

GENERAL GUIDELINES

All instructions and recommendations are based on the most recent information available. They should be followed for an ideal installation.

1. Inspect all planks for damage before installing. If you have any concerns about the product fit or finish, call your Supplier or provider. Claims will not be accepted for flooring that has been cut to size and/or installed
2. All areas where product will be installed must have a working heat and air conditioning source, operational for a minimum of one week prior to installation and remain in operation during and after installation.
3. Acclimation of material prior to installation is not required, however conditions should be at the same temperature and humidity level expected during normal use (between 55°- 83°F / 13°-29°C or average temperature of 70°F (21°.1C), with relative humidity no greater than 65%). It should NEVER be installed outdoors.
4. For installations involving 3 season scenarios, meaning, the dwelling or installed space is without climate control for extended periods during certain seasons of the year, the post installation temperature range allowed is an ambient room temperature between -25° F and 155° F (31.6°- 68.3°C). This allowance is for floating floors only and does not apply to glue-down installations
5. 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.
6. Product should only be installed after the jobsite has been cleaned and cleared of debris that could potentially damage a finished plank installation.
7. 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).
8. During the installation mix and install planks from several different cartons to minimize shade variation and create a more uniform appearance.
9. Required perimeter expansion spacing for Floating or Glue Down installation for areas less than 2500 sq. ft., use 1/4" gap and for areas larger than 2500 sq. ft. use 1/2" gap.
10. 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.
11. 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.
12. 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, to date, does not indicate that a second underlayment will provide additional acoustic benefit.

SUBFLOOR INFORMATION

Although PermShield OnePlus is designed to be a Floating (on, above or below grade) / Glue Down (on, above or below grade) floor installation, proper preparation of the subfloor is still a major part of a successful installation. Roughness or unevenness of the subfloor may telegraph through the new floor. Unevenness in the subfloor can also cause problems with the integrity of the locking system and possibly cause the locking system to disengage. All subfloors should be smooth and flat with the tolerance not exceeding more than 3/16" in 10' or 1/8" in a 6' span. All subfloor and underlayment patching must be done with a non-shrinking, water-resistant 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.

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 9585-832-610;19428; HTTP://WWW.ASTM.ORG.

1. Concrete subfloors must be dry, smooth, and free from dust, solvent, paint, wax, grease, oil, asphalt sealing compounds, and other extraneous materials. The surface must be hard and dense, and free from powder or flaking.
2. New concrete slabs must be thoroughly dry (at least six weeks) and completely cured, 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%. The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer.
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. PermShield 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. Holes, grooves, expansion joints and other depressions must be filled with a Portland cement-based underlayment and troweled smooth and feathered even with the surrounding surface.
6. Concrete floors with a radiant heating system are acceptable, provided the heating system is embedded into either the concrete or covered with a Portland cement based self-leveler. Heating system must be covered with a minimum ½" separation between the flooring and heat source. 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.

Wood Subfloors

1. Wood subfloors must be suspended at least 18" above the ground. Adequate cross-ventilation must be provided, and the ground surface of a crawl space must be covered with a suitable vapor barrier.
2. Wood subfloors directly on concrete or installed over sleeper construction are NOT suitable for the installation.
3. All wood and wood composition panels, including plywood, OSB, flake board, and particle boards can be used providing they are smooth, flat, structurally sound, and free of deflection.
4. A 4/1" underlayment panel should be installed over the subfloor if the surface of the wood subfloor is not smooth.
5. Do not apply sheet plastic over wood subfloors.
6. Resilient flooring is not recommended directly over fire-retardant treated plywood or preservative treated plywood.

Existing Floor Coverings

1. PermShield OnePlus products can be installed over most existing hard—surface floor coverings provided the existing floor surface is fully adhered, clean, flat dry structurally sound and free of deflection, smooth, or can be made smooth.
2. When installing over ceramic tile it is best to smooth the grout lines and texture with a cement patch or leveling compound. Smooth ceramic with narrow grout lines may be suitable without the need for a cementitious overlay.
3. Heavily cushioned vinyl flooring or vinyl flooring consisting of multiple layers are NOT suitable subfloor for installation. Soft underlayment and soft substrates will compromise the product's locking ability as well as diminish its indentation resistance.
4. Installation is NOT allowed over any type of carpet.
5. Do NOT install over wood floors adhered to concrete.

TOOLS NEEDED: Carpenters Square or Straight Edge, Tape Measure, Pencil, Wall Spacers, White Rubber Mallet, Blue Painters Tape, Circular Saw, Undercut Saw (If needed), Tile Cutter (if desired).

INSTALLATION

A. Getting Started

Installation of 6 mil Poly Film Underlayment is recommended for floating method only in high moisture applications.

While PermShield is waterproof, it is mnot a moisture barrier. Moisture wont't damage PermShield, but it can get in the walls and structure of the home and surrounding floors, which can cause expansion and contraction. PermShield recommends leaving a 1/4" expansion gap between the perimeter walls and any adjacent hardwood flooring.

For use over concrete substrates - seams MUST be taped.
Optional over wood substrates — do NOT tape seams.

1. 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.
2. After the flooring has been installed trim back the poly film from the wall.
3. 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.
4. 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.

Floating Installation:

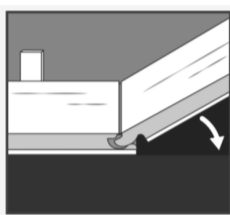
SPC plank flooring is designed to be installed utilizing the floating method. Proper expansion space 1/4" (6.35 mm) is required. Undercut all doorjamb. Do not fasten wall moldings and or transition strips to the planks.

Glue down Installation:

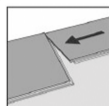
SPC products are approved for glue down installation over approved wood and concrete substrates. Follow adhesive label application instructions. Install flooring into wet adhesive to achieve a permanent bond. Maintain 1/4" (6.35 mm) perimeter expansion space. Refer to adhesive label for moisture limits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

Before starting, first measure the width of the room, and then divide the room's width by the width of the plank. If this means that the last row of planks will be narrower than 2", then you will need to cut the first row of planks to make it narrower. Cut in such a way that both rows of planks (the first and last to be installed in the room) will have the same approximate width for an overall continuous look. See "Installing the Last Row."

Note: To cut the boards, always saw with the teeth cutting down into the face or top of the board. Cutting from the top down helps protect the surface.

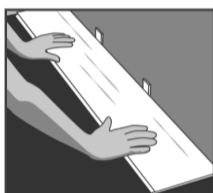


1. The planks install easily without glue. Simply attach the tongue on one plank to the groove side on another plank and the planks will lock snugly together.

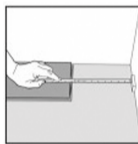


2. Begin the installation of the planks in the left hand corner of the room with the long direction parallel to the incoming sunlight source or to the longest wall of the room (if this is possible). Be sure to install the first row of boards with the tongue side facing the wall.

B. Position the First Row

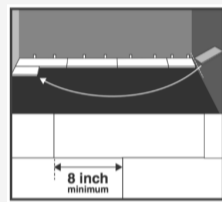


1. With the tongue side facing the wall, align the end of the second plank with the first and lock the end joints together by pushing it straight down on top of the first plank.
2. Lock the ends of the planks together until the first row is finished. Cut the last board in the row to the necessary length.

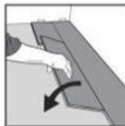


Note: If the starting wall is out of square, it will be necessary to scribe the first row to match the wall, allowing the opposite side of the row to present a true square base for the rest of the floor. When the first row is complete, you must have a straight, even base established.

C. Installing the Rest of the Floor



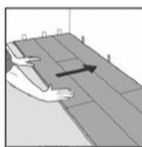
1. To start the second row, cut a plank that is at least 8" shorter than the first plank in the first row (you may use the leftover from the last plank of the first row). Then install this first plank by inserting the long side tongue into the groove of the plank in the first row. Line up the first plank of the second row so the outside end is even with the outside end of the first plank on the first row.



2. Lock the long side of the second row plank onto 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 an approximate 25 degree angle from the floor. Press the second plank down flat and the tongue will lock firmly into place.

3. After locking in place, lay the remaining planks in the row by first locking the long side in place and lift the outside edge and slide to the previous plank. Fold down and tap the end joint downward to lock together.

4. The planks cannot be forced together. If they are not lying flat then they will not align properly during locking. If this occurs, begin again, insuring the edges of both planks meet evenly while applying equal pressure while rotating the plank.



5. Once the third row has been clicked into place, check for a tight fit on sides and ends.
6. To install the rest of the flooring, continue placing boards from left to right, plank by plank, and row by row.

Note: Under door jambs or toe kicks of cabinets, there is not (may not be) enough clearance to achieve the required angle necessary to engage the sides. The tongue portion of the sides should be cut away using a wood chisel, and the boards glued together using high quality white wood (PVAC) glue. (Use blue painters tape to secure the plank until the adhesive cures. However, do not leave the tape on longer than necessary.)

7. To disengage the planks, lift the outside edge and remove from the long side seam(s). Lay the planks flat and slide the ends horizontally in opposite directions to disengage. Avoid pulling upwards (on the end joints) to disengage the short ends so as not to break them.

D. Installing the Last Row

Most often the entire length of the last row will need to be cut so that it is narrow enough to fit the remaining space. When this occurs, follow this simple procedure:

1. Lay a row of boards with the tongue toward the wall, directly on top of the last row installed.
2. Take a full width scrap piece of the product that is being installed with the face down and the tongue side against the wall. Use ¼" spaces against the wall to ensure the proper expansion space.
3. Draw a line along the row moving down the wall. The resulting line gives the proper width for the last row which, when cut, can then be wedged into place using a pull bar.

REPAIRS

In the unlikely event that a piece of 2G Fold Down product is damaged for whatever reason, the simplest method of repair is to disconnect the planks carefully (protecting the tongue and groove edges) until the damaged piece can be removed. Then replace the damaged piece with a new one and reassemble the disconnected planks. This typically works for planks that are closest to the two long walls of a room. For damaged pieces that are not close to the perimeter, you may have to remove the damaged pieces and insert new pieces without the short and long end grooves.

1. Using a sharp utility knife and a straight edge, cut out the damaged piece by leaving approximately 1" strip attached to the adjacent pieces.
2. Carefully cut back from the four corners of the plank to the inside edges in space left by the cut out piece.
3. Remove the plank edges carefully from of the adjacent pieces, making sure the tongues and grooves of the adjacent planks are not damaged.
4. Using a utility knife, remove the tongue strip on both the long and short ends of the replacement piece. In addition, remove the groove strip of the short end of the replacement piece.
5. Place double sided carpet tape along the three sides of the adjacent pieces, making sure the tongues and grooves of the adjacent planks are not damaged. Only the top-side release paper should be removed. The bottom-side release paper should NOT be adhered to the subfloor.
6. Position the replacement plank by engaging the groove of the long side into the tongue of the adjoining piece and pushing down on the other three sides. The carpet tape will hold the replacement piece in place with its adjacent planks. Use a hand roller to further secure the tape.

AFTER INSTALLATION

Sweep, dust mop or vacuum the floor to remove any debris. Flooring should be one of the last items installed in a project. Protect the floors while other trades are finishing their work prior to final cleanup and turnover to the owner. Use rosin or other breathable paper and blue painters tape to hold the paper to the floor. Make sure no debris is under the paper

MAINTENANCE AND PROTECTION

Clean up spills immediately. Sweep or vacuum the floor regularly and damp mop weekly. We recommend using Permshield™ Floor Cleaner for routine cleaning. This can be purchased from the flooring dealer where the 2G Fold-Down Product was purchased. Do not use soap based detergents or abrasive cleaners. Permshield™ does not recommend the use of steam cleaners on our flooring. To avoid possible permanent indentation or damage, proper floor protection devices must be used under furniture and appliances. Exercise care when removing and replacing furniture or appliances.

Preventative maintenance is a must with any type of flooring. Please use entry mats to stop as much dirt prior to entry of the building. Make sure all furniture is well protected, avoiding rubber products as they can cause stains. Use hard plastic or felt pads under heavy furniture to prevent point loads. Use flat, polished metal glides with a minimum 1" diameter under chairs and stools. These should have a rounded edge and pivot to remain in flat contact with the floor. Non-staining felt pads can be used provided they are changed on a regular basis to prevent dirt, debris and sand buildup. Wide, non-staining casters at least 2" in diameter or floor protectors should be used on rolling furniture such as office chairs. Also sweeping and damp mopping the floor on a regular basis and a diligent inspection of the floor protection installed on the furniture can be helpful. Never slide heavy furniture over unprotected floors.