



## Concrete VECS Flooring Sealer

### ***MOXIE SHIELD MFSII***

is a ready to use, multipurpose and permanent penetrating liquid sealer/hardener specifically formulated for the flooring industry on specialty applications, to stop water vapor migration and alkali efflorescence attack under flooring materials and other impermeable surface treatments.

#### AT A GLANCE

**Moxie Shield MFSII Flooring Sealer** is suitable for new and existing concrete, penetrating up to seven inches to seal, protect and preserve concrete against moisture caused problems. A superior sealer against moisture for all above and below grade, as well as interior and exterior concrete. Moxie Shield MFSII Flooring Sealer undergoes a complex chemical reaction by converting the by-products of cement hydration into a higher density cementitious material, creating an impermeable substrate. It dramatically enhances the natural characteristics of concrete by filling all pores and reducing the capillary voids to near zero.

#### RECOMMENDED USES

- For use on above and below grade:
- Normal-weight/Lightweight Concrete
  - Moisture/Acid exposed surfaces
  - High subgrade moisture conditions
  - Flooring Remediation
  - Finished Concrete Protection
  - Surface Adhered Floor Coverings
  - Efflorescence Sequestration

#### ADVANTAGES

- Stops water vapor transmission and water migration
- Prevents mold, mildew and fungi
- Suitable for above and below grade application
- Withstands Hydrostatic Pressure up to 100 psi (231 ft. below grade)
- Prevents surface dusting
- Dramatically reduces time required for installation of flooring materials
- Resists marine chlorides, oil, gasoline, acids and solvents
- Prevents chloride intrusion
- Increases freeze-thaw durability (exceeds 600 cycles)
- Prevents reinforcing steel corrosion
- Prevents efflorescence attack
- Prepares concrete for paintings, coatings and adhesives
- Penetrates concrete up to 6 inches
- Prevents corrosion and deterioration of concrete

## Proven Performance

Moxie Shield MFSII Flooring Sealer has been performing in laboratory and job-site settings for over 40 years and has demonstrated effectiveness in curing, surface hardening/strengthening, freeze-thaw durability and water vapor transmission.

## Sustainability

- Building for future generations – The Moxie technology strengthens the inner structure of concrete and leads to longer lasting quality structures.
- LEED Certification – Moxie Shield MFSII Flooring Sealer increases available LEED credits for projects.
- Zero VOC (EPA 24 VOC) – The Moxie technology is based on inorganic compounds.
- Non-Toxic/Non-Hazardous – The liquid Moxie Shield MFSII Flooring Sealer is not toxic or hazardous; therefore, when protecting concrete from moisture intrusion it will not release toxic or hazardous emissions.
- Water-Based – The technology is a water based carrier for inorganic ingredients.

## Standards Compliance

ASTM E96, E1745, F710, F2170- Sec 7.9, C156, C666, C805, D4263, D5084, C309 Performance Criteria, CARB EPA USDA VOC=0.

USDA approved for use in food processing areas. Complies with OSHA 29 CFR-1910.1200.

## Coverage Rate

For a two coat horizontal coverage, estimate approximately 150-200 ft<sup>2</sup> per gallon on the first coat. The second coat will use about half the amount of the first coat. Three coats or more will be required on very porous concrete. High moisture vapor emissions (12 lbs/1000 ft<sup>2</sup>/24 hrs to 26 lbs/1000 ft<sup>2</sup>/24 hrs or higher) will require additional applications, resulting in longer chemical reaction and drying time.

## Concrete Substrate Preparation

Substrate preparation is the most important factor when applying Moxie Shield MFSII Flooring Sealer. Moxie Shield MFSII Flooring Sealer is a chemically reactive, penetrating sealer that MUST penetrate in order to be effective. [NOTE: Perform the Water Absorption Test\* to verify absorption.] On existing slabs, remove any flooring materials, finishes, waxes, grease, surface sealers, paints, flooring adhesives, or any other materials that could impede the absorption and penetration of Moxie Shield MFSII Flooring Sealer. If the concrete is nonabsorptive, it must be properly and aggressively abraded to expose a surface that will allow static absorption of our water-based product. Bead blast, scarify, or grind with a diamond blade to expose an absorptive surface. Acid etching is neither acceptable nor effective.

## Packaging

Moxie Shield MFSII Flooring Sealer is available in 5 gal (18.9 L) pails, 55 gal (208 L) drums and 275 gal (1041 L) totes.

## Storage

Store above 40°F in a tightly closed container. If frozen, thoroughly agitate before use. Do not use compressed air, product may foam. Indefinite shelf life.

## Additional Information

Moxie Shield MFSII Flooring Sealer will seal against a hydrostatic pressure and vapor pressure; however, any source of water must be diverted or stopped before application. Very damp or cold conditions may extend drying times. Higher temperatures will shorten drying times.

Do not apply if the ambient temperature is below 65°F. Do not apply to fresh concrete (less than 28 days) if a calcium chloride accelerator was used. Avoid contact with eyes. Due to the high pH level do not allow this product to come in contact with plant life or leather. Do not allow product to come in contact with glass, porcelain or ceramic tile, aluminum, zinc or galvanized steel. Remove with running water or a damp cloth immediately. Product will permanently etch or erode the smooth surface.

Alkali salts (efflorescence), if present, will react with the carbon dioxide (in the air) within 24-48 hours and become permanent calcium carbonates unless removed. If not removed, these salts will require physical removal such as wire brushing or grinding.

## Manufacturer's Guarantee

Moxie Shield MFSII Flooring Sealer is guaranteed to perform and be manufactured per the specifications contained in the Moxie Engineering documentation.

## Warranty

When specified, Moxie Shield MFSII Flooring Sealer has an optional 20 year labor and materials warranty to replace the flooring manufacturer's warranty. If necessary, the 20 year registered warranty is available through Moxie International only and not the concrete producers/suppliers, dealers or distributors. For details and full description of the Moxie warranty contact sales@moxieshield.com.

## Related Documents

CSI Specification Sheet  
Application Procedures  
SDS  
Warranty

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