

Milliken's Barrier Coating for Installation of Milliken Modular Carpet and Milliken Resilient Flooring on Chemically Abated Concrete

1. Chemically abate - recommend petroleum distillate-based chemistries.
2. Clean slab - clean/mop with water and mild detergent (blue dawn).
3. Prep slab - apply Milliken Barrier Coating (2 coats) & necessary patch.
4. Install Milliken Modular carpet or FlexForm 2.5mm & 5.0mm resilient flooring.
5. Utilize applicable adhesives as outlined below.

○ APPROVED SUBSTRATES

- Dry, chemically abated, completely cured concrete
- For Milliken Modular Carpet, all abatement chemistries are approved.
- For Milliken 2.5mm & 5mm Flexform Resilient Flooring, abatement chemistries limited to petroleum distillate-based and citrus-based. Soybean oil-based abatement chemistries are not approved.

○ FLOOR PREPARATION:

- Chemical abatement: Removal of Asbestos Adhesives/"Cutback"/Residual Adhesives; if your subfloor is contaminated with old adhesives and you choose a chemical abatement method to remove them, NEVER scrape, sand or mechanically abrade any exposed black adhesive or any existing resilient floor. These may contain asbestos. The floor should be chemically abated in accordance with all Federal, State, and Local regulations. Clean well and dry as specified in the manufacturers' abatement procedures. No oily residue should remain on the concrete.
- Subfloor: Subfloor must be structurally sound, clean, dust free, smooth, and level. Inspect the floor for oily spots remaining from the abatement process. Must clean/mop with water and mild detergent (blue Dawn) to remove. Allow the floor to dry.
- Dust Removal: Prior to sealing the floor, it is REQUIRED that ALL dust and dirt MUST be removed. If not, poor adhesion of the coating can result.

○ MOISTURE: **Subfloor condition must be tested prior to determining installation method and any further subfloor slab preparation.**

- Milliken Modular Carpet – all abatement chemistries approved
 - In-situ RH \leq 95% per ASTM F2170 (Relative Humidity Probe Test)
 1. Milliken Barrier Coating
 2. Moisture resistant cementitious patch like ARDEX MRF or equivalent
 3. Milliken NonReactive Standard Adhesive
 - In-situ RH $>$ 95% per ASTM F2170 (Relative Humidity Probe Test)
 1. Milliken Barrier Coating
 2. Moisture resistant cementitious patch like ARDEX MRF or equivalent
 3. TractionBack Plus Adhesive System (connectors)
- Milliken Resilient Flooring (FlexForm 2.5mm & 5.0mm only) – abatement chemistries limited to petroleum distillate-based and citrus-based. Soybean oil-based is not approved.
 - In-situ RH \leq 85% per ASTM F2170 (Relative Humidity Probe Test)
 1. Milliken Barrier Coating
 2. Moisture resistant cementitious patch like ARDEX MRF or equivalent
 3. Milliken Moisture XT Adhesive.
 - In-situ RH $>$ 85% per ASTM F2170 (Relative Humidity Probe Test)
 1. Please contact Milliken Technical and Quality Assurance Team at 1-800-528-8453, option #2. These conditions require more extensive subfloor preparation, only covered under a case-by-case basis.

○ SEALING FLOOR WITH MILLIKEN BARRIER COATING:

INSTALLATION INSTRUCTIONS - ADDENDUM



- Room Preparation for Sealing: The room should be prepared by applying painter's tape to any walls or flooring abutments that will not be later covered with trim to prevent the Milliken Barrier Coating from coating/coloring those surfaces.
 - Sealing of Floor: Mix the Milliken Barrier Coating with a mixing shaft and drill until well mixed. The coating is water-based and cleans up in water. Using a large paint brush (3-6" is suggested), cut in around the edge of the floor at the wall/floor edge if trim will not cover the wall or door surface.
 - Next, using a 3/8" nap paint roller, roll the Barrier Coating over the floor. The roller can be dipped into the bucket to cover with coating and then applied to the floor. Where trim will cover the wall, the roller should spread coating right into the corner where the floor and wall meet. Coat cracks well. Do not pour the coating on the floor and roll out as uneven coverage result. Use a W pattern with the roller to get uniform coating. Coat the entire floor and allow to fully dry before proceeding. It will be a creamy pink appearance while wet but dries to a solid red color in about 1-2 hours.
 - Once dry, repeat the roller coating procedure to give the floor **TWO** coats.
 - A 5-gallon bucket of Milliken Barrier Coating should cover approximately 200 sq. yds. with two coats.
- PATCH FLOOR WITH MOISTURE RESISTANT PORTLAND CEMENT-BASED FLOOR PATCHING MATERIAL
 - Cracks and holes more than 1/8" (3.2mm) should be filled with a moisture-resistant Portland Cement based floor patching material. Gypsum based compounds are not allowed. Protruding objects must be removed. Floor must be flat (not undulating) for LVT.
 - APPLICATION / INSTALLATION OF FLOORING
 - Modular Carpet - Follow Milliken Modular Carpet Installation guidelines.
 - Resilient Flooring (FlexForm 2.5mm & 5.0mm) Install with Milliken LVT Moisture XT Adhesive
 - LVT Moisture XT is a wet-set adhesive. **Do not** walk, kneel, or work directly on top of flooring without the proper use of knee-boards for at least 60 minutes after flooring is installed.
 - For special LVT layout orientations like herringbone, Ashlar, etc., please see detailed installation instructions at: https://floors.milliken.com/docs/default-source/americas-documents/technical-documents/installation-instructions/installation_instructions_milliken_flexform_2-0-2-5.pdf?sfvrsn=7152e94c_4
 - **Plan, layout, and install from strategic starting spot;** please see Figure 1 as an example. Since the installer cannot put weight on tiles and must install from the unlaidd side, the adhesive applicator must apply at a 2-tile width for the installer to reach far enough to place the tile. With a strategic layout, the "glue spreader person" can continuously keep moving from spot-to-spot while the "tile layer person" installs the tile. The "tile layer person" waits about 10 minutes for the adhesive to "firm-up" and "level-out" to then lay tile, again moving from spot-to-spot. Near edges, the tile layer must first cut and dry lay fit the tile before adhesive is applied. The installation must finish at an exit door.

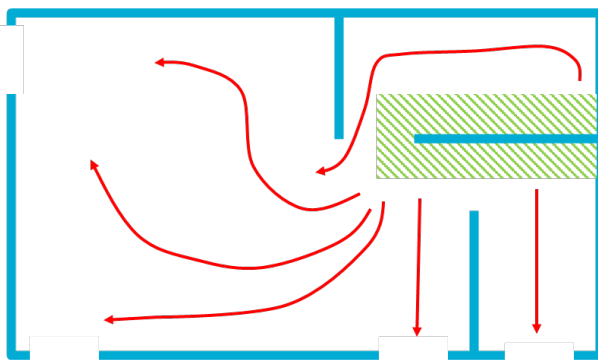


Figure 1: Strategic starting point

- The proper conditions of the room are between 60-90°F (15-35°C), and 30-65% relative humidity.
- Spread adhesive using a 1/16" x 1/32" x 1/32" (1.6mm x .8mm x .8mm) U Notch trowel.
- Wait 10 minutes after adhesive is spread to build surface tack and reduce movement. Adhesive ridges will dissipate and level-out during that time.
- Working time is approximately 45 min.
- Use a hand roller and apply normal pressure to ensure a good bond.

INSTALLATION INSTRUCTIONS - ADDENDUM



- Periodically lift flooring material to verify proper transfer of adhesive to tile.
- Wait a minimum of 1 hour, but no more than 2 hours, after the installation to roll and cross roll floor with a 75-100 lbs. (34-45 kg) roller to ensure proper transfer of adhesive.
- Do not wet mop the floor for 6 hours after the install is complete.