

INSTALLATION INSTRUCTIONS

Pre finished Solid plank

IMPORTANT: PROCEED WITH A VISUAL INSPECTION OF THE STRIPS BEFORE INSTALLATION. ONCE INSTALLED, THE STRIPS ARE CONSIDERED ACCEPTED BY THE INSTALLER AND THE OWNER.

PLEASE READ THE ENTIRE INSTALLATION INSTRUCTIONS
BEFORE PROCEEDING WITH THE INSTALLATION

OWNER / INSTALLER RESPONSIBILITY

Hardwood flooring is a beautiful and unique product of nature, which is characterized by distinctive variations in grain and color. These natural variations in color and grain are not flaws, but are a part of the natural beauty and uniqueness of hardwood flooring. These inherent variations should be expected and serve to enhance the natural beauty and enduring charm. This floor is manufactured in accordance with accepted industry standards, which permit a defect tolerance not to exceed 5%. The defects may be of a manufacturing or natural type

- The installer assumes all responsibility for **final inspection** of product quality. This inspection of the whole flooring should be done before installation. Carefully examine the flooring is color, finish and quality before installing it. Use reasonable selectivity and hold out or cut off pieces with glaring defects whatever the cause. If the flooring is not acceptable, contact your dealer immediately.
- Before beginning installation of any hardwood flooring product, the installer must determine that the environment of the job site and the condition and type of the subfloor involved are acceptable, insuring that it meets or exceeds all requirements which are stipulated in the installation instructions which follow. The supplier declines any responsibility for job failure resulting from or associated with inappropriate or improperly prepared subfloor or job site environment deficiencies.
- Prior to installation, the installer/owner has final inspection responsibility as to grade, manufacture and factory finish. The installer must use reasonable selectivity and hold out or cut off pieces with deficiencies.
- The use of stain, filler or putty stick for the correction of defects during installation should be accepted as normal procedure.
- Should an individual piece be doubtful as to grade, manufacture or factory finish, the installer should not use the piece.
- When a hardwood flooring is ordered, a 5 - 10% allowance factor, depending on layout, must be added to the actual square footage amount needed. (Diagonal installations may require more.)
- Please note that this floors must be installed in environments of 40% to 55% relative humidity to prevent possible damage not covered by warranty. Installation of a humidifier or dehumidifier may be necessary. The floor is designed to perform in an environmentally controlled structure. Warranty exclusions are, but not limited to, surface checking resulting from low humidity, mildew or discoloration resulting from extreme sub-floor moisture.

"INSTALLATION IMPLIES ACCEPTANCE"

JOB SITE INSPECTION & ACCLIMATION

- In a new construction, hardwood flooring should be one of the last items installed. All work involving water or moisture (plumbing, acoustical ceilings, dry wall taping, etc.) should be completed prior to wood flooring being installed. Heating and air systems should be fully operating maintaining a consistent room temperature at 16°C to 27°C (60-80° F) and a constant relative humidity of 40 to 55%.
- Flooring should not be delivered until the building has been closed in and cement work, plastering, painting and other materials are completely dry. Concrete and plaster should be cured and at least 60 to 90 days old. Check basements and underfloor crawl space to be sure that they are dry and well ventilated to avoid damage caused by moisture.
- For proper acclimation, flooring should be at the job site at least 72 hours prior to installation or as long as necessary to meet minimum installation requirements for moisture content. **Acclimation within a closed or sealed carton may not be adequate due to lack of air movement, especially in dryer climates. Please take appropriate measures to ensure proper acclimation, which may entail removal of outer plastic wrapping or opening of cartons and peeling back of interior plastic wrapping if packaged in this manner.** (Do not open the ends of cartons only, as this can lead to tapered ends of individual flooring strips or planks.)
- Handle with care. Do not stand on ends. Store the flooring in a dry place being sure to provide at least a four-inch air space under and around cartons.
- Do not store directly on concrete or near outside walls. Cartons should be placed in the installation area.
- The installation site should have consistent room temperature at 16°C to 27°C (60-80° F) and a constant relative humidity of 40 to 55% for a minimum of 5 days prior to installation.
- Note: The moisture content of the subfloor and wood flooring should be checked by an appropriate method. There should be no more than 4% (2% on planks 5" and wider) moisture content difference between properly acclimated wood flooring and subflooring materials, taking into consideration normal living conditions and equilibrium moisture content (EMC).

IMPORTANT:

3/4" Solid Flooring are for on or above grade installation only
3/4" Solid Flooring **can not** be installed over radiant heat

REQUIRED TOOLS AND ACCESSORIES

Hand Tools

- Power Nailer
- Tape Measure
- Mallet
- Circular Saw
- Miter or Table Saw
- Pry Bar
- Moisture Meter
- Broom
- Chalk Line and Chalk
- Hammer
- Safety Equipment (Goggles & Mask)
- Utility Knife
- Nail Punch

3/4" Fasteners

- Power Nailer #445 Pneumatic, #45 manual 2" cleat nail
- Primatch Pneumatic Floor Nailer Model P210 with 2" Power Cleat
- Primatch Manual Nailer Model H300 or H330 with 2" Power Cleat
- Stanley-Bostich Pneumatic Floor Nailer M3-FN with 2" Power Cleat
- Porta-Nailer 402 manual with 2" cleat nail

Note: Use only a flooring nailer that engages the top profile over the tongue at the appropriate angle. Make sure that the flooring nailer is flat against the board to prevent top edge damage. The plate in contact with the floor must be smooth and free from nicks or scratches. We also suggest the use of adaptors to prevent damage to the edges. Two existing, commonly used adapters are:

- Powernail's "Big Foot" must be used on their 45 and 445 nailers.
- Stanley's "M-3 Foot Kit" must be used with the M-3 nailer.

Important: Set air compressor to 80 PSI (or follow manufacturer's suggested PSI setting). Adjust the air pressure to insure proper setting of nails. If tongue damage occurs, lower the air pressure. Cracked or broken tongues can cause squeaking floors. Harder species of wood flooring are more brittle and require the use of cleats are recommended.

Minor occasional noises in fastened floors are normal and not covered by our warranty.

Important: If you need to remove a side nail, do not pull straight up from the tongue. This will damage the surface of the board. Instead, pull out the nail from the tongue at the front of the board with all pressure from the hammer head directed into the subfloor.

For 9/16" (14 mm) or 5/8" (15,5 mm), we recommends use of a; Powernail model 200 or 250 with 1-1/2" cleats or the High Pro AS-400 with 1-1/4" staple. These nailers have proved to be superior to any other nailer in the market. Use appropriate adapter for nailer. The use of any 3/4" nailer with 1/2" adapter plates is not recommended. In certain situations, these floors can be installed using a 100% urethane adhesive.

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SUBFLOOR PREPARATION

Approved Subfloor Types:

1. APA approved 5/8" minimum thickness, preferred 3/4" or thicker exterior plywood.
2. 3/4" (23/32") OSB on 16" center floor joists properly nailed.
3. Concrete slab with additional approved wood sleepers and screed system. (See NWFA's guidelines)
4. Wood floors (if installed at proper angle only).
5. Resilient tile and sheet vinyl if installed over an above mentioned and approved subfloor.

NOTE: When installing approved plywood, refer to specific manufacturer's instructions.

Subfloors must be:

- **CLEAN** - Scraped or sanded, swept, free of wax, grease, paint, oil and other debris
- **SMOOTH/FLAT** - Within 1/8" on 6'. Sand high areas or joints, fill low areas.
- **STRUCTURALLY SOUND** - Nail or screw any loose areas that squeak. Replace any damaged subflooring or underlayments.
- **DRY** - An 8 to 10% moisture content is ideal and must never exceed 13% prior to installation of wood flooring.

Remember: All moisture testing must be before wood has been acclimated 72 hours and job site requirements met.

Wood Substrates: Test the moisture of the wood substrate using a calibrated moisture meter approved for testing wood moisture according to the meter manufacturer. The reading should not exceed 13%, or read more than a 4% difference than moisture content of products being installed. (maximum 2% for planks 5" and wider)

Concrete Slabs (regardless of existing floor covering): Must have a minimum of 3/4" plywood installed as a screed/sleeper system with a minimum of 6 mil polyfilm vapor barrier secured to the slab.

All concrete subfloors must be tested for moisture content prior to installation of the hardwood flooring. The moisture content of the **concrete** subfloor must not exceed 3 lbs./100 sq. ft emissions.

Below are methods to test if moisture is present in the concrete subfloor:

- 1) Use an approved calibrated concrete Moisture Meter as a preliminary measurement for moisture such as: Delmhorst Moisture Meter Model G Tramex Concrete Encounter. Follow manufacturer's specific calibration requirements.
- 2) Perform a polyfilm Test. Tape down 2' x 2' polyfilm squares (a clear garbage bag or plastic drop cloth will do) in several places on the floor. Wait 24-48 hours, and then check for the appearance of condensation on the inside of the bag or plastic for a darkening on the concrete subfloor. Either occurrence signals the likely presence of excess moisture, requiring a mandatory Calcium Chloride Test.

Once you have determined the moisture content, a test **must** be performed to determine the moisture and alkalinity emissions through the concrete slab.

- Perform a Calcium Chloride test according to the manufacturer's instructions. The maximum acceptable reading is 3-lbs. /24 hours/1000 sq. ft for moisture emissions.
- Perform a pH Test according to the manufacturer's instructions. A pH reading of 6-9 on a pH number scale of 1-14 is acceptable.
- If the test results exceed this number the concrete slab should be sealed with appropriate sealers to correct those emissions as per the manufacturer's recommendations.

Installation on Plywood and Wood Substrates: Do not install over particleboard. Subfloor should be constructed of 5/8" or thicker plywood when installing directly over minimum 2 x 10 floor joists 16" on center. Plywood sheets should be laid with grained outer plies at right angles to joists; adjacent rows staggered four feet and nailed every 6" along each joist with 7D or larger nails. When installing directly over old wood or strip floor, sand any high spots, re-nail old floor to eliminate squeaks or loose boards, and install new planks at right angle (perpendicular) to the old floor, or over lay old floor with 1/4" plywood underlayment. Leave a 1/8" gap at the edges and nail with 7D or larger nails every 6" at the edges and every 12" in both directions and through the interior of each sheet of plywood. The moisture content of the wood or plywood should not exceed 13%.

Subfloor - Floated: PREFERRED: Subfloor system: 2 layers 1/2" (15/32", 11.9mm) CDX plywood subfloor/underlayment, (Exposure 1) 4' x 8' sheets. **MINIMUM** Subfloor system: 2 layers 3/8" (10mm) CDX Plywood subfloor/underlayment (Exposure 1) 4' x 8' sheets. Place first plywood layer with edges parallel to wall, without fastening. Plywood should be placed with 1/8" gaps between sheets. Lay second layer perpendicular or at 45 degree angle to first. Plywood should be placed with 1/8" gaps between sheets. 3/4" minimum expansion space at all vertical obstructions and wall lines. Staple, screw, or nail second layer to first layer on 12" grid pattern. Please note: Vapour barrier must be installed under the subfloor.

JOB SITE PREPARATION

- Acclimate product for 72 hours prior to installation.
- Verify subfloor is level to within 3/16" in 10', and structurally sound. Repair as needed.
- Undercut door casings.
- Remove any existing wall base, shoe molding, quarter round and doorway thresholds.
- Cover the clean surface, wall to wall, with 15 lb. asphalt saturated felt paper, butting the edges together. Use of felt paper is optional and will not prevent squeaks or any other noise reduction.

Step 1: ESTABLISH A STARTING POINT

- Before beginning the actual installation, provide proper layout of flooring by distributing short and long lengths equally over the areas where the flooring is to be installed.

Remember: Flooring is to be installed at right angles to the floor joists and if possible, in the longest dimension of the room.

- Work out of several cartons at a time to insure proper color mixture.
- Align the first row of planks to be sure you have a good straight line from one side of the room to the other. Snap a chalk line at the desired distance from the wall to help align the planks. The end joints of plank or strip flooring should be staggered to achieve the best appearance in the finished floor. (Minimum 6")

Important: Leave at least 3/4" for expansion at all vertical surface or at least what will be covered by the baseboard and quarter round trim.

Step 2: INSTALLING THE FLOOR

- **NOTE:** Always end glue wide width (4" or more) planks with a PVA wood glue.
- Striking the edge of a board with a mallet will fracture the new aluminum oxide finishes. Always tap the tongue or use a tapping block.
- Align the first piece on the chalk line. The groove side and end will be facing the starting wall. Pre drill holes and drive 7D or 8D finish nails or screw type flooring nails into the face of the board every 12", approximately 1/2" - 3/4" from the edge closest to the starting wall and within 2"- 3" from the ends and in the darker grain of the wood.
- Edge nail the plank by driving the same type nails at a 50° angle through the tongue of the first piece, spacing the nails every 8" - 10" and within 2" - 3" from the ends. This process should be repeated for each piece in the entire first row. Upon completion of the first row, go back and sink the face nails with a nail punch. If it appears that the holes will not be covered by the wall base or quarter round trim, fill the holes with Floor Putty, which blends with your pre-stained floor.
- **NOTE:** Typically the first few rows must be edge nailed by hand rather than with a nailing machine due to a vertical wall obstruction. When clearance allows, a nailing machine, which drive 2" fasteners with an appropriate mallet, can be used to simplify and speed up the nailing process.
- Install each succeeding row of planks by edge nailing the tongue side every 8" - 10" and within 2" - 3" from board ends. Be attentive to staggering the ends of the boards at least 6" in adjacent rows to avoid clustering end joints. Upon reaching the last row to be installed, the planks should be ripped to allow a 3/4" expansion space. The last rows must be fastened by nailing approximately 1/2" - 3/4" from the back edge of the board every 12". The same process of counter sinking the face nails and applying Flooring Putty should be repeated (as above on starting wall).
- When the installation is complete, make sure that the expansion space is covered with the appropriate molding such as, base board and 1/4 round.

COMPLETING THE JOB – ALL INSTALLATION

- Clean the floor with Hardwood Floor Cleaner. Please ensure that any adhesive on the finish is cleaned before leaving. Dried or cured adhesive cannot be removed.
- Install transition pieces.
- Inspect final floor for nicks or minor gaps and fill with appropriate color wood putty.
- Use plywood or hardboard when moving heavy appliances or furniture across floor.

CARE GUIDE

Your floor will add warmth and beauty to your home for many years to come. Following a few simple maintenance steps, will help protect your investment and keep your floor like new.

CLEANING

- Use a damp cloth to blot up spills and spots as soon as they happen. For tough spots such as oil, paint, markers, lipstick, ink, tar or cigarette marks, use acetone/nail polish remover then wipe with a damp cloth. Always avoid allowing liquids to stand on your floor.
- Regularly vacuum, (using the hard floor attachment not the beater bar), dust mop or sweep the floor to prevent sand or abrasive dust from accumulating and scratching the finish.
- Periodically clean the floor with approved hardwood floor cleaner, which are specially formulated for the finish.
- Do not use oil based, wax, polish, or strong ammoniated or abrasive cleaners, steel wool or scouring powder to clean the floor.
- Do not wash or wet-mop the floor with soap, water, oil soap detergent or any other liquid cleaning material. This could cause swelling warping, delaminating and joint-line separation, and void the warranty.
- DO NOT use any type of polisher.

PROTECTING

- Use quality area rugs and doormats by outdoor entrance areas to prevent dirt, sand, grit and other substances such as oil, asphalt or driveway sealer from being tracked onto your floor.
- Sweep, dust or vacuum the floor regularly to prevent accumulation of dirt or grit that can scratch or dull the floor finish.
- Use floor protectors and wide bearing leg bases/rollers to minimize indentations and scratches from heavy objects. As a rule of thumb, the heavier the object, the wider the floor protector should be.
- Do not use rubber or foam backed plastic mats as they may discolour the floor. To prevent slippage use an approved vinyl rug underlayment.
- Maintain a normal indoor relative humidity level between 40% and 55% throughout the year, to minimize the natural expansion and contraction of wood. Failure to provide adequate relative humidity in the home by the use of a humidifier or a dehumidifier will void the warranty.
- Avoid gouges or cuts in your floor from sharp objects. While your floor is one of the most wear resistant floors on the market, sharp or pointed objects can nevertheless damage it.
- Don't walk on your floor with stiletto-style heels, spiked golf shoes or cleats; they may cause indentations in your floor.
- Rearrange area rugs and furniture periodically so the floor ages evenly. UV sunlight will soften or darken the tone of different species of hardwood to varying degrees
- Use a dolly when moving heavy furniture or appliances. But first, put down a sheet of quarter inch plywood or Masonite to protect the floor. Never try to slide or roll heavy objects across the floor.
- **Keep pet's nails trimmed, or consider "booties" available at pet stores.**

LIMITED WARRANTY

This Hardwood Floor comes with a:

- Lifetime Structural Integrity Warranty
- 30 Year Finish and Wear Warranty

These warranties, which begin from the date of purchase, apply to products used in dry residential applications. Lifetime warranties apply for as long as the original purchaser owns and resides in the home where the product was installed.

What the Hardwood Flooring Limited Warranty covers:

Finish and Wear Warranty – The supplier warrants to the original purchaser that its finish surface will not peel off or wear through for the indicated period of time, from the date of purchase.

Lifetime Structural Integrity Warranty – The supplier warrants these engineered hardwood products in their original manufactured conditions to be free from defect in material and workmanship including assembly dimension and grading.

Note: Hardwood flooring is a natural product that will continue to expand and contract during seasonal and temperature changes. Products may experience separation between boards when properly acclimated and installed. If separations do occur, they are not covered by this warranty.

What you should do if any of the above listed problems occur and you need warranty service:

You (the original retail customer) should notify the authorized Hardwood Flooring dealer from which the original purchase was made of any defect no later than 30 days after discovering the defect but within the time period of the applicable limited warranty. You (the original retail customer) must present to that authorized Hardwood Flooring dealer the following items for a warranty claim to be considered:

- A valid proof of purchase in the form of a sales receipt or other documents which establish proof of purchase
- A description of the problem and/or a photograph/sample that clearly shows the warranty problem

What the supplier will do should you need warranty service:

If he accepts a claim under this limited warranty, the supplier will authorize your dealer to replace, free of charge, the amount of strips presenting a manufacturing defect or pay compensation equal to the cost of the defective strips. The supplier will not reimburse any installation fees or labour costs. If the claim is related to the finishing of the floor, he will assume the material and labour costs necessary to refinish the flooring of a room or rooms for which the claim was approved. This procedure constitutes the one and only way to make a claim in regards to this limited warranty.

Each Hardwood Flooring Limited Warranty is subject to the following conditions:

- This limited warranty is valid only in North America and United Kingdom. The warranty is not transferable. It extends only to the original retail consumer. This limited warranty applies only where the affected area of the flooring is visible and covers an area greater than 10% of the room. The flooring must be installed in accordance with recommended installation instructions.

- Natural wood characteristics such as mineral streaks, small knots, grain variations etc. are normal characteristics and are not considered as defects. No two pieces of wood are the same and color or other variations will occur. We do not guarantee against natural variations, or the normal difference between color samples or photographs and colors of installed floors.
- Indentation, scratches or damage caused by negligence, water moisture, insects, animals, and high heeled or spiked shoes, or failure to use pads under rolling chairs or other furniture.
- Any product deformity that is not measurable or that is visible only in a certain angle is not considered a defect. Defects are evaluated by their visibility from a reasonable vertical distance (standing height) from the floor.
- Failure to follow manufacturers written installation instructions including protecting the floor from subfloor moisture.
- Excessive or inadequate humidity in the area of use. Relative humidity in the area of use must be within a normal range of 40%-55%.
- Improper or insufficient protection, care and maintenance.
- Accidents abuse or misuse. Warranty will be made void if man-made or natural disasters including leaking or broken plumbing, fire, flood, earthquake, or standing water occur during or after installation.
- Improper alteration of original manufactured product. Alterations or repairs to the manufacturer's original product will void any and all warranties
- Changes in color due to full or partial exposure to sunlight and weather.
- Maple, Merbau, Kempas, Tamarindo, Pine, Brazilian Cherry and other species may darken due to light exposure. This is a natural occurrence and is not covered by this warranty.
- Failure due to structural changes in the subfloor, settling of the building or uneven subfloor that has not been adequately levelled.
- This warranty does not cover removal or replacement of cabinets, appliances, furniture or other fixtures.
- Gloss reduction is not considered wear.
- Faces checking, cracking, are not covered by this warranty.
- Please note that this floor must be installed in environments of 40% to 55% relative humidity to prevent possible damage not covered by warranty. Installation of a humidifier or dehumidifier may be necessary. The floor is designed to perform in an environmentally controlled structure. Warranty exclusions are, but not limited to, surface checking resulting from low humidity, mildew or discoloration resulting from extreme sub-floor moisture.

Please Note:

The supplier does not grant to any person or entity the authority to create for it any obligation or liability in connection with this floor. The supplier shall not be liable to the consumer or any other person for any incidental, special or consequential damages, arising out of breach of this limited warranty or any implied limited warranty (excluding merchantability). Some states or provinces do not allow the excluding of limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to the purchaser. This warranty gives the customer specific legal rights, such rights may vary from state to state.

"INSTALLATION IMPLIES ACCEPTANCE."NO WARRANTY WILL BE OFFERED FOR APPEARANCE RELATED CLAIMS ONCE THE PRODUCTS ARE INSTALLED.