

# Millstead Solid

## Installation Instructions

### Pre-finished 3/4" Strip or Plank Flooring

Read The Following Instructions Before Starting The Installation!  
SUGGESTED TOOLS AND ACCESSORIES

- Pneumatic/Manual Nailer/Stapler
- Electric Mitre Saw
- Broom or Vacuum
- Wood Filler
- Touch Up Kit
- Tape Measure
- Chalk Line & Chalk
- Pry Bar
- Safety Glasses
- Hammer

#### **WARNING: INSTALLERS AND BYSTANDERS SHOULD WEAR SAFETY GOGGLES.**

**INSTALLATIONS FOR WIDE WIDTH FLOORS:** Floors in widths wider than 3" are subject to greater dimensional change due to variations in moisture content, and may require longer acclimation times. Additionally, installers should check moisture content in multiple boards and packages to confirm equal acclimation prior to installation.

#### HANDLING AND STORAGE

Flooring must be protected from adverse moisture conditions during its transportation and must be stored 4" or more off the ground in dry warehouses under conditions which will prevent a significant change in its moisture content. Flooring should be delivered to job site 3 to 5 days before installation. Open cartons and allow flooring to acclimate.

#### SUBFLOOR

Installer should ensure subfloor is nailed properly.

##### 1. Construction:

- a. 5/8" minimum thickness, preferred 3/4" or thicker exterior plywood installed with long edges at right angle to floor joists and staggered so that end joints in adjacent panels break over different joists. Nail at each bearing with 6d threaded or 8d common nails spaced 6" on-center along all outer bearing edges and 10" on-center along intermediate joists.
  - b. 1" x 4" to 6" wide, square-edged, kiln-dried coniferous lumber, laid diagonally over 16" on-center wooden joists: the ends of all boards are to be cut parallel to the center of the joist for solid bearing. Face nail each board solidly at every bearing on the joists with two nails (7d threaded or 8d common).
  - c. 3/4 inch min. O.S.B. on 19.2 inch center or less floor joists system properly nailed.
  - d. Baseboards should be installed so that their lower edge is slightly above the level of the finished floor, but not nailed into the floor.
2. Check basement and crawl spaces: these must be dry and ventilated when strip flooring is to be installed over them. In crawl spaces a vapor barrier should be provided. Vapor barrier must be provided below subfloor on ground (6 or 8 mil. poly).
3. 3/4" solid flooring is not recommended to be installed below grade. New wood type subfloors should also be checked for moisture using a moisture meter. In general wood or plywood subfloors should not exceed 14% moisture content, with a maximum moisture variance not to exceed 4% difference between wood flooring and subfloor. Check with your local distributor for your geographical variances.

NOTE: A concrete slab is considered below grade when any part of the slab is below ground level—for example, walkout basements are below grade. Particle board is not recommended.

#### SUBFLOOR FLATNESS

Subfloors should be flat to 3/16" per 8' radius. If subfloor prep work is required, "hills" should be sanded down and "valleys" filled with an underlayment patch, developed by a reputable manufacturer for use with hardwood flooring. Do not sand sub-surfaces such as vinyl or synthetic tiles that may contain asbestos.

WARNING Installation of wood products may create wood dust, which is known to the State of California to cause Cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

#### GENERAL INSTALLATION INSTRUCTIONS

1. Time at which to install 3/4" solid flooring: All wet trades must be complete and dry well in advance before delivery and installation of wood flooring may begin. The building interior shall have been dried and seasoned and a comfortable working temperature (at least 60°F.) should exist during the flooring installation. New wood type subfloors should also be checked for moisture using a moisture meter. In general wood or plywood subfloors should not exceed 14% moisture content, with a maximum moisture variance not to exceed 4% difference between wood flooring and subfloor. Check with your local distributor for your geographical variances.
2. Preparation of subfloor:
  - a. Adequate and proper nailing as well as soundness of the subfloor should be ascertained. Foreign material shall be removed from the subfloor surface and swept clean.
  - b. The clean subfloor surface shall be covered, wall-to-wall, with 15-lb. asphalt saturated felt. Lap the edges of this felt 4" when positioning it. Double the felt around heat ducts in the floor.

NOTE: RED ROSIN PAPER IS NOT SUITABLE FOR THIS APPLICATION
3. Laying direction of strip flooring: flooring should be laid at right angles to the floor joists and, if possible, in the direction of the longest dimension of the room.
4. Starting to lay strip flooring: begin laying T&G strip flooring in a room corner with the long groove of the strips facing the wall. Provide not less than 3/4" expansion space or what will be covered by the baseboard and trim specified for the job.
5. End joints of strip: these should be staggered to achieve the best appearance in the finished floor (Min. 6 inches).
6. Nailing schedule for solid flooring: the first and last run of strips should be faced nailed then counter sunk 6" apart. Continue to blind nail each succeeding row until the nailer/stapler can be used to install the flooring. All other runs to be nailed at an angle of 45° to 50° on 6" to 8" centers at the tongue, also nail within 2" of each end joint. (Minimum of 2 fasteners per plank)
7. For pre-finished be sure to check nail gun faceplate to ensure it will not damage surface finish.
8. To avoid movement in wood floors, the relative humidity should be maintained year round at 35-55% RH.

NOTE: Prior to installation of solid flooring, the jobsite should be fully enclosed and the heating and/or air conditioning system fully operational. The thermostat should be adjusted to the expected living conditions of the owner. Flooring cartons should be opened and the flooring acclimated for 3-5 days prior to the actual installation.

NOTE: Color uniformity of all grades will be governed by the inherent variations characteristic of the wood species.

NOTE: • All crawl spaces must have 6 or 8 mil polyethylene covering entire surface of crawl space.  
• Do not install over radiant heated floors!  
• Do not install any product with visible defects

# Millstead Solid Limited Residential Warranty Program

## Limited Warranty Program

Our hardwood flooring products are manufactured from the finest raw materials. Local craftsmen create these beautiful and durable flooring products in the world's most technologically advanced hardwood flooring facilities. Naturally, products of such quality are supported by a full range of warranties from the manufacturer.

- **Residential Warranty:** Applicable products will be free from manufacturing defects for as long as you own your home. (Examples of Manufacturing defects are improper milling or grading.)
- **Finish Warranty:** We warrant that under normal residential conditions and with proper maintenance, our finish will not wear through within the amount of time specified in the Product Warranty Reference Chart. Gloss reduction is not considered wear through. Therefore, it is not covered under the finish warranty.
  - **Refinishing Warranty:** We warrant that our prefinished Solid Products can be sanded and refinished up to three times when performed by a professional sand and refinisher. Please note on surface textured products, sanding will alter handscraped appearance. On beveled edged products, stained color will remain on the beveled sides and ends.
- **Radiant Heat Warranty:** Solid products are not warranted for use over radiant heat systems.

### Regarding ALL Warranty Coverage

- It is critical that all installations are done in compliance with the procedures outlined in the installation instructions. Failure to install in accordance with the instructions will void all warranties.
- The sole obligation and liability of the manufacturer, under our stated warranties, is to repair, replace or refinish the floor, in part or in whole, at no cost to the original purchaser or to issue a refund of the purchase price, at manufacturer discretion.
- Only floors that were professionally installed will be eligible for labor cost reimbursement. If you installed the floor yourself we will cover the cost of replacement materials only. Retain your receipts for all product and installation costs.
- No warranty coverage is provided for flooring that contains obvious defects of any kind that were installed nonetheless. If before installation you discover any flooring that has obvious defects please contact Manufacturer immediately and replacement flooring will be provided at no cost.
- Our product is not intended for a full bath installation.

### Exclusions

- We cannot warrant a color match of our products to other wood products, such as stairs, stair railings, cabinets, trim, molding, etc.
- In order to maintain the recommended relative humidity (35%-55%) inside the home, installation of a humidifier or dehumidifier may be necessary. The floor is designed to perform in an environmentally controlled structure.
- Natural wood characteristics such as mineral streaks, small knots, grain variations, etc. are normal characteristics and are not construed as defects. Nature's Trademarks leave no two pieces of wood the same and color or other variations can occur. We cannot warrant against natural variations, nor the normal minor differences between color samples and the color of installed floors.
- Only approved cleaning and maintenance products are appropriate for use on our products. Use of non approved cleaners and maintenance products or any oil soap or ammonia-based cleaners will void all warranties. For a current list of approved products please call 1-800-258-5758.
- The warranty does not cover damage arising from accidents, abuse, abnormal wear, spike heels, grit, scratches, dents, excessive heat or excessive dryness.
- Gloss reduction is not considered wear-through. Therefore, it is not covered under the finish warranty.
- The warranty does not cover color changes to any products which result from UV light. Exotic and Domestic Exotics are especially susceptible and may darken due to UV light exposure. Area rugs should be moved periodically to minimize the effects of ultraviolet light on hardwood floors.
- Products designed as "bargain," "cabin grade," "seconds," "close-out," "off-goods," "non-standard" are sold AS IS. These products while structurally sound are not first quality, however will provide a serviceable

floor but no other warranties are implied or given by the manufacturer.

- Excessive ground moisture caused by natural weather conditions including (but not limited to): excessive rainfall, hurricanes, tornadoes, flooding or other natural disasters are not covered by the terms of this warranty.
- This warranty excludes and will not pay consequential or incidental damages associated with any warranty claim. Repair, refinish or replacement (or a refund of your purchase price) of flooring material are the sole remedies.
- The warranty does not cover insect infestation after the product has left our factory or scratches or stains caused by domestic pets.
- All warranties are limited to the original purchaser.
- Damage due to water saturation (including but not limited to) a leaky faucet, broken pipe and wet-mopping is excluded.
- The use of putties during and after the installation of hardwood flooring is considered normal and is not cause for a claim against this warranty.
- THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HERE OF. NO OTHER WARRANTIES EXPRESS, IMPLIED, BY OPERATION OF LAW OR OTHERWISE ARE MADE, INCLUDING BUT NOT LIMITED TO MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES SHALL MANUFACTURER BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM THE PURCHASE, USE OR INABILITY TO USE THIS PRODUCT, OR FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.
- No installer, retailer, distributor, agent or employee has the authority to increase or alter the obligations or limitations of this warranty.
- This warranty gives you specific legal rights. You may also have other rights which vary from state to state. Your rights and the limitations described above vary from state to state. Thus, it is important to retain this warranty information.
- If you need to file a claim under this warranty, first contact your Northwoods retailer, or write to us at: Technical Services • 2225 Eddie Williams Rd. • Johnson City, TN 37601
- Any and all disputes arising out of the purchase of these products or this warranty shall be subject to mandatory and binding arbitration in Johnson City, Tennessee, pursuant to the rules of the American Arbitration Association. Any trials by jury are expressly waived. Note: Please read installation instructions prior to installing.

<b>RESIDENTIAL FINISH WARRANTY</b>
30 Year Oaks 50 Year Maple & Hickory
<b>RESIDENTIAL WARRANTY</b>
Yes
<b>REFINISHING WARRANTY</b>
3 times Note: On surface textured products, sanding will alter handscraped appearance. On beveled edge products, stained color will remain on the beveled sides and ends.
<b>USE OVER RADIANT HEAT?</b>
SOLID PRODUCTS ARE NOT APPROVED FOR USE OVER RADIANT HEAT FLOOR SYSTEMS.

**NOTE:** CLAIMS WILL NOT BE PROCESSED WITHOUT PROPER RECEIPTS. CLAIMS MUST BE PROCESSED VIA AUTHORIZED DISTRIBUTOR.