

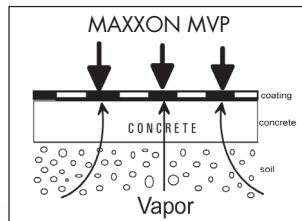
MAXXON MVP



MAXXON® MVP (Moisture Vapor Protection) is a unique 2-component, moisture tolerant, low viscosity, solvent free, chemically enhanced epoxy based product which reduces the passage of water vapor and moisture through slabs on or below grade, thus eliminating delamination of adhesives, floor coverings and coatings.

MVP reduces water vapor transmission levels of up to 25 lbs/24 hrs•1000 ft² to 3 lbs or less for the installation of most floor covering systems including VCT, sheet vinyl, carpets, wood, laminates, epoxy, terrazzo, & synthetic gym flooring.

Note: Use Maxxon DPM in case of capillary infiltration of oil or other chemicals from the ground or to treat oil contaminated slabs.



TYPICAL APPLICATIONS

- Concrete slabs
- Cementitious underlayment (other than gypsum)
- Ceramic tiles with missing or damaged under-slab vapor barriers

Call Maxxon for:

- Slabs with floor heating
- Residential slabs below grade
- Garages

COMMONLY USED IN

- Industrial/retail facilities
- Office buildings
- Hospitals and schools
- Residential slabs
- Food processing plants

FEATURES & BENEFITS

- Vapor & water barrier
- Compatible with most flooring systems
- One-coat system with no sand broadcast
- Reduces moisture vapor emission rates of up to 25 lbs to 3 lbs or less
- Minimal downtime
- Next day flooring system installation
- Covers new concrete (min. 5 days old; keep in mind shrinkage cracks may occur)
- Can be applied to damp concrete
- High alkalinity barrier (pH 13-14)
- Low viscosity
- Does not support mold growth
- Indoors: low odor and non-flammable
- VOC Content of 0 g/L
- Helps contribute to LEED Credit IEQ 4.2

MVP APPLICATION RATES

Moisture Vapor Emission Rate (per ASTM F1869)	Relative Humidity (RH) (per ASTM F2170)	No. of Coats	Application Rate	Approx. Thickness	Yield per 2.4 gal kit	Yield per 7.3 gal kit
			ft ² /gal (kg/m ²)	mils (mm)	ft ² (m ²)	ft ² (m ²)
lb/24 h•1000ft ² (g/h•m ²)						
up to 10 (up to 2.0)	<85%	1	155 (0.29)	10 (0.25)	370 (33.4)	1130 (105)
10 to 15 (2.0-3.0)	85-90%	1	130 (0.35)	12 (0.30)	310 (28.8)	950 (88)
15 to 20 (3.0-4.0)	90-95%	1	105 (0.43)	15 (0.38)	250 (23.2)	760 (70)
20 to 25 (3.1-5.0)	95-100%	1	80 (0.57)	20 (0.50)	190 (17.6)	580 (53)
Stand-alone coating on slabs		1	80 (0.57)	20 (0.50)	190 (17.6)	580 (53)
New concrete (min. 5 days old)		1	80 (0.57)	20 (0.50)	190 (17.6)	580 (53)

Note: All values theoretical. Application thicknesses are approximate. Some variations may apply due to porosity and absorption of substrate.

SAMPLE WATER VAPOR TRANSMISSION REDUCTION

TEST: ASTM E 96-95

Test <small>carried out by independent laboratory</small>	Test Results		
	Before Untreated Control Wet Method	After Maxxon® MVP Wet Method	Reduction
Water Vapor Transmission: • lbs/24 hours•1000 ft ² • grams/hour•m ²	24.08 4.89	Average of 6 samples 0.61 0.12	97%
Permeance: • perms • grams/Pa•s•m ²	16.95 9.69x10 ⁻⁰⁷	0.43 2.46x10 ⁻⁰⁸	97%

TESTING FOR CONTAMINANTS

Request owner of facility to test slabs with unknown history for contaminants (i.e. hydrocarbons, other organic compounds, un-reacted silicates, ASR, Sulfurous compounds, etc.) to determine suitability for MVP. If slabs test positive Maxxon DPM may be recommended in lieu of MVP, or neither one may be appropriate. Provide Ion Chromatography and IR Spectroscopy data before commencing application.

WATER-VAPOR EMISSION TESTING

Maxxon strongly recommends "Anhydrous Calcium Chloride" testing as per ASTM F 1869-98 on slabs to be treated, to determine the MVER (moisture vapor emission rate) in lb/24 hrs•1000 ft² (grams/hr•m²). Alternately determine RH content (%) as per ASTM F 2170. The testing must be carried out before application of MVP to obtain Maxxon warranty.

Note: MVER fluctuates within slab areas, and can have significant seasonal variations (i.e. in Nov./Dec. 6 lbs and in July/Aug. 16 lbs or more).

PREPARATIONS OF SUBSTRATE

All concrete surfaces with minimum 2,500 psi (17 MPa) compressive strength, to be treated with MVP must be clean, sound and have an "open"/absorptive surface ("tooth and suction"). Do not apply MVP to surfaces which have been previously treated with any kind of sealer prior to contacting Maxxon.

1. Remove existing floor coverings, coatings, adhesives, curing compounds, efflorescence, dust, grease, laitance, etc. down to bare concrete with steel shot blasting, scarifying or grinding using a diamond cup blade (run with low RPM and ensure that surface is profiled). Standard acid etching is NOT allowed.
2. Steel shot blast or abrasive blast concrete slabs to surface profile ICRI CSP 3-5 (ICRI, Des Plaines, IL, Guideline No. 03732.).
3. Burn off reinforcing fibers and vacuum remains.
4. Remove glaze from quarry tiles.
5. Repair cracks with a suitable patching mortar.
6. Install cementitious underlayment, leveling mortars, flash patching, etc. using a primer for non-porous substrates on TOP of MVP.
7. Treat saw cut and expansion joints as per application Guideline 331.
8. Carefully pre-dampen all the prepared surfaces (excluding quarry tiles) to be treated several times with clean water to SSD (saturated surface dry). Leave no standing water!

MIXING

Use chemical resistant gloves and goggles when mixing or applying MVP. Material should be minimum 60°F (15°C) at time of mixing. Do not alter mixing ratios. Do not thin.

PART A (A-Component) = resin

PART B (B-Component) = hardener

supplied in the appropriate mixing ratio.

1. Ensure that Part B completely drains into Part A. Always mix a complete kit in the proportions supplied.
2. Stir mixture for approximately 3 minutes to a homogenous, streak free consistency, using a slow speed drill (approx. 300 rpm) with a PS Jiffy blade. Avoid any action that may entrap air. Ensure that the material at the pail bottom and sides are agitated.
3. Pour mixed material from the mixing container into a clean container and carefully mix it once more (approx. 30 seconds).

APPLICATION

Do not apply at air or slab temperature below 50°F (10°C), or above 95°F (35°C). Do not apply to unprotected surfaces or surfaces where water has accumulated (puddles). MVP can be applied to concrete that is at least 5 days old.

1. **After steel shot blasting or scarifying, check slab surface with the water drop method.** Pour a drop of water about the size of a dime in several places. If it beads, surface is not absorptive and requires more preparation. If it penetrates the concrete within approx. 30 seconds the surface is absorptive and ready to receive the MVP treatment. However, this method does not replace pre-testing of concrete cores. A test application is highly recommended on old slabs where a sealer may be present, or slabs where an epoxy coating has been removed, followed with an adhesion test (i.e. Elcometer, etc.).

2. Protect the area to be treated from strong sunlight, wind, and rain. Indoors, prevent noticeable drafts.

3. Ensure that the material is applied within the coverage rate specifications by marking the area to be covered.

4. Install MVP as per the chart "Application Rates":

STEP 1: Pour MVP in sufficient quantity over the pre-dampened area (excluding quarry tiles) to be treated and uniformly distribute with a notched squeegee or non-shed roller to the still moist substrate.

Step 2: Carefully scrub it into the pores with a long handled scrub brush.

Step 3: Follow with a non-shed roller to achieve uniform coverage. Note: MVP is self leveling and has low viscosity, tending to flow to low areas where it can build-up.

MVP does not require broadcasting of sand. Protect fresh application from rain for 4 - 6 hrs. Observe relative humidity and dew point when installing flooring system over MVP. Shoes must be protected with cloth (i.e. Tyvek) booties when walking over cured MVP prior to installation of flooring system.

5. Resinous Flooring:

A. Subsequent top coatings such as epoxy, terrazzo, or polyurethane, must be applied within the 12 hr to 5 days recoat time.

B. MVP surface must be roughened if recoat time is missed. Re-treat "outgassing channels" and pin-holes by grinding surface, cleaning off residue. Make sure surface is dry and re-apply MVP. Does not apply to "fish eyes".

6. VCT, Sheet Vinyl, Carpet, Wood:

A. Flooring systems including VCT, sheet vinyl, linoleum, carpet and wood must be applied within the 12 hr to 5 days recoat time.

B. Please note that water based adhesives require a cementitious underlayment of minimum 1/8" (3 mm) thickness to absorb moisture from the adhesive (check with adhesive manufacturer).

C. Pressure sensitive adhesives installed directly over MVP require a longer "tack" time than listed on manufacturer's literature to prevent adhesive moisture or solvent entrapment.

D. Many floor covering materials (i.e. VCT, sheet vinyl, linoleum, carpet) also require a more level or smooth surface. In such cases an application of a self-leveling cementitious underlayment (minimum 1/8" (3 mm) thickness) is required over MVP to provide a proper substrate for the floor covering and the adhesive.

7. Underlayments & Patching: If cement based toppings, such as underlayments, screeds, "flash" patching, repair mortars to be used, the manufacturer's recommended primer must be applied over MVP.

TECHNICAL DATA

Material & Color	2-component, clear epoxy
Density	9.08 lbs/gal (1.09 ± 0.02 kg/L)
VOC Content	0 g/L
Volume Solids	100%
Flash Point: Part A	>212 °F (>100 °C)
Part B	>248 °F (>120 °C)
Mixing Ratio	100:50 (by weight)
Viscosity	(600±80 mPa*s) at 77 °F (25 °C)
Pot Life, approx	35 min. at 73 °F (23 °C)
Open to Foot Traffic	after 12 hrs at 73 °F (23 °C)
Recoat Time	min. 12 hrs at 73 °F (23 °C) max. 5 days, observe dew point
Working Temp	50 °F-95 °F (10 °C-35 °C)
Curing Temperature	minim. 50 °F (10 °C)
Full Strength	after 7 days at 73 °F (23 °C)
Adhesion to concrete	500psi (3.5MPa) @ 7d (dry conc) (ASTM D-4541 modified) Failure in substrate
pH 14 Resistance	Pass 14 day test. (ASTM D-1308)
Average Critical	1.00 W/cm - Passed = non-flammable Radiant Flux (CRF) (ASTM E 648-03)

All data are average values obtained under laboratory conditions. In practical use temperature, humidity and absorbency of the substrate may influence the above given values.

8. Sand: Where a broadcast of sand is desired use Maxxon DPM in lieu of MVP.
9. Maximum recoat time (adhesives included) is 5 days. Do not apply flooring system if MVP surface is wet due to dew point or other causes. If recoat time is missed, MVP surface must be sanded, cleaned with hot water, and allowed to dry before application of flooring system.
10. Application equipment needed: Notched squeegee, 1/2" or 3/8" non-shed synthetic nap roller, long handled scrub brush.
11. Cleanup: Immediately clean all equipment and tools with mineral spirits.
12. Note: Post-cracking of the concrete, slab warping or warping relaxation at joints or cracks after installation of the MVP may cause a breach in the coating and void warranty.
13. Safety: KEEP OUT OF REACH OF CHILDREN. Refer to MSDS. FOR COMMERCIAL USE ONLY.
Part A - irritant; sensitizer - contains epoxy resins.
Part B - corrosive; sensitizer - contains amines.
Avoid contact with skin and eyes and prolonged inhalation.
Wear chemical resistant gloves and safety goggles. After contact with skin, wash immediately with water and soap and rinse thoroughly. In case of eye contact, rinse opened eye for several minutes under running water and immediately seek medical advice. After inhalation supply fresh air and call doctor for safety reasons. Use NIOSH/MSHA approved vapor respirator in poorly ventilated areas.

WARRANTY

Maxxon Corporation warrants Maxxon MVP to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of Maxxon MVP. Because Maxxon Corporation does not perform the actual installation, it cannot be held responsible for the results of the application. Maxxon Corporation specifically disclaims problems that occur due to weather conditions, moisture, structural design flaws and application techniques. This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Maxxon Corporation's part. Maxxon Corporation neither assumes nor authorizes any person to assume for Maxxon Corporation any liability in connection with the sale and installation of Maxxon MVP.



MAXXON[®] MVP

Moisture Vapor Protection

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The Maxxon Green Mark
Maxxon products with this symbol are LEED-compliant and may help contribute toward points for LEED project certification.

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