

# SPC / WPC Flooring General & Installation Instructions

# **Pre-Installation Instructions**

#### Owner/Installer Responsibility

The owner is advised to be at home during the installation for consultation/direction. The owner and installer should discuss installation and layout to maximize satisfaction. If this is not possible, consultation should be done prior to installation.

The owner/installer assumes all responsibility for product quality of completed installation. PERFORM PRE-INSTALLATION INSPECTION. FOR CLAIMS PURPOSES, YOU ARE ALLOWED TO OPEN UP TO 5 BOXES FOR PRODUCT INSPECTION. DO NOT OPEN ALL THE BOXES. OPENING ALL THE BOXES CONSTITUTES YOUR ACCEPTANCE OF THE PRODUCT. INSPECT ALL THE PLANKS IN THESE 5 BOXES CAREFULLY. EXAMINE FLOORING FOR COLOR, FINISH AND QUALITY. IF YOU DISCOVER THAT PRODUCTS ARE DEFECTIVE, OR IF MATERIAL IS QUESTIONABLE, YOU SHOULD CONTACT THE RETAILER. IF YOU ARE SATISFIED, PROCEED WITH INSTALLATION.

Flooring to be installed in one large area should be purchased at the same time. Product purchased at a later time than the first purchase may vary beyond your expectations. This product is manufactured according to strict quality standards. In the event that defects are discovered in the field, the industry standards permit a defect tolerance not to exceed 5%. Order an additional 5% (10% extra for diagonal installations) for cutting wastage and plank replacement when the floor is in service. During installation, inspect the planks continuously. Defects that can be seen from a standing position should be cut off or held out. Installing defective planks implies acceptance. If You Need More Information To assure the warranty is not inadvertently voided, before proceeding with any activity that is not covered in this manual, please contact our our support department.

#### **CAUTION: ASBESTOS IN EXISTING FLOOR**

Unique Wood Products Flooring does not contain asbestos. Existing installed resilient flooring and asphaltic adhesive may contain asbestos fillers or crystalline silica. Do not sand, dry sweep, dry scrape, drill, saw, bead-blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphaltic "cutback" adhesive or other adhesive. See "Recommended Work Practices for Removal of Resilient Floor Coverings" (rfci.com) for detailed information and instructions on removing all resilient covering structures.

#### **GENERAL INFORMATION**

These installation specifications are for Stone Plastic Composite Flooring (SPC) and Wood Polymer Composite (WPC) Flooring. All recommendations are based on the most recent available information. The information on this sheet provides general guidelines. All instructions and recommendations must be strictly followed for a satisfactory installation.

- The floor covering should be stored and installed in climate constant or climate controlled indoor location with an average temperature of between 68°-77°F and a humidity range of 35-55%.
- Install SPC and WPC flooring only after the jobsite has been cleaned and cleared of everything that may hinder a fluent installation or may damage the planks.
- To minimize shade variation, mix and install planks from several cartons.
- Note that color uniformity of the planks can only be guaranteed for deliveries of the same production lot.
- · No complaints can, in any case, be accepted for flooring that has been cut to size or installed.
- All necessary subfloor patching must be done with a non- shrinking, water-resistant filler. Follow strictly the instructions on the installation guide
- As a rule: install all planks parallel to the main source of light in the room. Only in small and long and small rooms SPC and WPC must be installed in longitudinal direction.



#### **New Construction or Remodel**

All work involving water, such as pouring basement concrete floors, drywall and plasterwork, plumbing, etc. must be completed well in advance of the floor delivery. Ensure that the building is enclosed. Where building codes allow, permanent heating and/or air conditioning systems should be operating at least five days preceding installation to promote proper acclimation and should be maintained during and after installation. If it is not possible for the permanent heating and/or air conditioning system to be operating before, during and after installation, a temporary heating and/or dehumidification system that simulate normal living (occupied) conditions can enable the installation to proceed until the permanent heating and/or air conditioning system is fully operational.

Your job site should have a consistent temperature of 60°F-75°F which should be maintained continuously thereafter

#### **Basements and Crawl Spaces**

Concrete slab or ground must be dry. The ground in the crawl spaces must be completely covered using 6 mil black polyethylene. Crawl space clearance between the earth and underside of joists should be no less than 18 inches 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.

#### **Subfloor Information**

Correct preparation of the subfloor is a major part of a successful installation.

Roughness or unevenness of the subfloor may telegraph through the new floor covering, resulting in an unsightly surface and excessive wear on high spots.

All Subfloor must be:

- CLEAN Scraped or sanded, swept, free of wax, grease, paint, oil, previous or existing glues or adhesives, and other debris
- SMOOTH/FLAT Within 3/16" on 10' radius. Sand high areas or joints, fill low areas (no more than 1/8") with a cement type filler no less than 3000 p. s.i. Any irregularities may cause hollow spots between the flooring and sub floor in any installation method and are not warranted.
- STRUCTURALLY SOUND Nail or screw any loose areas that squeak. Replace any delaminated or damaged sub flooring or underlayment.

#### **Wood Subfloor Requirements**

It must be clean; no presence of construction debris, soil, mud and any other objects on or adhering to the floor; no protrusions of nails, debris, metals should remain. If necessary, scrape and sweep the subfloor before the installation.

It must be structurally sound and stable; no movements or squeaks; no loose panels or loose nails; no signs of ply de-lamination or other damages. Repair all shortcomings before installation.

It must be flat; no visible bumps or low spots; the subfloor should be flat to within 1/8" in 6 feet span or 3/16" in 10 feet.

It must be dry.

Plywood or Oriented Strand Board (OSB) Specifications

On truss/joist spacing of 16" (406mm) O/C or less, the industry standard for single-panel subflooring is minimum 5/8" (19/32", 15.1 mm) CD Exposure 1 plywood subfloor panels (CD Exposure 1) or 23/32" OSB Exposure 1 subfloor panels, 4' x 8' sheets. Expansion gap between panels should be 1/8" (3 mm). When subfloor panels spacing is inadequate, cut in the required spacing with a circular saw if the panels are not tongued and grooved. Do not cut in expansion space on joined tongue and groove of panels.



#### **Concrete Subfloor Requirements**

It must have minimum rated strength of 3000 psi. The concrete subfloor must be dry, smooth and free from dust, solvent, paint, wax, grease, oil, and any other extraneous materials. The surface must be hard and dense, and free from powder or flaking. It must be level to within 1/8" in a 6-foot span or 3/16" in a 10-foot span; no bumps or low spots. High spots can be removed by grinding; Gaps greater than 5/32" wide or depression deeper than 1/16" should be filled with patching compound formulated for use in floor installation. It must be clean; no construction debris, soil, mud and any other objects on or adhering to the floor; if necessary, scrape and sweep away before the installation; no protrusions of nails, debris, metals should remain. New concrete slab must cure for at least 60 days. It must have a minimum 6 mil polyethylene sheet between the ground and the concrete. It must meet concrete moisture requirement below. It must be free from moisture related conditions which can damage the installed flooring. Our SPC and WPC flooring is waterproof and reliably secures the flooring panels on all four sides. However, moisture in the subfloor could cause mold, mildew, and other moisture related issues such as cupping or moisture emissions under the flooring, which may contribute to an unhealthy indoor environment. The limited warranty does not cover discoloration from mold or mildew or from any kind of water damage caused by flooding, leaking or similar conditions. If needed, ask for the SPC and WPC warranty at your dealer. Holes, grooves, expansion joints and other depressions must be filled with a latex underlayment, and trowelled smooth and feathered even with the surrounding surface. Concrete floors with a radiant heating system are allowed, provided that the temperature of the floor does never exceed 89°F or 32°C. Before installing the flooring, the heating system must be turned on to eliminate residual moisture.

#### **Concrete Moisture:**

All concrete subfloors should be tested for moisture content and the results documented. Visual checks are not reliable. Perform tests at locations around exterior doorways, near walls containing plumbing, near foundation walls and in the center of the room. Minimum sample size is 3 samples per 1000 square feet of area and one test for every additional 1000 square feet thereafter.

Its moisture content should meet one of the following criteria below:

- 5% when tested using Tramex Concrete Moisture Encounter
- · Less than 3 pounds per 1000 square feet per 24 hours when using Calcium Chloride test (ASTM F 1869)
- 75% when using Relative Humidity Testing (ASTM F-2170).

Please note: Concrete moisture content may be acceptable the time of the test. These tests do not guarantee a perpetual "dry" concrete slab. The concrete slab moisture content can vary at other times of the year. We are not responsible for moisture related damage to installed flooring.

#### **Existing Floors**

SPC and WPC flooring can be installed over most existing hard–surface floor coverings, provided that the existing floor surface is smooth. Ensure the existing floor is stable, sound and flat. Cracks and openings must be filled with fillers suitable for the existing flooring. Acceptable floor coverings include: solid hardwood, linoleum, terrazzo, ceramic tile. Ceramic tiles should be made smooth by applying a cementitious overlay such as patching or levelling compound. When the removal of the existing resilient floor covering is not an option then it must be covered with a leveller or equivalent in order to adjust it. Existing sheet vinyl floors should not be heavily cushioned and must consist of only one layer. Unacceptable floor coverings include: carpet, needle punch felt, edge glued linoleum and "moisture absorbing flooring."

#### **Radiant Heated Subfloor**

This product cannot be installed over radiant heated subfloor.



#### Moisture Barrier and Moisture Retarder

Concrete Subfloor: For floating installation only, it is recommended to use 6 mil polyethylene film or other means with equivalent permeability.

# Wood Subfloor: Not required.

#### **Sound Control Underlayment**

Additional sound control underlayment is allowed. Check with sound control manufacturer for application quidelines. Generally, the less compressive and thinner underlayment is preferred.

#### **Expansion Gap**

Maintain an expansion gap of 5/16" - 3/8" around the perimeter of the floor and around vertical objects.

#### **Transition Molding**

Floating installation, transition T-molding is required in the following cases: floor spanning greater than 40 feet in length or width; doorways or passageways 5 ft. wide or less. **Note: Floor areas interrupted by wall openings** greater than 5 ft. wide or interrupted by wall sections extending out of the wall, or floor areas which are not rectangular may experience buckling or gapping if there is excessive floor expansion or shrinkage.

#### **Wet Areas**

This product can be installed in kitchens, mud rooms, powder rooms, bathrooms and laundry rooms. Do not install in saunas, swimming pool areas and other similar extreme hot, cold or wet areas. Fill all expansion gaps with water repellant caulk.

#### Caution

Some types of nails, such as common steel nails, may cause a discoloration of the vinyl floor covering. The method of gluing and screwing the underlayment panels is not recommended. Solvent based construction adhesives are known to stain vinyl floor coverings. All responsibility for discoloration problems caused by the use of the above mentioned products is not the responsibility of the producer but rests with the installer.



# **Installation Guide**

#### FLOATING FLOOR INSTALLATION --- Recommended Method of Installation ---

#### **General Tips and Pointers**

- Make sure your work area is well lit. Good visibility ensures that color is consistent and that visually defective planks are detected and removed.
- Preferred minimum length of the first and last plank is 12". The remainder of the last plank can be used as a starter board on the following rows.
- Using a shorter piece at undercut door jams will help when fitting flooring in place. Remove upper part of the tongue and use glue when joining ends.
- 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.
- Measure the distance between the floor face edge (exclude the tongue) to the wall. Subtract 5/16" 3/8" from this measurement for expansion gap. Draw a line. Cut through the line. Discard the excess piece. Proceed with installation. Another option is to follow procedure in Step 1 below.

#### **Required Tools and Accessories**

- Tape measure
- Moisture meter (wood / concrete)
- Circular saw or hand saw
- Pull bar
- Safety equipment (goggles & mask)
- · Utility knife
- 1/4" spacers
- Broom
- SPC and WPC are designed to be installed with the floating method and can be installed below grade, on grade or above grade. However the following instructions must be followed:
  - Undercut all doorjambs if necessary. Use a piece of flooring as a guide as to how much to saw. Put the floor panel faced down as a guide, saw off the bottom of the door frame to allow the floor panel to slide under it.
  - Before you start with the installation, it is important to determine the layout of the flooring. Proper planning and layout will prevent having narrow plank widths at wall junctures or very short length pieces at the end of rows.
  - 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.
  - Use 1/4" expansion spacers to provide a gap for the seasonal expansion of the flooring along the walls of the
    entire room. Always place expansion spacers against the wall where the two boards meet. This will make
    maintaining a good square easier.
  - Even if the first row of planks does not need to be trimmed in width, it will be necessary to cut off the unsupported tongue so that a clean, solid edge shows towards the wall.



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    entire room. Always place expansion spacers against the wall where the two boards meet. This will make
    maintaining a good square easier.
  - Installation of the product must start from the left side to the right of the room. 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.
  - Use the moisture barrier/mitigator = 6 mil poly sheeting plastic to prevent the material from being damaged by moisture from the subfloor.

# Step 1

First plank, first row. Place a distance  $\frac{1}{4}$ " (5mm) thickness to the left and position the plank against the wall. Later, after 3 rows, you can easily position the flooring against the front wall with distances  $\frac{1}{4}$ ".

Prior to installation, measure the width of the room to check if the first row should preferably be cut length wise to get more equal width of the first and last rows planks.



Be sure to install the first row of boards with the tongue side facing the wall. See diagram on left.

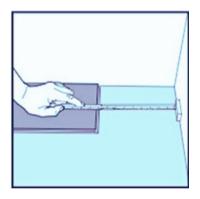


Second plank, first row. Press the short end of the next floorboard at an angle to the first one, and then lay down. Complete the first row in the same way. See image below.



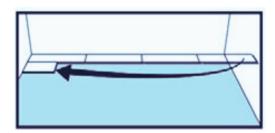
# Step 3

At the end of the first row, put a distance 1/4", to the wall and measure the length of the last plank to fit. Cut the last panel to correct length, recommended min length is two times the width of the plank.



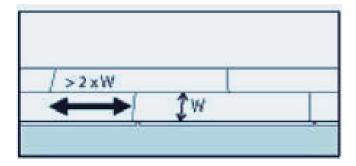
# Step 4

Second row. Position the remaining part of the first row's last plank as first plank of second row. Keep again two times the width as min length. Put a distance against the wall.



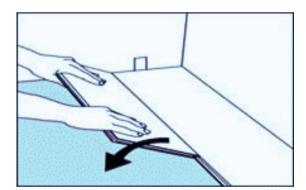


General distances between short ends. Minimum distance between short ends of planks in parallel rows shall not be less than about two times the width of the plank. See image below.



# Step 6

Place the floorboard an angle against the floorboard in the previous row, press forward and fold down at the same time. Leave the panel in a somewhat up angled position where the panels start to lock. To make this further easier, a wedge with the suitable angle can be placed under the plank near the short side joint as support. See image below



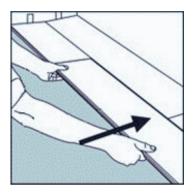
# Step 7

Second row. Position the remaining part of the first row's last plank as first plank of second row. Keep again two times the width as min length. Put a distance against the wall.





Push to slide the plank against the row in front so it aligns with the first plank. Put it down like with the first plank when the floorboards are positioned tightly together. The first/previous plank can now be folded completely down to horizontal position and if a wedge is used it can be moved to the next short end joint.



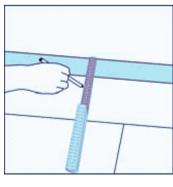
## Step 9

After 2-3 rows. Adjust the distance to the front wall by placing distances 1/4". Keep the distances in position during the entire time of installation and remove once the installation is completed. See image below



Step 10

If the wall is uneven, the floorboards must be adapted to its contours. Mark the floorboards with the contour of the wall. **Do not forget to leave a 5/16" - 3/8" space to the wall**. This procedure shall be used also for the first row if necessary. See image below





Cut off the locking element with a chisel, apply applicable glue on the adjusted strip and push the planks horizontally together. If necessary place some spacers between last board and the wall during the hardening time of the glue. The method can also be applied to the short ends. See image below.





Step 12

Mark the center of the holes and drill the hole with a diameter about 16 mm bigger than the pipe diameter (= at least 1/4" gap around), cut as shown with a saw or with a sharp utility knife. Install the floor plank. If necessary, put glue on the cut piece and replace.





#### Note: Expansion gaps around pipes.

- Measure the diameter of the pipes and mark the position on the floorboard. There should be a 5/16 to 3/8 inch expansion gaps between the floor panel and the pipe or other vertical structures.
- Cut out the holes.
- Saw the board width wise through the holes.
- Door frames may have to be undercut.
- Use a floor panel as a guide as to how much to saw.
- Put the floor panel faced down as a guide.
- Saw off the bottom of the door frame to allow the floor panel to slide under it.

