



Solid State Installation Guide

THE
**MODERN
FLOORING
SOLUTION**

PRE-INSTALLATION

SUBFLOOR REQUIREMENTS

RADIANT HEATING SYSTEM

AVAILABLE MOLDINGS

UNDERLAYMENTS

ACCLIMATION

PREP

INSTALL

CUTTING

FIRST ROW

SUBSEQUENT ROWS

FINAL ROW

DISENGAGING THE FLOOR

FINISHING THE JOB

INSTALLING ON STAIRS

DOOR JAMBS

FLOOR CARE

PRE-INSTALLATION

Solid State Wood Composite Flooring is a highly durable floor covering system composed of an HDF core. Following the instructions in this guide are required to ensure your floor is attractive, long-lasting, and covered by the manufacturer's warranty. These instructions apply to residential, and light-commercial/multi-family flooring installations. Solid State Wood Composite floors are intended for interior use only and are suitable for above-grade, on-grade, and below-grade applications. Avoid installing Solid State flooring materials in bathrooms and similar settings (known as wet areas) where the flooring will encounter frequent exposure to topical moisture.

EXPANSION

Solid State Wood Composite Flooring is a floating floor and should be allowed to expand and contract freely. Make sure to not glue, nail, or fasten Solid State Wood Composite Flooring to the subfloor in any way. Doing so may lead to a flooring failure. Exception: stair treads and risers (see stair installation requirements). Permanent cabinets, vanities, islands, and similar items should be installed prior to installing Solid State Wood Composite Flooring. Ensure to leave a 3/8" inch gap around the perimeter. Flooring can be installed under vanities with legs. Avoid acrylic caulking and anything intended as an adhesive.

PROTECT

Protect your floor from exposure to direct sunlight via the use with window treatments or UV tinting on windows. Discoloration to Solid State Wood Composite Flooring may occur due to UV fading resulting from direct sunlight exposure. UV/radiant heat from direct sunlight can also cause the temperature of the flooring to rise well above the ambient room temperature leading to damage.

OVERAGE ALLOWANCES

Order 5-10% more flooring than square footage needed to account for cuttings and waste. Failing to purchase enough materials for the job, or not keeping materials for repairs, may result in different dye lots on a future order or products being discontinued. Dye lots (batch numbers) are not recommended to be mixed.

PRODUCT INSPECTION

Check to ensure your flooring is in its original packaging and free from any visible damage or defects. Inspect all material for correct color, design, batch number, size, and quantity to finish the job.

NOTE:

- Some patterns are intended to have high shade variation. Single sample chips may be part of a set from a variegated pattern. It is the responsibility of the dealer and buyer to seek out pattern info prior to purchasing/installing.
- Avoid installing material from different batches across large areas.

PRE-INSTALLATION

SUBFLOOR REQUIREMENTS

RADIANT HEATING SYSTEM

AVAILABLE MOLDINGS

UNDERLAYMENTS

ACCLIMATION

PREP

INSTALL

CUTTING

FIRST ROW

SUBSEQUENT ROWS

FINAL ROW

DISENGAGING THE FLOOR

FINISHING THE JOB

INSTALLING ON STAIRS

DOOR JAMBS

FLOOR CARE

Within industry tolerances, it is not uncommon for there to be variations between dye lots/batches (production runs), these differences are caused by minute changes that can occur during the manufacturing cycle. These variations may involve any of the following, texture, gloss level, color saturation, or milling (of the clip system). Generally, these differences will not be noticeable unless batches are mixed, or when side-matching is attempted for repairs, new installs, or continued installations. Batches that are close in production runs may be able to be mixed. It is the responsibility of the contractor/installer to verify product batch compatibility prior to installation. Urban Surfaces does not guarantee compatibility between intermixed batches or an exact match when comparing material from separate production runs.

SUBFLOOR REQUIREMENTS

1. Solid State Wood Composite Flooring requires a secure subfloor that meets building codes. The added requirements are not intended to supersede federal, state or local building codes, but like many other interior finish products, may require some modifications to the existing structure to complete a successful installation.

2. The subfloor must be level to within 3/16" in a 10ft. (4.76mm in a 3m) span or 1/8" in a 6ft. (3.175mm per 1.8m) span or otherwise appropriate ratios of this requirement; no high or low spots.

3. Subfloors should not slope more than 1/2" per 6ft. (25mm per 1.8m). Must be structurally sound without deflection.

4. Must be clean: no construction debris, dust, soil, mud or any other objects on or adhering to the floor; if necessary, scrape and sweep away before the installation; no protrusions of nails, debris, or metals should remain.

5. A moisture test is highly recommended to determine if moisture is present in the subfloor. When using a calcium chloride moisture test for concrete subfloors (ASTM F1869), values must be ≤ 5 lbs/1000ft²/24-hr or $<80\%$ RH with an in situ probe (ASTM F2170).

5.1 Acceptable job site conditions, including relative humidity and subfloor moisture conditions, must be maintained throughout the lifetime of the flooring.

5.2 For concrete subfloors, install vapor barriers with overlapped seams of 12" or more with waterproof tape.

5.3 Moisture readings of wood subfloors must be $\leq 12\%$. If the wood subfloor is showing high moisture vapor readings, floating laminate wood floors should not be installed until the problem has been fixed.

5.3.1 All wood must be properly fixed to the substrate. Loose or creaking boards will result in a squeaking floor after installation.

CRAWL SPACES

The concrete slab or ground must be dry. Ensure that crawl spaces have open vents year-round to ensure proper air circulation and prevent moisture build-up. Crawl space clearance between the earth and underside of joists should be no less than 18" (45.7cm) and the perimeter vent area should be equal to 1.5% of the total square footage of the crawl space or as mandated by code. Crawl spaces should be insulated and have a vapor barrier covering exposed earth.

PRE-INSTALLATION

SUBFLOOR REQUIREMENTS

RADIANT HEATING SYSTEM

AVAILABLE MOLDINGS

UNDERLAYMENTS

ACCLIMATION

PREP

INSTALL

CUTTING

FIRST ROW

SUBSEQUENT ROWS

DISENGAGING THE FLOOR

FINISHING THE JOB

INSTALLING ON STAIRS

DOOR JAMBS

FLOOR CARE

ACCEPTABLE SUBFLOOR TYPES

It is possible to install Solid State Wood Composite Flooring over many existing floor coverings, provided they are stable and firmly fixed.

Existing flooring cannot be soft, damaged, loosely laid, more than a single layer, or exceed 1/2" in thickness. Remove carpet, needle felt, cushion vinyl, perimeter glued products, or any floating floor.

Solid State Wood Composite Flooring may be installed over directly over any existing hard surface flooring provided it is a single layer, meet flatness requirements, and is suitable for receiving vinyl flooring.

Mexican pavers and similar types of flooring may not be flat and even enough to receive Solid State Wood Composite Flooring. This unevenness may require correction to make it suitable for receiving the flooring. Existing floors must be firmly attached to the structural subfloor. Fill in grout lines larger than 1/4" (6mm) on any form of tile or similar floors with a cementitious leveling and patching compound. All substrates (including existing flooring) to receive Solid State Wood Composite Flooring shall be: dry, clean, smooth, and structurally sound.

They shall be free of: residual adhesive (including cutback adhesive), adhesive removers, alkaline salts, excessive carbonation/laitance, mold, mildew, dust, wax, oil, grease, solvent, paint, or curing, sealing, hardening/parting compounds, or any other foreign materials.

DO NOT install any Urban Surfaces product over sleeper floor construction, wood that lies directly on concrete, etc. Sleeper floors and other wood structures on top of concrete that do not meet the crawl space requirements can create moisture issues beneath the subfloor. This can lead to mold, mildew, or wood rot in the subfloor construction.

NON-APPROVED SUBFLOORS

- Carpeting/Carpet Pad
- Cork
- Engineered Hardwood
- Floating Floors
- Laminate
- Parquet Over Concrete
- Cushioned Vinyl Flooring
- Sleeper Substrates
- Rubber

RADIANT HEATING SYSTEM

Ensuring stable job site conditions, subfloor suitability and proper acclimation are especially important when installing over a radiant heat system. It is the responsibility of the installer/owner to ensure that the recommended environmental conditions are met for installation.

PRE-INSTALLATION

SUBFLOOR REQUIREMENTS

RADIANT HEATING SYSTEM

AVAILABLE MOLDINGS

UNDERLAYMENTS

ACCLIMATION

PREP

INSTALL

CUTTING

FIRST ROW

SUBSEQUENT ROWS

FIRST ROW

DISENGAGING THE FLOOR

FINISHING THE JOB

INSTALLING ON STAIRS

DOOR JAMBS

FLOOR CARE

Refer to your radiant heat system manufacturer to determine its compatibility with laminate flooring, and to learn the specific requirements for installation. It is recommended that the user consults with the radiant heating provider regarding best practices, installation methods, and proper subfloor types and conditions for the system. In-floor radiant components must be a minimum of 1/2" (13mm) below flooring. The surface temperature of the slab should never exceed 85°F (29°C). The heating system should be operational for at least two weeks prior to installation to calibrate temperature settings.

It is recommended that the user consults with the radiant heating provider regarding best practices, installation methods, and proper subfloor types and conditions for the system.

- Flooring cannot be laid directly over radiant heating mats.
- 3-days prior to installation lower the temperature to 65°F (18°C).
- After installation, gradually adjust the temperature in increments of 5°F per day to avoid rapidly heating and cooling the flooring which could lead to damage.
- The use of an in-floor temperature sensor is recommended to avoid overheating.

AVAILABLE MOLDINGS

Coordinated moldings and transitions are available for all Solid State Wood Composite Flooring products. These are necessary to allow for the transition of one product to another, around doorways, areas where the flooring flows into other hallways or rooms, etc. Follow molding requirements outlined above in conjunction with the molding installation instructions. Visit urbansurfaces.com/moldings to learn more about available moldings.

UNDERLAYMENTS

Solid State Wood Composite Flooring already has an attached pad Underlayment. No other underlayments are necessary. Additional underlayments may result in a reduction in the sound rating and may undermine the flooring's integrity leading to damage to the locking mechanism/clips. Leggett & Platt's Whisper Step® or an underlayment meeting the same specifications of density, thickness, and material type may be used with Solid state products if desired. Please follow the manufacturer's specifications and directions for installation in conjunction with a floating floor.

ACCLIMATION

- Stack boxes no more than 4 cartons (4ft.) high and space out the stacks.
- Keep away from direct sunlight.
- Flooring does not need to be taken out of the boxes, just opened at the ends.
- It is important that flooring products maintain a constant temperature between 65°F (18°C) and 85°F (29°C) 48 hours prior to, during, and 72 hours after installation.
- Thereafter, maintain a room and floor temperature between 60°F (15.5°C) and 95°F (35°C). A HVAC system must be on and functional.

- PRE-INSTALLATION
- SUBFLOOR REQUIREMENTS
- RADIANT HEATING SYSTEM
- AVAILABLE MOLDINGS
- UNDERLAYMENTS
- ACCLIMATION
- PREP
- INSTALL
- CUTTING
- FIRST ROW
- SUBSEQUENT ROWS
- FIRST ROW
- DISENGAGING THE FLOOR
- FINISHING THE JOB
- INSTALLING ON STAIRS
- DOOR JAMBS
- FLOOR CARE

PREP

Prepare the subfloor to be dry, smooth, level, clean and dust-free. See subfloor and substrate requirements prior to installation.

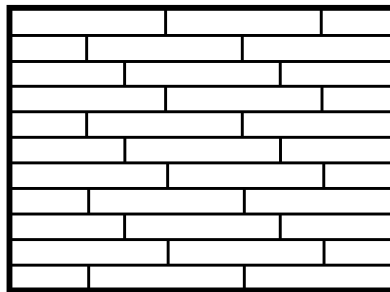
INSTALL

Follow the 7 critical steps for a successful installation.

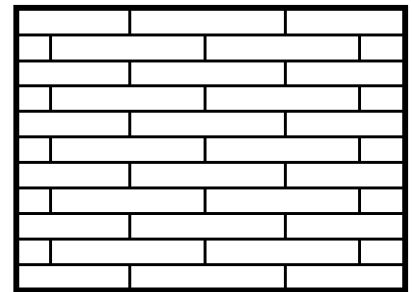
1. Choose Starting Wall.

Typically, flooring is aligned parallel with the longest wall.

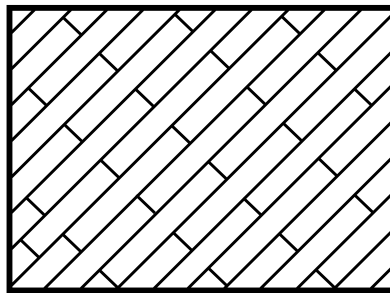
2. Determine an installation pattern.



RANDOM



SUBWAY



DIAGONAL

3. Determine how many planks are needed length and width-wise from wall to wall.

- i. Measure your starting wall
- ii. Divide the length of the wall by the length of the plank. This will determine how many planks will be needed for each row.

4. Spacers.

- i. Set 3/8" (9.5 mm) spacers along your starting wall.
- ii. Place spacers along the wall every 8"-12".
- iii. This will give the proper expansion gap along the walls.

PRE-INSTALLATION

SUBFLOOR REQUIREMENTS

RADIANT HEATING SYSTEM

AVAILABLE MOLDINGS

UNDERLAYMENTS

ACCLIMATION

PREP

INSTALL

CUTTING

FIRST ROW

SUBSEQUENT ROWS

DISENGAGING THE FLOOR

FINISHING THE JOB

INSTALLING ON STAIRS

DOOR JAMBS

FLOOR CARE

5. Remove existing wall base or trim.

Door trims must be undercut to allow the floor to move freely, door trim pieces should sit at least a 1/16" higher than the flooring materials to avoid pinching.

- i. A scrap piece of flooring may be used to support the blade during cutting.

6. Plan for Transition Moldings.

Flooring runs must not exceed 50 linear feet in a single direction. Determine the best placement of transition moldings corresponding with the length and floor plan of rooms where flooring will be installed. Transition moldings must also be used in doorways to separate flooring that extends into adjoining rooms. More information about t-moldings and other transition moldings can be found on our website

7. Install.

Install a moisture barrier, following the manufacturer's instructions. Overlap the seams by 12" and tape with waterproof tape.

CUTTING

To cut (rip) a plank width or lengthwise, simply measure and mark the plank with a pencil and then cut

- Decorative side-up if using a handsaw or
- Decorative side-down if using a power saw (to minimize chipping)

NOTE:

- The length of starting and ending planks in each row should not be shorter than 8" inches.
- Planks that are ripped lengthwise in the first and last rows of an installation should not be narrower than 3" in width.

FIRST ROW

1. For the first row along straight walls, remove the tongue on all long side joints and on the short side of the first plank only.
2. For uneven walls, trace contour on tongue side of plank and cut/rip planks.
3. To maintain a consistent expansion gap, place 3/8" spacers along the perimeter walls every 8-12".
4. Starting in the left hand corner of the room, take your first plank and set it against the spacers.
Make sure the tongue (that spans the length or long-side) of the plank is facing the wall.
5. Working left to right. Take your second plank and insert the tongue (spanning the width or short-side of the plank) into the matching groove of the plank first laid (from step #3) at a 45-degree angle.
6. To secure, gently angle the plank downward until it lies flat. Ensure that the planks are square/flush, and properly secured before proceeding (adjust if needed).

PRE-INSTALLATION

SUBFLOOR REQUIREMENTS

RADIANT HEATING SYSTEM

AVAILABLE MOLDINGS

UNDERLAYMENTS

ACCLIMATION

PREP

INSTALL

CUTTING

FIRST ROW

SUBSEQUENT ROWS

FINAL ROW

DISENGAGING THE FLOOR

FINISHING THE JOB

INSTALLING ON STAIRS

DOOR JAMBS

FLOOR CARE

7. Repeat step 4, adding additional planks until the row is complete. Failure to engage the clips correctly will result in plank separation and damage to the clips over time.

8. Trim the last plank in the row to the necessary length to complete the first row, ensure this plank is not shorter than 8" inches in length and that a $\frac{3}{8}$ " expansion gap is left between the floor and the wall. Place a $\frac{3}{8}$ " spacer in this void, to ensure the floor does not shift during installation.

NOTE:

- Be mindful of pattern repeat and design.
- Working from multiple boxes select different patterns to create a more random aesthetic, installing the same repeat consecutively will cause the floor to look artificial upon completion of the installation.

SUBSEQUENT ROWS

1. If the cut plank from the previous row is longer than 8" inches use it as a starting piece for the next row.

2. Starting with the long edge, insert the tongue of the new plank into the groove of the planks in the first row, then gently angle the plank downward until it lies flat to lock in place. Use a tapping block if needed to fully join the edges together by gentle tapping. (Planks are not fully engaged until they rest flat.)

3. To install the next plank in the row, start by joining the short ends first, (there will be a gap on the long side joints once the short ends have been joined together.)

4. To join the long sides together, raise the outside edge of the plank upward approximately 1" inch. Maintain this angle as you push the plank in until the Solid State Wood Composite Flooring edges meet. Then gently lower the plank down until the joints lock. (Use a tapping block if necessary to gently tap the planks until the clips are fully engaged. Planks are not fully engaged until they rest flat.)

5. Make sure the tongue and groove are secured properly along all sides before proceeding.

6. Repeat these steps for the rest of the installation.

FINAL ROW

1. Measure and rip the last row of planks (if needed) so that there is a $\frac{3}{8}$ " expansion gap between the floor covering and the wall.

2. To do this, place a new plank on top of the second to last row, ensuring this plank is perfectly aligned with the planks in the row beneath it.

3. Using a full width plank, trace the wall contour and then rip/cut the plank.

4. Once the tongue of this plank has been inserted into the groove at a 45 degree angle, use a tapping block and mallet to join the planks together.

5. For the remaining planks in this row, engage the long side first, and then use a tapping block and mallet to join the short ends together.

PRE-INSTALLATION

SUBFLOOR REQUIREMENTS

RADIANT HEATING SYSTEM

AVAILABLE MOLDINGS

UNDERLAYMENTS

ACCLIMATION

PREP

INSTALL

CUTTING

FIRST ROW

SUBSEQUENT ROWS

FIRST ROW

DISENGAGING THE FLOOR

FINISHING THE JOB

INSTALLING ON STAIRS

DOOR JAMBS

FLOOR CARE

DISENGAGING THE FLOOR

1. Start by separating an entire row of planks. Simply angle 45 degrees; until the planks disengage.
2. To disassemble the planks in the row (working from right to left) gently angle the short sides of the planks until they unclip.

FINISHING THE JOB

Remove all spacers. Then cover expansion spaces with quarter round or other trim, ensure trim sits at least 1/16" above the flooring so as not to trap or pin down the floor. Nails should go into the wall, not the floor covering or subfloor. Stray nails can prevent the floor from floating properly leading to damage.

INSTALLING ON STAIRS

To install Solid State Wood Composite Flooring on stair treads and risers:

1. Determine if the Solid State Wood Composite Flooring planks will be installed on the treads alone, or both the tread and riser.
2. Remove attached underlayment from planks prior to installation of flooring materials, an oscillating tool may help to accomplish this.
3. Apply an appropriate amount of adhesive to the substrate.
4. Press the planks into the adhesive starting with the treads first, followed by the riser.
5. Use a hand roller to apply pressure to planks to ensure they are firmly embedded into the adhesive.
6. Use a stair nose molding at the leading edge of the stair treads. (See the molding installation guide on urbansurfaces.com.)

DOOR JAMBS

Solid State Wood Composite Flooring requires transition molding at every threshold. Wood door jambs should be undercut a 1/16" higher than the flooring materials to avoid pinching, and the flooring should have a 3/8" expansion gap under both the door jambs and transition moldings ensuring the floor floats freely. Metal door jambs may also be cut in this manner, depending on the style. If cutting is not possible the floor should be cut so that there is a 3/8" inch expansion gap around the door jamb. Do not fasten, pin or glue the flooring down in any way.

Doorways are a common cause of floating floor failure, therefore special attention should be given to the installation in these areas.

DO NOT use acrylic caulk around the perimeter. Doing so can adhere the flooring in place causing a failure as the acrylic hardens over time. Ensure to only use adhesives that are designed and warranted by the manufacturer as safe for flooring.

PRE-INSTALLATION

SUBFLOOR REQUIREMENTS

RADIANT HEATING SYSTEM

AVAILABLE MOLDINGS

UNDERLAYMENTS

ACCLIMATION

PREP

INSTALL

CUTTING

FIRST ROW

SUBSEQUENT ROWS

FIRST ROW

DISENGAGING THE FLOOR

FINISHING THE JOB

INSTALLING ON STAIRS

DOOR JAMBS

FLOOR CARE

Use caution when using adhesives around the floating floor system. For example, if the installer is using adhesive to secure molding to the substrate, the adhesive must not get onto the floor. The intention of the molding is to allow the flooring to float beneath it.

FLOOR CARE

Heavy furniture (500+ lbs.) may obstruct the free, natural movement of a floating floor. Restricting this movement in certain areas can lead to problems such as buckling or separation when the floor experiences natural expansion and/or contraction.

Special attention should be given to unique cuts such as around islands, 45° angles, cuts around in-floor ducting/registers or other irregular cuts. Problems caused by unique/irregular cuts are not warranted.

AFTER INSTALL/FLOOR CARE MAINTENANCE Please see the maintenance guide for cleaning instructions at: www.urbansurfaces.com

DO NOT drag furniture across the floor, use appropriate protection before moving furniture as outlined by the care & maintenance guide as well as the warranty. See the care and maintenance guide for proper care instructions.