

MES 100

Moisture Reduction System



MES 100

Installing floor coverings over concrete slabs that emit excessive moisture vapor and alkalinity can void the flooring manufacturer's warranty and lead to costly floor failures. MES 100 is guaranteed to control moisture and protect your floor. After bead blasting the concrete slab, edge-grinding along walls and pretreating cracks and joints, the MES 100 two-component resin treatment is applied under Floor Seal Technology supervision. A topcoat of custom-engineered Portland cement-based underlayment can also be applied to create a floor-ready finish. The entire process is backed with a warranty that covers product, workmanship and final flooring.

Installation Benefits

- Complies with LEED V4 IEQ c4.2 VOC limits (<100g/L)
- Backed by 15-year warranty covering manufacturing and installation defects
- No warranty exclusions for existing concrete cracks or common chemicals
- Exceeds ASTM F3010 performance requirements

Flooring Surface and Coverings

A smooth cementitious layer can be incorporated to receive resilient hard-surface flooring systems, or as required by floor covering manufacturer's recommended installation instructions. MES 100 is compatible with virtually any type of floor covering, including:

- Vinyl composition tile (VCT)
- Sheet vinyl
- Linoleum
- Wood
- Rubber
- Cork
- Carpet
- Resinous coatings



MES 100

Preparation

1. Slabs are cleaned and prepared by shot blasting to ICRI Concrete Surface Profile (CSP) 3 or 4.
2. Joints and cracks are cleaned to sound concrete.
3. Surface irregularities are patched with MES 100 resin and/or cement patching material as determined by subsequent floor finish. Resin patching material may be used in areas not requiring cement topping. Cementitious material shall not be applied prior to MES 100 application.
4. Adjacent surfaces are masked and protected.

Installation

After surface preparation, treatment is applied by Floor Seal Technicians or certified personnel under direct supervision of Floor Seal Technicians. Application techniques depend on required vapor emission reduction and conditions.

1. MES 100 Part A is mixed with an electric drill mixer for 3-5 minutes.
2. MES 100 Part B is added in a ratio of 1 to 4 and mixed for 7-10 minutes.
3. After being allowed to sit for 45 minutes, 1 to 2 parts of water is added depending upon the porosity of the concrete.
4. The solution is mixed for additional 3-5 minutes and poured onto concrete.
5. MES 100 is squeegeed and back rolled with 3/8" nap roller to achieve required coverage.
6. Coverage will be determined by moisture reduction level required and Floor Seal's onsite Technician. Typical applications will yield 90 to 180 square feet per gallon.

7. Clean and dry 30-60 mesh sand may be broadcast into final coat of MES 100 if timing will not allow cement topcoat to be applied the same day as MES 100.
8. If primer is to be used instead of a sand broadcast (as is recommended for cement overlays and slab-leveling applications) MES 100 must be allowed to cure at least 72 hours before applying primer.

Compliance

- ASTM F3010
- SCAQMD Rule #1113
- Documentation of certified independent ASTM testing performance and MSDS information available

ASTM Performance

- E 96 Water Vapor Transmission: <0.1 Perms per laboratory conditions
- D 1308 Alkali Resistance: PASS, up to pH of 14
- D 7234 Adhesion Strength: 500+ psi (100% Concrete Cohesive Failure)
- Resists up to 100% Relative Humidity as measured by ASTM F2170
- VOC: 96 g/L, complies with SCAQMD Rule #1113



MES 100 Technical Data

- Drying Time** Dependent on temperature and humidity of interior building environment
- Optimal Application Temperature** 65 - 90°F
- Storage Life** One year, when unopened and protected from freezing
- Specifications** CSI Master Format™ - Divisions 3, 7, 9
- LEED®** Contact Floor Seal for specific credit information related to your project

Warranty

Floor Seal Technology, Inc. provides up to a 15-year warranty against manufacturing and installation defects when installed by manufacturer-employed or certified applicators. All MES 100 warranties require concrete floor slabs to comply with the minimum Uniform Building Code or ACI318 Building Code requirements for Structural Concrete in addition to the project's plans and specifications. Floor Seal must be notified of any deviations. Failure to do so will void any Floor Seal Technology warranties. Refer to warranty document for more information.



www.floorseal.com | 800.572.2344

1005 Ames Avenue, Milpitas, CA 95035 | 408-436-8181

