



SOLID BAMBOO INSTALLATION GUIDELINES:

Pre-installation guidelines:

- 1) ESTIMATE THE TOTAL SQUARE FEET OF THE ROOM** or rooms where you will install your new bamboo floor and add 5% - 10% for waste.
- 2) THE SUBFLOOR MUST BE FLAT** by 1/8" in a 6' radius. Make sure that wood based subfloors are structurally sound and properly attached to the floor joists to avoid creaking sounds.
- 2) THE SUBFLOOR MUST BE CLEAN.** If the floor is stapled, the subfloor must be clean of all debris that would cause the flooring not to lay flat. If the floor is glued down, all paint and overspray must be cleaned off in order to accomplish a strong bond between the subfloor and flooring.
- 3) THE SUBFLOOR MUST BE DRY.** The number one reason that a floor fails is because of moisture. The moisture could come from a number of sources. Make sure all doors and windows are installed and painting and wet work is completed before acclimating the floor. Always test the subfloor for moisture and document the results. Basements and crawl spaces must be dry and well ventilated. A black 6-mil (or thicker) polyethylene (poly) film must cover the ground of all crawl spaces; seams must be overlapped and taped. Gutters, downspouts and exterior grading should direct water away from the house. Not achieving the proper moisture levels before and after installation could cause cupping, buckling, gapping and grain raise. The following test methods are recommended:
 - Wood Subfloors – Use a pin meter for use in testing moisture in wood. The wood based subfloor should not exceed 12% moisture content, with a maximum moisture variance not to exceed 2% difference between the flooring and subfloor.
 - Concrete Subfloors – Calcium Chloride Test should not exceed 3.0 pounds or using a Tramex Concrete Moisture Encounter meter should not exceed 4.0%. The concrete subfloor must be fully cured and at least 60 days old.

Document and keep all of the moisture readings. If the testing exceeds the above mentioned guidelines, **DO NOT INSTALL THE FLOOR.** Elevated moisture levels on a wood based subfloor can be easily corrected by the use of polyethylene moisture retarder or if you are installing over a concrete floor, an adhesive that has a moisture retarder membrane. When corrected, retest your floor to insure moisture guidelines have been met.

4) THE MATERIAL MUST BE PROPERLY ACCLIMATED. Acclimating the flooring allows the flooring to achieve equilibrium moisture content (EMC) with the environment in which the floor will be installed. The flooring should acclimate for a minimum of 3 days prior to installation. The ideal way to acclimate a bamboo floor is to open the cartons and cross stack the boards leaving a 4" air space under the first row. The flooring should be placed in the center of the room, away from direct sunlight and air vents. The HVAC must be installed and running for 14 days prior to installation and must be stay in constant operation. The relative humidity should be kept between 35% and 55%. The temperature should be kept between 65° and 75°F. The flooring should not be stored in storage sheds, garages, car parts or any un-climatized building. **NOTE:** Remember to acclimate the moldings also.



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5) INSPECT ALL MATERIAL carefully before installation. Warranties do not cover materials with visible defects once they are installed. Bamboo is a natural material and has variations in color and mineral lines. These are normal and are to be expected. When installing, mix planks from 3-4 cartons at a time to ensure a good blend of the natural variation. Boards with noticeable defects should not be used. Installing the floor constitutes acceptance.

6) WHERE CAN YOUR NEW BAMBOO FLOOR BE INSTALLED? A solid bamboo floor can be stapled or glued down. When gluing or stapling a solid bamboo floor down, only install on or above grade.

NOTE: Do not install a solid bamboo floor in full bathrooms, powder rooms, wet areas, saunas, or pool rooms. The warranty is voided if installed in these areas.

7) WOOD DUST CAUTION: Cutting, sanding or machining wood products produces wood dust. While wood products are not hazardous under OSHA Hazard Communication Standard (29CFR 1910.1200), the International Agency for Research on Cancer (IARC) and the State of California has classified wood dust as a human carcinogen. PROPOSITION 65 WARNING: This product produces wood dust when cut, sanded or machined. Wood dust is considered a carcinogen by the State of California. Precautionary Measures: Airborne wood dust can cause respiratory, skin and eye irritation. Power tools should be equipped with a dust collector. Use an appropriate NIOSH-designated dust mask. Avoid dust contact with skin and eyes. First Aid Measures in case of irritations: In case of irritation flush eyes with water. If needed seek medical attention. If dermatitis occurs, seek medical attention.

8) WARNING! DO NOT MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALT ADHESIVES OR OTHER ADHESIVES: Previously installed resilient floor covering products and the asphalt or cutback adhesives used to install them may contain either asbestos fibers and/or crystalline silica. The products in this carton DO NOT contain asbestos or crystalline silica. Avoid creating dust. Inhalation of asbestos or crystalline dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material. See current edition of the Resilient Floor Covering Institute (RFCI) publication "Recommended Work Practices for Removal of Resilient Floor Coverings" for detailed information and instructions on removing all resilient covering structures.

9) DECIDE THE DIRECTION IN WHICH THE FLOOR WILL BE INSTALLED. When installing over a wood based subfloor, planks should be installed perpendicular to the flooring joists. It is best to install the flooring parallel to windows (if possible).

10) PREPLAN THE NUMBER OF ROWS required to finish the installation. The final row will normally be narrower and have to be ripped lengthwise. A good idea is to rip both the first and last rows to balance the installation. If the first or last row is narrower than 2", use carpenters glue to secure the narrow boards to the adjoining full row.

11) ALLOW AT LEAST 1/2" EXPANSION SPACE around the entire perimeter of the room including spacing under moldings and transition strips.



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12) UNDERCUT DOORJAMBS TO ALLOW FOR EXPANSION & CONTRACTION. This can be easily done by using a small piece of the flooring as a guide to cut the door jambs.

13) ALWAYS INSTALL FROM 3 – 4 CARTONS to ensure a good mixture of the natural color variation and grading. This is extremely important when working with natural colors.

You are now ready to install your floor:

GLUE DOWN INSTALLATION GUIDELINES:

Be sure to follow all Pre-Installation Guidelines.

Install vapor barrier or vapor retarder. Hestia recommends the use of a low-VOC, premium, water-free flooring adhesive and/or vapor barrier system specifically recommended by the adhesive manufacturer for use with bamboo flooring. Note: Always use a vapor barrier and adhesive system manufactured by the same company – never mix products. The sub-floor must be extremely flat (see adhesive manufacturer's specifications), be square with the space, and run perpendicular to the joists. Leave a 1/2" expansion space from base plate or wall. Starter rows should be held firmly in place using wedges. Once the starter rows are secure, apply the adhesive per the manufacturers' installation instructions. NOTE: Always remove any adhesive from the surface of the flooring (smudges, fingerprints, etc.) before it dries. Clean up as you go – do not wait until the installation is complete. Cured adhesives are very difficult to remove and may permanently damage flooring.

It is up to the owner/installer to confirm the warranty, the environmental statements of the manufacturer, and the suitability of any adhesive for the intended end-use. The selection and use of any adhesive / moisture control system is at the sole discretion and responsibility of the owner/installer.

NAIL DOWN – STAPLE DOWN INSTALLATION GUIDELINES:

Be sure to follow all Pre-Installation Guidelines.

Install a vapor retarder. Installed flooring should be square with the space and perpendicular to the joists, leaving a 1/2" (12mm) expansion space from base plate or wall. Starter rows should be held firmly in place by wedging or blind nailing. Once starter rows are secure, additional rows should be blind nailed directly above the tongue at a 45-50 degree angle to the face of each plank. Fasteners should be spaced at 6-8 inch intervals per plank. Fasteners should not be placed closer than 6" (15cm) from the end of planks to prevent splitting of the tongue. When choosing a nail/staple gun, be certain the model is appropriate for the tongue & groove profiles so as not to damage the edge or surface of the flooring.

The selection and use of any nailer is at the sole discretion and responsibility of the owner/installer.



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After the floor is installed – here are some helpful tips:

REMOVE THE SPACERS.

INSTALL THE MOLDINGS making sure to leave the required expansion space.

THOROUGHLY CLEAN THE FLOOR to remove dust and/or adhesive smudges.

THE USE OF PUTTY to fill small gaps is considered normal in any hardwood or bamboo installation. Use a good quality putty and make sure that any putty residue is not left on the floor.

NEVER COVER a newly installed floor with plastic. Always use a breathable material such as cardboard. Using a non-breathing type covering can cause a moisture build up under the covering and damage the floor.

NEVER use wax, oil soap, household cleaners or polish on your floor.

NEVER use a steam mop or wet mop the floors.

CLEAN YOUR FLOOR on a regular basis by misting an approved floor cleaner on the floor and immediately wiping dry. (Bona Hardwood Cleaner is recommended.)

USE WALK OFF MATS (RUGS) at all exterior entrances to avoid tracking dirt, sand, water and asphalt from drive ways onto your new floor.

PERIODICALLY RE-ARRANGE rugs and furniture to allow the floor to age evenly.

USE area rugs in high traffic areas.

MAKE SURE there that the temperature is kept between 65° and 75° Fahrenheit and the relative humidity is kept between 35% and 55%.

A BAMBOO FLOOR, like all wood floors, will expand and contract with seasonal changes. Do not place fasteners (nails, screws, etc.) through the floor. Do not force moldings such as transition strips, baseboard down directly onto the flooring. Damage could result such as gapping or buckling.

BAMBOO FLOORING WILL SCRATCH and dent, just like most hard surface flooring types. When choosing a flooring product for areas in your home; children, pets, and lifestyle activity should be taken carefully into consideration. Therefore, it is important to protect your floor with felt pads under chairs and other furniture that may be moved across the floor without damaging the surface of the floor. Keep pet nails trimmed.

MINOR SCRATCHES or dents damage can be repaired. Use a touch-up or filler kit. Major damage may require individual board replacements.

GAPPING CAUSED BY SEASONAL CHANGES should be expected in all natural flooring and does not constitute a product failure. It is normal that natural floors will be affected by fluctuating temperature and humidity levels within the home. Care should be taken to control relative humidity and ambient temperature.