

Solid Hardwood Installation and Warranty

Pre-Installation Responsibility

Job site should meet or exceed all requirements outlined in installation instructions and should refer to NWFA Wood Flooring Installation and Guidelines Methods guide if needed. Installer and Owner are responsible for all job site, sub-floor and environmental conditions and Manufacturer declines all responsibility of product, performance or installation failure. All work involving water or moisture must be completed prior to flooring being delivered.

Acclimation of Solid Hardwood flooring for a minimum 72 hours prior to installation. Additional acclimation of 3 to 5 days may be required based upon local climatic conditions. Boxes should be opened in room of installation. Heating or air conditioning must be on and operating at normal levels for at least five days preceding installation so the boards can acclimate to their environment. Prior to installation, ensure that wood flooring is within acceptable range of moisture content with the wood subfloor. No more than 2% moisture content difference between properly acclimated wood flooring and subflooring materials for flooring 3" or wider. Room temperature should be 60-80 degrees Fahrenheit with relative humidity between 30 – 50%. Do not install in full bathrooms or powder rooms. Not approved over radiant heat. Refer to NWFA Acclimations guidelines for more information.

Record your Moisture Readings:

Wood Subfloor	Concrete Subfloor
Subfloor Moisture Content _____%	Test Method & Results
Hardwood Moisture Content _____%	Calcium Chloride Test Results _____
Difference between Subfloor & Flooring _____%	RH Test Results _____
	Electronic Meter Test Results _____

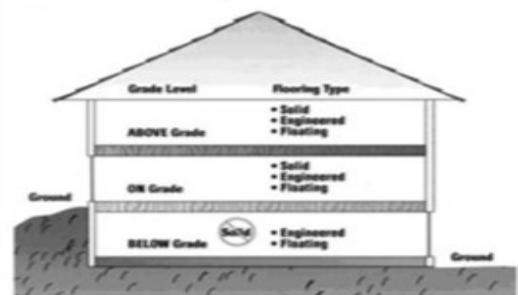
*For Complete Job Site Checklist please refer to NWFA Installation and Guideline Methods.

Shade Variations in colors, tone and graining are normal as wood is a natural product and contains natural characteristics from the tree. Flooring should be examined prior to installation for color, finish and quality. Unacceptable material should not be installed. Industry standards allow defects both natural and manufacturing up to 5%. Flooring installed will not be covered under manufacturer warranty due to any visible defect. Installer and Owner are responsible for final inspection of flooring manufacture, grade and finish.

Job Site Inspection

Hardwood flooring should be one of the last items installed. All work involving water or moisture (plumbing, acoustical ceilings, drywall, taping, etc) should be completed prior to wood flooring being installed. Buildings with crawl space foundations should include a vapor barrier 4 to 6 mil polyethylene installed between the ground and the sub-floor.

Solid Hardwood Flooring is not recommended for below grade installations. Flooring should not be delivered until the building has been closed in and cement work, plastering, painting and other materials are completely dry.



If the soil surrounding a structure is 3 inches or more above the floor of any level, consider that level below grade. This includes walk-out basements. In addition, the surrounding soil should be sloped away from the structure.

Subfloor should be properly nailed or secured with screws. Plywood/OSB should be installed on or above grade, clean from all debris, dry and does not exceed 12% moisture. No damage or swollen subflooring and should be checked for squeaks or loose components.

Subfloors should be flat to 3/16" per 8' radius. If subfloor prep work is required, high spots should be sanded down and low spots should be filled with a leveling compound approved for use under wood flooring. Do not sand sub-surfaces such as vinyl or synthetic tiles that may contain asbestos. Cover the clean subfloor surface, wall to wall, with 15lb. felt paper or Aquabar type paper.

When installing your Solid Hardwood Flooring, be sure you have good lighting as this will allow any obvious defects in a board or boards to be easily noticed. Proper moisture tests are performed and recorded and suggested tools are cleaned and ready for the installation.

Pneumatic/Manual Nailer, Tape Measure, Chalk Line and Chalk, Pry Bar, Electric Miter Saw, Broom and/or Vacuum, Wood Filler, Hammer, Touch up kit and Safety Glasses. See NWFA Installation and Guidelines for other accessories you may need.

Cleats are recommended for installation over staples.

Solid Strip & Plank Installation Methods

Floor preparation: Refasten any loose areas of subfloor and clean the subfloor by sweeping, scraping, etc., as necessary. With frame construction, mark location of joists on perimeter walls so that starting runs and finishing runs, which require face nailing, can be nailed into joists. Marking also locates the joists for plank flooring installation. Flooring direction: In general, over single layer subfloor, wood should be installed perpendicular to the floor truss.

A. Always follow the manufacturer's recommended installation procedure.

B. Factory-finished solid strip and solid plank flooring should be installed perpendicular to the joists or on a diagonal for any single layer subfloor. (Exception: Over diagonal, solid subfloor boards, install perpendicular to joists or subfloor direction.)

C. When 3/4" solid strip and solid plank flooring is laid parallel with the floor joists, follow one of these two steps below:

1. Add a layer of minimum 1/2" (15/32") CD Exposure 1 (CDX) plywood underlayment to the existing subfloor (as previously recommended).

2. Or brace between truss/joists in accordance with the truss/joist manufacturer's recommendations and with local building codes. Some truss/joist systems cannot be cross-braced and still maintain stability.

D. Before installing wood flooring, use an approved vapor retarder. Some examples of acceptable vapor retarders over wood subfloors include:

1. An asphalt laminated paper meeting UU-B-790a, Grade B, Type I, Style 1a.

2. Asphalt-saturated kraft paper or #15 or #30 felt that meets ASTM Standard D4869 or UU-B-790, Grade D. Aquabar and/or HWD15 are 2 examples.

3. Cover the subfloor with a good grade of #2 vapor retarders (see Perm Rating Chart in Chapter 3) ASTM 4869, lapped 2"- 4" along the edge seams. This retards moisture movement from below. Extend the felt/building paper completely to the walls. It is necessary to fasten the felt to the subfloor.

E. Wall Line Layout

1. Choose a starting wall according to the most aesthetically or architecturally important elements in the room, taking into consideration fireplaces, doors, cabinets and transitions, as well as the squareness of the room. The starting wall will often be the longest unbroken wall in the room.

2. Snap a working line parallel to the starting wall, allowing 3/4" expansion space between the starting wall and the edge of the first strip or plank run.

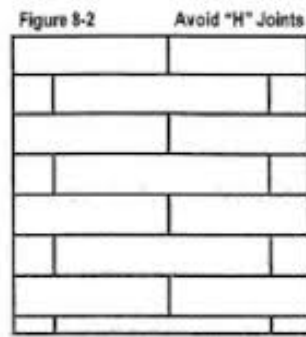
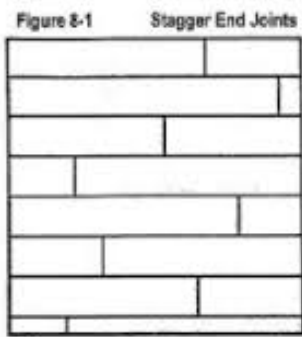
3. As a general rule, a 3/4" expansion space must be left around the perimeter and at all vertical obstructions.

4. Random-width plank is laid out with alternating courses varying by widths. Start with the widest board, then the next width, etc., and repeat the pattern.

5. Lay one row of strip or plank along the entire length of the working line.

6. Top-nail and blind-nail the first row (hand-nail if necessary), using appropriate fasteners. Denser species may require pre-drilling. Each succeeding row should be blind-nailed with the nailing machine wherever possible. At the finishing wall and other obstructions, it may be necessary to blind-nail by hand until top nailing is required.

7. Racking rule of thumb: Avoid H patterns. Stagger end joints of boards row to row a minimum of 6" for strip flooring, 8"-10" for 3" to 5" plank, and for plank wider than 5 inch, stagger as much as possible with minimal or no H joints. See Figures 8-1 and 8-2.



8. To minimize expansion on floors wider than 20 feet, more or less spacing between rows may be needed, depending on geographical area, interior climate control and time of the year.

9. Where spacing is required: Use a washer or removable spacer to leave additional space every few rows and/or start in center of room and work out to both sides. Do not use spacers that may cause damage on factory-finished products.

10. Nailing: Blind-nail through the tongue using 1½" to 2" fasteners. Use 1½" fasteners with ¾" plywood subfloor direct to concrete slab. Face-nail boards where needed using 6d-8d casing or finish nails.

Fasteners should be spaced every 6"-8" on blindnailing, or every 10"-12" on face-nailing.

11. If adhesive is used with nailing, follow wood and/or adhesive manufacturer's instructions for installing plank flooring.

12. Blind-nail, face-nail or use wood floor adhesive, as necessary, to complete the final rows.

F. Center Line Layout Note: For instructions on using the trammel point method to square a room and find the center point, see Appendix G, Trammel Point Method In NWFA Installation Guidelines.

1. Find the center of the room, measuring off the two longest walls, and snap a line down the center of that room.

2. Install a starter board on the line. Fasten the starter board to the floor using wood screws.

3. Nail the first row of wood flooring against the starter board, being careful not to move the starter board when nailing. The groove of the flooring should be against the starter board.

4. Use a blind nailer to install the remaining rows of wood flooring. Use the nailing practices described earlier.

5. After installing in one direction, remove the starter board and start rows going in the opposite direction.

6. Install a spline or a slip tongue in the groove of the board that was against the straightedge. Put wood flooring adhesive down the entire length of the groove before installing the splines.

7. Install the spline using a blind nailer. To keep the spline in alignment for the next flooring board, use a scrap piece of wood flooring to run along the length of the spline as you nail.

8. Install the remaining rows in the opposite direction. Use the nailing practices described.

*Warning installation of wood products may create wood dust, which is known to the state of California

to cause Cancer. Avoid inhaling wood dust and use a dust mask and/or other safeguards for personal protection.

HARDWOOD FLOOR WARRANTIES

Lifetime Structural Warranty:

The manufacturer warrants its products in their original manufactured conditions, to be free from defects in milling, dimension, and grade. All warranties are given to the original purchaser of the product and are non-transferable.

Residential Finish Warranty:

The manufacturer warrants to the original purchaser that the finish on its aluminum oxide factory finished products, from the date of purchase, when used under normal residential traffic conditions, as applicable, will not wear through or separate from the wood. See product information on years covered below;

Manufacturer 25 Year Finish Warranty applies on Manchester Plank, Kennesaw Plank, Autumnridge and Summit Oak products.

Manufacturer 15 Year Finish Warranty applies for Blueridge Plank and Black Forest Plank products.

Installation Warranty:

Installation of any flooring constitutes acceptance of its grade, milling and finish. The manufacturer has no control over installation methods or site conditions, and therefore cannot warrant any installation or site related issue. Installation should be done in compliance with the procedures outlined in the installation instructions and professional installer recommended. Installer and/or owner of the wood floor are responsible to inspect the flooring before installation and if they find hardwood not suitable for installation, hardwood should be returned in original packing to original place of purchase. Industry standards allow a 5% margin for error and imperfections and shall not be considered a structural defect under the terms of this warranty.

Warranty Exclusions:

Hardwood Flooring is a natural product and characteristics such as mineral streaks, knots, variations in grain and color are not considered defects. Newly installed floor will vary from samples or pictures shown and is not covered by our warranty. The use of putties during and after the installation are considered normal and is not cause for a claim against this warranty. Warranty excludes natural expansion and contraction resulting in separation between boards, or damage caused by low or excessive humidity.

The manufacturer warranty excludes indentations, scratches, or damages caused by misuse, negligence, accidents, fire, erosions, insects, pets, dirt or pebbles, shoes, furniture, other abrasives, lack of proper maintenance. Water and/or moisture damage including, but not limited to damage from broken pipes, wet mopping, steamers, cleaning products not approved or recommended for hardwood, weather or natural disasters, is excluded from all warranties. Cupping and buckling of the floor is caused by local sources of moisture and is excluded from warranty coverage.

No warranties apply to any product or products designated as thrift, antique, tavern, bargain or cabin, seconds, economy grades, D Grade. Please read all instructions and disclaimers on any cleaning products to include hardwood floor cleaning products, as cleaning products can damage the finish of your floor and are not considered manufacturer covered warranty.

FLOOR CARE AND MAINTENANCE

- Never wet mop your hardwood floors. Excess moisture or liquids can cause damage to your hardwood floor.
- Use hardwood flooring cleaners such as Capture, Mapei and other approved cleaners.
- Wipe up spills as soon as possible. Use professional hardwood floor cleaners.
- Do not use oil soaps, wax or other household products to clean floor.
- Sweep regularly or dry dust mop.
- Use door mats or area rugs with soft non-abrasive urethane backed. To prevent slippage, use an approved vinyl rug underlay.
- Normal exposure to sunlight will bring about changes in the shading of any hardwood floor as the floor ages. Area rugs should be moved occasionally as they block sunlight and may give the appearance of discoloring the rug. This is not a defect.
- Pet nails will scratch the hardwood flooring and should be kept trimmed.
- Use felt protectors under heavy pieces of furniture and all chairs.
- Protect floor when moving furniture or appliances.
- Spiked heels or shoes in need of repair can severely damage flooring.
- A humidifier is recommended to prevent excessive shrinkage in wood floors due to low humidity levels. Excessive humidity can also adversely affect your floor.
- In damp conditions, proper humidity levels can be maintained with air conditioning or dehumidifier.

WARRANTY POLICIES

Any warranty for a product distributed by Southern Wholesale Flooring Company ("Southern") is provided by the manufacturer and is subject to terms specified by that manufacturer regarding product inspection and acclimation, installation, environment control, continuing maintenance and appropriate use. Product packages include specific warranty information and installation instructions, and such information may also be provided on the Southern website. If you cannot locate the manufacturer's installation instructions and warranty information, you must contact Southern for the replacement instructions prior to installation. In all cases, failure to follow the manufacturer's instructions will void any and all warranties.

Southern will assist the consumer and / or the selling dealer in filing claims with the manufacturer. Except as offered by the manufacturer, Southern, as the distributor, disclaims all express or implied warranties (including, but not limited to, warranties for merchantability and fitness for particular purpose). Southern's liability for a defective product, if any, shall be limited to a credit of the purchase price from Southern for any uninstalled product, with apparent manufacturing defects, reported to Southern in writing within fifteen days of the date of purchase. Southern will not be responsible for incidental and / or consequential damages. Some states do not allow limitations or exclusions on strict liability, implied warranties, incidental damages and / or consequential damages, so these limitations may not apply to you.

Southern does, from time to time, offer items which are designated as cabin, tavern, thrift, seconds, etc. or are sold on close out. Notwithstanding other provisions of the Warranty Policies, such items are sold "as is", without any warranties, either express or implied.

Please contact your salesman or customer care representative, if you need manufacturer specific warranty and / or installation information or have any other questions.