

SPC & WPC Installation Guide



—Tools needed—

Jig Saw
Measuring Tape
Pull Bar

Safety Glasses
Expansion Spacers: 3/8" or 1/2"
Dust Mask

Straight Edge
T-Square
Utility Knife

How to Measure your Installation:

Measure the length and width of each room. Length x width= Square feet. Measure and add alcoves or offsets separately. Purchase a minimum of 10% extra to cover mistakes, trimming, and future needs or replacements.

General Information:

- Use personal safety precautions by wearing a Dust Mask, Safety Glasses, and gloves.
- Flooring should be transported and stored in a neatly stacked fashion on a smooth, flat surface.
- Protect carton edges, do not drop, and do not lean cartons against walls.
- Cabinets, built-in appliances, or heavy equipment should never be installed or placed on the floating floor.
- Do not install in areas exposed to the movement of heavy objects or rolling traffic, such as wheelchairs.
- Do not install in non-climate-controlled rooms such as sunrooms, solariums, and saunas.
- The flooring should be protected from prolonged exposure to sunlight or excessive heat.
- Maintain a climate-controlled environment with an ambient temperature range between 55F – 85°F and a humidity range of 30%-65% before, during, and after installation.
- If planks are not connecting correctly, check the joint alignment and inspect the joints for debris; DO NOT force the planks together.

Before Installation:

- Check cartons to ensure the Pattern and Color are correct.
- Check the planks for color, finish, gloss, and quality.
- Planks installed with a visible defect will not be warranted.
- Plan to mix and install planks/tiles from several different cartons during installation to achieve the desirable plank/tile variations.
- Color, shade, or texture variations between samples, print color photography, and the actual material are not warranted.
- The Manufacturer will not warrant color, gloss, texture, or appearance from different dye lots.

Acclimation:

- Acclimate unopened cartons for a minimum of 12 hours and install the flooring in a climate-controlled environment:
 - 55F – 85°F with a relative humidity range of 30%-65%
- NOTE: Failure to maintain temperature can cause dimensional changes and permanent damage to the flooring.

Wood, Concrete & other Subfloor Basics:

- The subfloor surface must be smooth, flat, dry, clean, and solid.
- **Flatness:** any area higher or lower than 1/16" must be flattened out.
 - Voids or humps in the subfloor will compromise the locking mechanisms and permanently damage the planks.
- The subfloor should not slope more than 3/16" in 10' or 1/8" in 6'.
- Adhesive residue must be removed or skim-coated.

Crawl Spaces:

- Crawl spaces must be a minimum of 18" from the ground to the underside of the joists.
- A 6-mil black polyurethane is required to cover 100% of the crawl space earth with joints lapped 6" and sealed with moisture-resistant tape.
- The crawl space should have perimeter vents equal to a minimum of 1.5% of the crawl space square footage.

Wood Subfloors:

- The subfloor must be clean, dry, flat, smooth, structurally sound, and free of deflection, wide voids, and gaps.
- Subfloors should conform to US Voluntary Product Standard PS1-95.
 - Particle board subfloors are NOT recommended.
- Remove carpet staples and loose nails or protruding screws.
- Check for loose or uneven panels.
- The subfloor should be permanently screwed down every 6" along the floor joists to avoid deflection and noise.
- If an additional layer of APA-rated underlayment is needed, fasten and secure according to the underlayment manufactures recommendations.
- **Flatness:** any area higher or lower than 1/16" must be flattened out.
- The subfloor should not slope more than 3/16" in 10' or 1/8" in 6'.
- **Wood Subfloor Moisture testing is required:**
 - Test the wood subfloor with a calibrated wood moisture meter in several areas in each room.
 - Wood subfloor moisture should be less than 14%.
 - If greater than 14%, the property owner should have moisture problems resolved before installation.
- Do not install material on wood subfloors applied directly over concrete or on sleeper-construction subfloors over, on, or below-grade concrete.

Concrete, Gypcrete, and other floor slabs:

- Must be at least 90 days old and fully cured.
- Moisture and pH tests are required on all concrete substrates regardless of the grade or age of the slab.
- Must be moisture tested in accordance with ASTM Standards by the general contractor, flooring installer, or an independent testing firm.
- Professional moisture remediation may be required if:
 - Moisture tests are higher than 14% on wood, or 4% on concrete (with a concrete moisture meter)
- Moisture test results should be documented for your protection.
 - Moisture tests only indicate moisture conditions at the time of the test.

Moisture Testing is Required for Concrete, Gypcrete, and other floor slabs On, Above, or Below grade:

- Concrete pH level should measure between 7 – 10
- Moisture Testing is required with a calibrated Concrete Moisture Meter.
 - 4% is the maximum allowable moisture content for concrete.
- The following tests are required if the concrete moisture measures more than 4%:
 - Anhydrous Calcium Chloride in accordance with ASTM F 1869. Maximum tolerance: 5 lbs. / 24 hours per 1,000 SF
 - RH In-Situ in accordance with ASTM F 2170. Maximum tolerance: 80%

Concrete meters in compliance with ASTM F 2659

- Tramex CEMX5
 - Measures slab temperature
 - Tramex CMEX5 provides App to document test results.
 - [Tramex Quick Check Video](#)
- Tramex CME5
- Wagner C555
- DeFelsko PosiTTest CMM

Over Hydronic Radiant Heat:

- The hot water tubing must be 1/2" below the slab.
- The system must be on and operational for at least 2-weeks prior to installation to reduce residual moisture.
- Acclimate and install the floor at an average temperature of 55 – 85°F.
- Increase temperature no more than 5 degrees at a time to avoid thermal expansion.
- Maximum operating temperature should never exceed 85°F.
- The use of an in-floor temperature sensor is recommended to avoid overheating.
- Contact the manufacturer of your radiant heating system for further recommendations.


Installation Checklist:

- **Subfloors:**
 - Must be clean, dry, flat, and structurally sound.
 - **Flatness: any area higher or lower than 1/16" must be flattened out.**
 - **The subfloor should not slope more than 3/16" in 10' or 1/8" in 6'.**
 - Fill all holes, saw cuts, and depressions with a Portland cement-based floor patch.
 - Fill control joints with a flexible polyurethane sealant designed to allow the slab to expand and contract.

- **Expansion space:**
 - **3/8" for installations up to 1600 SF**
 - **1/2" for installations over 1600 SF**
- **6-mil polyethylene Moisture Barrier is required** (Moisture Block* or equivalent) for all Concrete, Gypcrete, or Cementitious Subfloors. Overlap 8" and seal the edges with moisture-resistant tape. Lap the barrier 3/4"-2" up the walls.
- **DO NOT** install any additional Foam Underlayment or install over heavily cushioned sheet vinyl.
 - Soft underlayment and soft substrates will diminish the product's inherent strength in resisting indentation and joint integrity.
- **DO NOT** install over hardwood flooring (glued or nailed), carpet, carpet pad, floating floors, or existing vinyl floors with more than 1-layer.
- Ceramic Tiles must be well bonded, and grout joints should be less than 1/4" wide.
 - Fill grout joints wider than 1/4" with Portland cement.
- **Expansion space:**
 - Required in the width and length direction of the planks, along the walls, and at all vertical surfaces, including cabinets, posts, partitions, doorjambs, pipes, pillars, stairs, floor vents, closet & door tracks, etc.
 - 3/8" Expansion space is required for installations up to 1600 SF
 - 1/2" Expansion space is required for installations over 1600 SF
 - NOTE: Failure to provide proper expansion space may cause buckling, gapping, cupping, or peaking.
- T-mold is required for greater than 40' feet in length or width.
- Undercut all doorjambs.
- Leave a credit card space (1/32") below the baseboard, moldings, and other finish trim.
- **DO NOT adhere, caulk, nail, or screw anything to or through the flooring, including:**
 - Baseboards, moldings, Transitions (T-molding, end caps, reducer, quarter round), metal, floor vents, closet door tracks, doors, furniture, cabinets, or wood transitions.

Plan the layout:

- **Measure** the width of the room and divide it by the width of the plank.
 - If the last row of planks will be less than 3" (76.2mm) wide, you will need to cut the first row of planks in such a way that the first and last rows will have the same approximate width.
 - Expansion spacers should be placed along all walls and at all vertical obstructions (walls, cabinets, fireplaces, etc.) and remain in place until installation is completed. Spacers must be removed before moldings are installed.
- **Transitions:**
 - Use quarter Round, T-molding, reducers, or end caps where the flooring planks may meet other flooring surfaces, exterior door tracks, glass windows, walls, or doorframes.
 - Leave expansion space between the planks and the transition trim and adjoining surfaces.
 - Transitions must be used when changing the direction of the planks.
- **Caulk:**
 - Do Not use Acrylic Caulk.
 - Use 100% Flexible (neutral curing, no-odor) Silicone Caulk.
 - In moisture-prone areas, around bathtubs, shower stalls, toilets, etc.
 - Fill voids/expansion gaps where the floor has been scribed to metal doorjambs, etc.

Installation Videos – Also available on QR Code		
2G Angle/Angle Lock	5G Locking System	
2G Installation Video Aquarius-Installation-Tips.m4v		5G Installation Video
How to Disassemble Rows 2G or 5G Installation		
Lift the row up on the long sides- Slide the short (end) joints apart.		

Install the First Row:

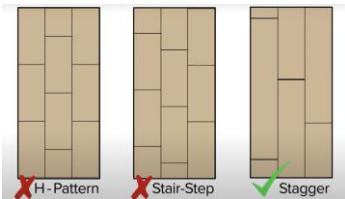
1. Start the installation in the left-hand corner of the room.
2. Square up the first row:
 - a. Measure the same distance from the wall at several points and snap a chalk line.
 - b. The distance you measure from the wall should be the width of the first row of planks plus the required expansion space.
 - c. 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.
3. Place 3/8" or 1/2" expansion spacers on the starting wall and at each end of the first row.
4. Measure the length of the wall to ensure the last piece will be longer than 8".
5. Cut the first plank to the desired length (longer than 8")
6. Start the first row with the tongue facing the wall and the groove edge facing into the room.
 - a. Optional: cut the long-side tongues off the starting row.



7. Lay the first plank down with the tongue side facing the wall.
8. Use a full-length piece for Plank 2.
 - a. Align the tongue on the short side of Plank-2 with the groove on the short side of Plank-1 and press down.
 - b. To disassemble an end joint, slide the end joint apart. Lifting may break the joint.
9. Continue installation of row 1 in this manner, keeping the planks in alignment.
10. At the end of row 1, you may need to cut a plank to complete the row.
11. When the first row is complete, make sure you have a straight, even base established with expansion space on three sides.

Install the Second Row:

1. Planks should be staggered, with at least 8" (200 mm) or 25% of the length of the plank between the end joint of adjacent planks.
2. Avoid H and Stair-Step patterns.



3. To start the second row, cut a plank that is at least 8" shorter than the first plank in the row. You may use the cut piece from the last plank in the first row if it is at least 8" in length.
4. Place a spacer on the walls at each end of the row.
5. Line up the first plank in the second row with the end of Plank 1.
6. Insert the tongue on the long side of the first plank into the long side of the groove on Plank 1 while holding the plank at a 30 - degree angle.
 - a. Make sure that there is no gap between the long side of plank 1 and the first plank in row 2, and then press the plank down flat to lock firmly into place.
7. Lay the second plank in the second row by first inserting the tongue on the short side of the plank into the groove on the previously installed plank at a 30 - degree angle.
 - a. Align the plank, so the long side tongue is positioned just over the long side groove of the adjacent plank in the first row.
 - b. Push the long side tongue into the groove by sliding along the short side seam.
 - c. You may need to lift the plank to the left slightly to allow for the "sliding" action.
8. Angle the plank down toward the floor. Lock the plank into place by gently pressing the long side of the plank.
 - a. Make sure that there is no gap on the long or short side of the plank.
 - b. The plank is properly engaged when no gaps are visible, and the two planks are flush across the top surface.

- c. To disassemble a row, lift the row up on the long sides, slide the short (end) joints apart.
- 9. Continue to install the remaining planks and rows in this manner.
- 10. When installing the last row, you may need to cut the width of the planks.

Fitting around irregular objects:

- 1. Make a pattern out of heavy paper to fit around pipes or irregular objects. Place the pattern upon the plank and trace. Cut along trace lines using a utility knife.
- 2. Be sure to leave a minimum of 3/8" or 1/2" expansion space around all fixed objects, floor vents, pipes, pillars, doorjambes, doorframes, etc.

Complete the installation:

- 1. Remove the spacers and replace the molding or wall base.
- 2. Nail the base or quarter round to the wall, not the flooring.
- 3. Leave a credit card space (1/32") below the baseboard, moldings, and other finish trim.
- 4. **DO NOT adhere, caulk, nail, or screw anything through the flooring, including:**
 - a. Baseboards, moldings, Transitions (T-molding, end caps, reducer, quarter round), metal, floor vents, closet & door tracks, furniture, cabinets, or wood transitions.
- 5. Fill voids/expansion gaps where the floor has been scribed to metal doorjambes (etc.) with 100% Flexible Silicone Caulk.

Closet door tracks (full length):



Concrete:

- 1. Install with screws shorter than the combined thickness of the track and the plank.
- 2. The screw will only be attached to the vinyl plank.
- 3. **DO NOT insert the screws into the subfloor.**

Wood Subfloor:

- 1. Place track in position
- 2. Drill pilot holes aligning with the screw holes on the track
- 3. Remove the track
- 4. Drill a hole through the plank larger than the pilot hole
- 5. Replace the Track. Install the screws.

Closet Door Guides:



Wood & Concrete Subfloors:

- 1. Install with screws shorter than the combined thickness of the track and the plank.
- 2. The screw will only be attached to the vinyl plank.
- 3. **DO NOT insert the screws into the subfloor.**

Stairs and Landings Only: Glue down Instructions:

- 1. Recommended adhesive Mapei ECO399.
- 2. Follow the above instructions, including all expansion space requirements
- 3. Do not glue down over Particleboard.
- 4. Follow adhesive label instructions, including temperature ranges during installation for the adhesive. The adhesive spread rate will vary depending on the subfloor, environment, and towel size used.
- 5. When the installation is complete, roll flooring in both directions using a 100 lb. (45-50 kg) sectional floor roller or Hand roller in tight areas.
- 6. Install trim to cover any exposed space or uneven cuts at walls or vertical obstructions. Do not affix trim to the floor.

***Warning:** Do not sand, dry scrape, bead blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphaltic “cut back adhesive”, or other adhesives. These products may contain asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Local building requirements may require the existing floor material be tested to determine if there are asbestos materials. Review the Resilient Floor covering Institute [Recommended Work Practices for Removal of Resilient Floor Covering](#) instructions.

Contact your Dealer for further information.

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