Sustainable Flooring's IonWood™ Installation Instructions

Important: COMPLETELY READ ALL OF THE FOLLOWING GUIDELINES, AS THEY ARE PROVIDED TO HELP WITH THE INSTALLATION PROCESS. INSTALLATIONS SHOULD BE DONE BY A PROFESSIONAL FLOORING INSTALLER, AND THEY SHOULD ADHERE TO THE INFORMATION AND GUIDELINES PROVIDED BY THE NATIONAL WOOD FLOORING ASSOCIATION (WWW.NWFA.ORG; 800-422-4556). WHERE THESE INSTRUCTIONS DIFFER FROM THE NWFA’S, THESE GUIDELINES TAKE PRECEDENCE. IF YOU HAVE ANY QUESTIONS OR CONCERNS, PLEASE CONTACT A SUSTAINABLE FLOORING REPRESENTATIVE PRIOR TO STARTING THE INSTALLATION PROCEDURE.

Pre-Installation Jobsite Requirements:

- Carefully inspect all material before installation. Any material installed with obvious defects (grade, color, finish, quality, or other visual defects) will not be warranted.
- Please note that Ion Wood™ is comprised of natural material and slight variations in color occur naturally.

Jobsite Requirements:

Prior to the installation of Ion Wood™, the installer must ensure that the jobsite and site conditions are suitable for installation. Sustainable Flooring is not responsible for flooring failure resulting from unsatisfactory jobsite/subfloor conditions.

- **Structurally sound subfloor** (5/8” plywood, ¾” OSB, existing solid-wood subfloor, or concrete; particle-board is not an acceptable subfloor for the installation of hardwoods)
- **Level subfloor** (within 1/8” height difference over 10 linear feet in all directions); if wooden subfloor is used, ensure subfloor is well fastened to joists (6” on center nail pattern is suggested)
- **Dry subfloor** – subfloor must remain dry year-round.
  - On concrete - when installing on a concrete slab, you must ensure that the flooring installed is separated from any potential moisture coming from, or transferring through the slab (see NWFA guidelines if you have questions). In addition, slab must not exceed 3lb. - as per the Calcium Chloride test; a general rule of thumb is that 60 days is the minimum for a concrete to properly cure. While Ion Wood™ flooring is much more stable than most woods, it is still subject to damage when in direct contact with a constantly wet slab. Ion Wood™ must be isolated from this type of slab by use of a reverse vinyl, sleeper sub floor, or alternative. Urethane adhesive will usually fail when vapor pressure exceeds 3 pounds per 1000 sq. ft. in 24 hours. Ion Wood™ flooring cannot be glued down under those conditions.
- **Site Conditions** - the temperature and relative humidity should be consistent for at least 10 days prior to installation (the minimum suggested acclimatization period; longer is always better). Hardwood flooring functions best when the room temperature ranges from 60-75 Fahrenheit, and the room relative humidity stays between 40-60%.
  - **Important Note:** Room temperatures above 80 Fahrenheit, or below 50 Fahrenheit, or rooms with relative humidity’s above 60%, or below 35% will void all warranties. These conditions must be met not only for installation requirements, but also for year-round conditions. A humidifier or dehumidifier may be needed to remedy these conditions, which not only will ensure a healthy Ion Wood™ floor, as well as help ensure a healthy indoor air quality.
  - **Note:** In extremely dry climates, care should be taken to avoid shrinkage by allowing flooring to acclimate under actual use conditions.
- **Debris-free subfloor** – prior to installation, the subfloor should be thoroughly cleaned to ensure all debris is removed.
- **Acclimation:** Flooring should be at the job site 24 hours prior to install. Cartons should be placed in the installation area. **DO NOT** open until ready to install.

Installer and Owner Responsibility

Hardwood flooring is a beautiful and unique product of nature which is characterized by distinctive variations in grain and color. These natural variations in color and grain are not flaws, but are part of the natural beauty and uniqueness of hardwood flooring. (These inherent variations should be expected and serve to enhance the natural beauty and enduring charm.) Your hardwood floors are manufactured in accordance with accepted industry standards which permit a defect tolerance not to exceed 5%. The defects may be of a manufacturing or natural type.
General Installation Guidelines –

- **Use spacers** – spacing around the perimeter and other fixed vertical portions of the room must be maintained to account for the typical fluctuations in relative humidity found in most interior environments (3/8" recommended).
- **Work out of multiple boxes** – though great effort is made to ensure color consistency, Ion Wood™ shades do vary, and there are no standards for this so the shade differences between cartons may be noticeable. Mixing cartons creates a natural, random shade effect.
- **Stagger Seams** – this ensures a random and flowing pattern to the floor.

Ion Wood™ can be installed using the “nail/staple-down” method, the “glue-down” method, or the floating floor method.

**Installation methods:**

**Nail/Staple Down:** Planks shall be started square with the room and parallel to its longest dimension by positioning with a chalk line, leaving 1/2" expansion from base plate, wall, or any other stationary vertical areas (site-made spacers work well to ensure proper spacing). Ensure starter rows are firmly in place by wedging or face nailing with 6d finish nail where the boards meet the wall. Place nails as close to the wall so they can be covered up by transition or wall molding. If this can not be done, set the nails with a nail punch and fill the holes with wood filler. Finish nails should be placed at 8" intervals along the wall. Once initial rows are secure, second and further courses shall be blind nailed directly above tongue at a 45-50 degree angle to the face. Fasteners shall be spaced at 8 inch intervals and 2 to 3" from the end of each board with a minimum of 2 fasteners per piece. Recommended stapler for the Ion Wood™ is Spotnail Stapler with 1-3/8" staple (Model #FS4825W2) or equivalent.

**Recommended underlayment for nail / staple down installation:** Red Rosin paper or 15 lb. asphalt saturated felt (roofing felt). Tape all seams completely with underlayment seam tape.

**Glue Down:** Sustainable Flooring recommends and Bostik Hardwood Products warrants the use of MVPTM Moisture Vapor Protection subfloor sealer in conjunction with the following adhesives: *Bostik’s BestTM, *Fast TrackTM, *BST UrethaneTM, *Ultra-SetTM Hardwood Adhesive, *EFATM (Do not use EFA with solid hardwood flooring). Follow the adhesive manufacturers instructions for use in this application. Wear rubber gloves and proceed carefully during adhesive application. Cured mastic is very hard to remove from the flooring as well as the tools. **DO NOT** allow any spilled or excess adhesive to remain anywhere but between the boards and the subfloor at any time during the installation. Clean up spills immediately as recommended by the adhesive manufacturer. **The flooring manufacturer will not be responsible in any way for adhesive that is not removed from the hardwood flooring immediately. Any damage to the flooring caused by the adhesive allowing to cure on the surface will be the sole responsibility of the installation mechanic.**

**Floating Method:** Install a suitable vapor barrier and/or underlayment, taping the seams to ensure full coverage over the subfloor (call for recommendations if needed). A recommended adhesive is Titebond III / T&G Glue (white glue that has flexible properties). You may contact Titebond.com (800-669-4583) for more detailed information regarding this product. Always apply Tongue and Groove glue to the top inside of the groove on each board. Do not put glue in the middle or bottom of the groove or on the tongue. Glue must be applied in a continuous heavy 1/8" thick bead along the entire groove on all 4 sides of plank. Clean off excess glue immediately upon installation. Manufacturer will not be responsible for glue residue left behind after installation.
Important Note: Prior to applying adhesive to planks, ensure they properly fit – once they are glued together, there is no recommended way to separate the planks – **proceed cautiously**. Begin the installation using spacers to ensure recommended expansion perimeter is maintained (1/2’’). Place the groove of the starter row against the wall, and apply adhesive (once proper fit is confirmed) along the top of the groove – quickly tap the flooring planks together using a tapping block. For the first several rows, it is also recommended to apply glue to the bottom side of the groove at the end joints.

- **Moisture:** While Ion Wood™ flooring is much more stable than most woods, it is still subject to damage when in direct contact with a wet slab. Ion Wood™ must be isolated from this type of slab by use of a reverse vinyl or sleeper sub floor. Urethane adhesive will usually fail when vapor pressure exceeds 3 pounds per 1000 sq. ft. in 24 hours. Ion Wood™ cannot be glued down under those conditions.

**Gyp-crete Underlayment:** If installing on Gyp-crete, it is essential that the slab material is completely dry (Delmhorst BD 2100 or G79 are recommended for an accurate moisture reading in gyp-crete). For detailed recommendations on installing over the Gyp-crete line of products, contact Maxxon Corporation (800-356-7887) - “Procedures for Attaching Finished Floor Goods to Maxxon Underlayments”. Options suitable for installation over gyp-crete are: install a ¾” plywood subfloor, float two layers (perpendicular to one another) of ½” plywood, nail and glue sleepers, or float the material. Gluing down onto Gypcrete is not recommended unless you have received appropriate manufacturers recommendations from Maxxon Corporation.

**Hydronic Radiant Systems:** American Walnut and American Maple are the only Ion Wood™ products that can be installed over "hydronic" radiant systems, but should not to be used over "electric" systems. The surface temperature must never exceed 80 degrees Fahrenheit. Due to the nature of radiant heat, the relative humidity must be kept between 40-60% (the use of a humidifier/dehumidifier will likely be needed). It is important to ensure that the "hydronic" system is running for at least 7 days prior to the installation, and then turned off prior to and during the installation. For detailed information of the installation procedures over hydronic systems, contact the Radiant Panel Association 800 660-7187, or your Ion Wood™ supplier).

### Protecting Your Investment

- Remove stubborn stains carefully with a little acetone applied to a rag which is then rubbed on the floor.
- Your floor is constructed of solid wood and therefore is subject to change from excessive moisture; remove any excess standing water immediately.
- Use quality vinyl-back area rugs and doormats by outdoor entrance areas to prevent dirt, sand, grit, and other substances such as water, oil, asphalt, or driveway sealer from being tracked onto your floor.
- Use floor protectors and wide-bearing cylinder leg bases/rollers to minimize indentations from heavy objects. As a rule of thumb, the heavier the item, the wider the floor protector should be. DON'T USE “BALL” ROLLERS.
- Maintain an indoor relative humidity level of 35% to 60% throughout the year, to minimize the natural expansion and contraction of wood.
- Avoid gouges or cuts in your floor from sharp objects. While your floor is the most wear-resistant floor on the market, sharp or pointed objects can nevertheless damage it.
- Do not walk on your floor with “stiletto-style” heels; they will cause indentations.
- Rearrange rugs and furniture periodically so the floor ages evenly. UV sunlight will change the color of different species to varying degrees.
- Keep pet nails trimmed and filed in order to minimize indentations. All wood floors will indent.
- Use a wide base air tire dolly when moving heavy appliances or furniture. But first, put down a sheet of quarter-inch clean plywood or Masonite to protect the floor. Never try to slide or roll heavy objects across the floor without precautions.