



INSTALLATION & MAINTENANCE GUIDELINES FOR SPC PRODUCTS

I. GENERAL INFORMATION

All instructions and recommendations should be followed for a satisfactory installation.

Acclimation of material prior to installation is recommended (24 hours) but not required, however the floor covering should be installed in a climate controlled environment with an ambient temperature range between 55° - 85°F (13°-29°C) or average temperature of 70 degrees (21.1°). Post installation temperature range is between -25 and 155 degrees F (-31.6°- 68.3°C). 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. Excess temperature due to direct sunlight can result in thermal expansion and UV fading.

Install product after all other trades have completed work that could damage the flooring. If cabinets are to be installed on top of the flooring (including islands), that area of material must be fully adhered to the subfloor (including an additional 2'ft beyond the cabinets and islands).

To minimize shade variation, mix and install planks from several cartons. Inspect all planks for damage before installing. If you have any concerns about the product fit or finish, contact seller. Claims will not be accepted for flooring that has been cut to size and/or installed. 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.

Installation Methods: Floating (on, above or below grade) / Glue Down (on, above or below grade)

Required perimeter expansion spacing for Floating or Glue Down installation is as follows:

- For areas less than 2500 sq ft, use 1/4" gap.
- For areas larger than 2500 sq ft, use 1/2" gap.

This flooring is waterproof and reliably secures the flooring panels on all four sides. However, excessive moisture in the subfloor could promote mold, mildew, and other moisture related issues like the trapping of moisture emissions under the flooring, which may contribute to an unhealthy indoor environment. Additional layer of 6 mil poly film or equal vapor retarder with a perm rating of 1 or less may be used as an additional layer of protection. A second underlayment is allowed under any currently sold SPC Product with attached underlayment in a residential application. If installed over a second underlayment, this underlayment cannot be greater than 3 mm thick.

IIC (ASTM E492- 09) and STC (ASTM E90-09) lab testing on certain SPC products tested with and without a second layer of underlayment, have not increased IIC/STC results.

II. SUBFLOOR INFORMATION

All subfloors must be clean, flat, dry and structurally sound. The correct preparation of the subfloor is a major part of a successful installation. Subfloor must be flat - 3/16" in 10' or 1/8" in 6'.

A. 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.

1. Do not apply sheet plastic over wood subfloors.
2. 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.
3. 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.
4. Resilient 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.

B. CONCRETE SUBFLOORS

NEW AND EXISTING CONCRETE SUBFLOORS SHOULD MEET THE GUIDELINES OF THE LATEST EDITION OF ACI 302 AND ASTM F 710, "STANDARD PRACTICE FOR PREPARING CONCRETE FLOORS TO RECEIVE RESILIENT FLOORING" AVAILABLE FROM THE AMERICAN SOCIETY FOR TESTING AND MATERIALS, 100 BARR HARBOR DRIVE, WEST CONSHOHOCKEN, PA 19428; 610-832-9585; [HTTP://WWW.ASTM.ORG](http://www.astm.org).

1. 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.
2. New concrete slabs must be dry. Maximum moisture level per CaCl test method is 8 lbs. per 1000 in 24 hr. Maximum level for ASTM 2170 In-situ Relative humidity test method - 90%.

3. Do not install over concrete with a history of high moisture or hydrostatic conditions. Excessive moisture in the subfloor could promote mold, mildew, and other moisture related issues like the trapping of moisture emissions under the flooring, which may contribute to an unhealthy indoor environment. Generations Group does not warrant nor is responsible for damage to floor covering due to moisture related issues.
4. pH level of concrete should be between 7-10.
5. The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer.

NOTE: IT MAY NOT BE THE FLOOR COVERING INSTALLER'S RESPONSIBILITY TO CONDUCT THESE TESTS. IT IS, HOWEVER, THE FLOOR COVERING INSTALLER'S RESPONSIBILITY TO MAKE SURE THESE TESTS HAVE BEEN CONDUCTED, AND THAT THE RESULTS ARE ACCEPTABLE PRIOR TO INSTALLING THE FLOOR COVERING. WHEN MOISTURE TESTS ARE CONDUCTED, IT INDICATES THE CONDITIONS ONLY AT THE TIME OF THE TEST.

LIGHTWEIGHT CONCRETE

All recommendations and guarantees as to the suitability and performance of lightweight concrete under resilient flooring are the responsibility of the lightweight concrete manufacturer. The installer of the lightweight product may be required to be authorized or certified by the manufacturer. Correct on-site mixing ratios and properly functioning pumping equipment are critical. To ensure proper mixture, slump testing is recommended.

Lightweight aggregate concretes having dry densities greater than 90 lbs. per cubic foot may be acceptable under resilient flooring. Concrete slabs with heavy static and/or dynamic loads should be designed with higher strengths and densities to support such loads.

Surface must be permanently dry, clean, smooth, free of all dust, and structurally sound. Perform Bond testing to determine compatibility of adhesive to the substrate. Primer can be utilized to promote adhesion. Three internal relative humidity tests should be conducted for areas up to 1000 SF. One additional test, for each additional 1000 SF.

Radiant Heat: Hydronic only - Radiant heat components must have a minimum of 1/2" separation from the product. This is the only type of radiant heat system that is approved. Radiant heat system must be on and operational for at least 2 weeks prior to installation to reduce residual moisture within the concrete. Three days prior to installation lower the temperature to 65 degrees, after installation gradually increase the temperature in increments of 5° F to avoid overheating. Maximum operating temperature should never exceed 85°F. Use of an in-floor temperature sensor is recommended to avoid overheating.

C. EXISTING FLOOR COVERINGS

Flooring can be installed over most existing hard-surface floor coverings, provided that the existing floor surface is fully adhered, clean, flat dry structurally sound and free of deflection.

Existing sheet vinyl floors should not be heavily cushioned and not exceed more than one layer in thickness. Soft underlayment and soft substrates will compromise the product's locking ability as well as diminish its indentation resistance. Installation is **NOT** allowed over any type of carpet. Do **NOT** install over wood floors adhered to concrete.

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.

RAISED ACCESS PANEL SUBFLOORS

- Raised access panels must be stable, level, flat, free and clean of existing adhesives 24" x 24" panels are recommended.
- Lippage (variation of height) between of panels must not exceed 0.295" (0.75 mm)
- Gaps between panels must not exceed 0.039" (1mm)
- There should be no deflection of the individual panels - Concave less than 0.0295" (0.75 mm)
- Flatness 1/8" in 10' Stagger the flooring tiles/planks to overlap the access panels
- Telegraphing of access panel seams may be visible and is not considered a product defect nor warranted by the flooring manufacturer.
- If needed overlay the panels with a 1/4" (6 mm) plywood and properly fasten to the access panels prior to the installation of the floorcovering.
- Prior to underlayment installation, repair any loose or unstable panels.
- Use the appropriate installation methods for the product.

INSTALLATION PREP

Tools: Tape Measure, Utility Knife, Jigsaw, Tapping Block or White Rubber Mallet, Pull Bar, 1/4" Spacers, T-Square, Safety Glasses, Broom or Vacuum and, if necessary, tools for subfloor repair.

Installation of 6 mil Poly Film Underlayment is recommended for floating method only in high moisture applications. For use over concrete substrates - seams **MUST** be taped.

Optional over wood substrates - do NOT tape seams.

Begin at the starting wall. Roll underlayment out parallel to the starting wall and allow the poly film to run 2 inches up the wall. After the flooring has been installed trim back the poly film from the wall.

Roll the next course of poly film parallel to the first run and overlap a minimum of 4 inches. Smooth out any wrinkles or creases in the poly film. Use clear tape to tape the seams together when installed over concrete substrates.

Continue to install the flooring over top of the poly film taking care not to damage the poly film.

Note: Do not cover the entire area of the substrate to prevent damage or present a slip hazard. Roll the poly film out one row at a time.

GENERATIONS SPC FLOATING PLANK FLOOR

INSTALLATION

Generations SPC plank flooring is designed to be installed utilizing the Unipush floating method or glue down (where required). Please refer to www.unlintechnologies.com for floating installations. Proper expansion space 1/4" (6.35 mm) is required. In spaces over 2,500 sf., allow a 1/2" expansion space. Undercut all doorjamb. Do not fasten wall moldings and or transition strips to the planks.

Floating Installation

Use of several 5/16" spacer blocks along the first wall will ensure the proper spacing is achieved and that floor does not 'walk' back towards the wall during installation.

1. Determine if the starter row will need to cut from the Layout instructions above. It will be necessary to cut off the unsupported tongue on full planks on the edges placed against the wall so that a clean, solid edge is toward the wall.
2. Starting in the farthest left, upper corner of the room position the first piece so that both the head and side seam groove is exposed. This requires installing the product from left to right in the room.
3. Install the second piece by lining the end joints and pressing straight down firmly and fully engage with a white rubber mallet. Be careful not to bend the corner of the piece. Maintain an expansion gap of approximately 5/16" from the wall. Continue this row until the last piece is installed; utilize the cut off for starting the next row.
4. Cut the last piece in the first row to fit approximately 5/16" short of the end wall. Use the cutoff of this plank to start the next row, if it is a minimum of 8". 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 (20° to 30°) of the plank.
5. If the starting wall is out of square, it will be necessary to scribe the first row to match the wall, allowing the opposite side of the row to present a true square base for the rest of the floor. When the first row is complete, you must have a straight, even base established.

6. To start the second row, cut a plank that is at least 6" shorter than the first plank the first row. (You may use the left over from the last plank in the first row.) Then install this first plank by inserting the long side tongue into the groove of the plank in the first row. Line up the first plank of the second row so the outside end is even with the outside end of the first plank on the first row.
7. Install the second piece in the second row by locking the long side of the second row plank on the plank on the first row by inserting the tongue of the second plank into the groove on the first plank while holding the plank at a low (~ 30°) angle from the floor. Press the second plank down flat and the tongue will lock firmly into place when tapped with a rubber mallet. You should feel the tongue lock into the groove and have a smooth, even joint line.
8. After locking in place, lay the remaining planks in the row by first locking the long side in place and then tapping the end of the plank downward to firmly lock into place at the end.
9. Continue installing pieces along the wall in the second row remembering it is critical to keep these two rows straight and square, as they are the "foundation" for the rest of the installation. Check for squareness and straightness often.
10. Continue installing pieces, being certain to maintain a random appearance and offset end seams by at least 6". Maintain a 5/16" expansion gap at all fixed vertical surfaces. Check to be certain all pieces are fully engaged; if slight gapping is noticed, the gap can be tapped closed using a scrap of flooring as a tapping block with a mallet. When fitting under door casings, etc, the flexibility and low angle of connection of Generations SPC plank floor becomes evident. If necessary, a flat pull bar or "last board puller" may be used to assist in locking the planks.
11. When fitting around obstacles or into irregular spaces, SPC product can be cut easily and cleanly using a circular saw or reciprocating jigsaw. It is often beneficial to make a cardboard template of the area and transfer this pattern to the plank.
12. **Protect all exposed edges of the Generations SPC plank floor by installing wall molding and/or transition strips. Use caution to prevent the fasteners from securing the planks to the subfloor.**

After Installation

1. Be sure planks are set, flat and have tight edges.
2. In the event that the planks must be removed, first lift the entire row at an angle to disengage from adjoining planks on the long end. Then, starting at the end, gently slide the planks horizontally to disengage on the short side. Do not angle, lift and pull the planks on the short side as this will cause breakage of the locking mechanism.

3. In the event that the SPC plank flooring is not the last portion of the construction project, the floor must be protected from construction traffic and damage. Utilize a reinforced fiber protective board or a heavy kraft paper (min. 60 lbs.) and cover the floor.

Glue Down Installation: SPC products are approved for glue down installation over approved wood and concrete substrates with industry approved adhesive for SPC flooring with attached pad. Follow adhesive label application instructions. Install flooring into wet adhesive to achieve a permanent bond. Maintain 1/4" (6.35 mm) perimeter expansion space. Refer to adhesive label for moisture limits of the adhesive. Roll flooring immediately after installation with a 100 lbs. 3-section roller.

GENERATIONS SPC FLOATING PLANK FLOOR

MAINTENANCE GUIDELINES

1. Initial maintenance can be performed immediately after installation of the SPC floating flooring. Cleaning utilizing a neutral pH cleaning solution and mop is recommended. White, green or blue abrasive pads can be used to remove heavier deposits. Rinse the floor thoroughly and allow to air dry. Do not overwater the flooring.
2. Daily and weekly maintenance by sweeping, vacuum or dust mopping the floor as needed to remove dust loose dirt and grit. In high traffic areas this may be a daily or twice daily procedure. Use only vacuums that do not have bristle beater bars or metal heads.
3. Clean liquid spills immediately to prevent the possibility of stains, slips or falls.
4. Damp mop the floor as needed to remove dirt and stains. Use a neutral pH cleaner and a white, green or blue pad if needed to remove ground in dirt. Soft white bristle brushes can also be used on flooring with embossed surfaces.
5. Preventative steps:
 - a. Use mats at all entry areas to keep dirt, sand and water off of the floor. Clean the mats on a regular basis. If mats are placed directly on top of the GENERATIONS floating floor, be sure the mats have a non-staining back. Rubber mats are not recommended over GENERATIONS flooring products.
 - b. Furniture shall have protective glides of at least 1" in diameter to minimize indentations or scratching to the surface of the floor. Do not use narrow chair glides! Felt pads are also excellent protection for the floor for furniture that will be frequently moved directly across the floor.
 - c. Do not move heavy furniture, appliances or fixtures directly across the floor. Use protective boards or appropriate furniture movers designed for use over hard surface flooring.
 - d. Protect the floor from direct sunlight by using appropriate window coverings.

- e. Areas with caster chairs must have protective mats under the chairs. Use chair mats at desks to protect the floor from damage due to chair legs or casters. Periodically clean caster wheels and check for wheels that may be broken or no longer rotating. Replace damaged wheels immediately.
- f. Avoid use of metal or razor scrapers to remove dirt, residues or other marks from flooring. This will damage the protective wear layer of the vinyl flooring.

These instructions are general guidelines for the proper procedures for installing and maintaining this flooring product. For any applications not listed or detailed instructions on Installation and Maintenance, please contact seller.