

# Commercial Resilient **Sheet Flooring**

**INSTALLATION** 

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Mohawk Group guidelines for preparation and installation of all Mohawk Group commercial resilient sheet products. Full Spread is the required installation method for all Mohawk Group commercial resilient sheet applications.

NOTE: Commercial resilient sheet flooring installations require specialized applications that are different than Residential. Mohawk Group 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.

# I. Full Spread Adhesive Installation Method Preparation (Commercial)

# **Materials Required for Installation**

- 1/16" X 1/32" X 1/32" U notch trowel
- Mohawk M95.0 Resilient Flooring Adhesive or Mohawk MS160 Spray Adhesive
- · Infuze Seam Sealer, if seaming is required
- · Heat Weld Equipment, if heat welded seaming is required
- · 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 Mohawk Group flooring as a result of the underlayment is NOT the responsibility of Mohawk Group. Mohawk Group 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. Mohawk Group 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 must 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 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—Portland-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 use with resilient sheet flooring.

## **UNACCEPTABLE** Underlayments

- Inter-flex or any perimeter-bonded products
- Cushion-back vinyl
- · Any floating floor system
- · Resilient tile installed below grade
- Cork
- Carpet
- OSB Non APA approved
- · Gypsum-based underlayment

Mohawk Group 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 Portland-based patching compound.

#### **Moisture Testing**

It is the responsibility of the flooring contractor and the installer to test all concrete substrates, both old and new, for moisture by determining relative humidity in concrete floor slabs using In-Situ Probes, which should be less than 95% RH.

# pH Levels

Concrete surface pH must be between 8 and 10.

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. Mohawk Group 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. Installation site should never drop below 55° F during the life of the floor.





NOTE: If removal of existing resilient floor covering is required, please follow all the Resilient Floor Covering Institute (RFCI) instructions at www.rfci.com, Recommended Work Practices for Removal of Resilient Floor Coverings.

# II. Full Spread Adhesive Installation (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 an 1/4" expansion gap when using Mohawk M95.0 Resilient Flooring Adhesive, as this is a permanent installation.
- 3. Fold back half of the material and apply Mohawk M95.0 Resilient Flooring Adhesive 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 Full Spread Installation (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 over the entire adhered floor.
- 6. Repeat steps 3-5 for the remaining half of the flooring material.

# III. Seaming Instructions in a Full Spread Adhesive Installation (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 Mohawk Group.
- 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 Mohawk M95.0 Resilient Flooring Adhesive 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 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 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 sheet vinyl.
- 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.
- · Never roll and store sheet vinyl face in. If it must be temporarily rolled face in for positioning in the room, make the rolls as large as possible.
- · 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 caulk along bathtubs, showers, sliding doors, patio doors, 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.

# V. Mohawk MS160 Spray Adhesive Installation Steps

Mohawk MS160 Spray Adhesive is engineered for commercial application of Mohawk Group fiberglass resilient sheet flooring products. Projected coverage is approximately 150 square feet per 22 ounce can.

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 1/4" expansion gap when using Mohawk MS160 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 area.
- 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.

Mohawk Group Commercial resilient sheet flooring seams may be heat welded immediately after installation, if using MS160 Spray Adhesive.

Please contact the Mohawk Group Technical Services Department at 888-833-6954 with any questions.