IVC US Commercial Installation Guide - Sheet Vinyl Flooring

IVC US recommends the following guidelines for preparation and installation of all IVC US commercial products using permanent bond adhesive. Permanent Full Spread is the required installation method for all IVC US commercial applications.

PLEASE NOTE that Commercial flooring installations require specialized applications that are different than Residential. IVC US recommends contracting a qualified commercial flooring installation service for all commercial installations. The installer should be well-versed and experienced with all procedures indicative of quality installations with resilient flooring.

Please contact IVC US Technical Services at 888-225-8287 with any questions.

Permanent Full Spread Bond Adhesive Installation Method (Commercial)

Materials Required for Installation:

• 1/16” X 1/32” X 1/32” U notch trowel
• IVC iGrip Permanent Adhesive for Sheet Vinyl
  - If unavailable, approved secondary alternatives include:
    o Taylor 2091 (commercial)
    o Henry© 650 P
  NOTE IVC will not be held responsible for problems that may arise for approved secondary alternative adhesives. Please contact the approved secondary alternative adhesives’ manufacturer with issues.
• IVC Infuze Seam Sealer
• IVC FLEX-PRIM Acrylic Latex Primer
• Sharp Utility Knife
• Straight edge
• 100 lb. roller
• Plastic putty knife, white clean cloths and denatured alcohol if seaming is required

Acceptable Underlayments:

• Wood Underlayment
  Wood underlayment panels require a double layer construction and must be underlayment grade as specified and warranted by the manufacturer. Always fasten underlayment panels in accordance with the manufacturer’s recommendations. Any failure of the underlayment or IVC US flooring as a result of the underlayment is NOT the responsibility of IVC US. Any porous wood underlayment must be primed. IVC US does not recommend installing resilient flooring over wood flooring or sub-floors applied directly over concrete or sleeper-construction floors.

• Concrete — See Grade Levels below. All concrete underlayments require moisture testing.

Grade Levels

Suspended: An acceptable suspended floor is a concrete or wood substrate with a minimum of 18” (460mm) of well-ventilated air space beneath it. IVC US recommends that a moisture vapor barrier be placed on the ground below the air space.

On-Grade: An acceptable on-grade floor is a concrete substrate in direct surface contact with the ground at the surrounding ground level. The concrete slab should be protected from moisture penetration and incorporate a proven moisture vapor barrier.

Below-Grade: An acceptable below-grade floor is a concrete substrate partially or completely in contact with the ground below the average surrounding ground level. The concrete slab should be protected from moisture penetration and incorporate a proven moisture vapor barrier.
• VCT (well bonded, on and above grade – in absence of waxes or sealers)
• Ceramic (well bonded & properly prepared)
• Terrazzo (well bonded & properly prepared)
• Self-leveling and patching compounds (latex fortified Portland cement based only)
• Resilient floor (no more than 1 layer, well bonded, non-cushioned)
• Radiant heat floors (not exceeding 85°F (29°C) and approved by the manufacturer for the use of their product with resilient vinyl flooring applications)

Unacceptable Surfaces:
• Inter-flex and any perimeter bonded products
• Cork
• Cushion-back vinyl
• Carpet
• Any floating floor system
• OSB
• Resilient tile installed below grade
• Gypcrete

IVC US will not warrant or accept responsibility of any kind for flooring failures related to the use of unacceptable substrates and surfaces.

Floor Preparation:
Floor must be clean, smooth, flat and dry. Remove all foreign substances such as wax, grease, dirt, construction marks, paints, sealers and contaminants, and any substance or chemical that would interfere with a good bond. Fill all holes and cracks with a latex fortified Portland cement based patching compound. IVC US only recommends the use of latex fortified Portland cement based products as a satisfactory patching or leveling compound.

IVC US recommends priming extremely porous floors with IVC FLEX-PRIM Acrylic Latex Primer to prevent over absorption of adhesives, dust containment, and to insure a better bond of the adhesive to the subfloor/underlayment.

Moisture Testing: It is the responsibility of the flooring contractor and the installer to confirm all concrete substrates, both old and new, for moisture transmission using the Calcium Chloride Moisture Test according to ASTM F-1869. Moisture vapor transmission should not exceed the recommended levels of 8 lbs. or less per 1,000 sq. ft. in 24 hours. This test should be performed and documented prior to installation. A second testing option determines relative humidity in concrete floor slabs using In-Situ Probes, which should be less than 90% RH per ASTM F-2170 before, during and after installation. These acceptable moisture readings are only applicable when using iGrip adhesive for Sheet Vinyl.

PH LEVELS: PH must be between 5 and 9

Inspection of flooring material prior to installation is required. Any defects should be immediately reported to the retail store from which the flooring was purchased before installation. IVC US will not be responsible for labor costs to repair or replace material with defects that were apparent before or noticed at the end of an installation. The job site and all flooring material and adhesive must be kept for 24 hours before, during and after installation between 65˚ F and 85˚ F (18°C and 29°C).

PLEASE NOTE: If removal of existing resilient floor covering is required, follow all recommended Resilient Floor Covering Institute (RFCI) work practices at www.rfci.com.

<table>
<thead>
<tr>
<th>Application Width x Depth x Spacing</th>
<th>Spread Rate</th>
<th>Type of Installation</th>
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</thead>
<tbody>
<tr>
<td>1/16” x 1/16” 1/16” Square Notch Trowel (1.6 mm x 1.6 mm x 1.6 mm)</td>
<td>Up to 180 sq. ft./gal (Up to 4.42 sq. meters/liter)</td>
<td>Porous Substrates</td>
</tr>
<tr>
<td>1/16” x 1/32” 1/32” U Notch Trowel (1.6 mm x 0.8 mm x 0.8 mm U)</td>
<td>Up to 260 sq. ft./gal (Up to 6.38 sq. meters/liter)</td>
<td>Non-Porous Substrates</td>
</tr>
</tbody>
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Permanent Full Spread Adhesive Installation (Commercial) Steps:

Step 1
Align the pattern with the most dominant wall, and using a sharp utility knife trim away excess material along the walls, cabinet and other permanent objects, leaving approximately 2” of material (rough cut) to be trimmed off later.

Step 2
Make relief cuts at corners to allow the material to lay flat before the final cuts are made. Final trimming does not require a 1/8” to 1/4” expansion gap when using IVC iGrip Permanent Adhesive for Sheet Vinyl as this is a permanent installation.

Step 3
Fold back half of the material and apply IVC iGrip Permanent Adhesive for Sheet Vinyl to the substrate using the appropriate trowel. If a seam is required, leave an 18” dry zone at the edge of the seam. Then follow the Seaming Instructions in a Permanent Full Spread Bond Installation (Commercial) found below.

Step 4
Do not immediately place the material into wet adhesive. To avoid bubbling, allow time for the adhesive to flash before positioning the material. There will be a slight transfer of adhesive to the skin when it’s ready for installation. Do not allow the adhesive to dry completely.

Step 5
Slide the material in place and remove air and vapors under the material using a 100 lb. roller over the entire adhered vinyl.

Step 6
Repeat steps 3-5 for the remaining half of the flooring material.

Seaming Instructions in a Permanent Full Spread Adhesive Installation (Commercial):

1. After positioning the flooring, over-lap the seam edges (make sure to match patterns). For non-descript/non-patterned/random designs which do not have (an obvious) pattern repeat, over-lap the seam edges an average of 2 inches (however, some patterns may require extending beyond this suggestion). This is valid for all sheet products from IVC.

2. Place a 4”-5” wide scrap of the vinyl between the substrate and vinyl, under the seam area.

3. Double cut through the layers of vinyl, creating a compression fit when the seam edges are joined.

4. Fold back both sides of the seam area and apply the IVC iGrip Permanent Adhesive for Sheet Vinyl to the dry zone. Allow the adhesive to flash before placing the material into the adhesive.

5. Place one side of vinyl into the adhesive and roll the seam area using a 100 lb. roller.

6. Apply small bead of IVC Infuze Seam Sealer along the edge of the installed vinyl.

7. Place the edge of the uninstalled vinyl against the edge of the installed vinyl and press into place.

8. Remove excess bond/sealer using a plastic putty knife followed by wiping the seam area using a clean dry cloth followed immediately with a clean cloth dampened with denatured alcohol.

9. Using a clean cloth, repeat until all residue is removed from the surface of the vinyl and protect the seam for six hours minimum.

*Heat weld seams do not require IVC Infuze Seam Sealer.*
**Heat Weld Seams**

- Cut in all seams and allow all material to cure for at least 12 hours before applying the heat weld.
- Follow the equipment manufactures' instructions for heat welding the seams, ensuring the temperature does not exceed 550° Fahrenheit.
- Use a grooving tool to remove 75 percent of the vinyl.
- Do not allow any traffic on the seam for approximately one hour. **NOTE:** The durability of the weld is based on the proper application and product specified. IVC US is not responsible for alternate products or installation errors.

**Additional Instructions/Notes:**

- Always inspect the flooring thoroughly before installation. Report any defects PRIOR to installation.
- After installation is complete, keep traffic off of floor for at least 24 hours and heavy objects or rolling loads for 72 hours.
- **DO NOT** slide heavy appliances or furniture over or across the flooring. Always lift objects and place them on a hard board between the flooring and object and gently reposition them.
- Use permanent caulk next to bathtubs, showers, sliding doors, patio doors, around metal door jambs or similar areas.
- Make sure furniture legs have large surface, non-staining plastic floor protectors or non-staining felt pads. The protectors should be at least one inch in diameter and rest flat on the floor. The heavier the item, the wider the floor protector should be. Replace small, narrow metal or dome-shaped glides with smooth, flat glides that are in flat contact with the floor.
iGrip Spray Adhesive Installation Steps:
iGrip Spray Adhesive is engineered for commercial application of IVC fiberglass sheet vinyl flooring products. Projected coverage is approximately 140 square feet per 22 ounce can. However, actual coverage will depend on substrate. It is up to the end user to determine the coverage that is appropriate for flooring and job site conditions.

Step 1
To begin, measure each portion of the installation into 140 square foot grids, marking with a chalk line. One can of adhesive will be applied to each grid area.

Step 2
Align the pattern with the most dominant wall, and using a sharp utility knife trim away excess material along the walls, cabinet and other permanent objects, leaving approximately 2” of material (rough cut) to be trimmed off later.

Step 3
Next, make relief cuts at corners to allow the material to lay flat before the final cuts are made. Final trimming does not require a 1/8” to 1/4” expansion gap when using IVC iGrip Spray Adhesive as this is a permanent installation.

Step 4
Fold back the material within the area in which you are about to spray.

Step 5
Shake can well before each use. Point can downwards, and press the side of the nozzle tip as you slowly walk back and forth in the area you have folded back for adhesive application. Do not use a sweeping motion, as this will create uneven coverage. Clean up drips.

Step 6
Allow adhesive to dry completely with no transfer to fingers when lightly touched. Open time will vary depending on the adhesive coverage, substrate porosity and the ambient conditions. Working time for the adhesive should not exceed 4 hours.

Step 7
Position the material in place and immediately roll in 4 directions using a 100 lb. roller over the entire adhered vinyl.

Step 8
Apply adhesive to the remaining portion of the room, allow adhesive to dry and complete the installation. Use a hand roller under toe kicks and other hard to get areas.

*IVC US Commercial Sheet Vinyl flooring seams may be heat welded immediately after installation.*