

## INSTALLATION INSTRUCTIONS

### OWNER'S/INSTALLER'S RESPONSIBILITIES

#### **Read all instructions carefully before starting.**

It is the owner's/installer's responsibility to follow all manufacturers' written instructions and/or applicable industry

Standards. In the absence of any specific manufacturer's instructions, revert to the National Wood Flooring Association's (NWFA) current industry standards. It is the owner's/installer's responsibility to carefully inspect all material for visual defects prior to installation. Boards that are considered imperfect or objectionable in any way should be used in hidden areas, cut-off or not installed. This product has been manufactured in accordance with industry standards which permit a defect tolerance of no higher than 5%. The defects may be of any type, whether manufactured or natural. Do not install defective flooring. Flooring that has been installed shall be deemed acceptable.

### JOB SITE CONDITIONS/ ACCLIMATIZATION

It is the owners/installer's responsibility to ensure that the job-site conditions and subfloors are environmentally and structurally acceptable prior to installation. Subfloors must be clean, flat, secure and meet the minimum standards set forth. The manufacturer shall not be held responsible for failures or deficiencies of bamboo flooring resulting from or related to the subfloor, job-site environmental conditions, or improper storage and handling. Prior to the product's delivery to the job site, the site conditions must be "normal living conditions" and maintained at between 35% - 55% relative humidity and 15- 26 degrees Celsius. The job site must be fully enclosed and the exterior finishing complete.

Gutters and downspouts must be in place, and all exterior grading should divert water away from the foundation prior to installation. The HVAC system should be on and fully operational for a minimum of seven days prior to installation.

All interior wet trades work (i.e. paint, drywall, concrete, tiling, etc.) must be completed prior to installation. Deliver all material to the job site to acclimatize for at least 72 hours, or as long as necessary to meet the proper requirements prior to installation. Store material in the same environment in which it is to be installed. Do not store material directly on a concrete floor, near windows or vents. Material must be checked with a moisture meter to ensure that it is in moisture equilibrium with the job-site environment. Record all moisture readings. Click bamboo may be installed above grade, on grade or below grade.

### RECOMMENDED SUBFLOOR SURFACES

#### **Wood - Subfloor**

- Minimum 5/8" CDX plywood or minimum 5/8" OSB (flooring underlayment grade). Particle board is NOT an acceptable subfloor for a staple or nail down installation.
- Maximum 16" on center joist construction.
- Subfloor must be clean, secure and flat within a minimum of 3/16" over 10 feet.
- Bamboo should be installed perpendicular to the joist system.
- Moisture content of the wood subfloor should not exceed 12% and should be within 4% of the hardwood floor being installed. Failure to test for proper moisture content of the hardwood flooring and the subfloor can result in cupping and/or other problems associated with moisture.

#### **Concrete Subfloor**

- All new concrete subfloors must be fully cured. They require a minimum of 60 days drying time before a wood floor can be installed. Follow NWFA guidelines for proper moisture testing on concrete slabs. Moisture emissions from a concrete subfloor cannot exceed 3 lbs. / 1000 sq. ft. / 24 hr.
- Concrete floors must be clean, dry and flat within 3/16" over a 10' radius and free from any structural defects. The surface must be free from drywall mud, paint, oil, wax, grease, old adhesives, curing compounds and other debris.

### **Other subfloors**

- Terrazzo, tile and any other hard surface that is structurally sound and level are suitable for the installation of an engineered floor. As stated above, the surface must be sound, secure and free from contaminants.
- Do NOT install over perimeter-glued resilient vinyl, rubber tiles, carpet, hardwood that has been glued to concrete or any floor that is not adequately adhered to the subfloor.

### **GETTING STARTED**

- Check the bamboo for moisture content. The moisture content must be between 6% - 9% and within 4% of that of the subfloor before installation can begin.
- Ensure that subfloors are clean, flat, and secure and meet minimum requirements as set forth.
- Undercut door casings 1/16" higher than the thickness of the floor being installed.
- Place an approved vapor retarder over the subfloor. Overlap the vapour barrier and tape all seams.
- "Racking" the floor, dry lay out several rows, staggering the end joints a minimum of 6" while avoiding "step" or "H" patterns. To achieve a random appearance across the floor, work from several cartons at a time. Do not install any boards that have a visual defect or are deemed objectionable
- Maintain a 1/2" expansion space along each wall and against all fixed obstructions. Increase the expansion gap to 3/4" for spans exceeding 30 feet.

### **INSTALLING THE FLOOR**

Establish a starting point - preferably the longest exterior wall that is perpendicular to the floor joists. Align a row of planks along the starter wall with the groove facing away from the wall. Place 1/2" (minimum) spacers between the wall and the first row to maintain the required gap. Cut a board half the length to stagger the end joints. From a 30-45 degree angle, insert the tongue into the groove and push the board in and down, securing it tightly into the other board. Working from right to left, insert the next board, then, with a tapping block and hammer, tap the end of the board until the end joint is secure. Be careful not to cause any damage to the face or the tongue of the board. Continue along the row. Rack out (dry lay) several rows for a random appearance while inspecting each board for acceptability. Maintain a minimum of 6" between board ends. It may be necessary to "rip" (cut lengthwise) the final row in order to maintain the required 1/2" expansion gap. In places where the floor may be subjected to heavier traffic, the boards may be glued by applying a small continuous bead of glue to the bottom edge of the groove. Clean up any excess glue that may get onto the face of the boards. Do not install any boards that may be objectionable or have a visual defect.

### **COMPLETING THE JOB**

Install appropriate transitions and trim pieces such as thresholds, t-moldings, baseboards, quarter-rounds, etc. Nail all baseboards and transitions into the wall or subfloor, ensuring that the nails have NOT penetrated the engineered floor.

Sweep, vacuum and clean the floor with an approved hardwood floor cleaner. Inspect the floor for imperfections and fill with the appropriate colored wood putty.

### **FLOOR CARE & MAINTENANCE**

Bamboo is a natural product and will show signs of wear over time depending upon the use. Factory finished floors will scratch and dent under certain circumstances. Here are some tips to keep your floors looking their best:

- Constantly maintain "normal living conditions" in the home. Maintain the relative humidity between 35%-55% and the temperature between 15-26 degrees Celsius. The proper use of a humidifier or de-humidifier may be required.
- Sweep and vacuum (do not use a vacuum cleaner with a beater bar) regularly to keep dirt and grit off the floor.

- Remove spills immediately with a soft absorbent cloth.
- Only use an approved hardwood/bamboo cleaner. NEVER wet or damp mop your floor with water or other products.  
DO NOT use hardwood floor cleaning machines, steamers, oil soaps, wax or other cleaning products that contain oils, silicone or ammonia.
- Keep pet nails trimmed.
- Remove shoes with spiked or damaged heels. Use protective pads under furniture legs to reduce scratches and dents.  
Chair casters will cause premature wear in the finish. Protect the floor when moving heavy furniture and appliances.

### **LIMITED RESIDENTIAL WARRANTY**

All factory applied UV cured aluminum oxide surfaces are warranted not to wear through or separate from the hardwood core, for a period of 25 years from the date of purchase. The flooring must be used under normal residential traffic conditions. Warranty applies to the original purchaser. The warranty is not transferable.

Liability for defective products will not exceed the original purchase cost.

#### **WARRANTY EXCLUSIONS**

The following are not covered under this warranty:

1. Indentations, scratches or damage caused by negligence, fire, water, wet mopping, sand, pebbles, pets, high heels, spike shoes and abuse.
2. Naturally occurring changes in color from exposure to sunlight.
3. Damage caused by failure to provide proper environmental conditions, including but not limited to maintaining proper humidity levels.
4. Damage caused by failure to follow installation instructions, including but not limited to failure to use moisture barriers, surface checking resulting from low humidity and/or mildew, and discoloration and cupping resulting from extreme sub-floor moisture.
5. Problems occurring due to poor installation workmanship.
6. Problems occurring due to improper care and maintenance.

### **MILLING DEFECTS**

Standard trade practice allows for up to 5% of the square footage to contain wood below grade and/or containing milling defects. During installation, when these defects are encountered, simply crosscut out the defects and use the remaining sections to start or finish a row. If your installer discovers a recurring problem or determines the waste to be excessive, stop the installation immediately. Do not install defective flooring. Flooring that has been installed shall be deemed acceptable. We shall not be liable for costs associated with installation and/or replacement, if flooring possesses obvious defects.

### **COLOR AND GRAIN VARIATIONS**

Wood is a natural material. No two pieces are the same. No two trees are alike. We cannot be responsible for claims arising from flooring that possesses a greater range of grain/color variation. Gloss reduction is not considered surface wear.

### **COLOR FASTNESS**

All woods are sensitive to light and/or oxygen and over time will change color, developing a unique patina. Certain species will lighten or darken over time. New and/or replacement flooring may not match existing flooring.