

# Peninsula Flooring: WPC Luxury Vinyl Plank Installation Guidelines

Please read all of these instructions completely before beginning installation.

## I. GENERAL INFORMATION

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

- While long-term acclimation is not strictly necessary for this waterproof flooring, material exposed to extreme temperatures (under 50°F [10°C] or over 100°F [38°C]) MUST be acclimated at room temperature for a minimum of 12 hours in unopened packages prior to installation. The room temperature must be maintained consistent between 60°F to 80°F (16°C to 27°C) before and during installation.
- 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 0°F and 100°F (-18° - 38°C). This allowance is for floating floors only and does not apply to glue-down installations.
- Avoid exposure to direct sunlight for prolonged periods, doing so may result in discoloration. During peak sunlight hours, the use of 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.
  - Do not install cabinets or fixed objects on top of the flooring. Proper expansion space (¼ in.) is required. Undercut all doorjamb.
  - Do not fasten wall moldings and/or transition strips to the planks.
- To minimize shade variation, mix and install planks from several cartons.
- Inspect all planks for damage before installing. 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)
- Required perimeter expansion spacing:  
For areas less than 2,500 sq ft, use ¼ in. gap  
For areas larger than 2,500 sq ft, use ½ in. 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.
- It is up to the flooring contractor to determine if a subfloor is not cured. Should the subfloor not be cured, a moisture barrier/mitigator like 6 mil poly should be considered for a successful installation and to prevent the material from being damaged by (moisture) vapor from the subfloor.
- 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 in a residential application. If installed over a second underlayment, this underlayment can NOT be greater than 3mm thick.
- Crumb rubber underlayments are NOT an acceptable option for use with resilient floor coverings due to performance issues resulting from chemical incompatibilities.

## 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 – 1/16 in. over 10 ft. and should not slope more than 1 in. per 6 ft. in any direction.

### 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.

- Do not apply sheet plastic over wood subfloors.
- 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 in. 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.
- **DO NOT** install over sleeper construction subfloors or wood subfloors applied directly over concrete.
- 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 plywood underlayment, fasten and secure according to the underlayment manufacturer's recommendations.
- Resilient flooring is not recommended directly over fire-retardant treated plywood or preservative treated plywood. An additional layer of APA rated ¼ in. thick plywood 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 F710, "STANDARD PRACTICE FOR PREPARING CONCRETE FLOORS TO RECEIVE RESILIENT FLOORING" AVAILABLE FROM THE AMERICAN SOCIETY FOR TESTING AND MATERIALS; [HTTP://WWW.ASTM.ORG](http://www.astm.org).**

- 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.
- If the adhesive residue is asphalt-based (cut-back), or any other type of adhesive is present, it must be removed by industry accepted methods such as mechanical removal or wet scraping.
- If a chemical abatement has been performed, use Surface Prep EXT to remove any residual chemicals present. Once Surface Prep EXT has been properly cleaned and removed, apply one coat of moisture resistant primer for additional protection.
- Adhesive removal through the use of solvents or citrus adhesive removers is not recommended. Solvent residue left in or on the subfloor may affect the new adhesive and floor covering.

**WARNING! DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEAD BLAST OR MECHANICALLY CHIP OR PULVERISE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUT BACK" ADHESIVES OR OTHER ADHESIVES.**

These products may contain either asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material.

- Concrete slabs must be dry with no visible moisture.
- Required Moisture Testing - maximum moisture level per ASTM 1869 CaCl is 8 lbs. and ASTM 2170 In-situ Relative Humidity 90% per 1000 sq. ft. in 24 hours.
- 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. Manufacturer does NOT warrant nor is responsible for damage to floor covering due to moisture related issues.
- pH level of concrete should be between 7-10.
- 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.
- Three internal relative humidity tests should be conducted for areas up to 1,000 SF.. One additional test, for each additional 1,000 SF..

**Radiant Heating:** Radiant-heated subfloor systems can be concrete, wood or a combination of both.

The heating systems components must have a minimum of ½ in. separation from the flooring product. The system must be on and operational for at least 2 weeks prior to installation to reduce residual moisture. 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. Contact the manufacturer of your radiant heating system for further recommendations.

Flooring cannot be laid directly over radiant heating mats. Please consult with the radiant heat system manufacturer to ensure that the system is compatible with vinyl flooring.

### **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.
- This product can be installed over existing ceramic/porcelain tile products with up to a 1/4 inch wide grout joint. If the grout joint width exceeds 1/4 inch, a cementitious patching compound should be used to fill the grout joint to make it smooth with the surface of the tile.

### **RAISED ACCESS PANEL SUBFLOORS**

- Raised access panels must be stable, level, flat, free and clean of existing adhesives
- 24 in. x 24 in. panels are recommended.
- Lippage (variation of height) between of panels must not exceed 0.0295 in. (0.75 mm)
- Gaps between panels must not exceed 0.039 in. (1mm)
- There should be no deflection of the individual panels – Concave less than 0.0295 in. (0.75 mm)
- Flatness ⅛ in. in 10 ft.
- 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 in. (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.

### III. INSTALLATION

**Tools:** Pencil, Tape Measure, Level, Utility Knife, Jigsaw, Tapping Block or Hard PVC 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.

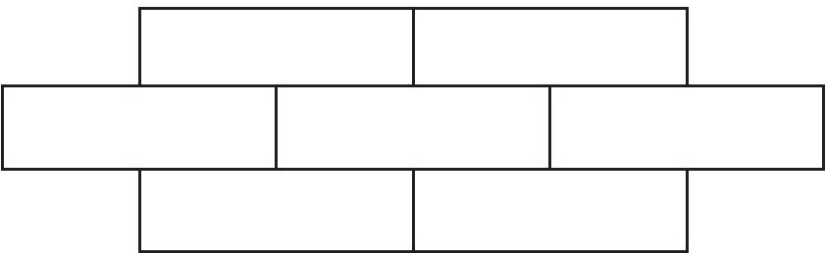
- Begin at the starting wall. Roll underlayment out parallel to the starting wall and allow the poly film to run 2 in. up the wall.
- After the flooring has been installed trim back the poly film from the wall.
- Roll the next course of poly film parallel to the first run and overlap a minimum of 4 in.. 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.

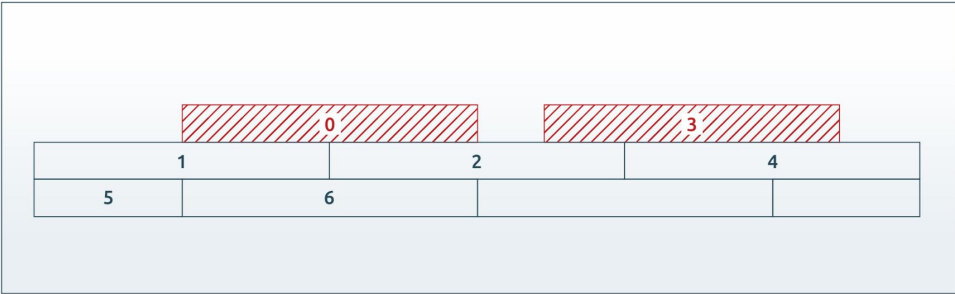
#### Floating Installation

Waterproof Luxury Vinyl Plank Flooring is designed to be installed utilizing the floating method. Proper expansion space ¼ in. (6.35mm) is required. Undercut all doorjamb. Do not fasten wall moldings and or transition strips to the planks.

**Tile patterns must be installed in a staggered (offset) brick pattern. Minimum 1/3 offset 1/2 offset is preferred.**



The installation process outlined here includes the use of 2 planks as an alignment guide (planks 0 & 3 shown above). Make sure plank 0 is centered across planks 1 and 2. Planks should be staggered in a brick laying pattern. The length of a plank must be at least 30cm/11.8 inches.



**STEP 01**

**Align installation**

It is very important that the first 2 rows are aligned. Use a full plank (0) as an alignment guide and place it against the wall. No need for spacers yet.

**STEP 03**

**Install plank 2**

Take another full length plank and angle it into plank 0. Then slide plank 2 until the short side makes contact with the short side of plank 1.

**STEP 05**

**Align installation**

Use a full plank (3) as an alignment guide by placing it against the wall. Angle plank 3 into plank 2.

**STEP 02**

**Install plank 1**

Next, take another full length plank, angle it into the middle of the long side of plank 0 and drop. **Ensure there are no gaps.**

**STEP 04**

**Engage the short sides**

Drop the short side of plank 2 onto the short side of plank 1. Drop & Lock by pushing down firmly, **if necessary use a hard PVC mallet to tap the joints slightly on the short side to secure. This ensures 3-fold locking.**

**STEP 06**

**Install plank 4**

Take another full length plank and angle it into plank 3. Then slide plank 4 until the short side makes contact with the short side of plank 2. Drop & Lock by pushing the planks firmly down, if necessary use a hard PVC mallet to tap the joints slightly on the short side to secure. Ensure there are no gaps or height differences.

#### STEP 07

##### **Finish rows 1 and 2**

Start your second row by using **half** a plank (5) and angle in with plank 1. Make sure the short sides are aligned. Repeat the same steps as above to finish the second row. Ensure there are no gaps or height differences.

#### STEP 09

##### **Use spacers & slide rows towards spacers**

Place the spacers along the walls to create an expansion space of  $\frac{1}{4}$  in. (6.35mm). Proceed by gently sliding rows 1 and 2 towards the spacers.

##### **Disassembling the long side (in necessary)**

Lift up the entire row with the same angle as you did during installation, then slide the rows apart.

#### STEP 08

##### **Remove alignment planks (planks 0 & 3)**

Remove planks 0 and 3 by angling them out.

#### STEP 10

##### **Finalize installation**

From row 3 onwards, installation does not require a specific laying pattern. To finish the last row, measure the distance from the wall to the last installed row minus  $\frac{1}{4}$  in. (6.35mm). Remove spacers when installation is complete. Finish up the room by placing any plinths, molding and trim.

##### **Disassembling the short side (in necessary)**

Disassemble the row by **sliding apart the planks** on the short side. **Ensure the planks are laying completely flat.** If you cannot slide the panels apart, the short side is not fully engaged. Tap with the mallet to engage then slide out.

## COMPLETION

1. Protect all exposed edges of the flooring by installing wall molding and/or transition strips. Make sure that no plank will be secured in any way to the subfloor.
2. For wet areas such as bathrooms caulk the perimeter of the floor with a flexible silicone caulk.
3. Protect the finished flooring from exposure to direct sunlight to reduce fading and thermal expansion.
4. Cutting resilient product into a fine point may lead to delamination. Use an ethyl cyanoacrylate based glue to help fuse the resilient point together. Be sure to clean all glue from the top surface immediately. Alcohol based glues may cause resilient products to swell.
5. Adhering tape to the surface of your resilient flooring could damage the surface.  
**Do not** use tape to secure floor protection directly to the floor during construction or renovation. Instead, adhere tape to the material used to protect the floor and secure it to the base molding along the wall. A material such as ram board can also be used to protect your flooring.