



SPC Flooring Installation Guide

PRE-INSTALLATION

Stone Polymer Composite (SPC) flooring is a highly durable floor covering system. 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, light-commercial/multi-family, and commercial flooring installations. SPC floorings are intended for interior use only and are suitable for above grade, on grade, and below-grade applications.

EXPANSION SPC flooring is a floating floor and should be allowed to expand and contract freely. Make sure to not glue, nail, or fasten SPC flooring to the subfloor in any way. Doing so may lead to a flooring failure. Exception: stair treads and risers. Permanent cabinets, vanities, islands and similar items should be installed prior to installing SPC flooring. Ensure to leave a 1/4"(6mm) inch gap around the perimeter. SPC 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 of window-treatments or UV-tinting on windows. Discoloration to SPC flooring may occur due to UV fading resulting from direct sunlight exposure. UV/radiant heating 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 #, 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.

It is possible for there to be slight shade and milling variations across products from different batches/dye lots. This is due to slight variations within industry tolerances that occur during different dates of manufacturing. Generally, this will not be noticeable unless batches are mixed, or side-matching is attempted such as during repairs or later installations. Batches that are close in production runs may be able to be mixed. This should be verified by the contractor/installer prior to installation to verify product batch compatibility. Intermixed batches that are not compatible or do not match is the responsibility of the contractor/installer.

SUBFLOOR REQUIREMENTS

1. The subfloor must be level to within 3/16" in a 10ft. (4.76mm per 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.
2. Subfloors should not slope more than 1/2" per 6ft. (25mm per 1.8m). Must be structurally sound without deflection.
3. 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.
4. Must be free from moisture-related conditions that can damage the installed flooring
 - 4.1 Moisture requirements vary from one subfloor material to another.
 - 4.2 Test all subfloors for moisture content and document the results. Visual checks are not reliable.
 - 4.3 Even though SPC floating floor is waterproof, moisture levels must still be checked in order to protect the surrounding structure, protect the subfloor, prevent pH damage, damage arising from hydrostatic pressure, and prevent a situation in which mold and/ or mildew could grow. SPC flooring should not be used to seal an existing floor from moisture. SPC flooring will not act as a waterproofing barrier for the subfloor and/or any surrounding structure.

pH: Between 7 and 10 pH when performing pH test (ASTM F710).

CRAWL SPACES 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.

ACCEPTABLE SUBFLOOR TYPES It is possible to install SPC 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" (12.7mm) thick. Remove carpet, needle felt, cushion vinyl, perimeter glued products, or any floating floor.

You may install directly over any existing hard surface flooring provided they are a single layer, meet flatness requirements, and are suitable for receiving vinyl flooring.

Mexican pavers and similar types of flooring may not be flat and even enough to receive vinyl flooring. This unevenness may require correcting to make it suitable for receiving vinyl 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 vinyl 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 apply moisture barriers over wood subfloors. **DO NOT** install any this 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 that will be trapped by the flooring's waterproof properties. This can lead to mold, mildew, or even wood rot of the subfloor construction.

NON-APPROVED SUBFLOORS

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

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.

Refer to your radiant heat system manufacturer to determine its compatibility with vinyl flooring, and to learn the specific requirements for installation. It is recommended that the user consults with the radiant heating provider for best practices, installation methods, and proper subfloors. 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.

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 SPC 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.

UNDERLAYMENTS SPC flooring products already have attached pad Underlayment. No other underlayments are necessary. Additional underlayments may result in a reduction in the sound rating and may even undermine the flooring's integrity leading to damage to the locking mechanism/clips. An underlayment meeting the same specifications of density, thickness and material type may be used with SPC flooring products if desired. Please follow the manufacturer's specifications and directions for installation in conjunction with a floating floor.

INSTALLATION OF THE FLOOR COVERING

Whether you're a pro or DIY homeowner, installing SPC flooring couldn't be easier. No power saws needed; SPC flooring scores and snaps with a simple utility knife.

ACCLIMATION

- Stack boxes no more than 4 cartons (4ft./1.2m) 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) for 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.

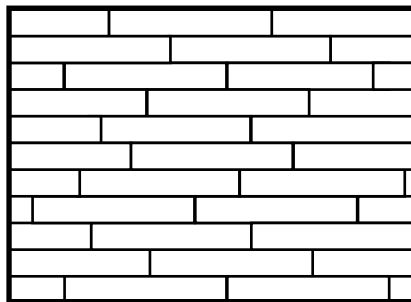
PREP

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

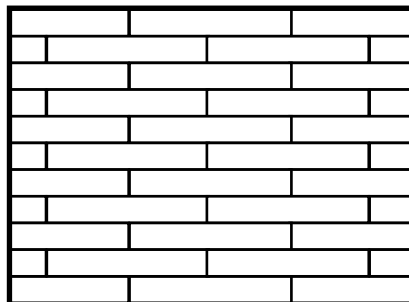
Install

Follow the critical steps for a successful installation as below.

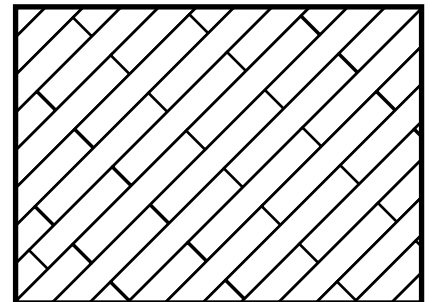
1. Choose Starting Wall
 - Typically, flooring is aligned parallel with the longest wall.
2. Determine an installation pattern



Random



Subway



Diagonal

3. Determine how many planks are needed length and width wise from wall to wall.
 - 3.1. Measure your starting wall
 - 3.2. 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
 - 4.1. Set ¼" (6 mm) spacers along your starting wall.
 - 4.2. Place spacers along the wall every 8"-12" (200mm-300mm).
 - 4.3. This will give the proper expansion gap along the walls
5. Install

FIRST ROW



1. Cut the starting and ending plank so they are no shorter than 8" (200mm) .

*.To cut a plank, simply measure and mark the plank with a pencil. Then, use a straight edge and utility knife to score and snap.

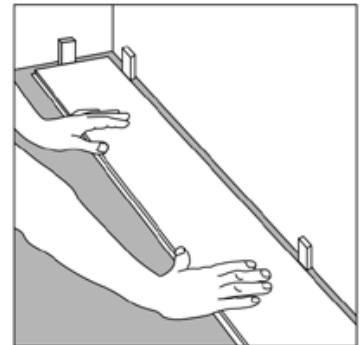
2. Do the same for the short side of the planks on the opposite walls

3. Cut the starting and ending plank lengthwise (Ripping) so the width is no smaller than 3" (76.2mm)

*.To rip a plank, simply measure and mark the plank lengthwise with a pencil. Then, use a straight edge and utility knife to score and snap.

4. Lay your first plank against the spacers along the starting wall in the left hand corner.

*. Make sure the tongue side is facing the wall



5. Take your second plank and place the short tongue side on top of the first planks short groove side

6. Gently drop the tongue side into the short groove side listening for a "click" or feeling of the tongue inserting the groove

7. Finish the connection by tapping the tongue side plank with a rubber mallet to fully engage the tongue into the groove securing the lock.

8. Make sure the tongue and groove are secured properly before proceeding

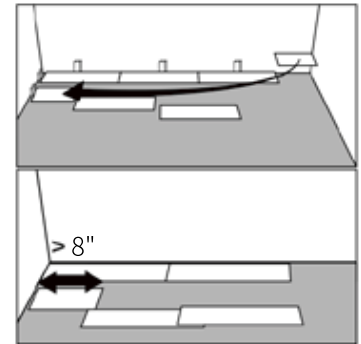
*. Repeat step 4. If the planks are not secured properly. Failure to connect correctly will result in separation and damaging of the clips

9. Be mindful of pattern repeat and design.

10. Work from multiple boxes selecting different patterns creating a more random effect, if you install the same repeat together the finished floor will look artificial

SUBSEQUENT ROWS

1. If the cut plank from the previous row is longer than 8" (200mm) use it as a starting piece for the next installment.



2. Working from left to right, engage the long tongue side of the new plank into the long groove side of the previous row by angling the new piece in a 45 degree angle

3. Once the tongue side is inserted into the groove side lay the piece flat

3.1. Make sure the long sides are connected tight with no visible gaps

3.2. Take a tapping block and gently tap the longside to make sure it is properly secured

4. Take your second plank and angle the long tongue side into the long groove side of the previous row by angling the new piece in a 45 degree angle.

5. While inserted into the previous row at a 45 degree angle, slide the plank to the left so the short tongue side is hovering over the previously laid plank's short groove side

6. Gently drop the tongue side into the short groove side listening for a "click" or feeling of the tongue inserting the groove

7. Finish the connection by tapping the tongue side plank with a rubber mallet to fully engage the tongue into the groove securing the lock.

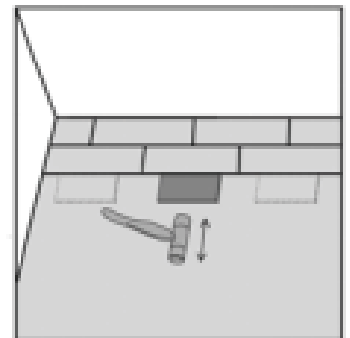
8. Make sure the tongue and groove are secured properly before proceeding

8.1. Repeat step 4. If the planks are not secured properly. Failure to connect correctly will result in separation and damaging of the Clips

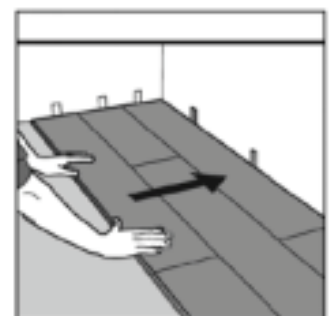
8.2. Make sure the long sides are connected tight with no visible gaps

8.3. Take a tapping block and gently tap the longside to make sure it is properly secured

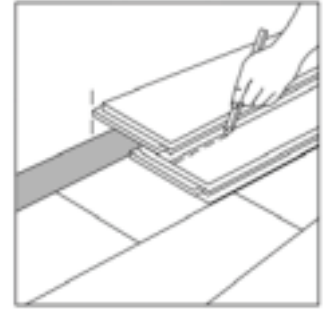
Note: You can use a scrap piece of flooring as a tapping block by taking inserting the tongue into the groove of the flooring and gently tapping the scrap piece to secure the clips



9. After 2-3 rows, adjust the distance to the front wall by leaving an expansion gap of 1/4"(6mm). Always ensure that the end joints are staggered at least 8"(200mm), both when in the same row as when from one row to the next one.



10. To lay the last row, position a loose board exactly on top of the last row laid. Place another board on top, with the tongue side touching the wall. Draw a line along the edge of this board to mark the first board. Cut along the edge of this line to obtain of the required width. Insert this cut board against the wall. The last row should be at least 2" (50mm) wide. The spacers can then be removed.



11. Be mindful of pattern repeat and design.

12. Work from multiple boxes selecting different patterns creating a more random effect, if you install the same repeat together the finished floor will look artificial

DO NOT angle or in any way bend the short end of the planks as this will damage the clip system potentially leading to a locking mechanism failure and joint separation later on

DISENGAGING THE FLOORING

1. Unclip the whole row by lifting it at a 45 degree angle and separating the pieces.

2. Disassemble the planks by gently sliding the short sides apart

2.1. WARNING: angle or in any way bend the short end of the planks as this will damage the clip system potentially leading to a locking mechanism failure and joint separation later on

2.2. If the planks are not sliding apart, take a rubber mallet and gently tap the tongue side to ensure the clips are properly secured.

2.3. The boards should gently slide apart

FINISHING THE JOB

Remove spacers. Cover expansion spaces with quarter round or other trim, being sure not to trap or pin down the floor. Nails should go into the wall, not the floor covering or subfloor. Strays nails can prevent the floor from floating properly leading to damage.

TOILETS

1. When installing in restrooms, toilets will need to be removed.

2. Once the toilet has been removed, use the same method of cutting around irregular objects to cut around the toilet flange and bolts. Ensure to leave a ¼" (6mm) expansion gap including around toilet bolts.

3. Re-install toilet.

4. Seal around the toilet using a premium waterproof 100% silicone sealant.

INSTALLING ON STAIRS

To install SPC flooring on stair treads and risers:

1. Determine if the SPC flooring planks will be installed on the treads alone, or both the tread and riser.
2. Apply an appropriate amount of adhesive to the substrate.
3. Press the planks into the adhesive starting with the treads first, followed by the riser.
4. Use a hand roller to apply pressure to planks to ensure they are firmly embedded into the adhesive.
5. Use a stair nose molding at the leading edge of the stair treads.
6. Use colored silicone caulk to fill in the seam where the treads and risers meet if desired.

NOTE: Landings are not to be glued down, fastened or otherwise pinned. Follow standard installation instructions when installing landings.

DOOR JAMBS

SPC flooring requires a transition molding at every threshold. Wood door jambs should be undercut and the flooring should have a ¼" (6mm) expansion gap under the door jambs and transition moldings to float freely. Metal door jambs can be undercut this same way, but in general flooring is cut to fit within a ¼"(6mm) around the 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.

IMPORTANT

When installing in wet areas, caulk around the perimeter using a permanently flexible silicone sealant. Avoid acrylic caulking. Do not fill in the expansion gap with sealant.

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 and for use with non-porous materials such as plastics, vinyl, EVA, etc.

Remember, when installing SPC flooring in a large room or area that it cannot exceed 50 linear ft. in any direction. Runs longer than 50 linear feet in any direction must be separated with the use of a transition molding, such as a t-molding that has been appropriately placed and installed.

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.

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

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.