



NAILDOWN INSTALLATION

Note: These instructions are intended to provide a thorough description of the **naildown** method of wood flooring installation including details that may or may not pertain to your individual jobsite. If you have any questions, you can email them to info@planethardwood.com, or call Planet Hardwood's home office in Vermont at 802-482-4404.

For the best results, unfinished flooring should be introduced to the job site for a chance to acclimate, for 4-5 days or more, to the targeted environment of the occupied building. It is important that all the "wet" work like concrete and sheetrock are no longer giving off moisture. The wood flooring should be stacked so as to allow all surfaces exposure to the air. Small pieces of wood ("stickers") can be used to separate the layers. For prefinished flooring, do not open flooring packages until you are ready to begin installation. Make sure the moisture content of the room and the sub-floor is appropriate for a wood flooring installation. Please check your flooring to make sure the correct species, style, and quantity match your order, and the bill of lading. Check each piece of flooring for any manufacturing defects or factory damage **before installation**, and put aside for replacement. Only install flooring deemed acceptable. Once the flooring has been installed, it is deemed acceptable of anything visible or apparent.

Flooring from Planet Hardwood is covered under a manufacturer's warrantee, which depends on the proper use of materials and tools. Failure to follow installation instructions and recommendations will void the warrantee coverage.

Perform jobsite and subfloor evaluation as described in **GENERAL INSTALLATION INSTRUCTIONS**, and correct any problems. Solid wood flooring can be installed ABOVE GRADE or ON GRADE using the naildown method of installation. Naildown installation is appropriate over a wood or plywood subfloor. Refer to SUBFLOOR CONDITIONS / WOOD-PLYWOOD in GENERAL INSTALLATION INSTRUCTIONS. Prepare subfloor for installation.

For NAILDOWN installation, you will need the following tools:

Hammer	1/2" Expansion Shims
Tape Measure	Pencil
Safety Glasses	Broom
Hand or electric saw	Pry Bar
Square	Side Nailing Machine
Chalk Line	Rubber Hammer (Included with Nailing Machine)
Electric Drill	Nail Set
Finishing Nails	

Carefully remove any horizontal trim like baseboards, doorway thresholds, or shoe moldings, as they can be re-used once the floor has been installed. Door casings and vertical trim that runs to the floor should be undercut to avoid difficult scribing. A piece of flooring can act as a saw guide. Thoroughly sweep and vacuum all debris from the subfloor.

TIP: You may leave the baseboards in place and use an additional moulding to cover the 1/2" expansion space. Place the 1/2" shims against the baseboard instead of the wall and use a quarter-round or shoe moulding to conceal the expansion gap.

Start with the groove side of the flooring facing the wall. If the starting wall is irregular, not straight, or out of square, scribe and cut the first row of planks to match the variation, and "square up" the first row with the rest of the room. The first row of planks establishes the basis for building the rest of the floor, so it is very important that the first row is square and true. Allow for 1/2" expansion space (to be concealed later with a baseboard or molding) between the edge of the flooring and any fixed element in the room like walls, columns, islands, casework, etc.. A temporary 1/2" shim between the floor and the wall will maintain the expansion space. Pre-drill and top nail the first row with 8d finish nails every 8"-10", nailing as close to the wall as possible. If the baseboard or molding does not conceal the nail heads, then the set nails should be filled with a matching wood putty suitable for hardwood flooring. Continue with full boards until the row is complete, cutting the last piece to allow for the 1/2" expansion space at the end.

TIP: If nailing an engineered floor, take care to position and set the nail in the "nail pocket" milled into the profile of the flooring at the top of the tongue, and to properly adjust the depth of the nail to avoid "dimpling". To prevent end gapping, apply carpenters yellow glue to the top end corner of the grooves of each board. Flooring less than 5/8" thick usually requires a different "shoe" or base to the flooring

After the entire first row is established and top nailed, "blind" nail the first row through the tongue using 1 1/2" - 2" cleats and a nailing machine adjusted for the thickness of the floor (usually 3/4"). Blind nailing refers to nailing flooring through the tongue on an angle so the nail head is hidden by the next row of flooring. Only the first and last row, or places too limited or awkward to fit the nailing machine, should require top nailing or blind nailing by hand. If blind nailing by hand, pre-drill a hole at the proper angle using a drill bit with a slightly smaller diameter than the 8d finish nails and set them carefully with a nail set. Subsequent rows are held down by the tongue of the previous row on the "back" edge, and blind nailing on the front edge.

TIP: Sometimes it becomes necessary to change the direction of the flooring, like continuing the floor through a doorway to another room or closet, starting from the groove side. On those occasions when the floor must be laid groove to groove, a spline that mimics the shape of the tongue must be glued into the groove of the secured flooring, converting a groove edge to a tongue edge. This will allow you to continue in this direction, tapping only the tongue side, using the installation procedures described previously.

Subsequent Rows: Start each new row with the cut-off end of the previous row, making sure ends of the flooring are staggered at least 4" or 1 1/2 times the width of the flooring, whichever is greater. Use the rubber side of the mallet to position the wood snugly against the adjacent pieces. If tapping against the groove, take care not to damage the surface of the flooring. Lay the flooring row by row following these procedures: Start with the cutoff board from the previous row. Place snugly against adjacent pieces and blind nail. Most nailing machines are air-driven with a compressor and do not require great strength to activate. Pressure should be set at 90psi, with slight adjustments up or down if necessary depending on the hardness of the wood. Place the next full board tight to the first board in the row (the cut-off). Make sure all seams are tight, and blind nail through the tongue along the long edge at approximate 8" intervals and within 2" to the ends of each piece of flooring. At the end of each row, cut the excess length (leaving 1/2" expansion space), and use it for the beginning of the next row if over 4" long.

Last Row: The last row may not allow a full width board. Scribe the last row to accommodate any irregularities in the wall, leaving the 1/2" expansion joint. Pull last row tight with a pull bar. If the wall is straight, an easy way to size the width of the last row is to lay a row of flooring directly on top of the last installed row, facing the tongue towards the wall. Take a short piece of flooring tongue side facing the wall, and place it face down on top of the stacked row, with the tongue against the wall. Draw a pencil line on the row moving down the wall. The line will define the width of the last row.

TIP: Sometimes the dimension of the room and the width of the flooring result in a very narrow last row. You can adjust the last row width by ripping down the width of the first row. This is usually done if a full width first row, results in a last row that is less than 1" wide.

After Installation: Remove all expansion space shims, and apply standing and running trim to cover expansion spaces and nail heads. Do not attach trim to flooring.