ArborCraft

Engineered–Floating

3" and 5" Widths

(minimum 3/8" thickness)

General Instructions

Storage Conditions
All flooring product should be stored in a climate-controlled area, which is equal to the environment it will be installed. Flooring should not be delivered to the job site until all "wet trades" are completed, and the subfloor moisture has been determined to meet the recommended moisture level required for installation. ***(To assure the moisture warranty will be valid in case of future problems please document the method and results of testing prior to installing. Keep a copy for records and give a copy to the homeowner with the warranty registration.)*** Packaging must not be removed prior to installation. A maximum moisture variance not to exceed 4% difference between the subfloor and the flooring must exist prior to installation. Upon delivery to job site, stack unopened boxes above grade only in a "waffle" pattern to allow for airflow until installation.

Pre-Installation Guarantee
Although each board is subject to stringent quality assurance checks before it leaves our factory, the installer should inspect again before installation. Any defects should be reported, and we will immediately arrange for replacements to be provided. We offer pre-installation guarantee of our products returned unused/unopened.

Pre-Installation Planning (Requirements)
Interior walls should be complete of all "wet trade" work, and should be thoroughly dry prior to installation.

The relative humidity must be between 35-55% before installation can begin, and should remain at this level year round. **Flooring installed or exposed to conditions outside the recommended levels will react *inconsistent* with normal expectations, and void the manufacturing warranty.**

The heating and cooling system must be installed and maintaining a minimum 60°F for at least 14 days prior to installation. All doors and windows must be installed. All water drainage must direct away from the foundation, with all gutter and downspouts in place.

Basements and crawl spaces must be dry and well ventilated. Adequate ventilation, and 6-8 mil black polyethylene film is essential to divert moisture away from the framework, subfloor and flooring. Check for moisture (see requirements).

Never install your ArborCraft Floors in a full bath.

Do not use flooring planks or stair nosing strips to build stair treads. Stair nosing pieces are designed to transition the floor to a down-step or set of stairs, not for individual stair construction.

The use of putty to fill small gaps should be considered normal in wood floor installation.

Always install from various boxes to ensure accurate color and grain mixing. This is extremely important when working with wood species or grades that have drastic color variation. Loose lay rows before installing, and remove any boards that are aesthetically unpleasing or have natural defects.

Do not install any material that is defective or may have been damaged. We do not accept responsibility for any costs incurred when plank(s) with visible defects have been permanently installed.

The key to a smooth installation is making sure there is no deflection in the starter row during installation, both at the back and sides of each row. This is of most concern when using the floating method of installation, as the starting row is not secured to the subfloor. Begin installing the floor in a stair step fashion. Work each successive plank into place, continuing the stair step process until three full rows have been installed. After three full rows are in place, re-check that you are square to the adjacent wall, and all wedges are secure. Since the floor is floating, repositioning the installed flooring and re-setting the wedges during initial set-up will allow for minor adjustments to the positioning of the installed planks. Although not necessary, allowing the initial three rows to sit for one hour will securely bond the planks together prior to installing the rest of the floor. If you leave the floor for any length of time, be sure all planks are securely installed in the correct position, as adjustments become difficult over time, and securely bond in one hour.

The use of a backer board is recommended to assist with the starting of the first few rows. Begin installing the Floating Engineered against the secured backer board. After the floor is installed across the room, remove the backer board, and install the final piece of wood and matching foam underlayment.

Use a minimum 20-ounce hammer to tap into the block. Engage the end joint first, and work the board in at an angle, starting from the outside, and tapping toward the previously installed plank. Use firm even strokes against the tongue side only.

Tap the block parallel to the flooring. Do not stand and swing the hammer perpendicular to the flooring. For best results simply slide the hammer across the foam underlayment into the tapping block, using firm strokes.

Only use the recommended tapping block to install ArborCraft Floors. Cut pieces of plank, or other makeshift tapping blocks can damage fit of the tongue, or the face of the plank.

INSTALLERS–Advise your customer of the following:
Varying levels of humidity and temperature will affect the performance and appearance of Wood Flooring. Care should be taken to control the environment the floor is exposed to. Heating season brings low humidity (dry air) that can lead to shrinkage and cracks in the wood floor. Non-heating season brings high humidity (humid/wet air) that can lead to expansion, cupping, or buckling of the wood floor. To protect your investment and to assure long

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lasting satisfaction we recommend that the Relative Humidity be kept at 35%-55% year round. Problems arising from lack of environmental control inside the building the floor is installed in is not covered under the warranty.

NOTE: Installing 5" widths adds to dimensional stability of flooring. Installing 3" widths is approved also.

Helpful Hints:

1) Start by installing the pre-cut planks along the wall following the directions listed above. Be sure to allow for expansion around the perimeter of the flooring with the use of wedges. Guidelines for expansions space are the thickness of the product being installed.
2) Lay the planks along the chalk line, being sure that the floor is installed absolutely straight. Use the pull bar to engage the sides and end joints of each successive plank. **The use of putty to conceal small gaps should be considered normal in wood flooring installation.**
3) After the initial 3 rows are installed, re-check for squareness, and secure all wedges. Do not install pieces less than 9" in length. End joints should be staggered a minimum of 6" between end joints of adjacent row.
4) Begin the next row with the leftover piece from the row before. Be sure not to visually repeat the end joints throughout the installation. Continue installing the floor across the room, being sure each board is placed in position and fully engaged as the glue becomes more difficult with time, and will permanently bond in one hour.
5) Doorjambs can be removed and replaced, however it is much easier to undercut them. Use a leftover piece of the plank as a guide to mark the bottom of the doorjamb, and use a fine tooth saw to make the cut, allowing the foam underlayment as well. The installed plank should slide easily under the doorjamb with no restriction.
6) Installing the last row:
   Most often the last row does not fit in width. When this occurs, follow this simple procedure: Lay a row of boards, unglued, tongue toward wall, directly on top of the last installed row. Take a short piece of floating floor with the face down and the tongue against the wall. Draw a pencil line along the groove side of the small plank, moving down the wall. The resulting line gives the proper width for the last row, which when cut, can be wedged into place using the pull tool. Make sure when the installation is complete that all wedges are removed, and the expansion gap is covered with the appropriate moldings. Always attach trim work to the wall or other vertical object, never to the hardwood.
7) Maintaining the floor:
   Protect the floor with fabric type floor protectors such as felt back pads under all furniture.
8) Place protective mats under chairs with wheels, by entrance areas, and in high traffic areas. Use only ArborCraft or other approved cleaners. Never use oil base or ammonia based cleaners on your ArborCraft hardwood flooring.
9) Minor damage can be repaired with ArborCraft Touch-Up Kits.

Subfloor Requirements

The subflooring must be flat, firm, structurally sound, clean and dry prior to installation. Test for moisture. If high moisture levels are found, **do not lay the floor**. (Refer to subfloor moisture requirements chart below to determine installation requirements.) Subfloor requirements for wood type subflooring is a preferred 3/4" or thicker plywood or OSB rated underlayment with a maximum 19.2 inch o.c. joist span. Existing wood flooring, or solid plank T&G is also acceptable. The wood subfloor must be securely fastened before installing your new wood floor. Be sure to check that your subflooring material is dry, and secured with a fastener every 6" along the floor joist to avoid squeaking, and potential gapping of the attached wood floor. The maximum allowance for both deviation and deflection is not to exceed 3/16" per 8' span.

Concrete subflooring must be cured to a hard, dry, non-powdery finish. The maximum deviation in the slab cannot exceed 3/16" per eight-foot radius for floating Engineered. Dry sand may be used to fill depressions less than 1/4" in depth. If depressions are greater than 1/4" use a Portland base leveling compound.

NOTE: Subfloor irregularities that cause wood flooring installation to develop movement or hollow spots between the subfloor and the wood flooring, are NOT the result of manufacturing defects and are not covered by ArborCraft warranties!

For concrete subfloors, when ArborCraft flooring will be installed directly to the subfloor, one of the following moisture tests must be performed and documented prior to installation. In any situation when test results indicate moisture levels exceeding the guideline for that test ***DO NOT INSTALL THE FLOORING****. No warranty coverage will apply.*

Subfloor Moisture Requirements

Calcium Chloride test (maximum 3.0 pounds)
Tramex Moisture Meter (maximum reading of 4.5)
Delmhorst G-40 Moisture Meter (reading of green/dry)
Mat Test (Visual Condensation)

New wood type subfloors should also be checked for moisture using a reputable manufacturers moisture meter, designed for use with flooring manufacturers. In general wood or plywood subflooring should not exceed 14% moisture content, with a maximum moisture variance not to exceed 4% difference between the flooring and subfloor.

Radiant Heat Subfloors (Oak, Cherry and Walnut only)

- First lay 6 mil plastic sheeting with seems overlapped 8" and lapped up the wall 4" all the way around the room. This can be trimmed off after moldings are installed. Then roll out foam butting edges.
- Maximum subfloor temperature should not exceed 80°F.
- Heating pipers must be covered with 1-1/4" concrete or minimum 1/8" below bottom side of plywood subfloor. In addition, heat transfer plates or insulation boards must be under pipes.
- Heat system must be operated at normal living conditions for a minimum of 14 days before installing flooring. 1-2 days before flooring is laid, turn heating system off (at time of installation subfloor must be 64°-68°F). Bring heat up to normal temperature over 3-4 days.
- Room temperature must not vary more than 15° from season to season. 35-55% humidity in home for radiant heated rooms.
- Must be a ArborCraft approved radiant heat system

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(8 watts per sq. ft. heating capacity).
- For additional information contact ArborCraft Floors: 1-800-258-5758.

As part of your subfloor preparation, remove any base, shoe moldings and interior thresholds. These can be replaced after the floor has been installed. Undercut doorjambs to allow for your expansion gap, and avoid difficult scribe cuts. This can be easily done by using a small piece of the flooring as a guide for your handsaw.

Tools & Materials Needed

Pencil	6-8 Mil Poly Plastic Sheeting
Measuring Tape	Foam Underlayment
Safety Glasses	Table Saw or Chop Saw
Hammer	Jamb Saw (Hand or Power)
ArborCraft Wood Adhesive	Tapping Block
Pull Bar	Pull Tool
	Spacers

Your local retailer can help you with the items listed above.

Job Preparation
Remove all doors and shoe moldings. undercut all door casings 1/16" higher than the thickness of the flooring and underlayment to be installed. Place a scrap piece of the flooring and sheet of underlayment against the door casing to act as a guide and cut the door casing with a hand or power jamb saw (set to correct height). Be sure subfloors are sound and dry and level within the recommended 3/16" in 8 linear feet.

After deciding the direction in which the planks run, measure the width of the room (the dimension perpendicular to the directions of the flooring). The last row of the flooring should be no less than 1-1/2" wide. If it is less we recommend cutting the starter row narrower. This will require extra cutting, but it will make the rest of the installation easier and faster.

NOTE: Planks installed parallel to the longest wall will accent the floor best.

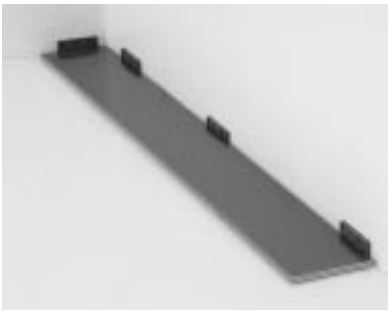
Racking the Floor
This process is essential to achieve a random appearance. Start by either using random length planks found in the cartons or by cutting four to five planks in random lengths, differing by at least 6" minimum end joints on all adjacent rows. Randomly install different lengths to avoid a patterned appearance. Never waste materials; the ends (if over 8" in length) cut from starter rows should be used at the opposite side of the room to complete rows or used to start the next row.

Installing the Floor (Floating Method)
3" and 5" width (minimum 3/8" thick) ArborCraft Engineered floors may be installed using the **floating** method of installation.

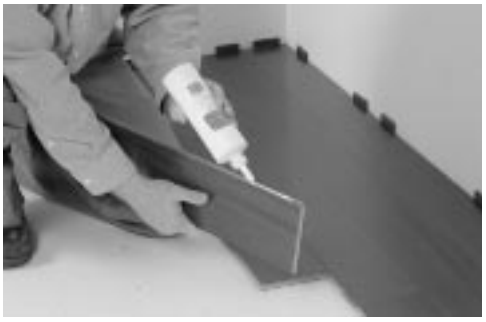
When choosing the floating method for Engineered, the subfloor must be flat to within 3/16" per 8 ft. radius. ArborCraft does not warrant movement or flexing of the floor when using the floating method. Whole unit or individual pieces with slight movement should be considered normal, and provides comfort under foot.

Before starting to glue planks, dry lay (no glue used) a trial layout of the first two rows of flooring. Working from left to right, install planks so that the tongue faces out. Leave a minimum of expansion space the thickness of floor that is being installed, between flooring and wall. When reaching the end of the first row, cut the plank as necessary to fit. (An easy way to mark the last plank in the row is to place the plank in position with the side tongue against the side tongue of the previously laid plank and the end of the plank against the spacing wedge. Mark across the plank with a pencil and cut along this line).

Insert spacers around all vertical walls every 8" to maintain the expansion space between the flooring and the wall. Look for walls that are not straight and use spacers as needed to keep flooring square and straight.



Apply glue in the groove of each plank as you install. Begin 2" from the end and fill the groove completely in 6" lengths, skipping 6" and repeating the length of the board. Fully glue the end joint. It is very important to fill the groove to its full thickness. This will ensure proper transfer to the tongue of the adjoining planks. Failure to follow proper glue schedule will void all warranties.



ArborCraft Floating Wood Floors can be installed above grade, on grade, or below grade. When installing over concrete or below grade a moisture barrier of 6-8 mil plastic sheeting is required. Loose lay the sheeting with the seams overlapped 8 inches, and lapped up the wall 4 inches. The plastic can be trimmed at the walls after the molding is installed.

Once the subfloor preparation is complete, and the 6-8 mil plastic sheathing (if required) is laid you are ready to install the foam underlayment. Once you have determined the direction the floor will run, install the foam in the same lengthwise direction you plan to install the flooring. Then roll the foam out, butting the edges to ensure they **do not** overlap. For foam with plastic sheeting attached, butt the foam.

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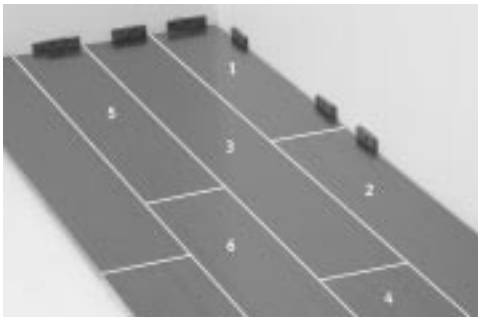
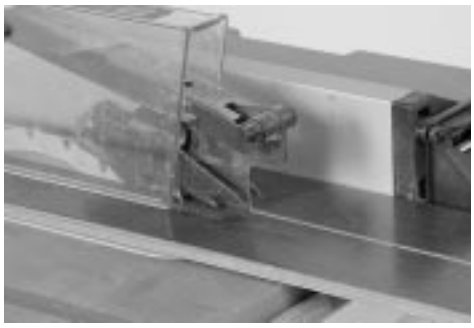
When the decision is made on the direction the planks will run, be sure to allow for expansion (thickness of floor) around the perimeter of the room. Begin by snapping a chalk line 5" plus expansion space off the starting wall. If the starting row is out of square, it is recommended that the first row of boards be scribed to allow for expansion, and a straight working line. Use wedges to secure the planks during installation at both the side and ends of each plank. Always work with the tongue facing away from the starting wall.

Stagger a minimum of 6 inches between end joints of adjacent planks (no less than 9" in length). End joints should not repeat visually across the floor. The floor can be installed in successive rows, or with the stairstep approach. We recommend using the stairstep method to ensure a tight fit for the first few rows, and limiting board separation during initial set-up. Always use a random pattern to begin the installation:

Example: begin by using a half plank to start the first row a whole plank for the second row and a quarter plank for the third row. Install in numeric order as shown in picture. (Before cutting starter pieces for the first row, always be sure that the plank size being installed at the adjacent end of the row will be a minimum of 6 inches.) To ensure a random pattern, the center plank should be longer than the first or third plank when laying the first row.



Installing the Last Row:
Most often the last row does not fit in width. When this occurs, follow this simple procedure. Lay a row of boards unglued, tongue toward the wall directly on top of the last row installed. Take a piece of the engineered floor with the face down and the tongue side against the wall. The resulting line gives the proper width for the last row which when cut can be wedged into place using a pull bar. Be sure that when the installation is finished the wedges are removed and the expansion is covered with the appropriate Arborcraft Wood moldings. Always attach the trim to the wall or vertical object and never to the installed floor.



Now that your ArborCraft floor has been installed you should take every precaution to keep it beautiful for years to come. Please refer to the maintenance guide for proper care.

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