

1. GENERAL INFORMATION/ OWNER AND INSTALLER RESPONSIBILITY /IMPORTANT NOTICE/**GENERAL INFORMATION****Product description****5" x ¾" (19 mm) Solid Wood Flooring**

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

- 1st story and ground floor.
- ¾" solid wood floors are not recommended for installation in basement.
- ¾" solid wood floors are not recommended for use over radiant heating systems.

OWNER AND INSTALLER RESPONSIBILITY

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.

The industry allows a 5% error margin for natural imperfections and manufacturing and grade selection defects.

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 is not present during installation.** Depending on the site and the type of installation, flooring orders should include 3% to 5% extra to compensate for cut loss. (45-degree angle installation results in increased cut loss of up to 7% to 9%.)

Improper installation or poor judgement by an installer are not covered by the warranty. This warranty covers material only and does not cover labor or installation costs.

IMPORTANT NOTICE

FOR PRODUCTS WIDER THAN 5": In addition to the use of mechanical fasteners, assisted glue applications should be used. The glue should be a premium grade urethane construction adhesive applied in a serpentine pattern to the back of each board. Then follow the recommended fastening pattern.

2. SITE REQUIREMENTS**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 68 °F (20 °C) and a relative humidity of about 45% (between 35% and 55%).
- The entire crawl space floor is covered with 6 to 8 mil black polyethylene-film.

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 moisture content of the flooring by more than 3%.

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

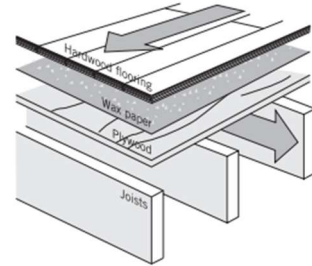
If the humidity of the subfloor or the difference between the flooring and the subfloor is outside recommended levels, heat, ventilate, and dehumidify the site further and delay delivery and installation until recommended levels have been reached.

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 68 °F (20 °C)). Never store flooring in unsuitable locations such as sheds or unheated garages.

3. SUBFLOOR/ UNDERLAYMENT**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.

**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 5/8" (16 mm) plywood panels for joists spaced 16" (406 mm) or less on centre.

Subfloor with radiant heat systems

Solid 3/4" (19 mm) flooring is not recommended for use over radiant heating systems.

4. TOOLS AND SUPPLIES**Recommended materials and tools**

This is not an exhaustive list of the tools that may be needed to install the Solid 3/4" (19 mm) wood floor. Damage caused by improper use of tools are not cover by the warranty.

1. Vacuum or broom
2. Pneumatic Hardwood flooring nailer or stapler
 - "L" or "T" nails or "U" staples
 - 15.5 to 18 ga
 - 1 3/4" (45 mm) or more in length
3. Levelling compound and sander (if necessary)
4. Level
5. Moisture meter for the wood and/or concrete
6. Wax paper
7. Measuring tape
8. Chalk line
9. Square
10. Mitre saw
11. Table saw
12. Tapping block
13. Handsaw
14. Drill and 3/32" (2.38 mm) bit
15. Hammer and nail punch
16. Finishing nails of 2" (51 mm) or more in length

5. INSTALLATION METHOD PROCEDURE**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.

For better results, stagger the joints by 6" (152mm) to 8" (203mm) and alternate the boards lengths.

Installation (nailed or stapled installation only)

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.

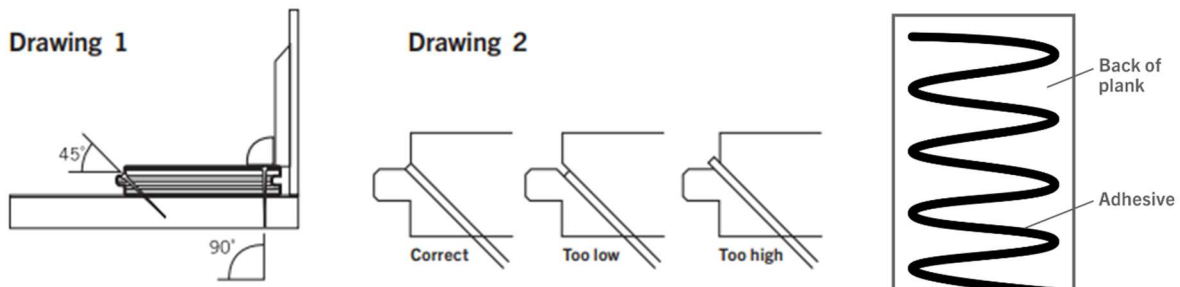
How to install flooring

- Use a chalk line to snap a guideline parallel to the starting wall at a distance of ¾" (19 mm) more than the width of the boards (e.g., 5 ¾" (146 mm) for flooring that is 5" (127 mm) wide). **This dimension corresponds to the space reserved for the expansion gap.** Flooring in the area between the wall and the guideline 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 guideline, with the tongue towards you and the groove towards the wall.
- Always leave a ¼" (6 mm) gap on either end 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).
- 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 pneumatic nailer for subsequent rows. Boards should be nailed every 6" to 8" (152 mm to 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.

Fastener Selection Chart

Product	Width	"L" or "T" nails	"U" staples	Fastener's minimum length	Spacing between fasteners	Distance from ends
Solid ¾" (19 mm)	5" (127mm)	15.5 ga to 18 ga	15.5 ga to 18 ga	1 ¾" (45 mm)	6" to 8" (152 to 203 mm)	2" (51mm)

- Fasteners must be installed at a 45-degree angle.
- 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 ¾" (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.

6. WALL MOLDINGS / TRANSITION

You may need to install stair nosings, T-moldings, quarter-rounds, or reducers. 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 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.



- **Stair nosing:** A molding undercut for use as a stair landings trim, elevated floor perimeters, and stair steps. Fasten down firmly with adhesive and nails or screws. Pre-drill nail holes to prevent splitting.
- **Reducer:** A teardrop shaped molding used around fireplaces, doorways, as a room divider, or as a transition between hardwood flooring and adjacent thinner floor coverings. Fasten down with adhesive, small nails or double-faced tape.

- **Threshold:** A molding undercut for use against sliding door tracks, fireplaces, carpet, ceramic tile, or existing thresholds to allow for expansion space and to provide a smooth transition in height difference. Fasten to subfloor with adhesive and/or nails through the heel. Pre-drill nail holes to prevent splitting.
- **T-Molding:** A molding used as a transition piece from one rigid flooring to another of similar height or to gain expansion spaces. Fasten at the heel in the center of the molding. Additional rigid support may need to be added to the heel of the molding dependent upon the thickness of the goods covered. Do not use this molding as a transition to carpet.
- **Quarter Round:** A molding used to cover expansion space next to baseboards, case goods, and stair steps. Pre-drill and nail to the vertical surface, not into the floor.

7. MAINTENANCE / AFTER CARE

Maintenance

The maintenance routine for your prefinished floor is fast, easy and only takes three steps:

- Vacuum regularly and as often as necessary to protect your wood floors and keep the finish from wearing out prematurely. This will eliminate dust and abrasives on the surface of the floor.
- To clean your floor, spray a recommended prefinished hardwood floor cleaner on a microfiber mop cover and wipe a section of the floor in a back-and-forth motion, along the length of the floorboards.
- Never use fabric softener (sheets or liquid) when washing the mop covers, as these products leave a greasy film on the surface of the floor.
- Avoid spraying directly on the surface of the floor to prevent the accumulation of an excessive amount of product, making cleaning difficult.

Important:

Never use wax, a mix of water and vinegar, home cleaning products, concentrated wood cleaners other than a recommended prefinished hardwood floor cleaner, or any oil-based soaps, on the floor. These products can damage the finish and cause it to fade or leave a greasy film, making the floor slippery and hard to maintain. Do not use steam cleaners on your wood floors. Do not wash wood floors using lots of liquid or with a soaked mop.

Wood and water

Be careful with water (liquid, steam, snow). The wood fibers will expand when they absorb water, which can cause the wood and finish to deteriorate. When water seeps into the floor, it can cause the boards to swell, contract, and discolor and lead to the growth of mold between the boards.

- The kitchen and entrance hall are areas where the wood might come in contact with water. Care should be taken to wood floors installed in these areas.
- Immediately wipe up any water, liquid, or detergent from the surface of the floor before the wood fibers absorb it.
- Place carpets in front of the sink, dishwasher and workstations in the kitchen.
- Use carpets in front of any door leading outside to collect water and snow.
- Place watertight saucers under plant pots.

Wood and humidity

Wood is a natural material that constantly reacts to variations in relative humidity by changing dimensions as it absorbs or loses humidity. During humid or dry periods, your floors can present distortion and spacing. The wood will generally return to its initial dimensions once conditions are back to normal.

- Maintain a relative humidity of 45% (between 35% and 55%) and an ambient temperature of around 68 °F (20 °C) in your home. These conditions are also ideal for humans. Note that for each 5% variation in relative ambient humidity, the level of humidity in the wood will vary by approximately 1% and lead to changes in the dimensions of the boards.
- Use appropriate equipment as needed, such as an air exchanger, heating system, dehumidifier, humidifier, etc., to restore ambient conditions

To prevent scratches and dents

- Hardwood species naturally offer good resistance to compression. However, if the pressure applied to the floor is higher than its degree of resistance, it will leave a mark.
- Avoid moving heavy furniture or objects by sliding them across the floor. Stick felt pads under the legs of the furniture and chairs to make moving easier without scratching the surface of the floor.
- Using chairs with wheels directly on the floor's surface is not recommended. Place protective chair mats under narrow wheels or replace them with wider rubber or soft polyurethane wheels.
- Pet claws should be trimmed regularly to reduce the severity of the scratches they can cause. The heavier the animal, the more pronounced the scratches left on the floor.

8. FLOOR REPAIR

Minor damage can be repaired with a touch up kit or filler. Major damage will require board replacement which can be done by a professional floor installer.

How to replace a floorboard

- Select a replacement board slightly longer than the one to be changed. Check to see it matches the surrounding boards.
- Using a circular saw or router, cut the board lengthwise to within 1/2" of the edges. For a glued board, make several cuts close together to separate the board into smaller sections.
- Make a diagonal cut down the center of the board from one end to the other of the cuts made in Step B. It may be necessary to make more than one cut if the board is glued in place.
- Using a wood chisel, remove the central part of the board first (between the side cuts).
- Remove nails or staples, then remove edges, taking care not to damage the adjacent boards.
- Remove the underlying or adhesive and clean any residue from the subfloor.
- Trim the replacement board to the desired length, cutting excess length from the tongue end.
- Remove the lower edge of the groove on the end and side of the board.
- Position the board to check the fit, then remove it.
- Apply glue to the subfloor.
- Install the board, using a rubber mallet and a wood block to place it in position.

9. CAUTION/ WARNING (LEGAL)

ATTENTION INSTALLERS**CAUTION: WOOD DUST**

Sawing, sanding and machining wood products can produce wood dust. Airborne wood dust can cause respiratory, eye and skin irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans.

Precautionary Measures: If power tools are used, they should be equipped with a dust collector. If high dust levels are encountered, use an appropriate NIOSH-designated dust mask. Avoid dust contact with eye and skin.

First Aid Measures in Case of Irritation: In case of irritation, flush eyes or skin with water for at least 15 minutes.