# **Solid Bamboo Flooring**

## Introduction

Thank you for choosing Wellmade Performance Bamboo Flooring! You have selected one of the highest quality bamboo floors available. As you might expect, Wellmade is always looking for ways to improve the quality of our products and related services. Please carefully read the following in order to ensure that you know what to expect, and so that you can enjoy your new bamboo floor for many years to come.

Please keep in mind that bamboo flooring will scratch and dent like any other hardwood flooring. Because bamboo is a natural product, you may experience shading variations. Although we sort into shading categories, there will still be shading variations within the cartons. When installing, you should work out of at least several cartons, and mix them in a natural random shading pattern that is pleasing to your eye. If you find very dark or very light planks in the carton, DO NOT INSTALL. It is the responsibility of the person installing the floor to inspect the flooring for defects and shading issues prior to installation. All wood flooring will expand and contract. This means that gaps may appear between the planks during low humidity conditions, and are considered normal. Scratches, dents, and shading are not covered by our Warranty, as we cannot control the conditions under which they can occur.

## **Tips for a Successful Installation**

**1.** Read all instructions/warranty first: Get all your questions answered before you start installing the floor.

**2.** Amount of flooring needed: Buy enough flooring to equal at least 105% of the square footage of your room, for waste allowance.

**3.** Before installing, open all boxes and let flooring sit in room for 3 to 4 days to acclimate to temperature and moisture. Run air conditioning or heat, as it will be in normal living conditions. Normal living conditions can be defined as having and maintaining a temperature between 50° - 70° and relative humidity (air) between 35% - 55%. It is recommended that humidifier/de-humidifier be used to maintain relative humidity. The

bamboo flooring is kiln dried and leaves the factory between 8% - 10%. Always avoid installing the floor under very dry or very humid conditions, it is best to install when conditions are about the same as it will be most of the year.

**4.** Be aware of moisture problems: Moisture can ruin any floor. Always look out for potential moisture problems, especially in basements and crawl spaces.

**5.** Checking for moisture: Use a Delmhorst J-4 (or equivalent) moisture meter for wood, or a Tramex Concrete Moisture Encounter meter (or equivalent) for concrete. You can also use a calcium chloride test for concrete. If the Tramex moisture meter is more than 4.5%, or the calcium chloride test is more than 3 pounds per 1000 square feet, you will need to consult with a professional to correct the problem. Always check for moisture in at least several areas of the sub-floor, as well as the flooring. The moisture difference between the sub-floor and the bamboo flooring must be no more than 4%.

**6.** Dealing with moisture before installation: If you have or suspect moisture problems, don't install your floor yet. Contact a professional flooring installer to improve sub-floor to an acceptable level of moisture.

7. To ensure a clean cut without any splintering, tape the area to be cut and/or use a fine-toothed circular saw with a carbide blade. Generally this is not necessary as it will be covered.

**8.** Place all nails/staples at 6 - 8 inch intervals along the tongue of the boards, and not closer than 3" from the end.

**9.** Room/entryway preparation: Undercut door casings are much better than trying to scribe the flooring to fit there.

**10.** Leave expansion gaps: Leave a 3/8" - 5/8" space at each wall, beneath door jambs, and at transitions for expansion of flooring. Base molding and transitions will cover this gap.

**11.** Tapping block: You can use a 6 – 8 inch scrap of flooring for this purpose. NEVER HIT FLOORING DIRECTLY AND BE CAREFUL NOT TO FRACTURE FLOOR EDGES.

**12.** Protect your bamboo floor from scratches. Use felt pads under chairs & tables. Also, if your chairs or other furniture have rolling castors, you made need to replace with softer rubber castors. **Never push/drag furniture or appliances across the floor as they can damage the finish.** Please remember that scratches and dents are not covered by warranty.

## NOT A PROBLEM:

**1.** Bending or bowing of the boards in length direction. These boards might be a little harder to install, but will NOT be a problem after they are installed, or in the future. They will lay flat like the others.

**2.** Color Variations will occur as bamboo is a natural product like oak and other hardwoods.

## PLEASE READ BEFORE INSTALLING

#### **Responsibilities of the Owner/Installer:**

Bamboo flooring is a natural and environmentally friendly product. If you take care to install this flooring correctly, taking all precautions suggested in this guideline, the flooring will give you many years of satisfaction. **Please note that it is always best to have your floor installed by a professional, even though it is possible to install yourself.** This is only guideline and cannot supply all the details you may encounter regarding the installation of this flooring. Detailed preparation and installation procedures are outlined by the National Wood Flooring Association's Hardwood Flooring Manual (NWFA) 1-800-422-4556 or www.nwfa. org. Wellmade cannot be responsible for the installation under any circumstances.

#### **Pre-Installation Procedures/Acclimation:**

Please handle, transport, and unload the flooring with care. Flooring should be stored in a dry place, with at least a four-inch air space under cartons. Flooring should not be delivered until the building has been closed in with windows and doors in place, and until cement work, plastering, painting, and all other materials are thoroughly dry. Acclimate the flooring for at least 72 hours (**preferably 3-4 days**) prior to installation In addition, the heating or cooling system should be operating and controlled at 50° – 70° for at least 72 hours before, during and maintained after

installing. Do not install in areas that are subject to extreme seasonal temperature/humidity changes where you cannot control the temperature/ humidity. As with all hardwood flooring, it is best if the humidity is maintained year-round to help prevent small gaps from appearing when humidity levels are very low. Precautions should be taken if you are installing in very dry or very humid conditions. The flooring is shipped from the factory between 8 – 10% moisture content. In some cases it will be necessary to use humidifiers or dehumidifiers to maintain the best environment for wood flooring. Please consult a professional for guidance in your area.

**Moisture Test:** Before installing over concrete or a wooden sub-floor, check it for moisture in several areas using wood or concrete moisture meter. You may also test concrete floors using the calcium chloride test. Also test the flooring materials. The moisture difference between the sub-floor and the bamboo flooring must be no more than 4%.

Before installation, lay out the flooring where it is to be installed (that is, lay the boards down roughly as they will appear after installation), taking care to mix it in a shading pattern pleasing to your eye. Installer should inspect each plank at this time for finish and quality. Once installed, it becomes the responsibility of the installer/homeowner. Normally you will want to start your installation along the longest outside wall, and it is best if your flooring is installed perpendicular (across) to the floor joists. If possible, you will want to orientate the boards with the major source of light (windows) so that light is shining down the length of the boards, rather than across the boards. Remember that all natural flooring comes in a range of colors and shades. Our quality control procedures at the factory ensure that very few, if any defective boards are delivered to the consumer. Remove baseboards and undercut door jambs to insure a quality installation.

#### **Recommended Areas:**

Bamboo flooring is recommended for on or above grade installation only. On grade is defined as being at the soil level, and above grade is above the soil level. Bamboo flooring should not be installed in wet areas such as bathrooms (with tub/shower) or mud rooms.

## Crawl Space Ventilation:

Proper air circulation is important to prevent moisture build up, especially in homes with a crawl space. Vents should be open year round. Check to make sure that there is no standing water or moisture at the soil level. If moisture is present, soil should be covered with 6 mil polyethylene to prevent moisture from migrating into the wood flooring.

## Acceptable Sub-Floors:

The sub-floors must be on or above grade & structurally sound. Bamboo flooring can be installed over the following sub-floors:

- Existing wood floors
- Plywood (3/4" thick)
- Sheathing grade
- Oriented Strand Board (OSB at least 3/4" thick underlayment grade)
- Vinyl tile
- Concrete floors (2 in 1 adhesive and moisture barrier recommended)

DO NOT INSTALL DIRECTLY OVER PARTICLE BOARD, WAFERBOARD, PRESSED WOOD, OR FIBER BOARD, except when installing with an adhesive system. **Due** to differences in the many types of radiant heat flooring, we do not recommend installing over radiant heat floors.

## **Sub-Floor Preparation:**

The sub-floor must be structurally sound and checked for moisture content. Movement and squeaks should be well fastened with ring nails or screws to the floor joists. The sub-floor must be clean and free of paint, wax, oil, and other debris. In addition it must be flat and level within 3/16" inside a 10' radius. High spots must be sanded flat and low spots must be filled with a leveling compound recommended by your dealer. On old or uneven wood floors, apply 1/4"- 5/8" plywood and ring nail or screw every 6" to avoid squeaking (it is also a good idea to glue the panels with a construction adhesive).

## For Creating A Random Effect:

To avoid creating a joint pattern in the floor, it is necessary to begin installation using starter boards. To create a starter board, cut the board at 2/3 the length. Start with the 2/3 length, and then install the full lengths and continue across the room. Use the 1/3 length to start the next row and continue as above keeping at least a 8" distance between the end joints. Cuts made at the opposite wall should be used for starter boards, so as to avoid a pattern. If necessary, use pull straps at 3 ft. intervals to hold the planks firmly together, or use blue painters tape. Be sure to allow at least a 3/8" - 5/8"expansion gap around perimeter.

Please keep in mind that tools left on the finished floor during installation will more than likely scratch the floor. It is also important that debris be removed from the finished areas immediately, and that all persons who might walk on the floor before it is finished should clean the bottom of their shoes. The more traffic you have on the floor before the installation is completed, the more likely it can be damaged.

## For Adhesive Installation:

There are many suitable adhesives that may be used, if you are not a professional installer, consult with your local flooring dealer for recommendations for the proper adhesive for hardwood installation. You will need to use a urethane adhesive. Do not use waterbased adhesives. In addition to the adhesive, some manufacturers offer moisture barriers that may be used with their adhesive system, be sure to contact manufacturer of the adhesive for proper use. Use a chalk line and leave at least a 3/8" space (smaller rooms) along the wall for expansion. Start with only a few rows, be sure to align perfectly, and then allow it to set until the planks will not move when adding additional rows. Every now and then, check to see if you are getting a good transfer of the adhesive to the back of the planks. Roll the flooring with a 150 lb. roller to ensure adhesive transfer to back of bamboo planks, be sure there is not any debris on the roller which may scratch your floor. You can also "walk" the planks as you are installing. This will help insure that the planks are not "bridging" across low spots in the sub-floor. It is very important that the planks be firmly attached to the sub-floor. Be sure to clean up any adhesive on the surface immediately, as once it dries, it may be very difficult to remove and damage the finish. Always follow adhesive manufacturers' instructions using their suggested adhesive and installation instructions for their adhesive warranty to be in effect.

## For Nail/Staple Installation:

If you are not a professional flooring installer, you will need to rent a special nailer for hardwood flooring. This tool will allow you to nail/staple the floor so that they will not show on the finished floor. Be sure to learn how to adjust the nailer so as not to damage the tongue. Also, be sure that the nailer is designed for or can be adjusted or shimmed for the appropriate flooring thickness. You will need to use 1 1/2" nails/ staples for this application. Nails/staples should be placed about 6 - 8 inches apart, and not closer than 3 inches from the end of the plank. The first and last rows will generally need to be nailed by hand next to the wall, as the nailer will not work in these areas. Pre-drill for 6d finish nails, counter sink, and fill the nail holes with matching putty. Be sure not to place nails too close to the edge of planks so as to prevent splitting. Generally it is not necessary to use a moisture barrier over wood sub-floors. If you prefer, you can use roofing felt as with any hardwood flooring. Remember to leave at least 3/8" - 5/8" expansion gap around the perimeter.

Splitting of the tongues is a problem normally related to the nailer, not the flooring. If the pressure is adjusted properly; and the nailer is designed or can be adjusted (shimmed) for the right flooring thickness so that the nail/staple is entering in the proper place, at the proper angle; and you are still splitting the tongue, you may need to go to a smaller gauge nail/staple.

#### Completing the Job:

Inspect your work, as it will cost you more if you have to come back to do a repair later. Replace original baseboards, or install matching bamboo baseboard. Install matching transitions as needed or recommended by your dealer or installer. It is not recommended or necessary to seal this floor after installation. **Protect** your floor from scratches by using felt pads on chair legs or furniture feet. Plastic rollers/castors can damage your flooring; if necessary, try to replace with softer rubber wheels/castors. When moving heavy items like refrigerators, use at least two sheets of 1/4" masonite or plywood while moving (sliding the appliance from one sheet to the next) to protect the flooring against scratching and denting.

**Congratulations!** You have just installed an environmentally friendly, beautiful, and elegant Wellmade Performance Bamboo Floor!