

Solid Flooring

INSTALLATION INSTRUCTIONS

- Please review the following instructions before starting the strip or plank installation.*
 - Please inspect flooring material before installation. Warranties do not cover visible defects once they are installed.
- It is the responsibility of the installer/supervisor/owner to ensure subfloor and job site conditions are environmentally and structurally acceptable for wood floor installation. Problems or failures related to deficiencies in subfloor or job site damage after installation will not be covered by wood flooring warranty.
- *Recommended Maple & Hickory 4" & 5" serpentine glue and mechanically fastened. See note below.

SUGGESTED TOOLS AND ACCESSORIES:

Nailer or Stapler:

For installation over 3/4" wood type sub-floors installed over joist or truss systems a minimum **1 1/2" or 2" long cleat**, or staple should be used. Use only nailers or staplers designed for installation of 3/4" hardwood floors. 3/4" thick plywood over concrete, 1 1/2" cleats or stapler should be used. See NWFA installation guideline for details. **High moisture areas** or Rooms larger than 20 ft. by 20 ft. 1/32 aluminum spacers may be needed for extra expansion as well as 3/4" at any vertical obstruction.

i.e. walls. **Mullican recommends prefinished foot for manual and air nailers/staplers. (See fig. 1)**



HANDLING AND STORAGE:

- Flooring must be protected from adverse moisture conditions during the transportation as well as the storage of the material. The material must be stored at least 4" or more off the ground and stored in a dry area. This practice will prevent a significant change in the moisture content. Open the cartons and allow flooring to acclimate. Follow NWFA guideline for acclimation on job site! See general instructions below.
- Factory finished flooring should be installed as close to living conditions as possible!

SUBFLOOR:

- **5/8" minimum thickness, preferred 3/4" or thicker plywood** installed with long edges at a right angle to the 16" on center floor joists and staggered so that the end joints in adjacent panels break over different joists. Nail at each bearing with 6d threaded or 8d common nails spaced 10" on center along intermediate joists.
- **1" x 4" to 6" wide, square edge, 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 joists for solid bearing. Face nail each board solidly at every bearing on the joists with two nails (7d threaded or 8d common).
- **23/32" minimum O.S.B. on 19.2-inch maximum center floor joists** with system properly nailed or minimum 7/8" subfloor with 24" on center floor joists or trusses.
- Baseboards should be installed so that their lower edge is slightly above the level of the finished floor, but not nailed into the finished floor.
- Basement and crawl spaces must be dry and ventilated when plank or strip flooring is to be installed over them. In crawl spaces a vapor barrier should be provided. Follow local building codes or black vapor barrier must be provided below subfloor on the ground. (6 mil. black)
- Plank or Strip flooring is not to be installed below grade.
- All subfloors, new construction existing should be checked for moisture using a moisture meter. In general wood or plywood subfloors should not exceed 14% moisture content, or **4% moisture content** difference between 2 1/4" wood flooring and subfloor, or **2% moisture** content difference with plank floor. Check with your local distributor for your geographical variances.
- Subfloor should be flat or made to be flat to 3/16" in a 8 ft. radius.
- Particle board of any thickness is NOT ALLOWED!

- 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.
- The clean subfloor shall be covered wall to wall with 15 lb. asphalt saturated felt, SVS under layment paper, Aquabar®B, or Mullican Moisture Mat (**NO ROSIN PAPER**). Lap the edges of this felt 4" when positioning it. Double the felt around heat ducts that may be in the floor.

GENERAL INSTALLATION INSTRUCTIONS

- Before installing the flooring, ascertain the conditions. Install the flooring after the sheetrock and tile and all brick work has thoroughly dried and all but the final woodwork and trim have been completed. The building interior shall have been dried and seasoned and a comfortable working temperature (at least 60°F) should exist during the material installation.

Acclimation of Wood Floors:

- 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, or 4% moisture content difference between 2 1/4" wood flooring and subfloor, or 2% moisture content difference with plank floor. Check with your local distributor for your geographical variances.
- Remodeled or existing subfloors, Oak, acclimation time is 3 to 5 days in live in conditions with normal relative humidity and temperature. Other wood species may require a longer acclimation time.
- Always install from several boxes.
- Flooring should be laid at right angles to the floor joists and if possible in the direction of the longest dimension in the room.
- Begin laying the flooring in a room corner with the groove of the flooring facing the wall. Provide no less than 3/4" expansion space or what will be covered by the baseboard and trim specified for the job.
- End joints should be staggered to achieve the best appearance in the finished floor (Min. 6").
- Nailing should be scheduled with the first run and last run of flooring to be faced nailed then countersunk, face nails should be placed in face of wood in grain to match filler/putty. 2 1/4" wide material should be nailed or stapled every 8" to 10". Plank should be nailed or stapled every 6" to 8". Also nailing is required within 2" to 3" of the end joints.
- 3/4" plank and strip are pre-finished wood flooring products. Be sure to check nail gun faceplate to ensure it will not damage the surface finish. (See fig. 1)
- Both 3/4" plank and strip have a U.V. cured polyurethane finish.
- To avoid dimensional change and movement in hardwood flooring the Relative Humidity should be maintained year round at 35%-55% Relative Humidity. Temperature should be kept between 68°F-78°F year round.
- Exotic wood species require special attention as to acclimation, nailing and/or sanding.

NOTE:

- **Wood flooring not recommended for wet areas, full baths or shower rooms.
 - **Do not sand any subfloor that may contain asbestos or lead.
 - **Do not install over radiant heated floors.
 - **Do not install any product with visible defects.
 - **Do not use any type of tape on the hardwood finish surface. If a covering is needed after installation, the wood floor should be completely covered and covering taped to itself, not the finish of wood flooring.
 - ** ALL crawl spaces must have 6mil. Black Polyethylene covering surface of crawlspace or follow local building codes.
 - **On or above grade only.
- Recommended for maple and hickory 4" & 5" to reduce movement add a serpentine bead of high quality urethane adhesive to subfloor as well as mechanical fasteners. This will require the moisture inhibiting paper NOT to be used. (Example of adhesive- Liquid Nail or Lockeditite: urethane wood to wood adhesive.)
- *For special applications such as glue to concrete call distributor or manufacturer. (No full spread applications)



LIMITED RESIDENTIAL WARRANTY PROGRAM

MULLICAN SOLID AND ENGINEERED PREFINISHED HARDWOOD FLOORING

The limited warranties set forth below apply only to pre-finished products and are effective with purchases made after July 7, 2014. All warranties are limited to the original purchaser only.

FINISH WARRANTY

Mullican Flooring warrants that the finish will not wear through to the wood within the amount of time specified in the Finish Warranty Chart (see below), or as long as the original purchaser owns the floor, whichever is less. Please refer to the Finish Warranty Chart or to the individual product brochure for more information on your particular product. EXCLUSIONS AND LIMITATIONS DO APPLY. SEE BELOW FOR DETAILS.

MULLICAN SOLID AND ENGINEERED PRODUCT FINISH WARRANTY

SOLID PREFINISHED	ENGINEERED PREFINISHED
LIFETIME WITH CLARITAGE EXTRA BY PPG	LIFETIME WARRANTY
- ST. ANDREWS	- PONTE VEDRA
- MUIRFIELD	- SAN MARCO
25 YEAR FINISH WARRANTY	25 YEAR FINISH WARRANTY
- CHATELAINE	- RIDGECREST
- KNOB CREEK	- MEADOWBROOKE
- CASTILLIAN SOLID	- CHALMETTE
- WILLIAMSBURG PLANK	- AUSTIN SPRINGS
- QUAIL HOLLOW	- CASTILLIAN
- ST. JAMES	- HILLSHIRE
	- LINCOLNSHIRE
	- NEWTOWN PLANK
	- MOUNT CASTLE
15 YEAR FINISH WARRANTY	- MERION
- OAK POINTE	- OAKMONT
	- 15 YEAR WARRANTY
	- CASTLE ROCK
NO WARRANTY	NO WARRANTY - "CABIN", "TAVERN", OR
- "CABIN", "TAVERN",	"AS IS" - 0 YEARS
"COUNTRY", OR "AS IS"	- UNFINISHED - 0 YEARS

MATERIAL WARRANTY

Mullican Flooring warrants that the products have been manufactured in compliance with the grading rules of Mullican Flooring, and will be free from manufacturing defects for as long as the original purchaser owns the floor. Manufacturing defects do not include natural wood characteristics such as mineral streaks, knots, grain variations, normal minor differences between color of samples and the color of installed floors, color variations from board to board, or minor width variation. Due to the nature of wide width plank (3" and wider), some minor width variation is to be expected and is not considered a defect.

CASTILLIAN SOLID AQUA SHIELD MOISTURE WARRANTY

Mullican Flooring warrants that Castillian Solid installed with the Aqua Shield system will not warp, buckle or cup due to sub floor moisture for as long as the original purchaser owns the home. The Aqua shield system consists of Castillian Solid installed in conjunction with Mullican Moisture Mat. Job must be registered with Mullican Flooring and a pre installation checklist must be completed and filed with Mullican Flooring in order for the Moisture Warranty to be in effect.

** Cupping is when the long edges of the flooring boards are higher than the center of the flooring boards in excess of .0833 inches.

EXCLUSIONS AND LIMITATIONS

These warranties do not cover damage, indentations, scratches, or stains arising from negligence, accidents, abuse, fire or excessive heat, abnormal wear, construction, spike heels, grit, sand or other abrasives, dents, insect infestation after the product has left our factory, or domestic animals. Splits and cracks after move-in are not normally manufacturer related.

These warranties do not cover damage caused by use of the flooring for purposes other than those for which it was designed; damage caused by disasters such as fire, flood, wind, and lightning; damage during shipment; or any other abuse or misuse by the purchaser.

It is critical that all installations are done in compliance with the procedures outlined in the Mullican Flooring installation instructions, which can be found in each carton of flooring and/or online at www.mullicanflooring.com. No damage or defects caused by improper installation or failure to provide a suitable installation environment are covered by this warranty. Failure to install your flooring in accordance with the instructions will void all warranties.

The sole obligation and liability of Mullican Flooring under our limited warranties is to repair, replace, or refinish the floor, at Mullican's option. Only Mullican 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. (Any and all labor costs must be pre-approved by the Mullican Flooring Claims Department.)

These warranties EXCLUDE and will not pay consequential or incidental damages associated with any warranty claim. Mullican Flooring will not pay costs associated with relocation during the

repair process such as hotel, meals, or moving and storage of furniture. This limitation does not apply to claims for personal injury. Some states do not allow limits on warranties, or on remedies for breach in certain transactions. In such states, the limits in this paragraph may not apply.

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 immediately contact the dealer from whom the flooring was purchased and replacement flooring will be provided at no cost.

Only Mullican Flooring approved cleaning products are appropriate for use on Mullican Flooring products. Use of non-Mullican Flooring approved cleaning and maintenance products, including oil soap or ammonia based products, will void all warranties. For a current list of approved products, please call your local dealer, wood distributor, or go online to www.mullicanflooring.com.

The limited warranties do not cover color changes to any flooring which results from exposure to UV light. Normal exposure to sunlight will cause changes in the shading of any wood floor, and this is not considered a defect. Certain species including, but not limited to, American Cherry, Walnut, Brazilian Cherry, Tigerwood, and most Exotics, are especially susceptible to color change. Please contact your Mullican retailer for more information. Area rugs should be moved occasionally, as they block sunlight and may give the appearance of discoloration under the rug.

After your floor is installed, it is critical to maintain the temperature and humidity of the home within the ranges set forth in the applicable installation instructions for the product. Failure to follow these guidelines, especially with regard to humidity range, can result in a performance failure or damage to your floor. In addition, it is important to maintain your floor in accordance with the Mullican Flooring maintenance instructions which can be found in the Mullican Flooring maintenance flyer and/or online at www.mullicanflooring.com.

These warranties do not cover damage or unsatisfactory performance caused by excessive moisture or moisture vapor including, but not limited to, improper humidity inside the home, excessive ground moisture that migrates into the home for any reason, excessive sub-floor moisture, water leaks caused by broken pipes or appliances, improper cleaning methods such as wet mopping or automated cleaning machines, weather conditions or natural disasters such as flooding or excessive rainfall.

Since wood is a natural product, it will tend to expand and contract as moisture and humidity levels inside the home may change. Accordingly, normal expansion and contraction which results in minor separations between flooring boards are not covered by these warranties.

Any Mullican Flooring product which is designated as "cabin grade", "tavern grade", "second", or "as is" is not covered by the above warranties.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, OR AS OTHERWISE SET FORTH HEREIN. NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE ARE MADE, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES SHALL MULLICAN FLOORING BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM THE PURCHASE, USE, OR INABILITY TO USE THIS PRODUCT, 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. 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. NO INSTALLER, RETAILER, DISTRIBUTOR, AGENT, OR EMPLOYEE OF MULLICAN FLOORING HAS THE AUTHORITY TO INCREASE OR ALTER THE OBLIGATIONS OR LIMITATIONS OF THIS WARRANTY.

HANDLING OF CLAIMS UNDER THIS WARRANTY

Claims must be filed within the coverage period, and information verifying the date of purchase may be required. Mullican reserves the right to have a designated Mullican representative inspect the floors and remove samples for technical analysis.

If you need to file a claim under this warranty, first contact your Mullican Flooring retailer. If for some reason, your retailer is unable to satisfy your claim, you may contact us at: Mullican Flooring, Claims Department, P.O. Box 3549 Johnson City, Tennessee 37602.

Any and all disputes arising out of the purchase of Mullican Flooring 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.

MULLICAN SOLID AND ENGINEERED PRODUCT FEATURES

PRODUCT	PAD & RECOAT	SAND & REFINISH *	INSTALL OVER RADIANT HEAT	WHERE TO INSTALL
SOLID	YES	YES	NO	ON GRADE ABOVE GRADE
ENGINEERED	YES	YES	YES (OAK ONLY)	ON GRADE ABOVE GRADE BELOW GRADE

*If your floor is sanded down to the bare wood and a new finish is applied, all finish warranties must be assumed by the finish manufacturer.