## **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

#### 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, ≥ 2 psi, and 25% compression or a maximum thickness of 5 mm to 8 mm, ≥ 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.

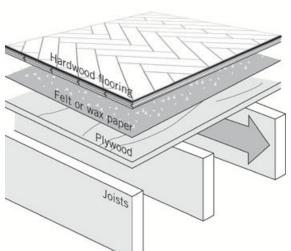
#### **Acclimation:**

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 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

#### 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

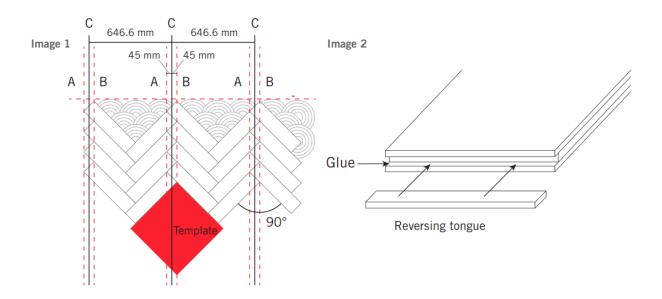
- · Work in small sections to prevent the adhesive from drying.
- Insert precut slip tongues into the grooves at the ends of the boards for the second and subsequent rows. Use PVA type II glue for the tongues but do not glue them into the groove on the long side of the boards.
- Leave a ½" (13 mm) expansion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

# 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.**



### 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.