



## **DensaCore™ 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](http://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 bamboo is a natural material and slight variations in color occur naturally.

### **Jobsite Requirements:**

Prior to the installation of DensaCore, 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" CDX plywood, 3/4" OSB, existing solid-wood subfloor, concrete, gypcrete, or underlayment grade particle board with a minimum of 40lb density)
- **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 wood** - when installing on a wooden subfloor, the difference between the moisture content of the flooring and the subfloor must not be greater than 2 percentage points. If you are unsure how to determine this, contact Sustainable Flooring. **Note:** *Acclimating is one of the most important steps to ensuring a healthy floor.*
  - **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 the DensaCore flooring is much more stable than most woods, it is still subject to damage when in direct contact with a constantly wet slab. DensaCore 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. **Recommendation:** *a concrete slab at any level that measures dry today may become moist in the future due to rising groundwater, etc. Installing a moisture barrier now may be viewed as an insurance policy against concrete becoming wet in the future; moisture getting to the hardwood floor may lead to floor failure.*
  - **Note: Sustainable Flooring is not responsible for any site related moisture issues.**
- **Debris-free subfloor** – prior to installation, the subfloor should be thoroughly cleaned to ensure all debris is removed.
  - **Note: It is the sole responsibility of the flooring installer to ensure that the job site, subfloor and installation tools and materials meet or exceed all applicable industry standards.**



- **Climatic 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). Flooring with natural components function best when the room temperature ranges from 60-70 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 65%, 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 DensaCore 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. Remove the planks from the box and expose to local conditions until the material has sufficiently acclimated to the site.*
  - **Note:** *Minor 'checking' between individual strands in extremely dry climates can occur*

### **General Installation Guidelines:**

- **Install via either a 'floating' or 'glue-down' installation procedure**
- **Test subfloor for moisture** -
- **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 (1/2" recommended).
- **Size up Area of Installation** - No area of connected flooring can span greater than 25 feet in width or 50 feet in length. For larger spans, install T-moldings or other transition pieces that allow the flooring to expand and contract.
- **Work out of multiple boxes** – though great effort is made to ensure color consistency, being a natural material, the color of DensaCore face veneer inherently varies. Mixing cartons creates a natural, random shade effect.
- **Stagger Seams** – this ensures a random and flowing pattern to the floor.
- **Heavy objects** - such as counters, kitchen islands, and large stoves or refrigerators should be in place prior to the installation of a floating wood floor. When installed in a 'floating' capacity, heavy objects can 'pin' the floor planks to the subfloor, inhibiting the floor's ability to move in response to changes in humidity, which technically can result in gapping or cupping depending on where this occurs within the installation space.
- **Moisture Barrier** - lay 6-mil Polyfilm (or other acceptable moisture barrier) to keep moisture from wicking up from the subfloor. Follow manufacturers' instruction on the installation of moisture barrier (paying attention to: overlapping seams [typically no less than 8"], taping seams (typically with waterproof tape), and perimeter extent of barrier [typically should extend no less than 4" up all vertical surfaces]).

### **'Floating' Installation:**

1. Dry lay a few rows, before starting installation to confirm your layout decision and working line. When laying flooring, stagger end joints from one row to the next by at least 8". When cutting the last plank in a row to fit, you can use the cut-off end to begin the next row. If cut-off end is 8" in length or less, discard it and instead cut a new plank at a random length (greater than 8") and use it to start the next row. Always begin each row from the same side of the room. To draw planks together, always use a tapping block, as tapping the flooring itself will result in edge damage. Fit end joints tightly together before tapping long edges together.



2. To install your first row, snap a chalk line parallel to your starting wall, If the wall is not parallel, adjust the chalk-line to compensate. Layout your first row of flooring along this line.
3. The tongue on the first row should be cut off to allow an expansion gap of min spacing is required on the perimeter of the room when this room is larger than 25' wide. Base board and quarter round can be installed to fill out the gap.
4. Between 2 separate rooms, or in a case of a sill doorstep, a molding is required as well. In extremely dry environments, the gap should be decreased to allow for shrinkage. The opposite should be done for very wet environments.
5. After laying the first row, starting from the left-hand side lay out the second row, click male facing the female side of the first row, making sure that all end seams are at least 6 inches apart. To install the second row, lift the board at a 45° angle to row one. Be sure click is secured tightly against one another by pushing down on joint; use a rubber hammer with a wood tapping block if needed. In addition, push it lightly until the flooring locks tightly.
6. To click the ends of the planks, use a rubber hammer and tapping block to slide then ends into position. In this order put together one row after another the long male click part of the floor, which is the last row next to the wall, should also be cut off to keep a space at the edge of the wall, as recommended above. The threshold between two adjacent rooms should be kept spaced as well, or with an expansion joint.
7. When you meet obstructions such as a post or wall, keep at least 1/2" spacing between the flooring and the object.
8. Flooring should be one of the last items installed in a project. To protect the floors while other trades are finishing their work prior to final cleanup and turnover to the owner, use rosin paper and only use 3M 2080 Blue Tape to hold the rosin paper to the floor (other blue tapes may damage the finish).
9. Clean the floor thoroughly before laying the rosin paper to ensure that no debris is trapped underneath. DO NOT USE plastic film or other non-breathing coverings as this can cause the floor to become damaged from humidity buildups.
10. Remove expansion spacers and reinstall base and/or quarter round moldings to cover the expansion space. It is especially important to nail the quarter round on the baseboard and not on the floor, as this will stop the normal movement of the floor, and DensaCore should not be nailed into.
11. Dust mop or vacuum the floor thoroughly to remove any dirt or debris.
12. Buff the floor with lamb's wool pads to remove any loose splinters, residues, footprints, etc.
13. Install any transition pieces that may be needed (reducers, T-moldings, nosing, etc.).
14. Place walk-off mats at all entrances to help collect dirt and debris that could damage or dull the flooring finish.
15. Install felt floor protectors underneath all furniture.

### **Hydronic Radiant Systems:**

DensaCore can be installed over "hydronic" radiant systems, but should not be used over "electric" systems. The surface temperature must **never** exceed 85 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 DensaCore supplier).



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**Note: Should you have any questions relating to the installation procedure, please contact Sustainable Flooring or your Sustainable Flooring representative before beginning the installation procedure. Sustainable Flooring, Inc. is not liable for any issue relating to its material if it is either installed incorrectly or installed in unacceptable conditions.**

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