RIGID CORE SPC
INSTALLATION GUIDELINES

IMPORTANT INFORMATION

Read all installation instructions and warranties prior to installing your Rigid Core SPC plank floor.

Owner/Installer should carefully inspect material prior to installation. Materials installed with visible defects are not covered by warranty. Unacceptable material should not be installed. Rejection of material must be made on the full order shipment of product, not box-by-box or piece-by-piece. Our flooring is manufactured within accepted industry standards. It is recommended to add 10% to order quantities to allow for installation waste and non-conforming product, add 18% if installing in a diagonal pattern.

Inspect the Flooring: Inspect material from several boxes and get customer approval for appearance, color, and finish. Only after the flooring is approved by the end user should installation begin. During installation, set aside pieces that may not be acceptable if installed. If the culled amount exceeds 10% of the flooring material, contact manufacturer before you proceed.

ACCEPTABLE JOBSITE CONDITIONS

- Rigid Core SPC flooring planks are watertight if installed correctly. This means no moisture will pass through the seam between properly seated planks as defined by a 24-hour surface test like the NALFA-LF-01. However, moisture can still pass through improperly seated seams and along walls.
- Liquids should be wiped up as soon as possible to prevent migration into the substrate.
- Rigid Core SPC is not designed for continually wet environments or outdoor applications. Residential bathrooms, kitchens, and laundry rooms are acceptable rooms for installation.
- Rigid Core SPC is constructed for floating floor applications only. Do Not Use adhesives to attach to the subfloor.
- **RWS&D warranties do not cover structural damage from heavy medical equipment such as wheelchairs, chair lifts, or medical beds.**

- Permanent fixtures like cabinets, vanities, and islands should be installed prior to flooring installation. They should not be placed on top of the floor.
- Direct sunlight over extended periods of time can fade or discolor your floor. Use UV-tinting or window treatments to help protect your floor. Occasionally move rugs and other furnishings to avoid defined lines in the floor.
- Rigid Core SPC is designed from real wood images. Blend and mix planks during installation to randomize the natural features of the floor.
- For residential installations, acclimate flooring to room temperature which must be between 60°F and 80°F. Once the flooring is the same temperature as the room and subfloor, it is ready to install.
- Commercial installation must remove planks from the carton and lie flat for at least 48 hours prior to installation. Maintain room temperatures between 60°F and 80°F.

SUBFLOORS

- The subfloor must be flat, meeting a minimum of 3/16" within 10' or 1/8" in 6'. The flooring installer is responsible for ensuring a level and flat subfloor.
- The subfloor must be dry. Moisture in the subfloor can lead to damage to the subfloor and the installed flooring. Correct all subfloor moisture issues prior to flooring installation.
- **NOTE: Damage to Rigid Core SPC planks, or to the subfloor, caused by mold, mildew, hydrostatic pressure, or excessive moisture in the subfloor are not covered under warranty.**
- The subfloor must be clean. Remove all construction debris, dirt, dust, and all other foreign substances from the subfloor prior to installing Rigid Core SPC planks.

DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEAD BLAST, OR MECHANICALLY CHIP, OR PULVERIZE ANY PART OF THE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVE,

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OR OTHER ADHESIVE. THESE PRODUCTS MAY CONTAIN ASBESTOS FIBERS AND/OR CRYSTALLINE SILICA. AVOID CREATING DUST. INHALATION OF SUCH DUST IS A HAZARD TO THE RESPIRATORY TRACT AND CAN CAUSE CANCER. INDIVIDUALS WHO ARE SMOKERS WHO ARE EXPOSED TO ASBESTOS FIBERS SIGNIFICANTLY INCREASE THEIR RISK OF SERIOUS BODILY HARM. UNLESS POSITIVELY CERTAIN THAT THE PRODUCT IS A NON-ASBESTOS-CONTAINING MATERIAL, YOU MUST ASSUME IT CONTAINS ASBESTOS. STATE REGULATIONS MAY REQUIRE THAT THE MATERIAL BE TESTED TO DETERMINE ASBESTOS CONTENT. CONSULT A CERTIFIED ASBESTOS TESTING LAB FOR REMOVAL BEFORE DISTURBING EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVE, OR OTHER ADHESIVE.

ACCEPTABLE SUBFLOORS

- Concrete
- Plywood and OSB
- Particle Board and Waferboard (when used over plywood or OSB)
- Tile, Terrazzo, and Marble
- Resilient Flooring without padding or cushioning

CONCRETE SUBFLOORS

- Grind high spots and use a cement based leveling material (minimum compressive strength 3000 psi) to fill all low spots. Follow the leveling compound manufacturer's instruction. Leveling compounds must be allowed to thoroughly cure and dry prior to flooring installation.

    NOTE: The installer is responsible for determining when the subfloor is dry enough to install the flooring. Rigid Core SPC should never be installed in areas with excessive moisture.

- Concrete slab moisture content must not exceed 4 lbs. per 1,000 sq ft per 24 hrs. on an ASTM F1869 Calcium Chloride test and cannot exceed 70% Relative Humidity (RH) if using an ASTM F2170 in-situ relative humidity test. If the slab tests outside these limits, proper moisture abatement is required. The subflooring should be tested in at least 10 separate places for every 1,000 sq ft to ensure adequate sampling.

Testing around plumbing fixtures, pipes, and other areas at risk for moisture is recommended.

- Trapped moisture underneath Rigid Core SPC can cause damage to the surrounding structure and create conditions that distort the shape of the flooring. Such conditions can develop even after the slab has been tested as dry.
- **For the long-term success of the product and dwelling, 6-mil plastic or approved roll-on moisture barrier must be used between the flooring and concrete subfloor. Plastic seams must be overlapped 6 inches and taped with waterproof tape.**
- Concrete pH level must be between 7-9.
- New concrete slabs must have been poured for at least 60 days, dry and fully cured.
- Concrete must be sound, free from chipping, flaking, and dusting.
- Adhesive residue from previous floor coverings must be scraped, sanded, or otherwise removed prior to installing Rigid Core SPC.

RADIANT HEAT SUBFLOORS

Rigid Core SPC planks can be installed over radiant heat in concrete. Consult your radiant heat subfloor manufacturer for compatibility with luxury vinyl flooring.

- Radiant heating mats are not approved. The radiant heat system must be installed in the concrete subfloor.
- Hydronic or Electric systems are acceptable.
- Heating elements must be 1/2" or more below the installed flooring.
- Heating systems must be operational for at least 14 days prior to flooring installation to ensure proper operation and temperature regulation.
- Heating must be even across the floor and no part of the installed floor's surface temperature should exceed 26°C/80°F.
- Rooms with radiant heat should have at least 1/2" expansion gap around the perimeter. Take particular care to ensure expansion at or near door jambs.
- Rooms with radiant heat must be separated from rooms without radiant heat by a 1/2" expansion gap and covered with a molding such as T-Mold.

- Radiant heat system must be operational continuously for 14 days before installation. It should then be turned off at least 4 hours before installation. After the flooring is installed, it can be turned back on and gradually brought to normal temperature within 24 hours.

PANEL WOOD SUBFLOORS (PLYWOOD, OSB, PARTICLE BOARD)

- Do not install Rigid Core SPC planks on wood panel subfloors installed over concrete, or solid wood installed directly over concrete.
- Do not install directly over dimensional lumber (e.g., 2x6" diagonal across joists.)
- All wood panel subfloors must be properly installed per the manufacturer's instructions and meet or exceed local building codes.
- Local building codes may only provide a minimum requirement for flooring systems. If deflection or bounce occurs in the subfloor, fasten an additional layer of APA rated underlayment to the subfloor per the underlayment manufacturer's instructions.
- Particle Board and Waferboard subfloors are only acceptable if installed over structurally rated plywood and OSB. These subfloors, however, are prone to failure when contacted by moisture; Rigid Core SPC does not prevent moisture damage to these subfloors.
- Loose panels must be fastened to the joists to prevent panel movement.

  NOTE: squeaks, cracking, or popping sounds and/or plank separation due to subfloor and flooring movement are not covered under warranty. The installer is responsible for ensuring subfloors are firm and flat.
- Do not install Rigid Core SPC planks over treated wood panel subfloors. Fasten an additional layer of APA rated underlayment per the underlayment manufacturer's instructions over treated wood panel subfloors.
- Crawl spaces must be dry.
- Do not place plastic sheeting between Rigid Core SPC and wooden subfloor.
- Crawl space must be a minimum of 18" from the ground to the underside of the joist.
- The crawl space earth (or thin "rat slab") must be covered 100% by a vapor retarder of 6-mil black polyethylene.

- Where the 6-mil black polyethylene ground covering is in place, the crawl space should have perimeter venting equal to a minimum of 1.5 square feet, per 100 square feet of crawl space.
- Crawl space vents should be properly located to foster cross ventilation.
- Unvented crawl spaces need ground covering of 6-mil black polyethylene, which must be overlapped 6 inches and be sealed or taped as well as extended 6-inches up stem walls and vertical obstructions such as support piers. Continuously operated mechanical exhaust and perimeter wall insulation or conditioned air supply and insulation must be provided.
- Wood panel subfloors must be tested with a pin or scan type moisture meter, and the moisture content should not exceed 12%. The subfloor should be tested in at least 10 separate places for every 1,000 sq ft to ensure adequate sampling. Testing around plumbing fixtures, pipes, and other areas at risk for moisture is recommended.

TILE, TERRAZZO, MARBLE

- Rigid Core SPC planks can be installed over existing hard surface flooring like ceramic tile, terrazzo, and marble provided the existing flooring is stable, firm, fully bonded to the substrate, and dry.
- Tile grout lines or other gaps greater than 1/4" should be filled and level with a cementitious leveling compound.
- Uneven tile or natural stone flooring should be smoothed and leveled with a cementitious leveling compound.

NOTE: The structural integrity of Rigid Core SPC flooring is subject to the structural integrity of the hard surface flooring underneath. Problems in the underlying hard surface flooring can result in damage to Rigid Core SPC flooring.

RESILIENT FLOORING

- Rigid Core SPC can be installed over sheet vinyl and monolithic vinyl (poured vinyl) flooring.
- Vinyl flooring should not be installed with additional padding underneath. Excessive padding will cause "bounce" or vertical movement to your new floor once installed and may cause damage to locking mechanism and edges of the planks.

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- Do not install flooring over multiple layers of vinyl. Only one layer of vinyl flooring is acceptable.

INSTALLING THE FLOOR

TOOLS NEEDED FOR INSTALLATION

- Utility Knife or plank cutter
- Ruler or straight edge
- Tape Measure
- Pencil
- Tapping Block
- Pull Bar
- Rubber Mallet
- Wall Spacers or Wedges
- Drill and necessary bits, if needing to cut holes for pipes or in-floor electrical outlets.

JOB SITE PREPARATION

Inspect the Flooring: Inspect material from several boxes and get customer approval for appearance, color, and finish. Cull out pieces that may not be acceptable once installed. If the culled amount exceeds 10% of the flooring material, contact manufacturer before proceeding.

NOTE: The manufacturer does not accept responsibility for any costs incurred when plank(s) with visible defects have been installed. Installation is acceptance of the product.

Ensure the Environment is Correct:

The environment must be between 60-80°F, and the permanent HVAC system must be operating prior to and during the installation.

NOTE: squeaks, cracking or popping sounds are not covered under warranty, and can be expected on floated floors. Proper subfloor preparation and flooring installation should minimize these noises.

- **Undercut Door Casings:** Undercut all door casings 1/16" higher than the thickness of the flooring being installed. To do this, use a scrap piece of flooring as a guide. Lay it on the substrate and cut the casing with a handsaw, oscillating saw, or a powered jamb saw set at the correct height.

- **Blending of Cartons:** Rigid Core SPC planks are designed from real wood images. To achieve a natural appearance across the entire floor, we highly recommend opening and working from several cartons at a time. This will allow you to blend the planks for maximum aesthetic appearance. Make certain the room is well lit to ensure color is consistent and that any visual defects can be seen and removed.

- **Match Transition Moldings:** For best appearance, blend all transitions and moldings to planks that have similar color and imaging. Set them aside for use as needed.

- **Layout of Flooring:** Laying out several rows prior to installation is essential to achieve a random appearance. Be sure to lay flooring perpendicular to the joists. Never waste materials; the end cuts from starter rows should be used at the opposite end of the room to complete rows and end cuts can be used to start subsequent rows.

- **Expansion Space:** Expansion space around the room perimeter and all fixed objects is required and should be at least 1/4". Rooms with radiant heat need a minimum of 1/2" expansion space.

- **Large Spaces:** Rigid Core SPC planks can be installed up to 50' x 50', or up to 2500 sq ft, with a 1/4" expansion gap. Larger areas up to 100' x 100', or up to 10,000 sq ft, require a 1/2" expansion gap. Any run over 50', length or width, must have a 1/2" expansion gap around the perimeter of each 50' section.

INSTALLING THE FLOOR

NOTES:
- Rigid Core SPC is designed for floating installations only. Never fasten or adhere the planks to a subfloor.
- Always work left to right and start along a wall or longest run for your first row.
- Planks length should not be cut shorter than 8".
- Cut planks by first marking a straight line across the plank or lengthwise down the plank. Then place a straight edge along the line, and score with a utility knife along the straight edge. Snap the plank on the score line. Flip the plank over

and cut the pad along the snap line to finish the cut.

- You may also use a jigsaw, circular saw, miter saw, or LVT Plank Cutter, to cut planks. Use blades that are recommended for vinyl and stone composite flooring. Refer to tool manufacturer's instructions for proper use.

STEPS:

1. Plan the layout of the floor prior to installing the first plank. Proper planning will prevent narrow rows along walls and short unsightly pieces at ends of rows.

2. Set 1/4" spacers (or wider spacers as otherwise defined in this document) along all walls and fixtures in the installation space.

3. Place the first plank with the tongue side of the plank facing the wall.

4. Connect the next plank to the end of the first plank by placing the tongue into the groove at a slight angle and fold the second plank down to the subfloor to lock the planks together.

   - Make sure the planks are square to one another by using a tapping block and soft rubber mallet to tap the planks into position.

   - Tap down on the end seam lightly with a soft rubber mallet to fully seat the end locking mechanism. There should be no gap between the planks when properly seated.

   - **Improperly seated planks will cause installation to be out of square to the room, create a visual curve to the planks, and cause subsequent rows to not engage properly.**

   - Continue installing the first row of planks according to this guideline.

5. Starting the second row, make sure the end seams are at least 8" apart from the first-row end seams. Cut the second-row plank as necessary to ensure proper seam spacing.

   - Angle the second-row plank and place the long-edge tongue into the groove side of the first-row plank. Fold down the plank to the subfloor to lock the seam. Ensure there are no gaps along the full length of the seam. Use a tapping block and soft rubber mallet to make sure the seam is properly seated.

   - The long edge seam must be properly and fully seated prior to inserting the next piece.

Damage and misalignment of planks can occur if not properly seated.

   - The plank can be lifted out of place and reinstalled as needed to ensure the seams are seated properly.

6. Angle the next plank and place the long-edge tongue into the groove side of the first-row planks. Align the short-end tongue over the preceding plank groove. Fold down the plank to the subfloor to lock the long-edge seam into place while gently tapping as necessary.

   - Ensure the long-edge seam is tight with no gaps. Once the long-edge seam is seated properly, tap the short-end seam in place connecting to the plank on the left. Use a soft rubber mallet to tap the seam in place. Make sure there are no gaps or edges on the end seam.

   - Continue installing the second row according to this guideline.

7. Once these first two rows are assembled, push the planks gently against the spacers along the wall.

   - Run a chalk line along the entire length of the inner row to ensure the planks are assembled in a straight line.

   - Adjust planks as necessary to ensure the first two rows are assembled square and in a straight line.

8. Continue installing the remaining flooring rows following the method in Step 6, making sure that each plank is square and properly seated to its connecting planks. There should be no gaps between planks.

9. The last row of the installation may need to be cut to fit next to the wall. Measure the width of the final row, ensuring you leave a 1/4" gap (or wider as otherwise defined in this document). Mark the width to be cut on each plank of the last row measuring from the tongue side of the plank. Score the length of the plank along the marked line, and snap to width.

   - Install the plank into place as in Step 6. Use a pull bar along the wall to engage the long edge seam. The pull bar should be resting against the cut side of the plank to pull it into place. Never use a pull bar against the tongue or groove side of a plank.

   - Continue to install as per these guidelines until the last plank in the last row is installed.

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RW Supply+Design **Portercraft FLOORS**

FITTING AROUND OBJECTS

- When cutting planks around objects, make sure not to damage the surrounding tongue or groove. Damaged locking mechanisms can cause improper seating or movement between planks.
- Draw a template of the object on a piece of paper or thin cardboard.
- Place the template on the plank to be cut and trace the lines using a utility knife or jigsaw. Snap or cut the plank to fit the template.
- Install the cut plank around the object following the installation guidelines above ensuring the proper expansion gap around the fixed object.

COMPLETE INSTALLATION

- Remove the spacers from along walls and permanent fixtures.
- In areas where water may occasionally be on the floor, like bathrooms and kitchens, ensure that water does not flow over the edge of the floor and become trapped underneath the floor.
- Clean the floor with an appropriate cleaner.
- Install or re-install any moldings or trim, making sure to cover expansion gaps along the walls and permanent fixtures.
- Trim nails must go into the subfloor or the wall, never drive trim nails into floor planks.
- Cover flooring with a breathable material like cardboard to protect from other construction traffic. Sweep thoroughly before covering.
- Save leftover planks. Do not discard. Leftover planks can be used for replacement planks in the future. These planks match the dye-lot of your installed floor. Wrap planks in plastic and with the original box, seal with packing tape and store away in a safe place.

MAINTENANCE

- Install protector felt pads on all furniture legs.
- Place rugs at all entryways to capture abrasive dust and debris and moisture. Clean rugs regularly.
- Use protective mats below rolling chairs and heavy furniture. Hard casters should not be used on rolling chairs.
- Use non-marring wheels and casters meant for hard surfaces.

- Use colorfast mats that are non-rubber. Check mat manufacturer guidelines to ensure they will be non-marring and will not leave a residue on your new floor.
- Vacuum with a brush attachment or sweep with dust mop regularly to remove abrasive dust and dirt.
- Do not use household/furniture dust treatments, sprays, oils, or polishes to clean the floor as they will contaminate the finish.
- Keep high heels and other shoe bottoms in good repair as they can damage the floor. Cleats and other sharp point shoes should not be worn on the floor.
- Keep pet nails trimmed to prevent scratching.
- Wipe up spills immediately with a dampened cloth and follow up with approved cleaner.
- Remove stains with a cloth dampened with an approved cleaner.
- Remove standing water and other liquids immediately.
- Use a neutral pH floor cleaner made for vinyl flooring or similar hard surfaces.

DO NOT USE THE FOLLOWING CHEMICALS OR TREATMENTS

- Cleaners with Wax, Polish, or Oil
- Vinegar (with or without water)
- Dish soap and water
- Multi-Purpose Cleaners
- Ammonia
- Bleach
- Steel Wool or Scouring pad
- Steam Cleaners
- Vacuums with beater bars
- Wet sweeper pads

NOTE: Damage, including but not limited to mold, mildew, and discoloration, to the subfloor caused by moisture from above the installed floor seeping to the subfloor is not covered under warranty.