

# RIGID CORE SPC LOCKING INSTALLATION SYSTEM

If properly installed and cared for your new flooring will be easy to maintain and and will look great for years to come. These directions are based on industry standards and best practices. Failure to follow these installation instructions may result in damage to the flooring and void the floor's warranty.

- CONTACT YOUR RETAILER FOR COMPLETE WARRANTY DETAILS.
- Contact your retailer for technical or installation questions, or general information.

## **WARNING: REGARDING EXISTING IN-PLACE RESILIENT FLOOR COVERING AND ASPHALTIC ADHESIVES. DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVE OR OTHER ADHESIVE.**

These **existing in-place** products may contain **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 existing in-place 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 removal and disposal of material.

Visit [rfci.com](http://rfci.com) to see the current edition of the Resilient Floor Covering Institute (RFCI) publication *Recommended Work Practices for Removal of Resilient Floor Coverings* for instructions on removing all resilient floor covering structures or contact your retailer.

**The floor coverings and adhesives do NOT contain asbestos.**

## Installation:

Location: All grade levels

## Tools:

Tapping block, pull bar, rubber mallet, utility knife, saw (optional), multi floor cutter, spacers, Bruce® TuffLink™ adhesive (or similar product) (optional), 6 mil poly film moisture barrier for concrete subfloors (floating installations only)

## General Information:

The locking installation system allows the planks to be installed without using adhesive. It is a floating floor installation. The planks should be installed 1/4" away from all vertical objects such as walls, cabinets, pipes, etc.

## Adhesives:

If a full spread glue down installation is desired with the Rigid Core SPC flooring, use Bruce® TuffLink adhesive (or similar product) with the recommended trowel found on the pail. Follow the manufacturer's instructions for the adhesive application.

When installed in bathrooms, the expansion gap should be filled and sealed with a good quality 100% silicone caulk. The gap can then be covered with molding or wall base. Base cabinets should not be installed on top of the planks.

## Keys to Successful Locking Installation:

- Most installations will need approximately a 10% cutting allowance added to the square footage of the room.
- Proper conditioning of the job site is necessary. Flooring planks should not be exposed to sudden changes in temperature.
- Store, transport and handle the flooring planks in a manner to prevent any distortions. Distortions will not disappear over time. Store cartons flat, never on edge. Ensure that the flooring planks are lying flat during installation.
- Installations of carpet, metal strips and other transition moldings should not pinch the flooring against the subfloor, and should allow for some slight movement wherever practical.
- Protect the floor from heavy-rolling loads, other trades, and movement of appliances by using sheets of plywood or similar.

## Suitable Substrates

All substrates listed below must be properly prepared and meet certain requirements. There may be other exceptions and special conditions (as noted below) for these substrates to be suitable for the locking installation system.

## SUITABLE SUBSTRATES INCLUDE:

- Concrete – dry and smooth on all grade levels
  - A 6 mil poly film moisture barrier is must be used over concrete subfloors. Failure to use a moisture barrier could affect the integrity of the SPC installation, or your warranty.
- Suspended wood subfloors with approved wood underlayments – must have minimum of 18" well-ventilated crawl space underneath
- Suspended hardwood flooring that is fully adhered, smooth and square edge without texture
  - SPC should be installed perpendicular to the direction of the existing wood floor
- Single-layer, fully-adhered, existing resilient floors – must not be foam-backed or cushionbacked
- Ceramic tile, Terrazzo, Marble
- Polymeric Poured (seamless) Floors
- OSB-3/4"
- Particleboard 40lb. density or waferboard

## DO NOT INSTALL OVER:

- Existing resilient tile floors that are below grade
- Existing cushion-backed vinyl flooring
- Carpet
- Hardwood flooring installed directly over concrete
- In rooms with sloping floors or floor drains
- Existing floating floors
- Concrete without a 6 mil poly film moisture barrier

## Job Conditions/Preparations:

- Resilient flooring should only be installed in temperature-controlled environments. It is necessary to maintain a constant temperature before, during and after the installation. Therefore, the permanent or temporary HVAC system must be in operation before the installation of resilient flooring. Portable heaters are not recommended as they may not heat the room and subfloor sufficiently. Kerosene heaters should never be used.
- All substrates must be structurally sound, dry, clean, flat, and smooth with minimal deflection. Substrates must be free from excessive moisture or alkali. Remove dirt, paint, varnish, wax, oils, solvents and other foreign matter, and contaminates.
  - Subfloors must be flat within 3/16" in 10' or 1/8" in 6'
  - For concrete substrates moisture testing should be conducted and moisture vapor emissions should not exceed 5lbs. per 1,000 ft<sup>2</sup> (calcium chloride) and/or relative humidity exceeding 95% (in-situ probe)
- High spots on the substrate should be leveled and low areas filled with appropriate underlayments.
- Do not use products containing petroleum, solvents or citrus oils to prepare substrates as they can cause staining and expansion of the new flooring.
- For renovation or remodel work, remove any existing adhesive residue so that 100% of the overall area of the original substrate is exposed.
- Ceramic tile floors, ceramic and marble grout joints, and irregularities in concrete should be filled and leveled using a cementitious patch to fill and smooth any embossing in the old floor.
- The area to receive resilient flooring materials and adhesives should be maintained between 65°F (18°C) and 85°F (29°C) for 48 hours before installation, during installation, and 48 hours after completion. Maintain temperatures between 32°F (0°C) and 140°F (60°C) thereafter.
- Radiant heated substrates must not exceed a maximum surface temperature of 85°F (29°C).
- The subfloor panels must have a smooth, sanded face and show no swelling of edges or surface due to exposure to weather conditions or construction traffic."
- There are numerous products available for use as floor fills, patches, self-leveling underlayments, and trowelable underlayments. They include proprietary blends of compounds such as portland cement, calcium aluminates, and gypsum-based products. These are recommended by their manufacturers for smoothing rough or uneven subfloors, enhancing acoustical and fire characteristics of structures or as substrates to receive floor covering for otherwise unsuitable subfloor conditions. If the subfloor surface appears to be dusty then apply a primer to the surface.

## Safety and Clean Up:

Wet adhesive should be cleaned up immediately with soap and water on a clean cloth. Dried adhesive may require the use of a solvent-based adhesive cleaner.

## Installation Preparation:

Remove baseboard, quarter-round moldings, wall base, appliances and furniture from room. For best results, door trim should be under-cut to allow flooring to move freely without being pinched. After preparation work, sweep and vacuum the entire work area to remove all dust and debris.

Whenever possible, plan the layout so that the joints in the planks do not fall on top of joints or seams in the existing substrate. The end joints of the planks should be staggered a minimum of 6" apart. Do not install over expansion joints. Avoid installing pieces shorter than 8" (20.32 cm).

Determine which direction the plank will run. Find the center of each of the end walls (the walls perpendicular to the long dimension of the planks and place a pencil mark on the floor. Connect these points by striking a chalk line down the center of the room. Do a dry layout of planks from the center line to the wall running parallel to the long direction of the planks to determine the width of the last row of planks (refer to Figure 1).

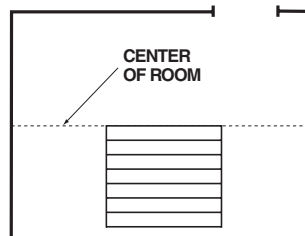


Fig. 1 – Dry layout to determine width of border plank.

Avoid having border pieces less than half with width of the planks. If you find the border planks will be less than 1/2 the width of the plank, the center starting line should be shifted a distance equal to 1/2 the plank width. This will "balance" the room and provide for a larger cut piece at the wall.

## Installation:

**NOTE:** The subfloor must be thoroughly free from dust and debris. If the subfloor is dusty this may affect the product performance.

**NOTE:** Stagger end joints by 6". Cut pieces at the ends of rows should be 8" long or longer.

Position the first plank so that groove edge is facing you. Install the product from left to right in the room. See Figure 2 for position of initial plank in the room.

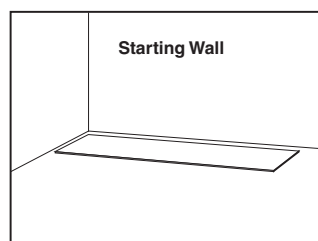


Fig. 2 – Left corner of starting wall.

Occasionally, it may be necessary to install backwards. This may be done by sliding the grooves under the tongues and working them right to left, but this is more difficult.

### Install First Row

1. Inspect each piece prior to installation for damaged planks.
2. To minimize pattern repeats, always pull from at least 3 cartons while installing.
3. Lay first row of boards with tongue side facing the wall.
4. If the starting wall is crooked, trace the contour of the wall on the first row of planks and trim as needed.
5. Use spacers along all sides that butt up against walls to maintain 1/4" (6.35 mm) expansion zone.
6. Lay pieces from left to right. Lock the end joints by aligning the end tongue with the end groove of the previous board then tapping the joints together with a soft rubber mallet.

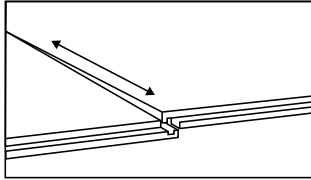


Fig. 3

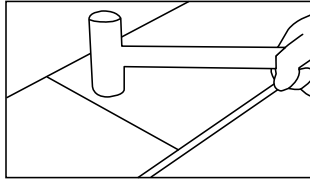


Fig. 4

7. When measuring the last piece in the row, subtract 1/4" (6.35 mm) from the end of the board to maintain expansion zone.
8. Cut decorative side up if using a hand saw or decorative side down if using a power saw to minimize chipping. A utility knife may also be used.
9. If the cut-off piece from the first row is 8" (20.32 mm) or longer, use it to start the second row. If it is less than 8" (20.32 mm), cut a full board in half and use that.

### Install Remaining Rows

1. Continue laying planks, one row at a time and staggering the end joints.
2. Install the long edge of the first board in the second row at an angle to the board in the first row. Press flat to subfloor to lock into place. A scrap piece of material can be used as a tapping block to ensure the long edge is properly engaged.

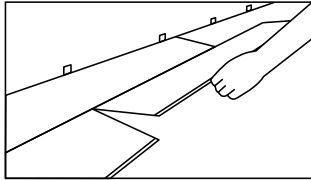


Fig. 5

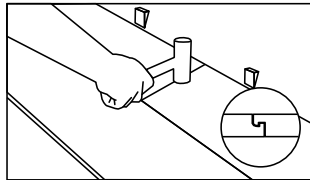


Fig. 6

3. Angle the long edge of the next board in the second row to lock into the first row (fig. 5) while positioning the short end of the board over the groove from the previous board. Lock and fold, then tap into place using a rubber mallet. (fig. 6).
4. Follow the order described above to continue laying the boards in the second and additional rows.
5. Use of a rubber mallet maybe necessary to tighten joints.

Continue installing planks. Maintain a random appearance by offsetting the end joints by at least 6". Always be certain that the planks are fully engaged. If slight gapping is noticed, place a cut piece of flooring (bridge piece) in the side groove that spans the ends of two adjacent planks within a row. Then tap the side of the plank with a tapping block.

When fitting in areas such as door casings it may be necessary to use a flat pull bar to engage the lock.

Continue installing the remaining rows in similar fashion. For planks, maintain the 6" minimum staggered end joints between rows and maintain the 1/4" gap at perimeter and vertical objects.

If planks need to be disengaged it is crucial to slide them apart (fig. 7) in order to maintain the integrity of the lock. If this is not done properly the lock can break.

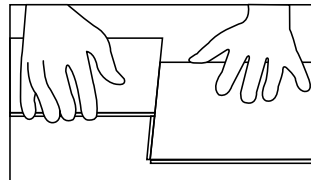


Fig. 7

### Optional - Glue Down Procedure:

If a full spread glue, down installation is desired, use Bruce® TuffLink™ adhesive (or similar product). Follow the manufacturer's instructions for adhesive application.

Apply a sufficient amount of Bruce® TuffLink™ adhesive (or similar product) using the recommended trowel at the starting wall in an area that can be covered within the working time of the adhesive. Be sure not to spread adhesive too far ahead of your work area. Begin laying planks in the adhesive after the recommended open time of the adhesive and install row by row using the same locking installation described above including the cut pieces at the perimeter until half of the installation is complete. Stagger the end joints by at least 6" (15.2 cm). Continue applying adhesive in the same fashion being careful not to spread too far beyond the working area. Allow the adhesive to dry-to-touch and complete the installation of planks in similar fashion.

After the planks are installed, immediately roll the entire floor with a 100 lb. roller. Use a hand roller in confined areas where the large floor roller will not reach, such as under toe kicks.

The planks may be walked on immediately; however, the floor should not be exposed to heavy rolling load traffic for 72 hours after the installation. Use pieces of hardboard or underlayment panels to protect the floor when moving heavy furniture and appliances back into the room.

### Finishing the Job:

Replace molding or wall base, allowing slight clearance between the molding and the planks. Nail the molding to the wall surface, not through the flooring. At doorways and at other areas where the flooring planks may meet other flooring surfaces, it is preferable to use a "T" - molding, or similar, to cover the exposed edge but not pinch the planks and the adjoining surface.

### Proactive Protection for Your Floor:

- When moving appliances or heavy furniture it is always wise to lay a plywood panel, or similar, on your floor and "walk" the item across it. This protects your floor from scuffing, gouging and tears.
- Use floor protectors under furniture to reduce indentation. As a general rule of thumb, the heavier the item, the wider the floor protector needed.
- Place a walk-off mat at outside entrances to reduce the amount of dirt brought into your home. We strongly recommend mats without a latex or rubber backing since these backings can cause permanent discoloration.

### Caring for Your Floor:

- Sweep or vacuum regularly, to remove loose dirt which can scratch your floor. Note: We do not recommend vacuums that have a beater bar since it can visibly damage your flooring surface. Additionally, we do not recommend electric brooms with hard plastic bottoms with no padding as use may result in discoloration and deglossing.
- Wipe up spills as soon as possible. Never use highly abrasive scrubbing tools on any resilient floor.
- Wash your floor regularly with a vinyl floor cleaner such as Bruce Multi Surface Floor Cleaner (or similar product).
- Do NOT use detergents, abrasive cleaners, or "mop and shine" products. These products may leave a dull film on your floor.
- Over time, if the shine on your floor begins to dull, apply a low gloss floor finish for resilient floors to restore the appearance of rigid core flooring. Do NOT use paste wax or solvent based polishes.
- Vinyl flooring, like other types of smooth floors, can become slippery when wet. Allow time for floor to dry after washing. Immediately wipe up wet areas from spills, foreign substance, or wet feet.