

# Herringbone platform Installation Guide





It is **important** to read the Installation Guide, Maintenance Guide, and Mercier Warranty before installing your prefinished wood floor. Failure to follow the installation instructions may void your warranty.

For questions about installation, please contact your authorized Mercier dealer or Mercier's Technical Service at 1-866-448-1785 or technicalservice@ mercierwoodflooring.com.

# Product description

Mercier 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<sup>1</sup> and concrete subfloors. For an optimal installation, Mercier Wood Flooring recommends that the installation of its 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



• 1<sup>st</sup> story : Yes

Ground floor : Yes

Basement : Yes

## Owner and installer responsibilities \_\_\_\_

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

Mercier products meet stringent quality requirements and top industry standards. The industry standard margin of error for natural imperfections and manufacturing and grade selection defects is 5%. If the installer has doubts about a board's grade selection or manufacturing or finish quality and cannot install it in an inconspicuous location or eliminate the imperfection, he should not install it.

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

Herringbone flooring is recommended for installation

**Radiant heating systems** 

over radiant heating systems.

Mercier Wood Flooring only replaces products with a defect rate that exceeds 5% (excluding the 15% cut loss). Mercier cannot be held liable for improper installation or poor judgement by an installer. It does not cover labor or installation costs.

<sup>1</sup>See Technical Bulletin #5 at mercierwoodflooring.com for specifications for use over radiant heating systems.

# Recommended materials and tools \_

This is not an exhaustive list of the tools that may be needed to install your Herringbone floor. Mercier Wood Flooring is not responsible for damage caused by improper use of 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

#### **Glued installation**

- Waterless, urethane-based adhesive Recommended adhesives:
  - AcoustiTECH AD-532+
  - Titebond 811
  - Bostik's Best, EFA+, BST
- Trowel recommended by the manufacturer of the adhesive
- 3M 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
- AcoustiTECH Leed 3.3 acoustical membrane\*

   (or equivalent with a maximum thickness of 5 mm,
   ≥ 2 psi, and 25% compression or a maximum thickness of 5 mm to 8 mm, ≥ 5 psi, and 25% compression)

\*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.

#### Acclimation\_\_\_\_\_

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.

# 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 <sup>3</sup>/<sub>16</sub>" (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.

Hardwood flooring Feit or wax paper Plywood Joists

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:

- $\frac{3}{4}$ " (19 mm) plywood or oriented strand board (OSB) for joists spaced 19  $\frac{3}{16}$ " (488 mm) or less on centre.
- Minimum  $\frac{5}{8}$ " (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 \_\_\_\_\_

#### **Glued installation**

Mercier Herringbone flooring can be glued directly to concrete or wood subfloors in basements, ground floor and above.

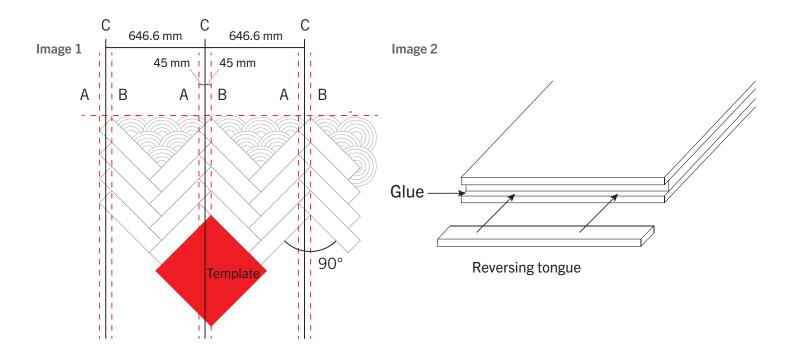
If you are using an acoustical membrane, it must be glued to the subfloor before installing the flooring.

Warning!

During installation, immediately wipe up any adhesive from the floor surface with adhesive cleaner.

#### How to install flooring

- We recommend making a template before installing your Herringbone floor. Cut a perfectly straight 20" x 20" (500 mm x 500 mm) square out of plywood.
- Mark the centre of the room and snap guide line C with a chalk line. Snap guide lines A and B 45 mm on either side of centre 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 your measurements by placing a piece of flooring on either side of the template. (see image 1)
- Draw a few parallel lines on the floor for subsequent rows. Start from centre guide line C and space the lines 646.6 mm apart. Then draw guide lines A and B for subsequent rows.
- Use a trowel to apply adhesive at a 45-degree angle. It is important to use the trowel recommended by the manufacturer in order to apply the correct amount of adhesive.
- Install the first piece of flooring by positioning the lower right corner along the starting line at guide line B and the upper right corner at guide line A, with the tongue side facing the template.
- The second piece should be aligned with the previous one, with the tongue side against the template.
- Continue installing the remaining boards in the row in the same manner until the first row is complete.
- Once the first row is in place, wait 24 hours for the glue to dry so subsequent rows have solid support and installation is perfectly square.
- If the subfloor is wood, you can nail down the first row and continue installation immediately.
- Lay the floor in small sections to prevent the adhesive from drying.
- For the second and subsequent rows, insert precut slip tongues into the grooves at the **ends of the boards**. The tongues need to be glued with PVA type II glue. **Do not glue the tongues into the groove on the long side of the boards**. (see image 2)
- Always leave a <sup>1</sup>/<sub>2</sub>" (13 mm) expansion gap between the wall and the last board in each row.
- Check for alignment and squareness regularly. Even slight deviations will create spaces at the ends of the boards that cannot be corrected in subsequent rows.
- Use blue masking tape to make sure the boards stay in place.
- Use a 100 lb. to 150 lb. (45 kg to 68 kg) roller to apply pressure to installed sections while the adhesive is still active (45 to 60 minutes). Cover the roller to avoid damaging the floor.
- You may need to use a tapping block to fit the boards together. NEVER use a hammer or a sledgehammer directly on the boards.



## Installation over a radiant heating system \_

Suitable for a glued installation. Refer to the radiant heating system manufacturer's recommendations for more information. Herringbone flooring may be used over a radiant heating system in basements, ground floors, and subsequent storeys by following these instructions. See Technical Bulletin #5 on flooring over radiant heating systems at mercierwoodflooring.com for more information.

#### Precautions and recommendations:

Herringbone flooring MUST be attached to the subfloor when used over radiant heating systems.

- The system must be tested and turned on a few weeks before installing the floor.
- Turn the system off during installation.
- Floors with radiant heating systems should not exceed 27 °C (80 °F) while in use.
- Visible or exposed pipes must be covered with <sup>3</sup>/<sub>8</sub>" (10 mm) plywood or a layer of concrete to ensure uniform heat distribution.
- When turning radiant heating on or off at the beginning or end of a season, gradually increase or decrease the temperature to limit 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 Mercier floor, and are available from your authorized Mercier dealer. Order them at the same time as your flooring.	<b>Warning!</b> We recommend pre-drilling pilot holes in the moldings to avoid splitting them.
Before installing the flooring, we recommend selecting boards that blend well with your moldings to avoid sharp contrasts in the floor's appearance.	When installing moldings such as baseboard and quarter round, make sure to attach them to the wall, not the wood floor, to allow for movement.
Inspection, finishing, and maintenance	Always leave the recommended space for expansion.

When installation is complete, vacuum the floor and clean it with Mercier Cleaner according to the instructions. NEVER use large amounts of water to clean a hardwood floor.

Use the Mercier Touch-Up Kit to fill and conceal small nail holes. For more information, see Technical Bulletin #7 on the Touch-Up Kit at mercierwoodflooring.com.