

INSTALLATION INSTRUCTIONS

Installer/Owner Responsibility

We strive to provide the highest quality hardwood flooring available. Please carefully read this installation guide to ensure satisfactory results from your floor. Carefully, inspect the flooring prior to installation for grade, color, finish and quality. Inspect hardwood in well lit conditions to ensure proper installation. If flooring is not acceptable contact distributor and arrange for replacement. The manufacturer will not take responsibility for installation of flooring with visible defects. Prior to installation of any flooring, the installer must ensure jobsite and subfloor conditions meet the requirements of specified flooring for installation. The manufacturer is not responsible for flooring failure resulting from unsatisfactory jobsite and/or subfloor conditions.

N.W.F.A., National Wood Flooring Guidelines prevail.

Jobsite and Pre-installation Requirements

Flooring should be one of the last items installed for any new construction or remodel project. Any work involving water or moisture should be completed before hardwood installation. Room temperature and humidity of installation area should be consistent with normal, year-round living conditions for at least one week before installation of wood flooring. Room temperature of 60°~80° Fahrenheit and humidity range of 30~50% is recommended.

Installation Requirements (Glue , Nail or Floating)

Quality of your floor installation is dependent on quality and preparation of the subfloor. Please read the information carefully. Subfloor must be structurally sound. Clean: Thoroughly swept and free from debris. Free of wax, grease, paint, sealers, old adhesives and other substances. Level: Flat to 3/16" per 10' radius 1/8" in 6'. Dry: Test with a moisture meter or Calcium Chloride Test. Acceptable Subfloor types: Plywood (at least 3/4"), OSB (at least 3/4"), Concrete slabs (glue only).

Installation Tools

Tape measure, pencil, chalk line, power saw, tapping block, pull bar, spacers, hammer, safety glasses

Nail Down: Approved pneumatic guns:

Power Nail pneumatic Model 50P 18 gauge, Cleat 1 1/2" Mallet activated.

Porta Nail Pneumatic Model 461A 18 gauge, 1/4" crown x 1 1/2" Leg Coated Staple. Trigger activated.

Primatech pneumatic Model Q550R 18 gauge, L cleat x 1 1/2",

Bostich pneumatic Model EHF1838K 18 gauge, 1/4" crown x 1 1/2" Coated Staple.

NOTE: Do not use a nailer that uses anything but a 20 gauge or 18 gauge fastener. Damage to plank will result.

Glue-down: Contact adhesive manufacturer to determine suitability of use and proper application.

Wood Subfloors

Moisture content of wood subfloor must not exceed 10%. There should be no more than a 2% Moisture Content difference between properly acclimated wood flooring and subfloor materials, taking into consideration normal living consideration and equilibrium moisture content (EMC). Subfloor must be dry and well secured. Nail or screw every 6" along joists to avoid squeaking. If not level, sand down high spots and fill low spots with an underlayment patch (glue down) repair wood subfloor irregularities with plywood sheeting and sanding (nail down).

Concrete

Must be fully cured (at least 30 days old). All concrete should be tested for moisture. The manufacturer does not warrant the floor against moisture from any source. Carefully follow adhesive manufacturers instructions for application of wood flooring to concrete substrates. Many adhesive manufacturers offer warranties against concrete subfloor moisture. Check with adhesive manufacturer for moisture abatement properties, subfloor moisture testing, and proper installation methods of adhesive/vapor abatement systems.

Radiant Heat

See NWFA installation guidelines. (Hardwood flooring surface should not exceed 80 °F); check with radiant heat systems manufacturer's suggested guidelines for correct water temperature inside carrier pipes. Relative humidity should be maintained at a minimum of 30 to 50%. Hydronic, water-based radiant heat systems must be used (Use of electric mat systems is not authorized). Installation with radiant heat can be performed using the floating installation method or glue down method. Check with adhesive manufacturer for installation specifications over radiant heat. Some manufacturers have moisture, compressive strength requirements or may require a primer when applying over Gypcrete/Lightweight Concrete.

- **Hickory:** Excluded from warranty when used over radiant / in-floor heating.

Preparing For Installation

Door casings should be undercut or notched out so flooring will fit underneath. Base moldings should be removed and replaced after flooring installation. Since wood expands with any increase in moisture content, always leave at least a ¼" expansion space between flooring and all walls and vertical objects such as cabinets. This space will be covered once you put on trims and base. When laying flooring always stagger the end joint by at least 8". When cutting the last plank in a row to fit, you can use the cut-off end to start the next row. Do not use pieces less than 6" to begin new row. To pull planks together always use a tapping block and hammer. Tapping block should be used against the tongue only, not against the groove. When near a wall, you can use a pull bar to close the end joints. Take care not to damage edge of flooring.

Getting Started

Wood flooring is often laid parallel to the longest wall for best appearance. Working out of multiple boxes to ensure a desirable mix and layout we recommend you begin installation next to an outside wall, which is usually the straightest and best reference for establishing a straight working line. Establish your working line by measuring an equal distance from the wall at both ends and snapping a chalk line. The distance you measure from the wall should be the width of a plank plus about 1/2" for expansion space. You'll need to scribe cut the first row of hardwood to match the wall to create a straight working line.

Nail Down Installation

See Preparing for Installation and Getting Started.

Lay flooring perpendicular to floor joists or parallel to the floor joists only if the subfloor has been strengthened for support (1/2" CD or better grade dry plywood). Lay first plank inside chalk line with grooved edge toward wall. Face nail grooved edge about 6" apart to secure back edge of starting planks. Use nail punch if necessary to sink nails below surface and fill with wood filler. Repeat on tongue edge of plank at opposite side of install. Install the entire first and second row in same manner. Always leave at least a 1/2" expansion around walls and vertical objects. Use wood or plastic spacers during installation to maintain this expansion space. Lay subsequent rows by using floor nailer to blind nail top inside edge of tongue at 45 degree angle. Nail each board every 4 - 6" and within 2" of each end. Remember to stagger end joints from row to row and use tapping block to snug boards together.

You may need to face nail tight around (doorways) and the last 2~3 rows where the nails will not fit. Staples or Nails should be a minimum of 1-1/2" in length.

Glue Down Installation

See Preparing for Installation and Getting Started.

Read adhesive instructions carefully for proper trowel size, adhesive set time, and angle to spread adhesive. Adhesive manufacturer is responsible for suitability of use of their product, and for adhesive performance, and moisture warranty if moisture abatement is required.

WARNING: Always allow for adequate cross ventilation in room when working with flooring adhesive.

Once adhesive has been troweled, lay the first row of flooring with groove facing the wall; and continue laying flooring until adhesive is covered. Always check your working lines to be sure the floor is still aligned. Use tapping block to snug planks. Be careful not to let installed floor move on the wet adhesive while you are working. When first section is finished, continue to spread adhesive and lay flooring section by section until installation is complete. Use a damp cloth to immediately remove any adhesive that gets on flooring surface. Remember to stagger end joints from row to row. Always leave a 1/2" expansion space around walls and vertical objects. Use wood or plastic spacers during installation to maintain this expansion space. Work each section of flooring foot-by-foot within the adhesive working time to ensure a solid bond with the adhesive. Flooring planks on perimeter of room may require weight on them until adhesive cures enough to hold them down.

Floating Installation

See Preparing for Installation and Getting Started.

Allow for 1/2" or greater expansion at all areas. NEVER pin down or nail anything into a floating floor as it prevents the normal expansion and contraction. Always leave at least a 1/2" expansion around walls and vertical objects. Use a PVA/D3 or equivalent adhesive on both side and end groove. Apply adhesive to bottom of groove application of adhesive. A minimum of 6-mil poly sheeting overlapped 6 inches and duct tape is required below underlayment pad (Floor Muffler or equivalent).

Use Franklin Titebond – Tongue and Groove Flooring Glue or equivalent white PVA/D3 glue specified by the manufacturer as being suitable for use as a tongue and groove adhesive.

Finishing The Job For All Applications

Remove expansion spacers and reinstall base and/or quarter round moldings to cover expansion space. Install any transition pieces that may be needed.

Do not allow foot traffic or heavy furniture on floor for 24 hours (if gluing)

Dust mop or vacuum your floor to remove any dirt or debris

Floor Care Guidelines

Cleaning your hardwood floor is simple – dirt and dust are easily removed with a vacuum featuring a hard-surface attachment, beater bar turned off, untreated dust mop or a soft broom. Grit control is your best defense to keep a wood floor looking great for many years.

For more difficult-to-remove soil, use a cloth moistened very lightly with Bona Hardwood Floor Cleaner. Then wipe the surface with a clean, dry cloth. Under no circumstances should the floor be wet-mopped. Heavier stains, such as crayon, felt-tip markers, etc., may be removed with a Bona Hardwood Floor Cleaner, or a small amount of original formula Goof Off using a clean terry cloth rag, for the same substances that may be more stubborn.

Flooring needs no special treatment – never use soap solutions, sealers, polishes, or any abrasive materials.

- Protect the flooring in high traffic areas and from excessive tracking of outside dirt and soil with walk-off mats at all entrances. Rubber Mats are to be avoided as they oxidize finish and result in discoloration.
- Hardwood is a natural product that is affected by light overtime, a process known as oxidization. Rearrange rugs and furniture periodically to help minimize the effect that sunlight and direct lighting can have the color tone of the hardwood floor.
- Use quality floor protectors, such as felt pads, beneath furniture legs to help protect the flooring surface.

Flooring is best maintained in a balanced room climate with 30~50% relative humidity at normal room temperature (60°~80° Fahrenheit).

Chemical spills such as acids, alkalis or petrochemicals should be removed immediately. The floor should then be cleaned with a wood cleaner and dried with a soft absorbent cloth to prevent any residue from remaining on the flooring surface.