

Installation of Engineered Pioneered Wood Flooring

Engineered Pioneered wood floors can be installed on a variety of subfloors including concrete, plywood, particle board, linoleum, wood and ceramic tile. Engineered Pioneered floors can be stapled down, glued down or floated. A floating floor is glued together in the joints, but is allowed to "float" unattached on top of the subfloor. When installing in new homes, the interior must have been acclimated to normal moisture and temperature levels during at least 30 days prior to installation by heating or air-conditioning. A concrete subfloor must be cured a minimum of 60 days before installation of an Engineered Pioneered floor. The relative humidity before, during and after installation should be 30 - 60 % (45 - 60% is normal).

On concrete, it is necessary to check the moisture content prior to installation. A calcium chloride moisture test provides the best method. Using a moisture meter in previously drilled holes also works well. A less exact, but often used method, means placing a 3x3 foot piece of polyethylene in two to three places on the concrete subfloor and duct taping these to the concrete. If, after 24 hours, no condensation is visible, the concrete is dry enough for a wood floor installation. Should condensation be evident, the concrete either needs longer curing, requires a moisture barrier, or it may be too moist for wood flooring. Please consult your local dealer for a thorough evaluation before proceeding.

For installation over radiant heated subfloors, all three installation methods may be used over plywood or wafer board subflooring. When stapling, it is very important not to accidentally puncture heating pipes. Over concrete or Gyp-crete, engineered Pioneered floors may be glued down or floated. Whenever the floating method is used, a polyethylene vapor barrier must be installed. For further instructions, please see the Radiant Heat Installation and Maintenance Sheet.

Engineered Pioneered does not recommend its flooring products to be stapled down over oriented strand board (OSB) or particle board subfloors.

Keep the floor boards in their packages, unopened, in dry storage until installation. Claims regarding any visibly defective floor boards should be made prior to installation.

The subfloor or old floor has to be well dried and level. Levelness of the subfloor is controlled by placing a 78" straight edge in a multitude of spots on the subfloor. Maximum tolerance for floating a floor is +/- 1/8" in 6 1/2 feet. Mark uneven areas and level these by using self leveling underlayment compound, floor felt or, in extreme cases,

possibly even plywood stapled or glued to the subfloor. A floor sander can be used to smoothen bumps on many subfloors.

When installing on concrete always use self leveling compound. There are several to choose from, among them Thoro, Flo-Top and Ardex K-15. They are mixed with water and are relatively easy to work with. Please remember, that all of these contain water, which must be allowed to dry adequately prior to installation of your Pioneered floor. This usually takes from 24 to 48 hours, depending on the type of subfloor (slabs take longer), temperature and humidity.

When subfloor preparation is completed, it is advisable to check the subfloor once again for levelness. For a floating installation you should be able to place the straight edge anywhere on the subfloor and nowhere have a gap exceeding 1/8". Staple and glue-down installations allow greater tolerance.

To install an engineered Pioneered floor, the following tools are needed: hammer, T-square, pencil, flat crowbar, saw (skil saw or miter saw), stick saw, chisel, tape measure, drill, wedges, wood glue (when floated) and tapping block (an 8" piece of 2" x 4" works fine).

It is important that you preplan the installation. Measure the width of the room. Normally, it will be necessary to cut the last run of boards lengthwise, but in two cases the first run should also be cut: a) when the last run becomes less than 2" wide, b) when the wall is not straight. Measure so that the first and last runs will be approximately the same width.

When installing on below grade concrete, or when otherwise required, use 12 mil polyethylene sheeting (or two layers of 6 mil) as insulation against moisture. The sheets must overlap by at least 12" and be turned up 1" along the walls. For best results seal seams with duct tape. When installation is complete cut away excess polyethylene along walls.

Put down one layer of 30 lb. floor felt, cork, 1/8" high density foam or other approved underlayment material. Do not overlap. When using granulated polystyrene type underlayment sandwiched between layers of polyethylene, it is important to tape all seams using PVC tape at least 2" wide. When stapling down your Pioneered floor, 15 lb. floor felt or rosin paper can also be used.

Provide expansion gap of 1/4" to 3/8" between the floor and the walls. This is also necessary around pipes, columns etc. Use the wedges to maintain proper gap. Remove wedges after completed installation. For large installations, allow 1/16" expansion for every 36" of floor.

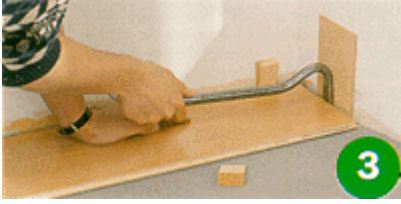


Lay the first run of boards with the groove side facing the wall. Mark a straight chalk line to ensure that the first run lies absolutely straight. Do not take it for granted that the wall is straight. Whenever required, scribe the first run of boards with the preplanning in mind. This is done by laying the first run absolutely straight along the wall using a chalk line as your guide. Using a piece of floor board or wood placed on top of the board and tight to the wall, draw a pencil line on the first run by holding the pencil to the wood piece and pushing it along the entire wall. Then cut along pencil line using a stick saw.



Never force a floor board to follow the wall. Use wedges to ensure proper expansion gap and straightness of the first run. To cut the last board of a run to length, turn it around so that tongue is facing tongue or groove is facing groove on both end joints and the board to be cut is against the wall with proper expansion gap.

Measure and cut.



Turn the cut end towards the wall. Glue the end joint and carefully tighten it by using a crowbar. Remember to always place a wedge between crowbar and wall to prevent damage.

Start the next run and stagger end joints in adjacent runs by at least 20". Use a wedge on the end.

Repeat this run after run. Use a block when knocking the boards together to prevent damage to tongue and finished edges. Do not use a cut-off piece of flooring, since this transfers the impact of the hammer directly into the wear layer, instead of the tongue and may cause dents. Lightly tapping the boards together will usually work best. Heavy pounding may cause the board to bounce back and leave a crack between the floor boards. To easier achieve a tight end joint, start knocking the board together from the open end and work your way towards the end joint swinging the hammer in the direction of the tightening end joint.

Apply a continuous bead of wood glue to the top side of the groove. Glue both end and side joints. Do not apply glue into the bottom of the groove, since this leaves no room for glue to spread and may prevent a tight joint.



Cut last boards to fit final available space. To ensure correct measurement of the last run, place board to be cut exactly on top of the last board installed. Use a short, full width piece of board and place it on top of board to be cut and tongue flush with the wall. Push the short piece along the wall and mark on the board to be cut. Use a crowbar to tap the last boards firmly into place. Remove all wedges after installation is completed.

When stapling your engineered Pioneered floor, use a pneumatic floor stapler with 1 1/2"-2" serrated floor staples.

After the first run is laid straight, face nail the edge as close to the wall as possible. Use wedges to ensure it stays straight.

Staple above the tongue 3" from either end and 8" to 10" apart. Face nail the last run the same as the first. Whenever necessary, use a nail set to drive the last part of the nail to avoid damage to the surface of the board. Should the stapler be specifically designed for 3/4" floors, it may be necessary to place a thin distance plate on the base of the stapler to achieve proper nailing angle.

For glue down applications we recommend urethane based adhesives, such as Bostik's Best by Bostik. Since this type of adhesive does not contain water or chlorinated solvents, it allows for the wet-lay method of installation. Suggested trowel size for use with Bostik's Best when installing engineered flooring is a square notched 1/4" x 1/8" trowel. For additional detailed installation instructions, please follow the procedure as required by the adhesive manufacturer. Side joints must not be glued when nailing or gluing down the floor.

Practical Tips:



Cutting off door jambs. Place a piece of floor board with underlayment underneath, next to the jamb and saw as seen in the picture. The floor is then inserted underneath door jamb. Remember to maintain proper expansion gap, even where you cannot see the floor.



Base board or shoe molding. Press these down with a piece of board of 2" x 4", while nailing them to the wall.

If you have to continue the installation from the groove side, insert a slip tongue by gluing and tapping it into the exposed groove. Continue the installation.

Pioneered manufactures a floor of excellent quality with very tight and exact milling tolerances by using diamond cutters. On rare occasions these tolerances may be slightly tighter than normal. Should this occur, it may mean that the floor boards do not fit together as expected. In this case, simply take a piece of heavier grit sandpaper, fold it until it provides a tight fit in the groove of the floor board and pull it through the groove until proper fit is restored. Once is usually enough.