

SMARTCORE NATURALS 6.5" WIDE INSTALLATION

When properly installed in accordance with Shaw's published installation instructions, this product will not swell, cup, or crack due to exposure to water from topical spills or moisture from the sub-floor when exposed to such conditions. This product is not designed to withstand submersion from standing water or flooding.

READ THESE INSTRUCTIONS THOROUGHLY BEFORE BEGINNING INSTALLATION. If the following instructions leave any unanswered questions or if additional information is required, please call Shaw Technical Support at 1.800.471.7429. This flooring is a natural wood product on a solid polymer core, which has natural variations in color, texture, and sheen/gloss. For best visual effect, install planks working from several cartons.

NOTE: SMARTCORE NATURALS 6.5" wide products cannot be installed with existing SMARTCORE NATURALS 5" wide products.

INSTALLER/OWNER RESPONSIBILITY

- **We urge you, as the final inspector to inspect for proper color, finish, style, and quality PRIOR to installation. Verify that the flooring is the correct material. Care should be taken at this time to remove or repair particular characteristics you do not desire. Manufacturer declines responsibility for any costs incurred when plank(s) with visible defects have been installed.**
- **The use of stain, filler, or putty stick for the correction of minor defects during installation should be accepted as normal procedure. 5% cutting allowance, depending on layout, must be added to the actual square footage amount needed.**

NOTE: SMARTCORE® Naturals flooring may be installed with a direct glue-down method on approved wooden (or) concrete substrates on or above grade only. For below grade installations, use the floating installation method. Use only Shaw approved (or comparable) adhesives. Please consult with the adhesive manufacturer (or) contact Shaw Technical Support at 1.800.471.7429 directly to determine if the selected adhesive is suitable for use with this material.

- Do not install SMARTCORE® Naturals flooring as a floating floor where it will be exposed to temperatures greater than 140° F. In areas where the floor may be exposed to direct, intense sunlight resulting in excessive heat to the floor, use the full spread glue down method. Avoid exposure to direct sunlight for prolonged periods, doing so may result in discoloration. During peak sunlight hours, the use of the drapes or blinds is recommended.

PRE-INSTALLATION JOBSITE REQUIREMENTS

It is the installer/owners' responsibility to ensure that the jobsite conditions and jobsite subfloor are environmentally and structurally acceptable prior to the installation of any hardwood flooring. The manufacturer declines any responsibility for failures or deficiencies of hardwood flooring resulting from or related to sub-floor, sub-surface, or job-site environmental conditions. All substrates must be clean, flat, dry, and structurally sound.

- Flooring should be one of the last items installed in any new construction or remodel project.
- Install flooring after cabinets have been installed to prevent damage to the flooring.
- Cut outside whenever possible to minimize airborne contaminants that may become embedded in the grain.
- When cutting inside, dust collection bags should be clean and in place.
- Always wear adequate eye protection and safety masks.

Room temperature and humidity of installation areas should be consistent with normal, year-round living conditions for at least one week before installation of flooring. Maintaining an optimum yearly room temperature of 70° F and a humidity range of 35- 55% is recommended.

CAUTION: WOOD DUST - The International Agency for Research on Cancer has classified wood dust as a nasal carcinogen. The sawing, sanding, and/ or machining of wood products can produce wood dust that can cause respiratory, eye, and skin irritations. Equipment should be equipped with a dust collector to reduce airborne wood dust. Wear an appropriate NIOSH designated dust mask to reduce exposure to airborne wood dust. Avoid contact with eyes and skin.

In case of irritation, flush eyes or skin with water for at least 15 minutes. In cases of severe irritation; seek immediate medical attention. *For further technical or installation questions or to request a Product Specification Data Sheet contact the manufacturer 1.800.471.7429.*

WARNING: Drilling, sawing sanding or machining wood products can expose you to wood dust a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

PRE-INSTALLATION SUBFLOOR REQUIREMENTS

Note: All subfloors must be flat to within 3/16" in 10' or 1/8" in 6'.

WOOD SUBFLOORS

- Do not install material over wood subfloors that lay directly on concrete or over dimensional lumber or plywood used over concrete. Refer to ASTM F1482 for panel underlayment recommendations.
- Do not apply sheet plastic over wood subfloors.
- Basements and crawl spaces must be dry. Use of a 6 mil black polyethylene is required to cover 100% of the crawl space earth. Crawl space clearance from ground to underside of joist is to be no less than 18" and perimeter vent spacing should be equal to 1.5% of the total square footage of the crawl space area to provide cross ventilation. Where necessary, local regulations prevail.
- All other subfloors - Plywood, OSB, particleboard, chipboard, wafer board, etc. must be structurally sound and must be installed following their manufacturer's recommendations. Local building codes may only establish minimum requirements of the flooring system and may not provide adequate rigidity and support for proper installation and performance. If needed add an additional layer of APA rated underlayment, fasten and secure according to the underlayment manufacturer's recommendations.
- Hardwood flooring is not recommended directly over fire-retardant treated plywood or preservative treated plywood. An additional layer of APA rated 1/4" thick underlayment should be installed.

CONCRETE SUBFLOORS

- Floors shall be smooth, permanently dry, clean, and free all foreign material such as dust, wax, solvents, paint, grease, oils, and old adhesive residue. The surface must be hard and dense, and free from powder or flaking.
- New concrete slabs must be dry. Maximum moisture level per CaCl test method is 5 lbs. per 1000 in 24 hr. Maximum level for ASTM 2170 In-situ Relative humidity test method - 85%.
- Do not install over concrete with a history of high moisture or hydrostatic conditions.
- Ph level of concrete should be between 7-10.
- The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer.

WARNING! DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVES OR OTHER ADHESIVES.

These products may contain either asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material. See current edition of the Resilient Floor Covering Institute (RFCI) publication Recommended Work Practices for Removal of Resilient Floor Coverings for detailed information and instructions on removing all resilient covering structures. For current information go to www.rfci.com.

EXISTING FLOOR COVERINGS

- SMARTCORE® Naturals flooring can be installed over most existing hard-surface floor coverings provided that the existing floor surface is clean, flat dry and structurally sound.
- Existing sheet vinyl floors should not be heavily cushioned and not exceed more than one layer in thickness.
- Installation is **NOT** allowed over any type of carpet.
- **Do NOT** install over wood subfloor or wood floors adhered to concrete.
- Ceramic tile must be well bonded to the subfloor and meet the tolerances for being flat/level.
- Never use solvents or citrus adhesive removers to remove old adhesive residue. Solvent residue left in and on the subfloor may affect the new floor covering.

STARTING YOUR INSTALLATION

- Because houses and buildings, as well as adjacent hardwood or laminate floors, expand and contract, Shaw recommends leaving a ¼" expansion gap between the perimeter walls and any adjacent hardwood floor.
- For floating installations an underlayment is generally **not** required. However, if you prefer an even quieter installation you can include an underlayment approved for resilient products.
- **Note:** Larger rooms require additional expansion space. Add 1/16" to the width of the expansion space for every 3' the room extends beyond 25'.

Work from several open boxes of flooring and "dry lay" the floor before permanently laying the floor. This will allow you to select varying textures, colors, and sheens, and to arrange them in a harmonious pattern. Remember, it is the installer's responsibility to determine the expectations of what the finished floor will look like with the end user first and then to cull out pieces that **do not** meet those expectations.

Begin installation next to an outside wall. This is usually the straightest and best reference for establishing a straight working line. Establish this line by measuring an equal distance from the wall at both ends and snapping a chalk line. The distance you measure from the wall should be the width of a plank. You may need to scribe cut the first row of planks to match the wall in order to make a straight working line if the wall is out of straight.

You may want to position a few rows before starting installation to confirm your layout decision and working line. When laying flooring, stagger end joints from row to row by at least 8" (20 cm) for planks. Use the cut-off end to begin the next row when cutting the last plank in a row to fit. If cut-off end is less than 8", discard it and instead cut a new plank at a random length (at least 8" in length) and use it to start the next row. Always begin each row from the same side of the room.

INSTALLATION INSTRUCTIONS

These installation guidelines apply to the SMARTCORE® Naturals product. All instructions and recommendations should be followed for a successful installation.

Tools: Tape Measure, Utility Knife, Jigsaw (fiberglass / plexiglass blade), Tapping Block or Rubber Mallet, Pull Bar, ¼" Spacers, T-Square, Safety Glasses, Broom or Vacuum and, if necessary, tools for subfloor repair.

- SMARTCORE® Naturals flooring is an interior product and must be stored/installed in a temperature-controlled interior environment, maintained between 55°F and 85°F or 13°-29°C.
- Excessive moisture in the subfloor could promote mold, mildew, and other moisture related issues that will contribute to an unhealthy indoor environment. Shaw is not responsible for damages related to these moisture issues. Shaw recommends a 6 mil polyfilm when installing over concrete subfloors.
- Flexible silicone caulking should be used around the perimeter of the installation in areas being exposed to excessive topical moisture.
- Flooring should be installed after all other trades have completed work that could damage the flooring.
- Use cementitious patching and leveling compounds that meet or exceed maximum moisture level and pH requirements. Use of gypsum based patching and/or leveling compounds, which contain Portland or high alumina cement and meet or exceed the compressive strength of 3,000 psi are acceptable.
- Inspect all planks for damage prior to installation. If you have any concerns about the product fit or finish, call Shaw Technical Support at 1.800.471.7429. Claims>Returns will not be accepted for any flooring that has been cut to size and/or installed.

Radiant Heat: SMARTCORE® Naturals flooring can be installed over radiant heat using either the floating or glue down method. ³

When gluing floor, use only Shaw approved or comparable adhesive over manufacturer's recommended substrate. Radiant heat systems must have a minimum of 1/2" separation from the product. Maximum operating temperature should never exceed 85°F (30°C). Use of an infloor temperature sensor is recommended to avoid overheating.

- **Turn the heat off for 24 hours before, during and 24 hours after installation when installing over radiant heated subfloors.**
- Failure to turn the heat off may result in significantly shortened working time of the adhesive.
- Floor temperature must not exceed **85°F (30°C)**.
- Once the installation has been completed, the heating system should be turned on and increased gradually (5 degree increments) until returning to normal operating conditions.
- Failure to strictly follow adhesive manufacturer's guidelines may result in failure and void the warranty.

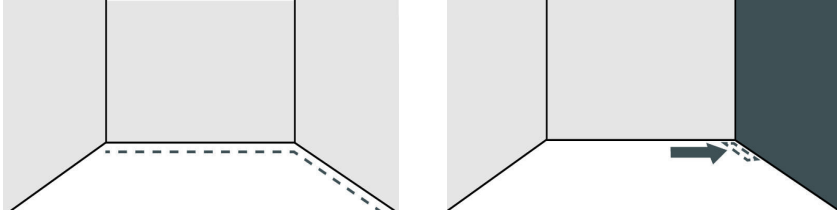
Warning: Electric heating mats that are not embedded into the subfloor are not recommended for use underneath Waterproof Wood Flooring.

Installation: SMARTCORE[®] Naturals flooring is engineered to be installed utilizing the floating method. Do not install cabinets or fixed objects atop the flooring. Proper expansion space is required. Undercut all doorjamb. Do not fasten wall moldings and or transition strips to the floor and planks.

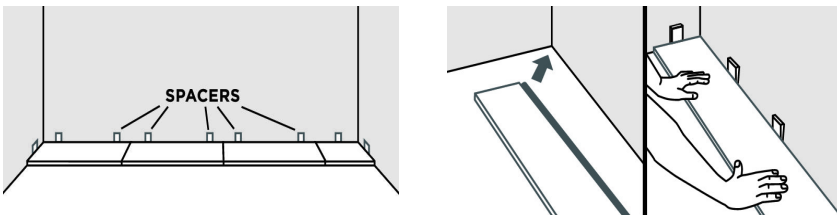
- Check groove on plank to make sure it is clean and free of debris.

1. Before you start with the installation, it is important to determine the layout of the flooring. Proper planning and layout will prevent having narrow flooring widths at wall junctures or very short length pieces at the end of rows.

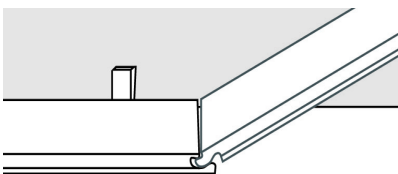
2. Determine if the starter row will need to be cut. (*In order to have a balanced floor layout, the width of the flooring for the first and last row may need to be cut). The cut width of the flooring should be ½ the width of the flooring. If the first row of flooring does not need to be trimmed in width, it will be necessary to cut off the unsupported tongue so that a clean, solid edge shows towards the wall.



3. Installation of the product must start from the left side of the room, working to the right when working in front of the flooring or facing the starting wall. Use spacers along the walls to maintain proper expansion space (1/4") and align the first piece.



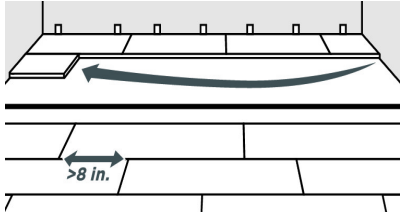
4. Install the second plank by aligning and dropping the end tongue over the end groove of the first piece. Apply light pressure to join the two pieces together.



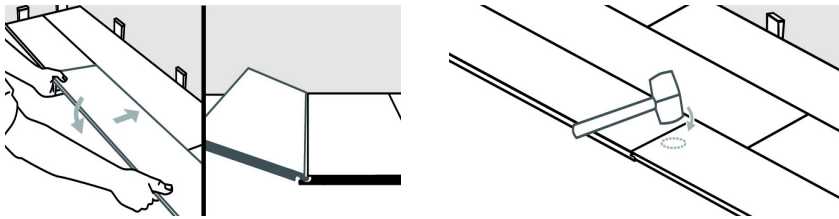
5. If needed use a rubber mallet to fully engage the short side of the flooring by lightly tapping on the top of the flooring to engage and sit flush with the adjacent piece. Maintain an expansion gap of approximately 1/4" from the wall. Repeat this process to complete

the first row. At the end of the row, measure and cut the flooring to complete the row. **Note:** to create a cut edge, use a straight edge on the face of the flooring to cut the flooring. Install the cut edge closest to the wall. If the end is raised use a non-marking rubber mallet to lightly tap the end (tongue side) about 1" from the seam. Do NOT tap directly on the seam.

6. Start the second row by cutting the flooring to the desired length. Keep in mind that piece must not be shorter than 8" (20cm) to achieve the best appearance.

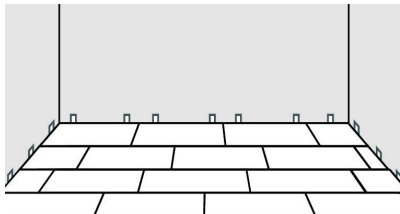


7. Install the first piece in the second row by inserting the long side tongue into the groove of the piece in the first row. This is best done with a low angle. Maintain light pressure into the side seam as you rotate the flooring to the subfloor. Use a rubber mallet to engage the short side by tapping lightly on the top of the flooring. Very little force is required to seat the tongue into the groove. You should feel the tongue lock into the groove. Repeat the process with the remaining additional pieces to complete each row.



8. It is critical to keep the first two rows straight and square, as they are the "foundation" for the rest of the installation. Check for squareness and straightness often.

9. Continue installation and make sure to achieve a random appearance with end pieces of minimum 8" (20cm). Check that all pieces are fully engaged; if a slight gapping is found, the gap can be tapped together by using a tapping block and a scrap of flooring to cover the tapping block in order to avoid damages to the flooring.



10. When fitting under door casings, if necessary, a flat pull bar may be used to assist in locking the joints. Doorjamb or at row ends near walls where space is limited, the tongue can be "shaved" and glue containing "cyanoacrylate" can be applied to the groove to join the pieces together.

11. When fitting around obstacles or into irregular spaces, the flooring can be cut easily and cleanly using a utility knife with a sharp blade. It is often beneficial to make a cardboard template of the area and transfer this pattern to the flooring.

COMPLETION

- Sweep or vacuum floor
- Clean the floor with proper hardwood floor cleaner
- Install transition pieces -i.e. – thresholds, t-moldings, base boards and quarter round. Nail moldings to wall, not the floor.
- Inspect final floor for nicks and or minor gaps – fill with appropriate color wood putty.
- Unused material should be left with owner and stored in a dry place in case of future repairs are needed.
- Use plywood or hardboard when moving heavy appliances or furniture across floor.