

PREFINISH HARDWOOD FLOORING

LIMITED WARRANTY AND INSTALLATION GUIDE

October 2023

This guide replaces and prevails over all previous versions.

This guide is complementary to good installation practices such as the industry standards dictated by the NWFA (National Wood Flooring Association).

TABLE OF CONTENTS

| WARRANTY | 3 |
|--|----|
| CONDITIONS FOR IMPLEMENTING THE WARRANTY | 3 |
| CLAIM PROCEDURE | 4 |
| GENERAL INSTALLATION GUIDE | 4 |
| STORAGE | 4 |
| RESPONSIBILITY OF INSTALLER AND OWNER | 4 |
| Before the installation | 4 |
| Subfloor | 5 |
| Subfloor moisture | 5 |
| INSTALLATION – GENERAL REMARKS | 6 |
| AFTER INSTALLATION | 6 |
| CUSTOMER OBLIGATIONS REGARDING THE MAINTENANCE OF A HARDWOOD FLOOR | 6 |
| PARTICULARS OF INSTALLATION TYPES | 7 |
| Stapled Installation | 7 |
| Glued Installation | 7 |
| Installation Over a Radiant Heat System | 7 |
| Floating Installation | 8 |
| Membrane | 8 |
| Floor | 8 |
| Expansion rules for floating floor installation | 9 |
| ANNEX A MANDATORY INSTALLATION CONDITIONS BY PRODUCT TYPE | 10 |
| NOTES | 10 |

WARRANTY

Structural integrity warranty: lifetime limited.

Limited warranty on total wear of the finish:

| Warranty | Titanium [©] Finish |
|---|------------------------------|
| Residential ¹ | 50 years |
| (Areas of normal circulation) | |
| Light commercial ² | 5 years |
| (Low activity areas without direct exterior | |
| access) ¹ | |

- 1. The warranty covers residential activities in areas of normal circulation.
- 2. Light commercial usage: The warranty applies only in low activity areas and only for establishments having no direct exterior access, such as stores in a shopping mall (where store access is via the mall's hallways), offices, health facilities, etc. This warranty DOES NOT COVER commercial establishments with a direct exterior access such as restaurants, bars, clubs, and businesses and/or installations where the floors might be subjected to excessive wear.

CONDITIONS FOR IMPLEMENTING THE WARRANTY

- The warranty is non-transferable and therefore valid only for the original customer. Warranty is also subjected to the procedures, restrictions, renunciations, and exclusions outlined in this document.
- Considering that wood is a living matter, industry standards allow up to 5% of floor components containing defects without determining that the whole floor is sub-standard. The manufacturer's responsibility is limited to replacing or repairing defective components. This only applies to defects explicitly covered by the warranty and that are above the 5% threshold.
- For wear to be covered by this warranty, the wear shall be clearly visible and shall cover more than 10% of the total surface of the purchased floor.
- This warranty will not apply to products that have not been paid in full.
- The warranty does not cover ANY other costs, such as (but not limited to): installation, transport, punitive damages, etc.
- Should a floor component be deemed sub-standard or not acceptable with respect to grade, color, craftsmanship or finish, it should not be installed; otherwise, it will be considered as accepted "as is" by the Customer. Wood floor will react and interact with the environment. Therefore, it shall be installed and maintained in the appropriate environmental conditions. PLEASE refer to the table of Annex A "MANDATORY INSTALLATION CONDITIONS BY PRODUCT TYPE" to identify the recommended relative humidity level for your product.
- Failure to follow the installation guidelines might partially or completely void the warranty.
- The warranty does not cover: Dimensional changes and cracks due to floor moisture content variations
 caused by environmental changes. Wear, luster variation, color variation and/or discoloration. Damages
 such as scratches and dents caused by impacts, friction due to heavy loads and objects, abrasive
 compounds, high heel shoes, shoes with hard, rigid soles, and animals.
- There is No WARRANTY on products sold "as is" including tavern, rustic or second grade.

CLAIM PROCEDURE

When lodging a claim, the Customer shall contact the retailer where he/she purchased the manufacturer's product from. The Customer must have the detailed sales receipt that shows the date of purchase, the quantity bought and the product code.

The Manufacturer retains the right to:

- Inspect the floor.
- Take floor samples to perform technical analysis.
- Inquire as to how the product was installed.
- Any other inquiries relevant to the claim.

Any manufacturing defect must be presented to the retailer where the Customer purchased the floor within 30 days following the initial purchase and/or the discovery of the defect.

GENERAL INSTALLATION GUIDE

STORAGE

- Always store the floor and moldings in the area the material will be installed. Follow the manufactures
 recommendations for conditions needed to be met for the environment, i.e., between 35% and 55%
 relative humidity.
- Do not store in a garage, basement, or other locations where the wood would be exposed to the effects of uncontrolled humidity and environment conditions.
- When storing material boxes should remain closed in manufactures packaging including the box ends.

RESPONSIBILITY OF INSTALLER AND OWNER

The installation of a hardwood floor should be done according to the floor industry's best practices. Therefore, we are recommending that you contact qualified professionals that are familiar with the industry's installation norms and guidelines (for example: NWFA, NOFMA, etc.) for your floor's installation.

Before the installation

Ensure and confirm that the work environment and the subfloor meet the minimal recommended conditions of this document.

- Inspect the subfloor and verify its moisture content (MC) and that its level. Adress and repair any squeaks.
- Install your product in normal living conditions; between 35% and 55% relative humidity.

Perform final inspection of the floor components with respect to their grade, finish, color, and manufacturing quality prior to the permanent installation.

• Any installed floor component will be considered as accepted by the installer and the owner regardless of the owner's presence or absence during installation. Consequently, installed material will not be covered by our warranty.

Subfloor

Before proceeding with the installation of your wood floor, carefully inspect the work location. Determine whether the subfloor and the building's ambient environmental conditions are acceptable and follow the recommended standards.

Verify the following:

- For houses that have a crawlspace or a pillar foundation:
 - o Vents shall ensure a transverse ventilation so that air can freely circulate everywhere.
 - The foundation shall have a minimum of two vents that are open year-round and whose combined cross-section area is equal or greater than 1.5% of the crawlspace area.
 - Cover the crawlspace floor with a black polyethylene vapor barrier of 6 mil (6/1000 in or 0.15 mm).
- The wood subfloor shall be structurally sound and firmly affixed to the joists.
- For plywood subfloors or OSB, they shall conform to the norm "U.S. Voluntary Product Standard PS1-07, Construction and Industrial Plywood" and/or "US Voluntary PS 2-04" and/or the standard Canadian performance norm CAN/CSA 0325.0-92.
- Subfloor plywood thickness is determined by the joist spacing:
 - A joist spacing of 16 in (41cm) requires a plywood of 5/8 in (16mm) or OSB 23/32 in (19mm) or more.
 - A joist spacing of 19 in (48cm) requires a tongue and groove plywood of 23/32 in (19mm) or
 OSB 23/32 in (19mm) or more.
- If the subfloor is a wood surface, the floor components shall be installed either perpendicular or at 45 degrees with respect to the joists.
- If the subfloor is a concrete surface, the concrete shall have a minimum compressive strength of 3 000 psi.
- The subfloor must be clean, flat, smooth, and free of debris of any kind. Flatness tolerance is a maximum of 1/4 in (6 mm) within a radius of 10 ft. (3m) or of 3/16 in (4,8mm) within a radius of 6 ft. (1.8m).
- For nailed or stapled installations, the installation of a wood subfloor vapor barrier is recommended. Acceptable vapor barrier must be a membrane with a vapor permeability 6 (infiltration coefficient) equal or greater than 0.7 and equal or lower than 10 when tested as per ASTM E-96 A. The installation of a vapor barrier will reduce the migration of humidity and related vapor problems, but it is not a guarantee that it will eliminate them.
- For glued installations, a sealer or a glue containing a sealer are acceptable solutions. If this is the chosen method of installation, refer to the manufacturer's technical specifications (either for the sealer or the glue containing a sealer) to know the vapor permeability properties. If a combination of glue and sealer is used, make sure that the two products are compatible.

Subfloor moisture

- The wood subfloor moisture shall not exceed 12%.
- The moisture difference between the wood subfloor and the floor itself shall be:
 - No more than 4% for solid floors less than 3 in (7,5cm) wide or for all engineered floors
 - No more than 2% for solid floors wider than 3 in (7,5cm) wide

• The moisture evaporation rate for concrete is at most 3 lbs per 1000 ft2 /24 hrs (ASTM- F1869 calcium chloride test). If it is higher than that, use a sealer/retarder appropriate for the specific installation.

INSTALLATION – GENERAL REMARKS

For nailed or stapled installation: it is best to start from the center of the room AND mandatory for any room over 20 ft (6 m) wide in order to distribute the expansion. Be sure to leave an expansion of at least 3/4" (19 mm) for solid floors and ½" (12,7mm) for engineered floorings.

Clean the floor and be sure to remove any glue residue AS YOU GO. If the adhesive dries it could leave permanent marks on the floor.

Given the natural wood color variations, the installer shall always work with three or four open boxes to harmonize the overall look of the floor.

- 1- Draw a guiding line parallel to the installation orientation
- 2- Fix a straight support block to guide and facilitate the installation of the first rows.
- 3- Remove the support block and glue and nail or staple (depending on the chosen installation method) a tongue reversal piece in the groove of the first installed row and continue with the installation.
- 4- To complete a row, pick a floorboard that has a length difference of at least 6 in (15 cm) with the first floorboard of the previous row, to avoid aligning the joints. Install the floorboard and then use its sawed-off section to start the next row.
- 5- Avoid joint alignment:
 - For products of 4 in (10cm) or less, make sure that the joints are at least 4 in (10 cm) away from each other.
 - For products of more than 4 in (10cm), make sure the joints are away from each other by more than the product width.

6- Install moldings and quarter rounds by nailing them in the wall, NEVER IN THE FLOOR.

AFTER INSTALLATION

- Install moldings and other aesthetic parts (when applicable).
- For glued or floating installations, limit traffic and furniture moving for the setting period recommended by glue manufacturer, usually 24 hours.
- Let the floor breathe. Do not cover with a non-porous material like plastic, rubber, or vinyl.

CUSTOMER OBLIGATIONS REGARDING THE MAINTENANCE OF A HARDWOOD FLOOR

- Maintaining the relative humidity level in your house; refer to the table of Annex A "MANDATORY INSTALLATION CONDITIONS BY PRODUCT TYPE".
- Immediately wipe away any spills.

- Sweep or vacuum regularly.
- Clean your floor with product specifically designed for it.
- Lightly spray the cleaning product on a dry mop or sweeper. Never pour a cleaning product directly on your floor.
- Never clean your floor with a wet mop.
- Install a small rug or a door mat in front of every entrance to protect your floor from abrasions and humidity. Regularly clean and vacuum the rugs/mats.
- Install small felt pads (or other soft, protective material) under furniture legs to protect the floor from abrasion and dents. Replace them regularly by new ones. Do not use hard or plastic covers.
- Never move any heavy objects without protecting your floor. Should you have to move a heavy object, put the object on an upside-down clean rug or carpet, and gently slide it across the floor. Ensure floor is free from any debris under rug used.
- Never use wax, oil-based detergents, or other household cleaning products on your floor. These products could damage the lustre/finishing of your floor or make them fade. They are also likely to leave a greasy film on the floor that will make it slippery and hard to clean.

PARTICULARS OF INSTALLATION TYPES

Stapled Installation

Using a stapler is impossible when working next to a wall. Those rows will have to be done manually, either by using a manual nailer from the top of the floorboard or by using flexible glue. Using nonflexible glue might interfere with the natural expansion of the wood and cause permanent damage not covered by the warranty.

Make sure you follow the recommended spacing of nails or staples; please refer to the table in Annex A "MANDATORY INSTALLATION CONDITIONS BY PRODUCT TYPE".

Ensure that each floorboard is fixed at least at two different locations, no matter what length it is.

Glued Installation

Only recommended for engineered floors

Use an adhesive designed for engineered floor, but not a water-based adhesive.

Refer to the glue manufacturer's instructions to select the proper trowel. Read the glue manufacturer's instructions to ensure its proper application.

Installation Over a Radiant Heat System

Only recommended for engineered floors

Hickory floorings are not compatible and should not be installed over a radiant heating system.

- 1. Starting up an integrated radiant heat system in a concrete sub-floor before the concrete has completely cured might negatively impact its structural integrity.
- 2. Start the heating system at 2/3 of its maximum capacity for 14 to 16 days to get rid of any excessive humidity. Midway through the 14 to 16 days period, raise the temperature to its maximum for 2 days.
- 3. Once the concrete slab or the sub-floor has completely cured and is dry, shut the heating system down for 1 to 2 days prior to installing the wood floor. Sub-floor temperature shall not exceed 68 °F (20 °C) at installation time.

- 4. Install the wood floor according to the appropriate installation guide directions.
- 5. 24 to 48 hours after installation, gradually increase the heating system temperature by increments of 10 °F (5 °C). Avoid a drastic and sudden raise of temperature, as it might result in permanent damage not covered by the warranty.
- 6. Floor temperature shall not exceed 80 °F (26 °C) once the floor is installed
- 7. Do not install rugs, carpets, or furniture without any air gaps, that will not let the floor breath.

NOTE: Refer to the table in Annex A "MANDATORY INSTALLATION CONDITIONS BY PRODUCT TYPE" to determine whether your floor is compatible with a radiant heat system.

Floating Installation

Only recommended for engineered floors with Multiple Length and Micro-V

Membrane

A membrane is required for installation of a floating floor. Please use a membrane that is recommended for engineered wood floor floating installation. refer to the membrane manufacturer's instructions for installation methods.

Floor

- 1. Accurately measure the room's dimensions and figure out the way the floorboards will be laid out while making sure the parallel sides are equal and at the same distance from the walls. Leave a gap of at least $\frac{1}{2}$ " (12mm) (with the exception of the 2-ply engineered floor where that gap must be $\frac{3}{4}$ " (19mm)) between the floorboards and the walls for lateral expansion and $\frac{1}{2}$ in (12mm) at the ends of the rows for longitudinal expansion.
- 2. Plywood floorboards will be installed from left to right with the grooves oriented towards the starting wall. Start by installing the first two rows simultaneously. Position a long board in a corner on the left side of the installation.
- 3. Apply glue on the lower side of the lateral groove of the second board and join the second board to the first one. The new board should be at least 5 in (13 cm) shorter than the first one.
- 4. Apply glue on the lower side of the end groove of the third board and join that third board to the end of the first board.
- 5. Continue the installation of the first two rows by applying glue to the lower side of the lateral and end grooves. Those rows must be perfectly straight. Keep at least ½" (12mm) (with the exception of the 2-ply engineered floor where that gap must be ¾" (19mm)) from the starting wall by using small spacer blocks. Those spacers will also prevent floorboards movement during the rest of the installation.
- 6. Stagger the end joints of the floating floorboards by a distance equal or larger than the boards' width. Allow for at least three rows between end joints that are even. Firmly press the floorboards together manually, or by using a small block designed for it. Clean and remove the excess glue with a wet rag or mineral spirit. Painters tape that can be quickly removed (like the 3M blue 2080 tape) can also be used to fix the boards together.

- 7. Allow the glue to dry between the first two rows before starting installation of the other rows. Remove the painters' tape, if used, within two hours of its application. A lever bar can be used to press boards together after a row has been added.
- 8. When the first two rows are firmly in place, proceed with the rest of the installation while leaving at least a 1/2in (12mm) gap all around the room (with the exception of the 2-ply engineered floor where that gap must be 3/4" (19mm)). Clean and remove excess glue. Stagger the end joints by at least 5 in (13 cm) throughout the installation. Use the starting boards to vary the location of end joints. Starting boards shall have a minimum length of at least 6 in (15 cm).
- 9. The last row against the wall will rarely be the same width as the other rows. Cut the boards lengthwise so that the last row matches the available space. Apply glue and use a lever bar to press it into place.
- 10. Cut off the excess membrane so that it will not be visible after installing the moldings.

Expansion rules for floating floor installation

- 1. Plan for an expansion space next to walls, doors, and vertical obstacles. The minimum required space is ¾ in (19mm) for continuous surfaces up to 24 ft. (7 m). A continuous surface is defined as an area without separation or expansion joints. If the installed floor is directly joined to adjacent rooms by a hallway or an entrance without T-shaped molding then the width of the continuous area is the sum of the separate room's widths or the entrance. Obstacles include cabinets, kitchen islands, and the wall opposite to the starting wall.
- 2. No continuous floor can spread more than 40 ft (12m) of width.
- 3. Adjacent rooms more than 16 ft (5 m) in width connected by a door 3 ft (0.9m) wide or less shall be separated by a T-shape molding.

ANNEX A MANDATORY INSTALLATION CONDITIONS BY PRODUCT TYPE

| Product | Engineered Multiply 7/16 in (11 mm) | Engineered Multiply Between 7/16 in (11mm) and ¾ in (18mm) |
|------------------------------------|--|--|
| Installation location | All levels | All levels |
| Compatible with radiant heat floor | Yes See note 4 | Yes See notes 2 & 4 |
| Allowed installation method | Nailed Stapled Glued Floating See notes 3, 4,5 & 6 | Nailed Stapled Glued Floating See notes 3,4 & 6 |
| Fasteners | Min 1¼ in (3 cm) 18 to 20 Ga | Min 1¼ in (3 cm) 18 to 20 Ga |
| Fasteners spacing | 4-6 in (10-15cm) OR 4 in (10 cm) for products more than 5 in (13 cm) | 4-6 in (10-15cm) OR 4 in (10 cm) for products more than 5 in (13 cm) |
| Fasteners spacing from board's end | 1-2 in (2.5-5cm) | 1-2 in (2.5-5cm) |
| Relative humidity, at all times | 35-65% | 35-65% |

It is essential to control the pressure generated by installation tools; we strongly recommend trying various pressures on a board to determine the right one. The head of the nail or staple should rest on the tongue without penetrating it.

NOTES

- 1. To minimize the risk of cracks and other structural failures that might be caused by humidity fluctuations, we recommend the use of cleats.
- 2. The thickness of floorboards might act as thermal insulation and impact the performance of radiant heat floors.
- 3. Glued installation: using straps is strongly recommended to avoid gaps between floorboards.
- 4. A floating installation might reduce the efficiency of a radiant heat system
- 5. A floating floor installation is not recommended for square edges products.
- 6. For nailed or stapled installation where products are 5 in (12cm) wide and more the manufacturer recommends putting a glue bead in a serpentine pattern, either on the subfloor or on the back of the board to maximize the floor's stability. Please note that the glue assist won't perform is used with a vapor barrier membrane.