

Hardwood Flooring Installation Instructions

PLEASE READ BEFORE INSTALLATION

INSTALLATION WARNING:

Installation conditions – including temperature, sun exposure and humidity – will affect this product's performance over time. For best results, room temperature and humidity of installation area must be kept consistent with normal, year-round living conditions for a minimum of one week prior to installation. All products require a specific temperature range of 60°F to 80°F with 35% to 55% relative humidity. Installation outside of these recommended ranges or over a wet subfloor will likely cause movement in the flooring, including potential shrinkage, tip-raising, gapping between pieces, cupping and face-checking. This product MUST be installed according to the National Wood Flooring Association's (NWFA) installation guidelines in order for the Limited Warranties to be valid. The most current publication of the NWFA guidelines is available to all NWFA members, and can be found at www.nwfa.org (800-422-4556)

Installer's / Owners Responsibility

As a natural product, hardwood contains inherent variations in color, grain and appearance and other visual imperfections. This product is manufactured in accordance with industry standards which permit a defect tolerance not to exceed 5%. These defects may be the result of manufacturing or naturally occurring characteristics of the material. It is recommended that a 5% cutting or grading allowance be added to the total sq footage when calculating the quantity of the flooring required. It is the sole and joint responsibility of the installer and owner to conduct a quality inspection of all the flooring prior to installation. All pieces of flooring should be examined for quality of manufacture, finish and color. If the

product quality is deemed unacceptable, it should not be installed. Flooring that has been installed will be deemed to have been inspected and accepted by the installer and owner. It is the sole responsibility of the flooring installer to ensure that the job site, subfloor and installation tolls and materials meet or exceed industry standards. Manufacturer voids all responsibility for problems arising from incorrect or improper site preparations or installations procedures.

Site Preparation:

- The building is completely enclosed with all outside doors and windows in place and secured.
- All concrete, masonry, plastering, drywall, texturing, painting and other wet work is complete and has been allowed to cure and dry completely.
- Basements and crawlspaces are dry. Crawlspaces must have no standing water and have a vapor barrier installed in accordance with local building codes.
- Exterior surface drainage is directing water away from the house.
- Interior heat and humidity levels can be controlled and maintained at recommended levels for the duration of the acclimatization and installation period.
- Sub-floor is properly prepared for installation.

Flooring Acclimatization and Climate Control

Climate control at the job site must be maintained with the temperature between 60-80°F and humidity at 35-55% before and during the installation. These conditions should be maintained for at least one week prior to installation.

Flooring material should not be delivered to job site until the site has been acclimatized as detailed above. After delivery, the flooring must be allowed to acclimatize on the job site for 72 hrs prior to installation. Do not open packages during the acclimatization period, leave boxes sealed until ready to start installation, and then only as needed.

Subfloor Preparation

The installer and customer are jointly and solely responsible for ensuring that the subfloor is suitable for the flooring application and properly prepared for installation.

All sub-floors must be clean, dry structurally sound and flat to within 1/8" in 8'. All subfloors must be tested for moisture content according to NWFA guidelines.

Plywood sub-floors must meet local building code requirements. They must be secure to the joists, free of squeaks ad protruding fasteners. Subfloor moisture content must not exceed 12% and the variance in moisture content between the subfloor and the flooring boards must not exceed 4%.

Expansion Space

Hardwood flooring will expand and contract with changes in ambient temperature and humidity. To allow for this, during installation leave a ½" expansion space around the entire perimeter of the floor between the flooring and the walls. Also leave a ½" expansion space where the flooring will meet and vertical

obstacle, such as stairs, pipes, door sills, tiles, cabinets, etc. **NOTE:** In climates with extreme variations in humidity, it may be necessary to leave a larger expansion space.

Nail Down Installation Guidelines:

NOTE: Nailing planks wider than 7.5" without a full spread adhesive will void all warranties. Nail down installation is not recommended.

Disclaimer:

This product is not warranted against squeaking, popping or crackling when using nail down/staple installation methods. Squeaking, popping or crackling is normal, and these symptoms may be aggravated in arid areas or during dry conditions.

Glue-down Installation Guidelines:

- Make sure to properly test subfloor before installation, following subfloor preparation instructions previously discussed.
- Apply a moisture barrier to slab. BOSTIK, DRITAC, MAPEI, STAUF and TITEBOND are recommended.
- A urethane-based adhesive should be used exclusively. BOSTIK, DRITAC, MAPEI, STAUF and TITEBOND are recommended.
- Read the glue manufacturer's instructions (printed in detail on the glue container) to choose the correct size trowel.
- Create a working line parallel to the starting wall, in multiples of our engineered plank width, to set up the baseline of installation.
- Following the spread rate and curing time suggested by the glue manufacturer, spread glue evenly
 on the subfloor to cover an area appropriate to the number of planks that can be laid in time for
 best result of the glue.
- Lay one row of flooring planks along the entire length of the work line. Add each additional row of flooring, watching the pattern repeat and offsetting or staggering the joints as desired.
 (Generally, joints should either match in a specific pattern or be staggered by no less than six inches).
- A 1/2" expansion space should be left around the perimeter. Roll whole floor with a 150 lb. roller within 3-6 hours after installation. Finished areas should be covered with a breathable protective paper, NEVER PLASTIC, immediately after installation to prevent damage. Do not tape protective paper to the finished surface of the wood for extended periods of time.

Floating Installation Guidelines:

• Make sure to properly test subfloor before installation. (Please follow manufacturer's subfloor preparation instructions).

- If needed, apply a moisture barrier to slab. **BOSTIK, DRITAC, MAPEI, STAUF** and **TITEBOND's** moisture barrier are recommended.
- After the moisture barrier has cured and dried apply a floating floor poly-foam underlayment, BOSTIK, DRITAC, MAPEI, STAUF and TITEBOND are recommended. Please follow manufacturers installation instructions.
- Floating floors is generally a more difficult installation to start, as the boards will move. It is imperative that the first few rows be straight and gap free.
- Create a working line parallel to the starting wall, in multiples of our engineered plank width, to set up the baseline of installation. A bead of adhesive should be applied all along the TOP groove of each plank, any glue meeting European DIN EN 204 D3 standard is recommended.
- Lay one row of flooring planks along the entire length of the work line. Work with the tongue side outward. NEVER engage material by striking the groove edge, use a tapping block against the tongue or board puller to avoid edge damage while engaging plank. Add each additional row of flooring, watching the pattern repeat and offsetting or staggering the joints as desired. (Generally, joints should either match in a specific pattern or be staggered by no less than six inches).
- A minimum 1/2" expansion space should be left around the perimeter.
- Finished areas should be covered with a breathable protective paper, NEVER PLASTIC, immediately after installation to prevent damage. Do not tape protective paper to the finished surface of the wood for extended periods of time.

Disclaimer:

Upon completion of the floating installation of a random length engineered wood floor, the floors surface may not appear as continuously flat as compared to a traditional long strip floating floor. Hollow sound and squeaking should be expected since the flooring is not secured to the subfloor by means of chemical fastening (gluing) or by mechanical fastening (staples, cleats or nails). Hollow sound is NOT a defect caused by manufacturing, but rather the result of the way in which the floor is put together.