

$\frac{3}{8}$ " 10mm
 $\frac{1}{2}$ " 12.7mm

$\frac{9}{16}$ " 14mm
 $\frac{5}{8}$ " 15mm



MULLICAN[®]
— HARDWOOD FLOORING —

Engineered Flooring Staple Down Installation

STAPLE DOWN INSTRUCTIONS

ATTENTION

Inspect **ALL** materials carefully **BEFORE** installation. Warranties **DO NOT** cover materials with visible defects once they are installed.

It is the responsibility of the installer/owner to determine if the job site subfloor and job site conditions are environmentally and structurally acceptable for wood floor installation. Mullican Flooring declines any responsibility for wood floor failure resulting from or connected with subfloor, subsurface, job site damage or deficiencies after hardwood flooring has been installed.

STAPLE DOWN INSTALLATION

Tools: 3/8 and 1/2 thick products can use a 1 1/4 or 1 1/2 inch 18 gauge staple, 7/32 or 1/4 inch crown or 1 1/4 inch 20 gauge cleat. 9/16 and 5/8 thick products can use a 1 1/2 inch 18 gauge staple. Cleat should be 1 3/4 inch 18 gauge cleat. **Do not use staples or nails intended for 3/4 inch solid flooring products.**

Wood type subfloors should also be checked for moisture using a reliable moisture meter. Wood or plywood subfloors should not exceed 14% moisture content, the moisture content difference between hardwood flooring and subfloor should not exceed 4%. Check with your local distributor for your geographical variances.

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 minimum 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. Black vapor barrier must be provided below subfloor on the ground. (6 mil. black)
- 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 15lb. asphalt saturated felt, Aquabar[®] B (**NO ROSIN PAPER**), or Mullican Moisture Mat. Butt the edges when positioning one or the above mentioned moisture retarder. Double the felt around heat ducts that may be in the floor.

General Staple Down Installation Instruction:

- Time at which to install hardwood flooring: Lay only after sheetrock and tile work are thoroughly dried and all but the final woodwork and trim have been completed. The building interior should have been dried and seasoned and a comfortable working temperature (at least 60° F) and a relative humidity of 35 – 55% should exist during and after installation.
- **DO NOT open until ready to install.**

Preparation of subfloor: Subfloor irregularities and undulation may cause any wood flooring installation to develop hollow spots between the flooring and subfloor. These hollow spots are NOT the result of any wood floor manufacturing defect and are NOT covered by the Mullican Flooring warranty.

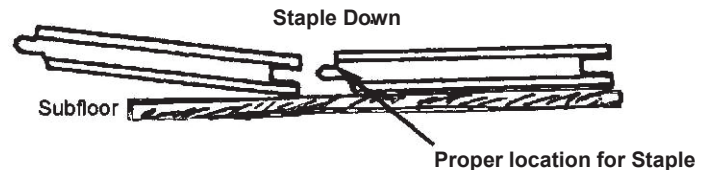
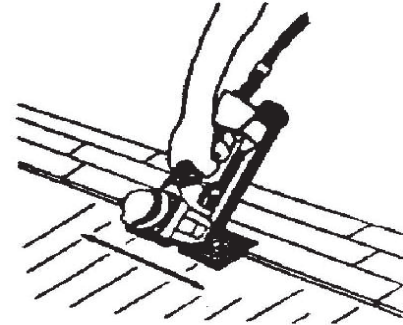
- Adequate and proper stapling as well as soundness of the subfloor should be ascertained. Foreign material shall be removed from the subfloor surface and swept clean.
- The clean subfloor surface shall be covered, wall to wall, with 15 lb asphalt saturated felt, Aquabar[®] B, or Mullican moisture mat (**NO ROSIN PAPER**). Butt the edges of this felt when positioning it.
- Laying direction for plank 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.

Note: Normally, expansion space around the room should be the same distance as the thickness of the hardwood flooring.

- The floor should be installed from several cartons at the same time to ensure color and shade mix.
- End joints should never be closer than 4" from each other.
- Staple Engineered Plank Hardwood Flooring: The first and last row of flooring should be face nailed and filled, as well as staples placed at Tongue. Staple or Nail (cleat) each board along the tongue every 4 to 6 inches apart and within 2 inches of each end joint. This should be done to the entire floor.

Notes:

- To avoid movement in hardwood floor relative humidity should be maintained year round at 35-55%. Temperature should be kept between 68°F-78°F year round.
- The use of matching wood flooring putty to cover small cracks or face nail holes should be considered normal in hardwood flooring installation.



Radiant Heat Subfloors (OAK ONLY) – See instructions on reverse page (Glue Down Installation) or go to: www.mullicanflooring.com

FLOATING INSTALLATION

- 3/8", 9/16", 5/8" or 1/2" product **3" width or wider** can be floated in some, not all, installations. If necessary call your supplier for details or go to: www.mullicanflooring.com

NOTE:

** 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.

Trim pieces available from your Mullican Flooring Distributor.



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