

INSTALLATION

Light Commercial Resilient Sheet Flooring

Technical Services Department

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Aladdin recommends the following guidelines for preparation and installation of all Aladdin light commercial resilient sheet products using permanent bond adhesive. Full Spread is the required installation method for all Aladdin commercial and light commercial resilient sheet applications.

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

Please contact the Aladdin Technical Services Department at 888-387-9881 with any questions.

I. Full Spread Adhesive Installation Method (Light Commercial)

Materials Required for Installation

- 1/16" X 1/32" X 1/32" U notch trowel
- Mohawk M95.0 Permanent Adhesive for Resilient Sheet or Mohawk MS160 Spray Adhesive
- Infuze Seam Sealer
- Sharp Utility Knife
- Straight edge
- 100 lb. roller
- Plastic putty knife, white clean cloths and denatured alcohol if seaming is required

Acceptable Underlayments

- **Wood**

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 Aladdin flooring as a result of the underlayment is NOT the responsibility of Aladdin. Aladdin does not recommend installing resilient flooring over wood flooring or subfloors applied directly over concrete or sleeper-construction floors.
- **Concrete**— See Grade Levels below. All concrete slabs shall be tested for moisture regardless of age or grade level.
 - Suspended:** An acceptable suspended floor is a concrete or wood substrate with a minimum of 18" (460mm) of well-ventilated air space beneath it. Aladdin 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 retarder.
 - 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 must be protected from moisture penetration and incorporate a proven moisture vapor retarder.

- **VCT**—Well bonded, on or above grade, in absence of waxes or sealers.
- **Ceramic**—Well bonded and properly prepared.
- **Terrazzo**—Well bonded and properly prepared.
- **Self-leveling and Patching Compounds**—Latex fortified Portland cement-based only
- **Resilient Floor**—No more than one 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 sheet flooring.
- **Gypcrete**—Can be utilized when necessary due to radiant heat and in high rise buildings. Gypcrete must be sealed using **Mohawk PrimeCoat Acrylic Primer** to stabilize the surface for adhesive bond. All issues with gypcrete cracking, crumbling, powdering and resulting in the release of adhesive bond are NOT warranted by Aladdin.
- **OSB (underlayment grade)**—OSB underlayment panels must be underlayment grade as specified and warranted by the manufacturer. Underlayment panels and joints must be fastened and reinforced according to manufacturer’s instructions. Completely sand the floor with a floor sander, so that the floor is smooth and flat. **NOTE:** The chips in OSB overlap. Without sanding properly, OSB has high and low spots throughout the floor that could telegraph through the vinyl.
 - **Surface must be primed using Mohawk PrimeCoat Acrylic Primer.**
- **Particle Board (underlayment grade)**—Particle board underlayment panels must be underlayment grade as specified and warranted by the manufacturer.
 - **Surface must be primed using Mohawk PrimeCoat Acrylic Primer.**

Unacceptable Underlayments

- Inter-flex and Any Perimeter-bonded Products
- Cushion-back Vinyl
- Any Floating Floor System
- Resilient Tile Installed Below Grade
- Carpet

Aladdin 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-based patching compound. Aladdin only recommends the use of Portland-based products as a satisfactory patching or leveling compound.

Aladdin recommends priming extremely porous floors with Mohawk PrimeCoat Acrylic Primer to prevent over-absorption of adhesives, to provide dust containment and to ensure a better bond of the adhesive to the subfloor/underlayment.

Moisture Testing: It is the responsibility of the flooring contractor and the installer to test all concrete substrates, both old and new, for moisture transmission using In-Situ Probes, which

should be less than 95% RH per ASTM F-2170 before, during and after installation. These acceptable moisture readings are only applicable when using M95.0 Adhesive for Resilient Sheet. When using MS160 Spray Adhesive, maximum RH Limit is 93%.

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 seller from which the flooring was purchased before installation. Aladdin 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 jobsite and all flooring material and adhesive must be kept between 65° F and 85° F (18° C and 29° C) for 24 hours before, during and after installation.

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

Trowel Specifications		
Application Width x Depth x Spacing	Spread Rate	Type of Installation
1/16" x 1/32" x 1/32" U Notch Trowel	Up to 225 sq. ft./gal	Porous and Non-porous Substrates

II. Full Spread Adhesive Installation (Light Commercial)

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.
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 1/4" expansion gap when using M95.0 Permanent Adhesive for Resilient Sheet, as this is a permanent installation.
3. Fold back half of the material and apply M95.0 Permanent Adhesive for Resilient Sheet 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 Full Spread Installation (Light Commercial)** found below.
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.
5. Slide the material in place and remove air and vapors under the material using a 100 lb. roller.
6. Repeat steps 3-5 for the remaining half of the flooring material.

III. Seaming Instructions in a Full Spread Adhesive Installation (Light Commercial)

1. After positioning the flooring, overlap the seam edges (make sure to match patterns). For non-descript/non-patterned/random designs which do not have (an obvious) pattern repeat, overlap the seam edges an average of 2" (however, some patterns may require extending beyond this suggestion). This is valid for all sheet products from Aladdin.
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 flooring, creating a compression fit when the seam edges are joined.
4. Fold back both sides of the seam area and apply the M95.0 Permanent Adhesive for Resilient Sheet 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 Infuze Seam Sealer along the edge of the installed vinyl.
7. Place the edge of the uninstalled flooring 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 Infuze Seam Sealer.

Heat Weld Seams: Professionally heat welded seams provide a strong, watertight, hygienic, monolithic surface.

- Wait a minimum of 12 hours before heat welding newly installed sheet vinyl.
- Seam edges should be only slightly gapped (about a business card thickness) and vertical. Wide gapped and/or undercut seams will prevent quality welds.
- The depth of the groove should be 1/2 to 3/4 the thickness of the material. DO NOT go too deep. The groove must also be centered between edges. Both are critical to **ensure proper strength and bonding**.
- Grooves must be clear of all debris including dust.
- Use only professional quality welding equipment that will maintain sufficient temperatures. A welding tip must be chosen to produce a quality weld without damaging the appearance of the resilient sheet.
- Preheat welding gun. Temperature should be set approximately 700° F. Just above 5 on the green Leister gun. Practice on a scrap piece to fine tune temperature and pace for type of substrate and site conditions.
- Determine the correct welding speed by ensuring that the welding rod actually fuses into the groove. A small ridge must form on either side of the welding rod, at the vinyl surface. If no ridge forms, you have not heat welded the seam.
- While the welding rod is still warm, trim off 1/2 -2/3 the excess rod with a spatula knife and trim plate.

- After the rod has cooled to room temperature, make the final trim pass using only a razor sharp spatula knife in one continuous movement.

IV. Additional Instructions/Notes

- Always inspect the flooring thoroughly before installation. Report any defects **PRIOR** to installation.
- **DO NOT** slide heavy appliances or furniture over or across the flooring. Always lift objects and place them on hardboard on top of the flooring, and gently reposition them.
- Use permanent caulk next to bathtubs, showers, sliding doors, patio doors, around metal door jambs or similar areas.
- For bathroom installations, it is not necessary to remove the toilet. Make relief cuts around the perimeter of the toilet and make sure the vinyl flooring is laying flat before trimming off the excess material once installed. Apply caulk around the toilet, next to the bathtubs and showers to prevent moisture from getting under the vinyl. Note: if there is a ceramic sanitary cove and no place to install trim mold, you can apply silicone caulk around the walls.
- 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.

V. Mohawk MS160 Spray Adhesive Installation Steps

Mohawk MS160 Spray Adhesive is engineered for light commercial application of Aladdin fiberglass resilient sheet flooring products. Projected coverage is approximately 150 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 jobsite conditions.

1. To begin, measure each portion of the installation into 150 square foot grids, marking with a chalk line. One can of adhesive will be applied to each grid area.
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.
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 MS 160 Spray Adhesive as this is a permanent installation.
4. Fold back the material within the area in which you are about to spray.
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.
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.
7. Position the material in place and immediately roll in 4 directions using a 100 lb. roller over the entire adhered flooring.

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.

Aladdin Light Commercial resilient sheet flooring seams may be heat welded immediately after installation.

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