

HDF Engineered Strand Uniclic Floating Floor

Introduction

Thank you for choosing our HDF Engineered Bamboo Flooring, featuring the glue less Uniclic floating installation system. You have selected one of the highest quality HDF engineered floors available. Our HDF engineered flooring is a combination of the best natural materials and state-of-the-art manufacturing technology. It features an extremely durable High Density Fiberboard (HDF) core topped with a premium quality strand woven bamboo wear layer. Our proprietary finish system, utilizing an acrylated urethane finish with aluminum oxide, consists of 13 layers to provide one of the most durable finishes available. Please carefully read the following in order to ensure that you know what to expect, and so that you can enjoy your bamboo floor for many years to come.

Please keep in mind that all hardwood flooring will scratch, dent, and change color over time. Therefore, you will need to decide if hardwood is suitable for your home or lifestyle. Because bamboo is a product of nature, you may experience shading variations. There will be shading variations within the cartons, and when installing, you should work out of 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 boards in the carton, that are not consistent with the other flooring, put them aside. These should be used in areas like closets or other areas that are not readily visible. It is the responsibility of the person installing the floor to inspect the flooring for defects and finish issues prior to installation. Should an individual piece be doubtful as to quality, do not install. Installation of the boards constitute acceptance. Although HDF engineered flooring is more stable than solid flooring, all wood flooring will expand and contract. The use of stains, fillers, and putty sticks for touch-up is accepted as part of normal installation procedure. In addition, naturally occurring mineral streaks and knots are not considered defects. Scratches, dents, shading, and color changes due to oxidation or UV exposure are also considered normal for all hardwood flooring. They 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. Your HDF engineered flooring will need to be acclimated for a minimum of 48 hours (3 - 4 days is optimum) prior to installation. Store the material in the area that it will be installed, under normal living conditions. Normal living conditions can be defined as having and maintaining a temperature between 60° - 80° and relative humidity (air) between 30% - 55%. It is recommended that humidifier/de-humidifier be used to maintain relative humidity. Our HDF engineered 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. Also, when installing over radiant heat flooring, be sure to contact the system manufacturer to determine that it is compatible with hardwood flooring.
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 subfloor, as well as the flooring. The wood substrate should not be more than 12% moisture content. The moisture difference between the subfloor and the hardwood 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 subfloor 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. Room/entryway preparation: Undercut all door casings prior to installing flooring.
9. Leave expansion gaps: Leave a 3/8" – 1/2" space at each wall, beneath door jambs, and at transitions for expansion of flooring. Base molding and transitions will cover this gap.
10. 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.
11. Protect your floor from scratches; use felt pads under chairs & tables. Also, if your chairs or other furniture have rolling castors, you may 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; you will need to work out of several boxes to ensure a pleasing shading mix.

PLEASE READ BEFORE INSTALLING

Responsibilities of the Owner/Installer: Our HDF engineered 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. **We 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 HDF engineered flooring in the area in which it will be installed for a minimum of 48 hours (3 - 4 days is optimum). In addition, the heating or cooling system should be operating and controlled at 60° – 80° 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 levels.** 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 subfloor, check it for moisture in several areas using a 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 subfloor and the hardwood 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. 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:

HDF Engineered flooring can be installed on, above, or below grade using the Uniclic floating system. On grade is at soil level, above grade is above the soil level, and below grade is lower than soil level (This includes all basements, including daylight basements.) 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 may be on, above or below grade, but **must** be structurally sound. Bamboo flooring can be installed over the following sub-floors:

- Existing wood floors
- Plywood (3/4¹¹ thick) or greater
- Sheathing grade
- Oriented Strand Board (OSB - at least 3/4¹¹ thick underlayment grade)
- Vinyl tile
- Concrete floors (moisture barrier)

Sub-Floor Preparation:

The subfloor 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 subfloor 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 concrete based 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).

Radiant Heat Flooring

HDF Engineered strand bamboo may be installed with Uniclic floating installation system over radiant heat concrete subfloors. The radiant heat system should be operational for at least 7 days before beginning installation. Turn off heat to allow subfloor to cool down to room temperature 3-4 hours before beginning the installation. After the installation is completed, turn on the radiant heat immediately, and **gradually** return to normal levels. The finished floor surface must not exceed 85° F (29° C) for the life of the floor. Because radiant heat creates a dry heat that can lower interior humidity levels, it may be necessary to add a humidifier to maintain the humidity level between 30-55% to prevent damage to the hardwood floor. **Please be sure to consult with the radiant heat system manufacturer to ensure that the system is compatible with hardwood flooring.**

For Creating A Random Effect:

To avoid creating a joint pattern in the floor, it is necessary to begin installation using starter boards for the first three rows. Use a full plank for the first row, 1/3 plank for the second row and 2/3 plank for row three, being sure to keep the end joints at least 6 - 8 inches apart. Cuts made at the opposite wall can then be used for starter boards, so as to avoid a pattern. Be sure to allow at least a 3/8" – 1/2" 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.

Moisture Barrier and Underlayment Required:

While it is not necessarily difficult to install a Uniclic floating floor, you may want to consider having it done by a professional installer. Bare concrete floors require a moisture barrier of at least 6 mil polyethylene if 1m with the sheets overlapping 6" and taped to prevent moisture migrating to the wood flooring. Use 1/8" foam padding (or other underlayment) over the moisture barrier as recommended by your dealer. You may choose to use a 2 in 1 type underlayment (moisture & padding). You can also install over sound deadening underlayments with this method.

Installing Floating Uniclic® Floors

Uniclic® is a revolutionary system for installing the flooring without using glue. Because of the unique shape of the tongue and groove, you can install the planks in several different ways:

Method A (preferred): Position the plank at a 20-30° angle to the plank already installed. Move the plank gently up and down while pushing forward. The plank will then automatically fold into place. You can either insert the tongue into the groove or the groove on to the tongue. The tongue in groove method is most common, and also the easiest. Never force the plank to lay flat, always help it to fold into position. **See Diagrams A-1, A-2 & A-3.**

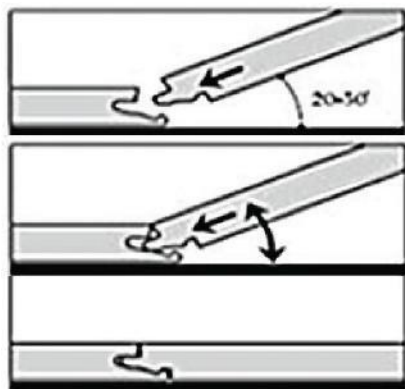


Diagram A-1

Diagram A-2

Diagram A-3

Method B: You can also tap the planks into place with a tapping block and hammer without lifting the planks. For this method you will need a special tapping block designed for 3/8 inch (9mm) flooring. The planks should not be tapped together with a single tap. To avoid damaging the plank, you must tap them together gradually. **See Diagrams B-1 and B-2.**

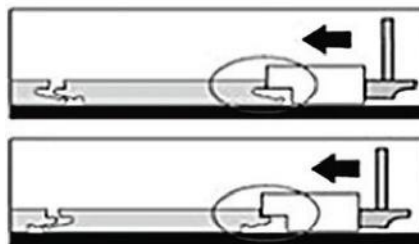


Diagram B-1

Diagram B-2

Method C: With our new fold-down end joints, you simply line up the ends of the two boards (**Diagrams C-1 & C-2**) with the tongue of the long side of the plank inserted into the groove, then lower into place (**Diagram C-1**). When working towards a door frame and need to install under it, lay the final piece in with the tongue of the short end of the plank in the groove, slide in as far as possible with your hands, and then use a tapping block and gently tap into the final position. An alternate method that would be easier - would be to start the new row under the door frame. Position the plank so that ends in the proper spot under the door (remember to leave room for expansion/contraction), and use a tapping block to gently tap into place; then continue installing the planks normally to finish the row.

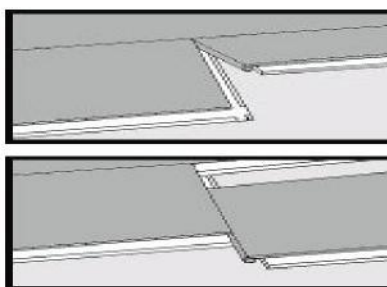


Diagram C-1

Diagram C-2

Remove all wall base or molding, and undercut door frames if necessary. When installing over concrete or a crawl space, you will need to use at least a 2 in 1 underlayment (with moisture barrier); if you are not using an underlayment with an attached moisture barrier, you can use a standard underlayment over

a polyethylene film (6mil or more thickness) for this purpose. Overlap the seams by 4 – 6 inches (101.6 – 152 mm), and then tape the seams to provide a seamless moisture barrier. Put down the plastic film as necessary until you complete that section, this will help to keep the moisture barrier from getting damaged. When using an underlayment with attached moisture barrier, butt the edges of the underlayment together, overlap the plastic film, and then use underlayment tape for a seamless moisture barrier (Figure 1). Allow the film to run up the wall a short distance; then trim so it will be covered by wall molding (Figure 2). When starting the installation, it is important to take time to plan the installation; accurate measurements will allow you to avoid having to cut small strips when you reach the other side of the room. If necessary, you may need to trim the starting row width so that you can avoid very thin strips of flooring when you reach the other side of the room.

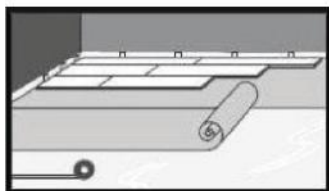


Figure 1

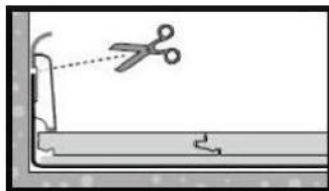


Figure 2

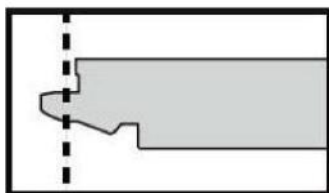


Figure 3

To start, the sides of the planks that will go next to the wall will need to have the tongue portion removed (Figure 3) to allow room for expansion. To start, take two full size planks and cut 1/3 and 2/3 off the planks (be sure that the cut sides will be next to the wall); this will give you two cut planks to start the second and third rows. Place the full plank close to the wall, then add the larger of the two cut planks (aligned to the left, cut edge next to wall); then take the third smaller cut plank and do the same (Figure 4.1). It may be helpful to lay out the planks on the floor, so you see how to use the 2 foot (610mm) boards effectively. Be sure to mix them in a pleasing pattern, and place close attention that all the short planks in each box are used effectively, otherwise you may end up with too many or too few left over. It is not a good idea to use the short boards for

starting a new row; pieces cut when finishing a row can usually be used to start the next row. Be sure that all cut planks are at least 8 inches (203mm) long, and that the end joints are never closer than 8 inches (203mm) from the next end joint in another row. Follow the procedures shown in Figures 4.1 - 4.3 for the first three rows; you can then push these 3 completed rows into place along the wall. Be sure to use spacers or scrap pieces of flooring along the wall to maintain the expansion gap. At this point, you can avoid a stair step joint pattern by using the pieces of boards cut off when finishing a row (or cut new ones). Be sure these pieces are at least 8 inches (203 mm) long. Always keep the end joints at least 8 inches (203 mm) apart. You can then finish the room as shown in Figures 4.4 – 4.6.

Please Note: Be sure there is sufficient room for expansion along all walls, under door frames, and around any pipes or fixtures attached to or come through the subfloor. Rooms longer than 40 feet (12.19m) will require an expansion gap (you can decide where you think it will look best), which can be finished with the T-Molding. When installing in other rooms, leave an expansion gap directly beneath the door; this can then be covered with the T-Molding. Never attach the flooring directly to the subfloor as it will prevent the floor from expanding/contracting.

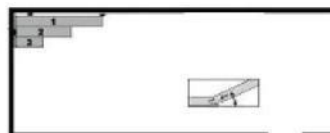


Figure 1

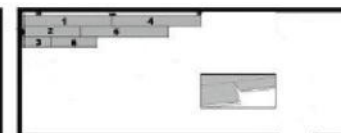


Figure 2

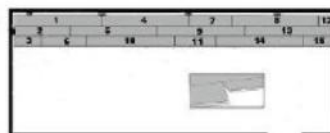


Figure 3

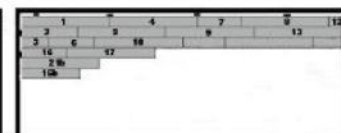


Figure 4

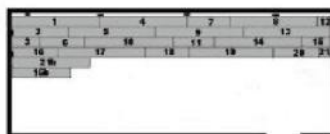


Figure 5

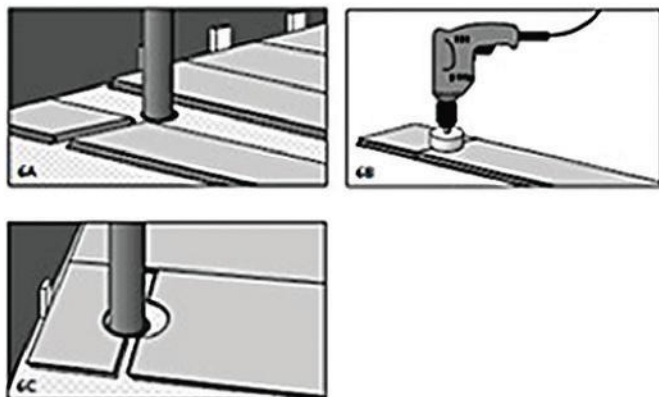


Figure 6

Wellmade

HDF Uniclic Installation Guidelines

Pipes: In rows where there is a pipe or other object through the subfloor, make sure the object lines up exactly where two boards will meet on the short ends. Take care to measure carefully before cutting, so the two boards end at the middle of the object. Use a drill or hole bit that is the diameter of the pipe or object, plus 3/4 inch (20mm) for expansion. Click the two short sides of the boards together, then drill the hole centered on the joint between the boards as shown. Now you can separate the two boards and install as normal. **See Diagrams 6A – 6C.**



Under Door Frames: When cutting boards that will go under the door frame, you need to be sure to leave the height of the flooring plus height of pad under the door frame. When undercutting the door frame, be sure you cut far enough under, so that the frame covers the board, and still has enough room for expansion/contraction. Lay the final piece flat with the tongue in the groove, slide in as far as possible with your hands, and then use a tapping block to gently tap into the final position (Diagram 7.1). Remember that this board needs to end so that the transition piece used in the doorway ends directly under the middle of the door, plus the expansion gap. If you are installing in the adjacent room, the T-Molding should be centered under the door.

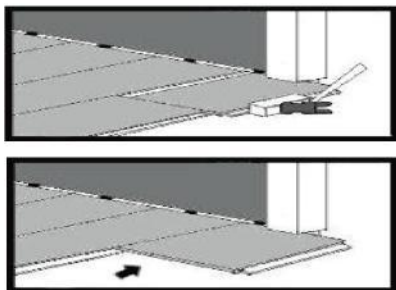


Diagram 7.1

Diagram 7.2

An alternative method would be to start the row at the door frame and gently tap into place with a hammer and tapping block, you can then continue installing across the area to the opposite wall (Diagram 7.2). Be sure that this piece is positioned properly to allow for expansion under the door frame, as well as the T-molding that will be used under the door.

Transitions, Moldings, and Wall Base:

All transition pieces should be attached to the subfloor with a high quality construction adhesive, available at most Home Centers and Hardware stores. Place a generous bead of adhesive under the part of the transition that will sit directly on the subfloor, and then press the transition firmly in place. Be sure the transition sits firmly in the adhesive, and take care not to get any adhesive on the finish. Remove any adhesive from the finish immediately with mineral spirits and buff off any residue with a dry soft cloth. It may be necessary to place heavy weights on the transition until the adhesive dries to ensure it will lay flat. If necessary, you can also use small finish nails by pre-drilling, countersinking, and then filling the nail hole with matching putty. **Never attach the transitions directly to the flooring.**

Finishing 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 hardwood 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/casters can damage your flooring; if necessary try to replace with softer rubber wheels/casters. 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 HDF engineered bamboo floor!