

Engineered LOC Floating Installation Instructions

FLOATING 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. Flooring manufacturer 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.

CHECKLIST

You find additional information to each section further below:

- Store the packages in the future room climate and open package after package when you install.
- This floor will be floating installed, i.e. always keep a minimum 3/8" distance to all walls and vertical obstructions.
- · Check your subfloor, it must be dry (measure always!), clean, firm, and flat.
- Measure the room, decide installation direction. Note the limitations as per below due to natural behavior of wood!
- Floor heating see special advices and requirements <u>follow the instructions</u> <u>from the system supplier!</u>
- Check your floor continuously during the installation. Defective boards that are installed are not covered by warranty.
- Keep room climate 35-55% RH at 64-78°F, before, during, and after install.

GENERAL INFORMATION

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.

Note: Normal expansion space around the room should be the same distance as the thickness of the hardwood flooring or a minimum of 3/8".

Thoroughly clean subfloor:

Remove paint, wax, oil, plaster, "sheetrock mud" and other foreign materials, as well as obvious surface irregularities. #3-1/2 grit open coat paper may need to be used to grind a concrete subfloor. This will loosen any dirt, loose concrete or contaminates. Sweep or vacuum thoroughly. All previous or existing glues or adhesives must be removed before installing new hardwood floor. Concrete subfloors must be clean, flat, sound and sufficient compression strength (3000 lbs. P.S.I.) being sure that the surface is NOT slick.

Sections not flat due to waviness, trowel marks, etc. are to be flattened by grinding or the use of leveling compound. Especially along the walls, the subfloor flatness must be checked and if necessary improved. Flatten to 3/16" in 10' radius. In addition to cement subfloors, these wood flooring products can be installed over dry, flat subfloors such as plywood.

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 $35-55^{\circ}$ s should exist during installation. If subfloor is concrete, check for dryness see below. If moisture is present, do not lay. All concrete subfloors on or below grade need to be tested.

Concrete subfloor Moisture Testing:

Electrical Impedance Test and Electrical Resistance Test (Concrete Moisture Meters) Follow Moisture Meter MFG Guidelines. If Meter shows possibility of excess moisture further testing is required. Calcium Chloride Test. See below.

Relative Humidity Test (Standard test method for determining relative humidity on concrete floor slabs using Situ Probes. If test shows over 75% vapor retarder must be used or wait for further curing.

Calcium Chloride Test ASTM F-1869 Readings over 3 lbs and up to 7 lbs vapor retarder needed.

As part of your subfloor preparation remove any existing base, shoe mold or doorway thresholds. These items can be replaced after installation, but should be replaced in such a way as to allow at least 3/8" room for expansion around the perimeter of the room. All door casings should be notched out or undercut to allow 3/8" room for expansion and to avoid difficult scribe cuts. This is easily done by placing a piece of the engineered product on the subfloor as a height guide for your handsaw or jamb saw.

The use of flooring putty to cover small cracks or face nail holes should be considered normal in hardwood 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 and no more than 4% MC difference between wood flooring and subfloor. Check with your local distributor for your geographical variances. If the plywood is used as an overlay over the existing subfloor, the thickness of the overlay material must be such as to yield a total %" subfloor thickness.

Floor Heating – OAK SPECIES ONLY

Installation over subfloor heating – some important issues. Max allowed temperature on top of the wood is 75°F.

Important: Follow the heating regulation recommendations given by the system supplier.

Please note two-in-one foam underlay must be placed on top of the sub-floor either made of cement screed/concrete, etc. or also over wood!

INSTALLATION PREPARATIONS

General

Measure the area to be installed and define the installation direction. It is recommended to install the length direction of the planks parallel to the main light direction. (See figures on page 2.)

Floating Installation

Your floor is made to be installed floating. Leave an open expansion gap around the whole perimeter (use wedges), i.e. also at pipes, stairs, columns, door frames and thresholds.

The floor must be able to move free – do not connect or install tight to any construction part. Rooms with off square areas like for example L, T, U shapes, separate the areas with an expansion joint and especially always in door openings.

Contact your distributor for further information.

AFTER THE INSTALLATION

Room climate - humidifier or de-humidifier needed?

At all times, before, during and after installation, the recommended room relative humidity (RH) of 35-55% and temperature of 68-78°F should be kept. If necessary install a humidifier/dehumidifier to ensure the best climate for yourself, furniture, and your floor.

Installing the floor:

- 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 9 inches or half the distance of the plank from each other. (See figure 8.)
- · Install base and molding after floor installation.

Floor protection furniture, entrances

Stick felt pads to chair and other pieces of furniture legs. Place doormats at out door entrances

- Do not mop floors.
- For maintenance see www.mullicanflooring.com
- · Do not use tape on finish.

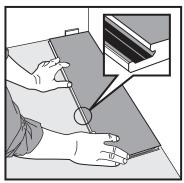


Fig 1.
First plank, first row. Start in a left-hand corner of the room with the locking strip (groove) facing the room. Remember to leave a gap between the wall (left) and the board. It is practical to adjust the gap between the long sides and the wall later, when three rows have been installed.

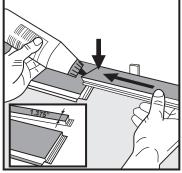


Fig 2.
Joining length cut panels. First row(s).
Glue the joint with white glue, put a weight over until the glue has hardened.

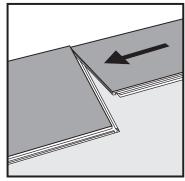


Fig 3.
Second plank, first row
Place next floorboard tight to the short
end of the first one in the corner.

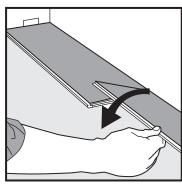


Fig 4.
Then fold down with a single action movement. Make sure the long sides of the planks make a straight line. Complete the first row in the same way.

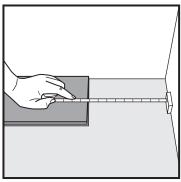


Fig 5.
At the end of the first row, put a distance of 1/2", to the wall and measure the length of the last plank to fit.

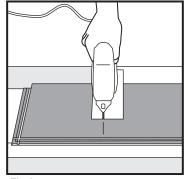


Fig 6.
Cut with a saw – hardwood turned down or with a hand saw with the hardwood visible.

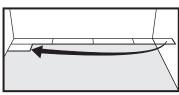


Fig 7. Second row.



Fig 8.

General. Minimum distance between short ends of planks in parallell rows shall not be less than 9" or half the distance of the plank.



Fig 9.
Second plank second row. Place the floorboard tight to the short end of the previous panel and fold down in a single action movement.

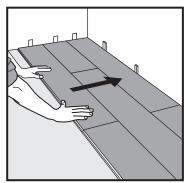


Fig 10. After 2-3 rows. Adjust the distance to the front wall by placing distances $\approx 1/2$ ".

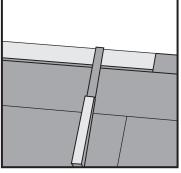


Fig 11.
Last row.
Cut the panels lengthwise and glue the short ends.

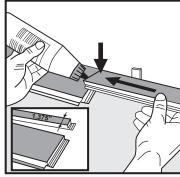


Fig 12.
Joining length cut panels. First/last row(s). Glue the joint with white glue, put a weight over until the glue has hardened.



Fig 13.
Horizontal installation (where angling is not possible). Cut off the locking element by using for example a chisel.

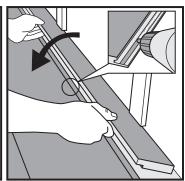


Fig 14.
Put white glue along the adjusted profile and press the panels horizontally together.