

PRODUCT DESCRIPTION

MM-100 is a water, solvent and VOC free, polyurethane-based moisture mitigation product used to treat concrete slabs with excessive moisture levels beyond what flooring adhesives allow. MM-100 can block moisture up to 20 lbs. MVER or 99% RH. MM-100 is a single component product, eliminating extensive mix times and concerns regarding pot life. MM-100 does not require aggressive concrete preparation, such as shotblasting or diamond grinding. MM-100 is a two coat system that is incredibly

easy to apply and does not require any specialized equipment. It's excellent coverage rates also make it incredibly cost effective. Despite being a two coat system, MM-100 is incredibly fast drying. Flooring or subsequent coatings can be installed in less than two hours. Backed by a 10 year material and labor warranty, MM-100 is a fast and easy solution for the moisture issues that commonly plague flooring installations.

FEATURES

- **Zero VOC**
- **Contains No Water or Solvents**
- **Single Component**
- **No Mixing Required**
- **Easy to Apply**
- **Does Not Require Shotblasting**
- **Blocks Moisture Up To 99% RH / 20 lbs. MVER**
- **Insensitive to Alkalinity**
- **Install Flooring In As Little As 2 Hours**
- **Compatible With Most Adhesives for Non-Porous Substrates**

TECHNICAL INFORMATION

- Unit Size: **2.5 Gallons**
- VOC: **0.0 g/l**
- LEED v2009 IEQ Credit 4.1: **Complies**
- ASTM E96 - Permeance Rate: **< 0.4 gr. / hr. / ft.²**
- Coverage Rate: **1000 Sq. Ft. Per Unit Per Coat**
- Application Roller Type: **3/8" Short-Nap**
- Drying Time: **Approx. 45 Mins**
- Recoat Time: **45 mins - 24 hours**
- Flooring Installation Time: **Approx. 90 mins - 72 hours**
- Shelf Life: **1 Year**
- Storage Temperature: **50° - 75° F**

1. PRE-INSTALLATION CHECKLIST

- Consult all associated product literature concerning installation and warranty prior to installation.
- Allow all trades to complete work prior to installation.
- Deliver all materials to the installation location in its original packaging with labels intact.
- Inspect all materials to ensure there is no leakage or damage.
- Do not stack pallets to avoid damage.
- Ensure installation area and material storage temperatures are between 65° F (19° C) and 85° F (30° C) and 40% - 65% RH for at least 48 hours before, during and after installation.
- Ensure HVAC system is operational and fully functioning at normal operating conditions 48 hours prior to, during and 48 hours after installation.
- Protect installation area from extreme temperature changes, such as heat and freezing, as well as direct sunlight for at least 48 hours before, during and after installation.
- Ensure concrete moisture testing is conducted or scheduled to be conducted prior to flooring installation.
- Ensure all vents, walls, moldings and/or doorways are

protected with tape or plastic prior to installation.

- Ensure the adhesive being used is for a non-porous substrate if bonding directly to the MM-100.
- Do not proceed with installation until all conditions have been met.

2. SUBSTRATE PREPARATION

All substrates must be prepared according to ASTM F710, as well as applicable ACI and RFCI guidelines. Substrates must be clean, smooth, permanently dry, flat, and structurally sound. Substrates must be free of visible water or moisture, dust, sealers, paint, sweeping compounds, curing compounds, residual adhesives and adhesive removers, concrete hardeners or densifiers, solvents, wax, oil, grease, asphalt, visible alkaline salts or excessive efflorescence, mold, mildew and any other extraneous coating, film, material or foreign matter.

All substrates must have any and all existing adhesives, materials, contaminants or bond-breakers mechanically removed via scraping, sanding, grinding or buffing with a 25 grit DiamoBrush Prep Plus tool prior to adhesive installation. In extreme situations, shotblasting may be required. Mechanical preparation must expose at least 90% of the original substrate. Following cleaning and removal, all substrates must be vacuumed with a flat

vacuum attachment or damp mopped with clean, potable water to remove all surface dust. ***Sweeping without vacuuming or damp mopping will not be acceptable.***

All porous substrates must be tested per ASTM F3191 to confirm porosity. Use a pipette or equivalent to conduct three tests by placing a .05 mL (1/4" wide) droplet of clean, potable water onto the surface. If the substrate absorbs water within 60 seconds, the substrate is considered porous. Conduct 3 tests for the first 3000 sq. ft. and one for each additional 2000 sq. ft., at least one per room. All other substrates that do not meet this requirement are considered non-porous. Ensure that all non-porous substrates are not contaminated with any aforementioned contaminants.

It is recommended that all substrates have a floor flatness of FF32 and/or a flatness tolerance of 1/8" in 6' or 3/16" in 10'. Substrates that do not meet this requirement should have a compatible cementitious patch (such as the Excelsior CP-300) or self-leveling underlayment (such as the Excelsior SU-310) installed to flatten the installation area.

Do not use solvent/citrus based adhesive removers prior to installation. Follow The Resilient Floor Covering Institute's (RFCI) "Recommended Work Practice for Removal of Existing Floor Covering and Adhesive", and all applicable local, state, federal and industry regulations and guidelines. When removing asbestos and asbestos containing materials, follow all applicable OSHA standards.

CONCRETE SUBSTRATES

All concrete must be prepared in accordance with ASTM F710 and must be 30 or more days old. Do not install flooring in below grade areas when hydrostatic pressure is visible or suspected. Any and all concrete repair or leveling must be performed **after** the MM-100 has been installed and has dried.

GYPSUM SUBSTRATES

If no existing moisture-related issues are present or observed, MM-100 can be used to prime and/or strengthen gypsum-based substrates. When installing over gypsum-based underlayments or patches, MM-100 must be installed in **one coat only** to avoid moisture accumulation and damage to substrate. All gypsum-based substrates must be clean, smooth, permanently dry, flat, and structurally sound.

WOOD SUBSTRATES

MM-100 can be used to prime, seal or encapsulate wood substrates. When installed over wood substrates, MM-100 must be installed in **one coat only** to avoid moisture accumulation and damage to substrate. Wood substrates must be prepared in accordance with ASTM F1482. Crawl spaces beneath wood substrates must be in compliance with local building ventilation codes and have at least 18" of cross-ventilated space between the ground and the joists. Substrate must be a subfloor grade underlayment with a minimum thickness of 1/4" thick and be fully sanded prior to installation. Wood subfloor deflection, movement, or instability will cause flooring installations to release, buckle

or become distorted. Any and all plywood patching or leveling must be performed **after** the MM-100 has been installed and has dried.

TERRAZZO / CERAMIC SUBSTRATES

All terrazzo, ceramic or other stone flooring materials must be solidly adhered and all loose tiles must be removed prior to installation. Ensure all glazed, sealed, smooth and/or shiny surfaces are properly sanded using 40-60 grit sandpaper or a 100 grit Diamabrush Prep Plus tool. Ensure surface is clean and dry prior to installation. Any and all patching or leveling must be performed **after** the MM-100 has been installed and has dried.

METAL SUBSTRATES

Metal substrates must be thoroughly sanded/ground and cleaned of any residue, oil, rust and/or oxidation. Substrate must be smooth, flat and sound prior to installation. Any deflection in the metal floor can cause a bond failure between the adhesive and the metal substrate. Any and all metal patching or leveling must be performed **after** the MM-100 has been installed and has dried.

ADHESIVE RESIDUE SUBSTRATES

Adhesive residues may be encapsulated with the MM-100. When installing over substrates that have existing adhesive residues, ensure adhesive residues are thin, sound, non-water soluble, free of tack and well bonded. Ensure any and all patching compounds or repair products under existing adhesives are removed.

When dealing with cutback adhesives and materials that contain asbestos, follow all OSHA guidelines. Removal must be conducted using the wet-scrape method outlined in RFCI "Recommended Work Practices for the Removal of Resilient Floor Coverings". Ensure all federal, state, local and industry guidelines are followed. Any and all patching or leveling must be performed **after** the MM-100 has been installed and has dried.

RADIANT HEATING SUBSTRATES

When installing flooring over a substrate that contains a radiant heating system, ensure the radiant heat is turned off 48 hours prior to installation and remains off during the entire installation. 48 hours after installation, the radiant heat may be gradually increased over the course of 24 hours, until normal operating temperature is reached. Ensure the temperature of the radiant heating system does not exceed 85° F (29.5° C) and avoid making abrupt changes in radiant heating temperature.

3. CRACKS, JOINTS & VOIDS

All cracks, joints and voids, as well as the areas surrounding them, must be clean and free of dust, dirt, debris and contaminants. All minor cracks and voids 3/64" wide or less may be repaired with a suitable cementitious patch.

Due to the dynamic nature of concrete slabs, manufacturer **cannot** warranty installations to cover expansion joints, cracks or other voids (such as control cuts, saw joints and moving

cracks or voids) wider than 3/64". Do not install flooring directly over any expansion joints or cracks wider than 3/64".

All expansion joints should have a suitable expansion joint covering system installed to allow expansion joint to freely move. To treat expansions joints where an expansion joint covering system can't be installed or to treat through cracks (depth at least 75% of the thickness of the concrete), chase joint or crack with a suitable saw or grinder and open to a minimum width of 1/4". Be sure to clean all dust, dirt and debris from crack. Joints and cracks should then be sealed with a suitable, elastomeric caulk (such as Ardex Ardiseal Rapid Plus, Mapei P1 SL or equivalent) designed for use in expansion joints. Install a closed-cell backer rod at prescribed depth and follow caulk manufacturer's instructions for installation. Ensure surface is troweled flush with surface of concrete.

To treat other cracks and voids (such as control cuts, saw-cut joints and surface cracks) over 3/64", chase joint or void with a suitable saw or grinder and clean all dust, dirt and debris from crack. Fill entire crack with a rigid crack filler (such as Ardex Ardifix, CMP CM10 or equivalent) designed for use in control or saw-cut cuts. Follow material manufacturer's instructions for installation. Ensure surface is troweled flush with surface of concrete.

Consult a structural engineer prior to treating any crack or joint, especially those that may affect structural integrity (such as expansion joints). Review all manufacturer installation instructions and/or consult manufacturer technical staff for all crack or joint filling products prior to treating joints and cracks.

PRODUCT INSTALLATION

Do not use if there is standing or visible water on the substrate. While sealed, shake container vigorously prior to application. Apply material using a 1/4"-3/8" short nap paint roller at the prescribed coverage rate, ensuring thin, even coverage without pooling or puddling material. ***Over-application could result in bumps, blisters and bubbling.*** Avoid filling large divots and voids with MM-100, as this could affect drying time and performance.

Wood substrates, metal substrates and gypsum-based underlayments or patches should only receive one coat of MM-100. All other substrates must receive two coats of MM-100 to effectively block moisture.

Allow MM-100 to fully dry prior to applying second coat. Material should be completely hardened and no longer tacky. Be sure to install second coat within 24 hours of the first coat. When applying second coat, be sure to apply material perpendicular to the first coat to ensure complete coverage. When installing the second coat beyond 24 hours, be sure to sand the surface of the first coat of MM-100 with a low speed buffer and 100 grit

sandpaper.

4. CONCRETE REPAIR & LEVELING

Prior to installing patch, self-leveling underlayments or other concrete repair materials, the MM-100 must be primed with a suitable primer, such as the Excelsior NP-230. The primer must be designed for use over non-porous substrates and must be used specifically for promoting the adhesion of cementitious products to non-porous substrates.

Be sure to apply primer ***within 24 hours*** of MM-100 drying to ensure proper adhesion. When installing after 24 hours, sand the surface of the MM-100 with a low speed buffer and 100 grit sandpaper and apply primer as normal.

Once primer is applied and fully dry, follow primer and concrete repair material manufacturer's instructions for installation of subsequent materials.

5. ADHESIVE INSTALLATION

If substrates are within flatness tolerances or do not require repair and leveling, flooring may be installed directly over the MM-100. The adhesive must be designed for use over a non-porous substrate and must be suitable for the floor covering that is being installed. Follow all adhesive manufacturers' installation recommendations. Be sure to install flooring ***within 72 hours*** of MM-100 drying to ensure proper adhesion. When installing after 72 hours, be sure to sand the surface of the MM-100 with a low speed buffer and 100 grit sandpaper and apply primer as normal.

6. CLEAN-UP

Dry material is extremely difficult to remove. As such, wet material must be removed immediately using a clean cloth and denatured alcohol or equivalent. If adhesive has hardened onto the surface of tools, equipment or other materials, mechanically removed with an abrasive pad or tool (if possible) and clean area with denatured alcohol or equivalent.

7. WARRANTY

MM-100 provides a 10 year material & labor warranty for all installations where MM-100 is properly installed. For more information, see the Excelsior MM-100 warranty document.

FOR PROFESSIONAL USE ONLY. PLEASE CONSULT ALL ASSOCIATED TECHNICAL DATA SHEETS, SAFETY DATA SHEETS AND WARRANTY INFORMATION PRIOR TO INSTALLATION.