaner or by dry static pads to take all the dust off the floor.
- The second round of cleaning should be done with a lightly damp cloth using the right soap for various floors.
- Any stains or dirt which sticks to the flooring should not be removed using rough materials as this will scratch the floor. Instead use a soft cloth made of white cotton only.
- Please make sure that all furniture is correctly protected - for example the legs of the sofa, tables, chairs and any other objects that could damage the floor need sufficient padding / floor protectors.

# SITE CONDITION GUIDE FOR WOOD FLOORING INSTALLATION

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## **Rugs**

Rugs that stay in areas that get direct sunlight such as a conservatory, south facing windows or very large windows, over time, will cause discoloration to the floor.

## **Underfloor heating and rugs**

Extremely heavy rugs aren't recommended to be laid on top of wood floors with underfloor heating. They can create hot air pockets which can over-dry the wood and damage the wood flooring.

# UNDERFLOOR HEATING GUIDE FOR WOOD FLOORING INSTALLATION

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The following guideline is designed to complement the current **British Standard BS8201**.

- The underfloor heating system must be commissioned and working for a minimum of 2 weeks prior to acclimatisation of the flooring.
- The flooring must be allowed to properly acclimate on site with the underfloor heating at the desired working temperature.
- The flooring must be delivered to site and stacked to allow for acclimatisation. During this time the underfloor heating must be running, and site conditions must be as close as possible to "normal" living conditions.
- During acclimatisation the surface floor temperature must not exceed 27 degrees centigrade. For the subfloor surface temperature not to exceed 27 degrees centigrade the hot water in the pipes under the floor must be cooled at the manifold accordingly. It is vital to get the calibration right at this point, it will avoid damaging the floor in the future.
- For wet underfloor heating systems, the underfloor heating system must be turned off prior to installation.
- The underfloor heating must be left off for a full 7 days to allow the adhesive to cure completely.
- After 7 days the underfloor heating can be turned back on at 15 degrees centigrade and gradually brought up to the desired working temperature in steps of 1 degree per day.
- Any subsequent increase or decrease in the floor temperature should always be in increments of 1 degree centigrade per day.
- Do not run the underfloor heating if the floor has been covered for protection during the building process, wait until all protective coverings have been removed.
- At no point should the temperature of the floor exceed 27 degrees centigrade, and the relative humidity of the air should always be maintained between 40% and 60%.

## **NOTE:**

The responsibility of keeping the above conditions rests solely with the customer before the floor is laid, during and after work.

The installers' responsibility is to check those readings before starting the installation.

The supplied floor is suitable for under floor heating but when all or some of the above conditions are not met, the floor can get too dry and damaged with cracks and other defects. This will invalidate any warranty.

# INSTALLATION GUIDE FOR ENGINEERED WOOD FLOORING

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## **OWNER/INSTALLER RESPONSIBILITY: READ CAREFULLY PRIOR TO INSTALLATION**

Hardwood floors are manufactured in accordance with accepted industry standards which permit a defect tolerance not to exceed 5%. The defects may be of a manufacturing or natural type. Prior to the installation of any hardwood flooring product, the installer must determine that the job-site environment and the sub surfaces involved, meet or exceed all requirements as stipulated in these installation instructions. We do not accept any responsibility for job failure resulting from or associated with sub surface or job-site environment deficiencies. The installer/owner has final inspection responsibility as to grade, manufacture and factory finish. He must use reasonable selectivity and hold out or cut off pieces with glaring defects, whatever the cause. When hardwood flooring is ordered, 5% must be added to the actual square metres needed as allowance for cutting waste and/or mis-manufacture. Should an individual piece be doubtful as to grade, manufacture or factory finish, the installer should not use the piece. DO NOT INSTALL ANY QUESTIONABLE OR DEFECTIVE PRODUCT.

**NOTE: IT IS RECOMMENDED THAT YOU EMPLOY A PROFESSIONAL FLOORING CONTRACTOR WHO OWNS A MOISTURE METER TO LAY YOUR FLOORING. IT IS THE INSTALLER'S RESPONSIBILITY TO CHECK THE MOISTURE OF THE CONCRETE AND OTHER CONDITIONS IN THE HOUSE BEFORE LAYING THE FLOOR**

## **STAGE 1: Before you start – Job site inspection**

### **Acclimatisation and storage:**

The floor should be stored horizontally in the room that is being fitted for at least 7 days before installation – the longer the better. The period required to acclimatise the flooring should be determined by taking moisture readings of the flooring and also from within the room. The fitter should aim for the two to be in equilibrium. Failure to acclimatize may cause excessive expansion and contraction. Do not open the packs prior to installation. The temperature must be at least 18°C and the relative humidity between 40 – 60% for a minimum of 14 days prior to the installation of the flooring as well as during and after the fitting. The fitter should carry out these tests. Never bring flooring into a house which is not to the above conditions. It is vital that the packs are stacked correctly and horizontally. Place at least 3 laths between the ground and first row. The best way to stack the packs is to place laths between each row.

### **Sub-floor evenness and cleanliness:**

It is imperative to ensure that your cement or wood sub-floor is level (to within 5mm over a 3 metre span) and that it is clean, dry and secure. Failure to do this may result in edge damage to the boards or noise related issues e.g. squeaking. It is the fitter's responsibility to ensure that the floor is level and clean. Any remaining residues or dirt should be removed.

## **IMPORTANT - SUB-FLOOR MOISTURE CEMENT SCREEDS:**

The moisture of the concrete floor must not be over 3% based on Tramex Concrete Encounter Red Scale in diagram) - this should be tested with an appropriate moisture meter e.g. Tramex Concrete Encounter. If the cement subfloor moisture level is too high, either wait until it is dry or use a PU Primer / Liquid DPM such as Seal Tight 100 which will seal moisture in cement floors up to 6% moisture.

# INSTALLATION GUIDE

## FOR ENGINEERED WOOD FLOORING

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### **Pump / Anhydrite screeds:**

For pump / anhydrite based screeds (usually 45-50mm thickness with underfloor heating), the moisture content level of the screed must be below 0.3% CM Moisture (Tramex Concrete Encounter Blue Scale highlighting CM % Moisture in diagram). Please note PU Primers or Liquid DPM's are not suitable for use over Pump / Anhydrite Screeds.

### **Timber subfloor:**

Suitable timber subfloors include PAO Battens (Kiln dried approx. 12%), flooring grade plywood or OSB Grade 3 (Kiln Dried approx. 12%). If using battens, they should not be further than 300mm apart. Construction Plywood or Rough Timber battens are not suitable subfloors due to their high moisture content. If the timber subfloor has a moisture content higher than 12% or you are nailing to rough battens/joists, we recommend the use of Bitumen Paper which helps prevent moisture penetration from the timber subfloor. Bitumen paper is used at installer's/owner's risk.

### **Moisture barrier:**

Always use builder's polythene or a suitable moisture barrier over cement floors for additional moisture protection. Overlap seams by 30cm and tape with duck tape (or similar waterproof tape), extend the polythene up the wall behind the skirting.

### **Inspect flooring:**

Prior to installation, the fitter should inspect each board in daylight for any visible faults or damage and also check the colour, structure and finish. The installer/owner has final inspection responsibility as to grade, manufacture and factory finish. They must use reasonable selectivity and hold out or cut off pieces with glaring defects, whatever the cause. Once a board is fitted, it is deemed to be acceptable. It is the responsibility of the fitter and the end user to ensure that the grading of the floor is correct. Always select boards from different bundles to ensure an even appearance. NO CLAIMS ARE ACCEPTED ONCE THE FLOORING BOARDS HAVE BEEN INSTALLED.

### **Rustic (or similar) grades:**

We do not guarantee Rustic grades as they may contain boards with open knots, cracks or minor defects Longitudinal Bowing In the case of engineered flooring, it is possible for some boards to be bowed on the length. This is more prone in higher humidity environments. These boards can be installed without any problem as longitudinal bowing is self correcting. Some boards may need to cut and used as a starter and end piece.

## **STAGE 2: Installation**

### **Methods of installation**

- 1: Floating Installation
- 2: Glue Down Installation
- 3: Installation over Under-floor Heating

### **Laying direction:**

The laying direction normally depends on the main sources of light fall in the room e.g. French windows. The boards should run parallel with the entering light for best appearance. Ensure that the boards are always laid lengthways in narrow hallways. In the case of L, T or U shaped hallways they may require placing an expansion gap and changing the laying direction of the flooring.

# INSTALLATION GUIDE

## FOR ENGINEERED WOOD FLOORING

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### 1: Floating installation

Suitable subfloors for a floating installation include cement screed, flooring grade Plywood or OSB Grade 3 (Kiln dried 12%). Construction Plywood is not a suitable subfloor due to its high moisture content. The widest floor that can be installed in a floating installation is 220mm. Timber flooring wider than 220mm should be glued down. Please consult page 1 section "Sub-floor Moisture" of these instructions for further information regarding correct job site moisture levels.

**Important:** Over Cement Screeds, always use polythene. A good quality underlay should be used underneath the flooring. The installer will require a heavy tapping block, PVA glue, clamp straps and woodworking tools to complete the installation.

**Expansion:** Wood is a living material. Always remember to leave an expansion gap of 15mm at walls, pillars, stairs, doorways etc and around any fixed object. Fixed objects also include door stops and heavy items such as island or kitchen units. For any pipes: drill a hole with a diameter about 15mm larger than that of the pipe. It is recommended to place an expansion profile at all doorways. Do not fix any objects to a floating floor installation e.g. kitchen island unit fixed to subfloor through the flooring as this prevents the floor from expanding / contracting throughout theseasons. If there are very heavy objects on top of the flooring, then a glue-down installation is recommended.

The maximum area in which an engineered floor should be floated is 8 metres in any direction. In larger areas, a suitable profile should be used or alternatively a glue-down/nail down installation should be considered.

1: Begin installation along the longest wall, or an outside wall, which is most likely to be straight and square with the room. At a minimum of 3-4 points, measure out from the wall 1 board width (including the tongue) and also include the expansion gap of 15mm. Snap a chalk-line connecting these points, parallel to wall and perpendicular to adjacent walls. Since most walls are not square, you may have to trim the edge of some planks along the walls.

2: Fix a straight edge (e.g. 3 x 1 PAO) to the subfloor along the chalk-line and work off this (Be careful there are no water pipes running underneath). Using the longest and straightest board, install your first plank with the tongue facing away from the wall along the chalk line. Use a good quality PVA wood glue compliant with EN204D3 or BS4071. All boards must be glued. Spot gluing is not sufficient; a full glue line must be applied inside the groove on the long side and the short ends. Remove any excess glue with a damp cloth. It can take over 24 hours for PVA glue to fully harden so please wait 24 hours before traffic and furniture is allowed into the room.

**NOTE:** Proper alignment is critical. Misaligned starter rows can cause side and end gaps. When you have the starter row completed, you can start the next row.

3: The flooring joints should be staggered so that rows do not appear aligned. If you come across a bowed or twisted board, cut this in half and use this as an end piece and starter piece. After completing 6-8 rows of the room, clamp straps may need to be used to tighten the floor together. This will tighten up any floor joints where minor gaps have opened during the installation. This should be left for 30 minutes for the glue to start working. After this time, continue on as before, again stopping if necessary when you have completed another 6-8 rows to apply the clamp straps for 30 minutes.

4: When you get to the far wall, you will likely be required to cut the final row in width to fit against the wall. Do this by laying a plank in position and scribing a line on the plank (Don't forget to leave your expansion space of 15mm from the wall). Cut planks for the last row and glue them into place. Go back to the beginning of the installation, position the first 1-2 rows and glue them into place. The clamp straps should again be fixed to the flooring to ensure there are no gaps while the glue is setting.

**NOTE:** It is extremely important to blend planks from several cartons to ensure a good balance of colour and graining.

# INSTALLATION GUIDE FOR ENGINEERED WOOD FLOORING

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## 2: Glue down installation

Suitable subfloors for glue down installation include cement screeds, ceramic tile, flooring grade plywood or OSB Grade 3 (Kiln Dried approx. 12%). Construction Plywood is not a suitable subfloor due to its high moisture content. All cement screeds must be properly cured, clean, dry and free of contaminants such like sealers and old adhesive residue. All subfloors must be structurally flat within industry standards of 5mm variance across 3mt. All sub-surfaces must have a sound but still 'rough' or porous surface in order to ensure a good bond with the adhesive. Old adhesive residues should be removed. A slick or sealed surface should be pre-sanded.

Glue down installation requires that a quality low water solvent free based adhesive be used, using a trowel and spread rate as specified by the adhesive manufacturer. The recommended adhesive for most installations is Griptight 50 PRO PLUS Adhesive or equivalent. See adhesive manufacturer's installation instructions for specific rules and guidelines regarding installation procedures and acceptable subfloors. Any questions regarding the acceptability of a concrete slab or any other type of subfloor or subfloor coating for application of an adhesive, is the sole responsibility of the adhesive manufacturer and the flooring contractor. Remove wet adhesive immediately as it can be very difficult to remove once cured. The recommended trowel is a 5.5mm V Notch trowel to ensure maximum coverage and a good bond between the subfloor and wood flooring. Larger notch trowels will result in less m2 coverage per kg.

**Expansion:** Always remember to leave an expansion gap of 15mm at walls, pillars, doorways or fixed objects etc and around the entire perimeter. For pipes: Drill a hole with a diameter about 15mm larger than that of the pipe. In the case of solid flooring or large areas of engineered flooring, it may be necessary to leave additional expansion through the floor as well as around the perimeter. It is the fitter's responsibility to calculate what additional expansion may be required.

1: Begin installation along the longest wall, or an outside wall, which is most likely to be straight and square with the room. At a minimum of 3-4 points, measure out from the wall 1 board width (including the tongue) and also include the expansion gap of 15mm (For narrow boards, it may be necessary to measure 2 board widths from the wall). Snap a chalk-line connecting these points, parallel to wall and perpendicular to adjacent walls. Since most walls are not square, you may have to trim the edge of some planks along the walls. Prior to installing flooring, we highly recommend that a straight edge be firmly secured along the chalk line as a guide and to prevent the planks from shifting during installation. Alternatively, the first row can be face nailed with finishing nails into a wood subfloor or spring nailed into a concrete sub-floor (Be careful there are no water pipes running underneath).

2: Spread adhesive from the chalk line/straight edge out to approx the width of two planks using a trowel size according to the adhesive manufacturer's recommendations. Using the longest and straightest board possible, install your first plank with the tongue facing away from the wall along the chalk line/straight edge and secure into position.

**NOTE:** Proper alignment is critical. Misaligned starter rows can cause side and end gaps.

3: When you have the starter row completed, you can start the next row. When the first two rows are straight and secure, spread 700mm to 900mm of adhesive across the length of the room. Never spread more adhesive than can be covered in 30 to 45 minutes (This time may vary depending on quality of adhesive being used). Check for a close fit at all end and side joints. Continue to install planks and tap or pull them into place when necessary. Any badly bowed or twisted boards should be cut and used as a starter and end piece. Weights may be required to be placed on the floor in certain areas to ensure full contact until the adhesive is set.

**NOTE:** It may be necessary to use clamp straps for a period and pull the floor together if some minor gapping develops.

4: Remember to leave an expansion gap of 15mm between the flooring and walls. As stated above additional expansion may be required through the floor for solid flooring or large areas of engineered flooring. This is to be determined by the installer.



# INSTALLATION GUIDE FOR ENGINEERED WOOD FLOORING

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5. This by laying a plank in position and scribing a line on the plank (Don't forget to leave your expansion space of 15mm from the wall). Cut planks for the last row and install. Go back to the beginning of the installation and remove the straight edge. Spread adhesive on to exposed subfloor and position the final 1-2 rows into place. Remove all expansion spacers at wall and any temporary face nails before applying trim mouldings / skirtings.

6: Allow adhesive to cure for at least 24 hours before permitting foot traffic or moving furniture onto floor.

If the floor is being sanded afterwards, the adhesive must be allowed to cure for a minimum of 48 hours prior to sanding.

**NOTE:** It is extremely important to blend planks from several cartons to ensure a good balance of colour and graining.

**NOTE:** It may be necessary to leave weights on flooring boards which are pushing up to ensure full contact with the subfloor while the glue cures. This is normal practice and these weights can be removed once the glue has fully set.

## **3: Underfloor heating (We do not guarantee solid flooring over underfloor heating):**

Our engineered floors are suitable for use over underfloor heating. Please follow below guidelines and information. It is very important that the moisture content of the subfloor which your floor will be laid onto is at the correct moisture level. To avoid cracks in new subfloors, you need a natural drying time of approx. one week per cm thickness of the screed. You can turn on the heat after the above has been achieved. Raise the temperature by 5 degrees per day till you reach maximum capacity and leave the heating on for 14 days. This is important as a relatively small moisture percentage can cause movement issues with your floor. After these 14 days, switch the heating off for at least 1 week. If necessary, the floor can be levelled and primed at this stage. A floor should be levelled with a high quality latex levelling compound if outside tolerances of 5mm over 3 metres. A moisture check must also be done on the screed prior to any installation. The temperature below the floor must never exceed 28 degrees celsius and the maximum difference of temperature per 24h is 5 degrees Celsius. There are 2 types of installation:

## **Floating installation recommendations (Please follow below guidelines and floating installation instructions):**

- 500 Gauge Polythene – over cement floors
- 2mm Cork Underlay or Acoustalay 1500 – lowest heat transfer resistance.

## **Glue down installation recommendations (Please follow below guidelines and glue down installation instructions) :**

- Sealtight 100 PU Primer (If Cement Moisture is above 2.0% CM but less than 4.0% CM (< 6% on red scale below)
- Griptight 50 PRO PLUS Flexible Adhesive Glue

**Note:** For a glue-down installation, please turn heat off / to minimum 2 days before installation. You can turn on the heating system again two days after installation - again with maximum increments of 5°C per day. We recommend that a high quality flexible glue (suitable for U/F Heating) such as Griptight 50 PRO PLUS Adhesive is used for glue down installations.

# INSTALLATION GUIDE FOR ENGINEERED WOOD FLOORING

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## Guidelines:

- Moisture of concrete must not be higher than 3.0% for cement screeds on the Red scale based on Tramex Concrete Encounter (or approx. 1.8% CM on yellow scale)
- For anhydrite or calcium screeds (pump screeds), the moisture level must be 0.3% CM or below based on Tramex Concrete Encounter Blue Scale)
- 500 Gauge Polythene (If floating installation over screed, extend up walls behind skirting - tape all joints with waterproof tape)
- The floor needs to be level – (Max 5mm deviation over 3mt)
- Bring Flooring into house in normal living conditions i.e. Temp >18°, Humidity 40-60%
- Surface temperature of screed not to exceed 26° degrees celsius
- Flooring should be separated at doorways with an expansion trim
- Use a quality flexible glue such as Griptight 50 PRO PLUS that is suitable for under-floor heating (If glue down)

## IMPORTANT: RETAIN SEVERAL LEFTOVER PLANKS FOR POSSIBLE FUTURE REPAIRS

## STAGE 3: Care of your floor

### Room conditions:

Timber likes pleasant room conditions similar to humans; a room temperature of 20°C and humidity of about 50%. A humidity controller may be required. All rooms, which have timber flooring, should ideally be maintained at the above.

### Protecting your floor:

To preserve quality and beauty of your floor we recommend you use protective pads and castor cups under chairs and furniture legs. If there is a door leading outside from the room where you have installed your hardwood flooring, use a doormat to catch the dirt and absorb the humidity. Never use a rubber mat, with Styrofoam or plastic backing. If you must move heavy pieces of furniture (e.g. refrigerator, piano etc.), never slide them directly over the flooring. Instead, place a piece of carpet face down between the legs and the flooring and pull on the carpet to move the furniture.

**In the event of a proven manufacturing defect, the companies or sellers total liability shall under no circumstances exceed the value of the defective product. The company or seller shall not in any way be responsible for any additional consequential costs or losses.**

**If you are unclear regarding any of the above instructions, contact your local supplier**

# INSTALLATION GUIDE FOR HERRINGBONE WOOD FLOORING

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## Product description:

Prefinished Herringbone wood flooring consists of a hardwood surface glued to premium hardwood plywood. Herringbone floors require glued installation. It is designed for use with all subfloors, including in basements and over radiant heating systems, as well as concrete subfloors. For an optimal installation, it is recommended that the installation of Herringbone floors be executed by a qualified professional.

Prefinished flooring is factory finished under controlled, optimal conditions. The flooring is ready to install, and occupants are not required to leave the premises.

## Recommended use:



### Installation sites

- 1st story : Yes
- Ground floor : Yes
- Basement : Yes



### Radiant heating systems

Herringbone flooring is recommended for installation over radiant heating systems.

## Owner and installer responsibilities:

Prior to installation, the installer and owner must ensure the installation site and subfloor comply with the conditions specified in the installation guide.

**The installer and owner should inspect the flooring before installation to ensure the grade, color, gloss, and quality are consistent with the product purchased.**

These products meet stringent quality requirements and industry standards. The industry standard margin of error for natural imperfections and manufacturing or grade selection defects is 5%.

If the installer has doubts about a board's grade selection, manufacturing, or finish quality and cannot install it in an inconspicuous location or eliminate the imperfection, it should not be installed.

**Once a board has been installed, it is considered to have been accepted by the installer and the owner, even if the owner is not present during installation.** Depending on the installation site, Herringbone orders should include about 15% extra to compensate for cut loss.

Products will only be replaced if the defect rate exceeds 5% (excluding the 15% cut loss). The manufacturer is not liable for improper installation or poor judgment by the installer and does not cover labor or installation costs.

## Recommended materials and tools:

1. Vacuum or broom
2. Mitre saw
3. Tape measure
4. Chalk line
5. Square
6. Handsaw
7. Hammer and tapping block
8. Levelling compound and sander
9. Precut slip tongues and type II wood glue
10. Mercier Touch-Up Kit
11. Mercier Maintenance Kit

# INSTALLATION GUIDE FOR HERRINGBONE WOOD FLOORING

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## Glued installation:

- Waterless, urethane-based adhesive

### **Recommended adhesives:**

- AcoustiTECH AD-532+ / AD-844 MS
  - Titebond 811
  - Bostik's Best, EFA+, BST
- Trowel recommended by the adhesive manufacturer
- Blue masking tape or equivalent
- Right angle template made of plywood
- 100 lb. to 150 lb. (45 kg to 68 kg) roller
- Urethane adhesive cleaner
- Acoustical membrane (maximum thickness of 5 mm,  $\geq 2$  psi, and 25% compression or a maximum thickness of 5 mm to 8 mm,  $\geq 5$  psi, and 25% compression)

### **NOTE:**

Using a thicker membrane or one with greater compression can result in increased vertical movement.

## Preparing the installation site:

Installing prefinished wood flooring should be the last step in your project. Before the flooring is delivered, inspect the installation site to make sure:

- The concrete, plaster, paint, and subfloor are completely dry.
- Any heating, ventilation, or air conditioning systems are functional and running.
- The building is kept within normal ambient conditions for at least one (1) week before laying the floor, at a temperature of about 20 °C (68 °F) and a relative humidity of about 45%.

**The installer should check the moisture content of the subfloor (plywood or OSB) and flooring at various locations using a moisture meter for wood.**

**The moisture content of the subfloor should not exceed 12%. The difference between the moisture content of the subfloor and the flooring must not exceed the internal moisture content of the flooring by more than 2%. The internal moisture content of the flooring should be between 6% and 9%.**

**If the humidity of the subfloor or the difference between the flooring and the subfloor is outside recommended levels, heat, ventilate, and dehumidify the site further and delay delivery and installation until recommended levels have been reached.**

If the subfloor is a concrete slab, allow a minimum 30-day drying period for a reliable moisture-level test. Measurements should not exceed 4% using a concrete moisture meter. If there is moisture, test using calcium chloride. The moisture content measured with the calcium chloride test should not exceed 3 lb. per 1,000 sq. ft. over 24 hours.

## Acclimatisation:

Once the recommended conditions have been reached, store the flooring at the installation site. Allow the flooring to acclimate for at least 24 hours before installation. Make sure the wood is at the same temperature as the installation site (about 20 °C (68 °F)). Never store flooring in unsuitable locations such as sheds or unheated garages.

# INSTALLATION GUIDE FOR HERRINGBONE WOOD FLOORING

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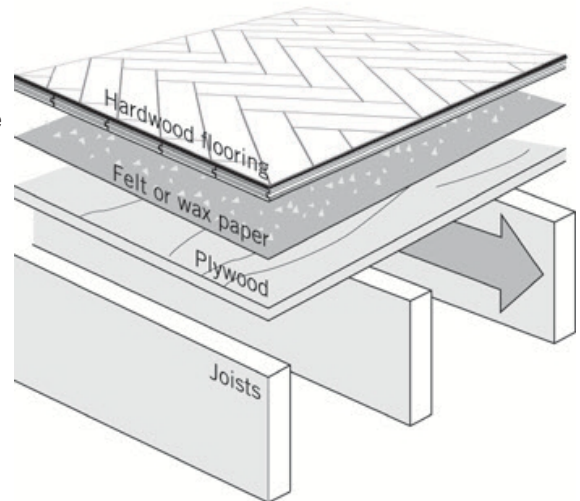
## Subfloor preparation and levelling:

- The subfloor must be structurally sound and securely fastened to the joists with floor screws to prevent movement of the plywood panels, which could cause creaking.
- **The subfloor must be flat and level, the maximum tolerance is 3/16" (5 mm) over a distance of 10' (3 m).** If necessary, fill or sand any unevenness, depression or bulge in the subfloor.
- The surface of the subfloor must be free of defects. Fill any cavities with levelling compound and sand uneven spots.
- The surface must be clean and free of all contaminants, including grease, dust, oil, nails, staples, etc. Remove staples, drive in protruding nails, and remove dirt and dust with a vacuum cleaner.

For installation on a concrete subfloor, make sure the concrete is not low density (below 3,000 psi) or brittle.

For installation on a wood subfloor, make sure the structure meets the following requirements:

- 3/4" (19 mm) plywood or oriented strand board (OSB) for joists spaced 19 3/16" (488 mm) or less on centre.
- Minimum 5/8" (16 mm) plywood panels for joists spaced 16" (406 mm) or less on centre.



## Recommended installation method:

**For best results, Mercier Wood Flooring recommends that Herringbone products be installed by qualified professionals.**

Herringbone flooring requires precise and meticulous installation. We recommend using the metric system for greater accuracy.

- Plan your project by making a sketch.
- Determine your start point. Herringbone flooring can be installed starting from anywhere, but the usual starting point is the centre of the room.
- Use a protective surface under tools and the floor nailer during installation.
- Before you begin, cut the bottoms of door moldings to insert flooring under them.
- Leave space for the wood to expand as a result of humidity changes. The expansion gaps will be hidden by the baseboard and/or quarter round, which should be nailed to the wall, not the floor.
- Vacuum frequently during installation to remove sawdust and dirt.

# INSTALLATION GUIDE FOR HERRINGBONE WOOD FLOORING

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## Installation

### Glued installation

Herringbone flooring can be glued directly to concrete or wood subfloors on all levels, including basements, ground floors, and upper floors.

If using an acoustical membrane, it must be glued to the subfloor before installing the flooring.

### How to install flooring

We recommend creating a template before installing your Herringbone floor. Cut a perfectly straight 20" x 20" (500 mm x 500 mm) square from plywood.

#### 1. Prepare the template and guide lines

- Mark the center of the room and snap guide line C with a chalk line.
- Snap guide lines A and B, 45 mm on either side of center guide line C.
- Align one corner of the template with guide line B and secure it to the subfloor with nails or concrete nails. Verify measurements by placing a piece of flooring on either side of the template.
- Draw a few parallel lines on the floor for subsequent rows. Start from center guide line C and space the lines 646.6 mm apart. Draw guide lines A and B for subsequent rows.

#### 2. Apply adhesive

- Use a trowel to apply adhesive at a 45-degree angle. It is important to use the trowel recommended by the adhesive manufacturer to ensure the correct amount of adhesive is applied.

#### 3. Install the first row

- Position the lower right corner of the first board along the starting line at guide line B and the upper right corner at guide line A, with the tongue side facing the template.
- Align the second board with the first, keeping the tongue side against the template.
- Continue installing boards in this manner until the first row is complete.
- **Important:** Once the first row is in place, wait 24 hours for the adhesive to dry to provide solid support for subsequent rows.
- If the subfloor is wood, you can nail down the first row and proceed with installation immediately.

#### 4. Lay additional rows

- Work in small sections to prevent the adhesive from drying.
- Insert precut slip tongues into the grooves at the ends of the boards for the second and subsequent rows. Use PVA type II glue for the tongues but do not glue them into the groove on the long side of the boards.
- Leave a ½" (13 mm) expansion gap between the wall and the last board in each row.

#### 5. Ensure alignment and secure boards

- Regularly check for alignment and squareness. Small deviations can cause gaps that cannot be corrected in later rows.
- Use blue masking tape to hold boards in place during installation.

# INSTALLATION GUIDE FOR HERRINGBONE WOOD FLOORING

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## 6. Apply pressure and final adjustments

- Use a 100 lb. to 150 lb. (45 kg to 68 kg) roller to apply pressure to the installed sections while the adhesive is still active (45 to 60 minutes). Cover the roller to protect the flooring.
- If needed, use a tapping block to fit boards together. **Never use a hammer or sledgehammer directly on the boards.**

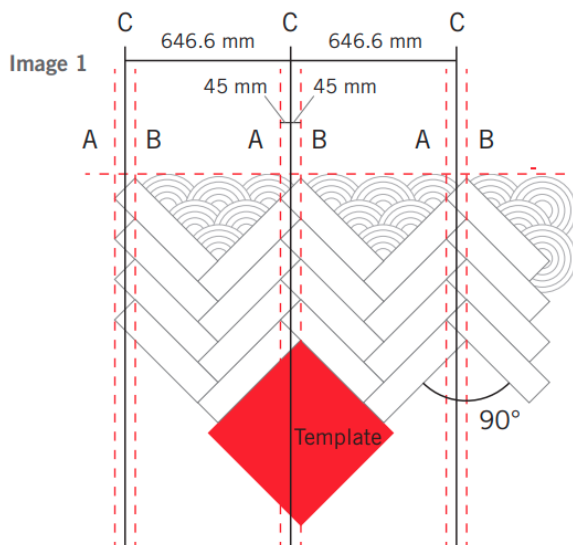
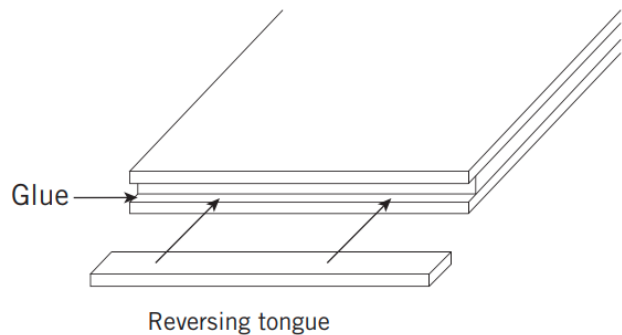


Image 2



## Installation over a radiant heating system:

Suitable for glued installation. Refer to the recommendations provided by the radiant heating system manufacturer for specific guidelines.

Herringbone flooring can be installed over a radiant heating system in basements, ground floors, and upper levels by following the appropriate installation instructions. For detailed guidance, consult technical resources or guidelines on installing flooring over radiant heating systems.

## Precautions and recommendations

Herringbone flooring **MUST** be securely attached to the subfloor when installed over radiant heating systems.

- The radiant heating system should be tested and turned on a few weeks before the flooring installation.
- Turn off the heating system during the installation process.
- Floors with radiant heating systems should not exceed 27 °C (80 °F) while in use.
- Exposed or visible pipes must be covered with 3/8" (10 mm) plywood or a layer of concrete to ensure even heat distribution.
- When turning the radiant heating system on or off at the start or end of a season, gradually adjust the temperature to prevent stress on the wood.

You may need to install stair nosings, T-moldings, quarter-rounds, or reducers. These moldings are available in the same colors and species as your flooring and can be purchased from your authorized flooring dealer. It is recommended to order them at the same time as your flooring.

**Before installation, it's a good idea to select boards that blend well with your moldings to avoid sharp contrasts in the floor's appearance.**