

Solid ¾" (19 mm) platform Installation Guide





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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 Solid flooring is made of 34" (19 mm) solid wood.

Prefinished wood flooring is factory finished under controlled, optimal conditions. The flooring is ready to install and occupants are not required to leave the premises. They can reposition their furniture immediately following installation.

## Recommended use



#### Installation sites

• 1st story : Yes

Ground floor: Yes

• Basement : No



## Radiant heating systems

Solid ¾" (19 mm) flooring is not recommended for use over radiant heating systems. Engineered flooring is recommended for such applications, except for Hickory.

## 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.

 $^{1}\mbox{Diagonal}$  installation results in increased cut loss of up to 7% to 9%.

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 site and the type of installation<sup>1</sup>, flooring orders should include 3% to 5% extra to compensate for cut loss.

Mercier Wood Flooring only replaces products with a defect rate that exceeds 5% (excluding the 3% to 5% cut loss). Mercier cannot be held liable for improper installation or poor judgement by an installer. It does not cover labor or installation costs.

## Warning!

Authentic grade Mercier flooring has specific characteristics that may be apparent at purchase or appear over time, including:

- Cracked or sagging finish around character marks
- Open knots and holes (including worm holes)
- Splits and checks
- Character marks that may become more prominent
- Open markings that may sag

## Recommended materials and tools

This is not an exhaustive list of the tools that may be needed to install your Solid ¾" (19 mm) wood floor. Mercier Wood Flooring is not responsible for damage caused by improper use of tools.

- 1. Vacuum or broom
- 2. Hardwood flooring nailer or stapler (pneumatic or manual)
  - "L" or "T" nails or "U" staples
  - 15 to 17 ga
  - 1 ½" (38 mm) or more in length

#### See Technical Bulletin #9 for more details.

- 3. Levelling compound and sander (if necessary)
- 4. Level
- 5. Moisture meter for the wood and/or concrete
- 6. 15 lb. felt or wax paper

- 7. Measuring tape
- 8. Chalk line
- 9. Square
- 10. Mitre saw
- 11. Table saw
- 12. Tapping block
- 13. Handsaw
- 14. Drill and <sup>3</sup>/<sub>32</sub>" (2.38 mm) bit
- 15. Hammer and nail punch
- 16. Spiral finishing nails of 2" (51 mm) or more in length
- 17. Mercier Touch-Up Kit
- 18. Mercier Maintenance Kit

# 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 entire crawl space floor is covered with 6 to 8 mil black polyethylene sheeting.

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 4%. The internal moisture content of the flooring should be between 6% and 9%.

For boards wider than 4" (102 mm), the difference between the moisture content of the subfloor and the flooring must not exceed the moisture content of the flooring by more than 2%. The internal moisture content of the flooring should be between 6% and 9%.

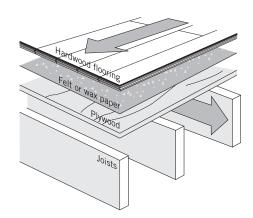
If the humidity of the subfloor or the difference between the flooring and the subfloor is outside recommended levels, heat, ventilate, and dehumidify the site further and delay delivery and installation until recommended levels have been reached.

## Acclimation

Once the recommended conditions have been reached, store the flooring at the installation site. Allow the flooring to acclimate for at least 48 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. Remove minor imperfections with a sander.
- 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.
- We recommend installing 15 lb. felt or wax paper over the entire subfloor.



#### Recommended subfloors:

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

# Recommended installation method \_\_\_\_\_\_

- Plan your project by making a sketch.
- Determine your start point.
- Determine the direction of the flooring. We strongly recommend installing flooring at a 45- or 90-degree angle with respect to the floor joists.
- 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.
- Pick boards from at least 3 boxes at a time to ensure consistency.
- Vacuum frequently during installation to remove sawdust and dirt.

## Installation (nailed or stapled installation only)

Mercier Solid ¾" (19 mm) wood floors can be nailed or stapled directly to a wood subfloor on the ground floor and above.

### Using a nailer

- Practice using your floor nailer on a scrap piece of flooring. Follow the manufacturer's instructions and safety guidelines.
- Clean the plate under the nailer frequently to avoid damaging the finish.
- Adjust the pressure on the compressor and check it regularly.

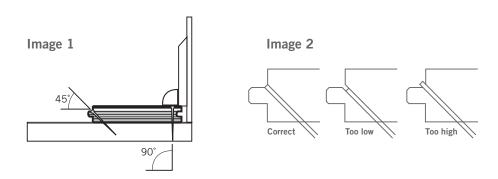
## How to install flooring

- Install felt or wax paper according to the manufacturer's instructions.
- Use a chalk line to snap a guide line parallel to the starting wall at a distance of ¾" (19 mm) more than the width of the boards (e.g., 4" (102 mm) for flooring that is 3 ¼" (83 mm) wide). Flooring in the area between the wall and the guide line should be installed last.
- Make sure your line is straight and square.
- Lay out 4 or 5 rows of boards that match in terms of joints and color. Cut boards with imperfections or place them in less visible areas.
- Use spacers or shims between the edge of the flooring and the walls to leave enough room for the wood to expand due to changes in humidity.
- Install the first board along the guide line, with the tongue towards you and the groove towards the wall.
- Always leave a 1/4" (6 mm) gap on either side of each row for expansion.
- Depending on your nailer, you will need to nail the initial rows by hand, until you have enough space to use the nailer. Drill holes at a right angle to the top of the board as close as possible to the wall and fasten with spiral finishing nails. Drive the nail heads in with a nail punch. Drill holes in the tongue at 45-degree angle and drive spiral nails every 4" (102 mm). (see image 1)
- The last board in each row should be cut. Offcuts that are at least 6" (152 mm) long can be used to start the next row.
- Use a manual or pneumatic nailer for subsequent rows. Boards should be nailed every 8" (203 mm) and 2" (51 mm) from either end. Each board must be secured with at least two nails. Do not nail closer than 2" (51 mm) from the ends to avoid splitting the tongue. See the Fastener Selection Chart below from Technical Bulletin #9 for full details.

## **Fastener Selection Chart**

| Platforms and<br>thicknesses                | Widths  | "L" or "T" nails | "U" staples    | Fastener's<br>minimum<br>length | Spacing<br>between<br>fasteners | Distance<br>from ends |
|---|---|------------------|----------------|---------------------------------|---------------------------------|-----------------------|
| Solid <sup>3</sup> / <sub>4</sub> " (19 mm) | 2 ¼" (57 mm)<br>3 ¼" (83 mm)<br>4 ¼" (108 mm) | 15 ga to 17 ga   | 15 ga to 17 ga | 1 ½" (38 mm)                    | 8" to 10"<br>(203 to 254 mm)    | 2" (51 mm)            |

- Fasteners must be installed at a 45-degree angle. (see image 2)
- You may need to use a tapping block to fit the boards together. NEVER use a hammer or a sledgehammer directly on the boards.
- The last rows of boards should be installed in the same manner as the first.
- You may have to rip the last row lengthwise to allow a 3/4" (19 mm) space for expansion.



## Warning!

Split or broken tongues can cause creaking.

When working with harder woods, it's important to pay close attention to the pressure on the compressor.

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.

Before installing the flooring, we recommend selecting boards that blend well with your moldings to avoid sharp contrasts in the floor's appearance.

#### Warning!

We recommend pre-drilling pilot holes in the moldings to avoid splitting them.

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.

Always leave the recommended space for expansion.

## Inspection, finishing, and maintenance

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.