

PRODUCT DESCRIPTION

MAVERICK MAVCLAD EM is a heavy-duty polymer resin and aggregate floor system suited for floors subjected to chemical exposure and mechanical abuse. Applied at 1/4", this durable system is commonly utilized for new construction as a protective overlay or for renovation work to restore concrete surfaces.

FEATURES AND BENEFITS

- Abrasion and impact resistant
- Seamless, monolithic application
- Durable finish, chemical resistant
- Available in a wide array of colors
- Zero VOC, very low odor

RECOMMENDED USES

- Warehousing and manufacturing facilities
- Chemical processing plants
- Laboratories, hospitals, healthcare facilities
- Correctional facilities
- Traffic aisles, assembly lines
- Cafeterias, kitchens

PRODUCT INFORMATION

PRODUCT NAME	SIZE	COLOR/FINISH	ITEM NUMBER
MavClad EM Epoxy Binder	15-Gallon Kit	Pigmented	Consult Maverick
MavClad EM Trowel Aggregate	50 lb. Bag	N/A	Consult Maverick

Variety of color pack options available. **MavClad EM** is available in Gloss, Orange Peel, or Satin finish.
Primer: **MavPrime EP** @ 200 sq. ft./gal. Optional grout coat: **MavSeal UPA** @ 175 sq. ft./gal.

TECHNICAL DATA

PHYSICAL DATA	
Components	2 (Epoxy + Hardener)
Generic Type	Trowel-applied epoxy topping
Mix Ratio (by volume)	2 Resin : 1 Hardener
Solids by Volume	100%
VOC	0 g/L
Standard Colors	Color pack options available
Pot Life	25 minutes (@77°F)*

*Higher temperatures will shorten pot-life and working time.

THEORETICAL COVERAGE	
Typical Application	1/4" trowel-applied topping
Mortar	120 sq. ft./mix (3 gal binder + 200 lbs agg.)
Primer (MavPrime EP)	200 sq. ft./gal.
Grout Coat (MavSeal UPA)	175 sq. ft./gal.

CURE TIMES	
Drying Schedule	77°F (25°C)
Foot Traffic	12 – 24 hours
Light Service	24 hours
Full Service	48 – 72 hours
Recoat Window	Within 24 hours (@70°F)



PHYSICAL PERFORMANCE PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Compressive Strength	ASTM C579	13,250 psi
Tensile Strength	ASTM D638	8,650 psi
Flexural Strength	ASTM C580	5,000 psi
Hardness, Shore D	ASTM D2240	75 – 90
Bond Strength	ASTM D4541	350 psi
Abrasion Resistance	ASTM D4060	75 mg loss
Volume Solids	—	100%

Typical properties at 70°F. Data reflects typical results based on laboratory testing under controlled conditions; variations may result. Test methods are modified where applicable.

SURFACE PREPARATION

Concrete and coated concrete surfaces must be sound, clean, dry and free of contaminants such as dirt, dust, grease, oil, silicones and other contaminants that may negatively affect adhesion.

- New concrete should be cured a minimum of 28 days.
- Concrete contaminated with chemicals or other foreign matter must be neutralized or removed.
- Remove any laitance or weak surface layers.
- Concrete must have a minimum surface tensile strength of 300 psi per ASTM D4541.
- Mechanically prepare to a CSP 3 – CSP 5 profile per ICRI Guideline 310.2R (equal to 60-grit sandpaper or coarser).
- Address all surface irregularities, cracks, expansion joints and control joints prior to application.

MOISTURE VAPOR BARRIER:

Moisture vapor transmission (MVT) should be 3 lbs. or less per 1,000 sq. ft. in 24 hours per ASTM F1869. Relative humidity (RH) must not exceed 75% per ASTM F2170.

TEMPERATURE

Air	50° – 95°F	10° – 35°C
Surface	Minimum 5°F above dew point	
Storage	65° – 80°F	18° – 27°C

Higher temperatures will shorten pot-life and working time.

Floor temperature must be at least 5 degrees over the current dew point.

APPLICATION PROCEDURE

MavClad EM mix ratio is 2 Parts Resin to 1 Part Hardener by volume.

PRIMER:

1. Prime the concrete with **MavPrime EP** at 175 – 250 sq. ft./gal. The **MavPrime EP** primer coat may be thinned with up to 5% xylene. For green concrete, prime with **MavPrime MVT**.
2. Pre-mix **MavPrime EP** Part A Resin prior to use due to possible additive separation that can occur during transportation and storage.

MORTAR:

3. Combine Part A Resin and Part B Hardener in a separate mixing vessel. Mix with a Jiffy-type mixer at low speed.
4. Pour catalyzed liquid into a concrete or mortar mixer. Add Trowel Aggregate (200 lbs. per 3 gallons of binder) and mix thoroughly.
5. Apply mortar with a screed box or a rake set at the appropriate height. Trowel smooth using a power trowel or a steel finishing trowel.

GROUT COAT:

6. Sand the surface to remove any trowel marks or imperfections.
7. Repeat steps 3 and 4 above to prepare the grout coat mixture.
8. Apply the grout coat by pulling a trowel tightly over the surface at approximately 150 – 250 sq. ft./gal. The grout coat should fill any slight voids or surface imperfections and provide a smooth finish.
9. After the grout coat is tack free (approx. 10 hours @ 70°F) and before the 24-hour recoat window closes, apply a MavClad topcoat if desired for texture, finish or UV stability.
10. Maverick offers a complete line of topcoats for increased resistance to UV exposure, chemicals, and high traffic.

CLEAN UP AND DISPOSAL

Clean up mixing and application equipment immediately after use. Use acetone or xylene; do not use alcohol. Follow solvent manufacturer's safety instructions. Be sure to follow all local, state and federal regulations when disposing of materials.

MAINTENANCE

To maintain the appearance and extend the life of the newly sealed surface, it is imperative to have a routine maintenance program. Dirt and debris that is tracked over a finished floor will quickly scratch and dull the surface. Place walk-off mats at entrances. Sweep and mop/scrub floors regularly using soft bristles/pads and a mild cleaner. Some cleaning products and equipment or improper use of these can damage a surface. Remove spills quickly to minimize damage and/or stains. For systems that support parked vehicles or other heavy items on rubber wheels, place a small piece of nonporous material, such as sheet metal or plexiglass, between the tires and floor to prevent tire marks. Reapplication may be necessary in heavy traffic areas.

LIMITATIONS

- ⚠ Like all epoxies, **MavClad EM** is not 100% color stable without use of a UV-stable topcoat.
- ⚠ Not designed for exterior use or constant immersion applications.
- ⚠ Floors should be sloped to drain to prevent standing water or chemicals.
- ⚠ Confirm product performance in the specific chemical environment prior to use.
- ⚠ Do not apply to slabs on grade without a heavy, unruptured vapor barrier, or where moisture / MVT is present.
- ⚠ Always use protective clothing consistent with OSHA regulations during use.
- ⚠ Refer to the Safety Data Sheet (SDS) for detailed safety precautions.
- ⚠ For industrial/commercial use. Installation by trained personnel only.

SHELF LIFE AND STORAGE

12 months from date of manufacture when stored indoors in the original unopened container at 60°F – 85°F (16°C – 29°C) in a dry location with humidity below 65%.

- ⚠ Do not allow materials to freeze.

TECHNICAL ASSISTANCE

- ❓ Information is available by calling Maverick
313-889-2526

LIMITED WARRANTY

Maverick warrants this product to be free from defect in the material that affects its performance for a period of one year (from date of purchase). Maverick will replace at no charge the quantity of the Coating that Maverick determines has failed to perform, as the sole and exclusive remedy for any breach of this warranty and/or any other defect or failure of the coating. Proof of purchase is required. Cost of labor for application of any product specifically is excluded. Warranty is void if Maverick products are mixed with or used in conjunction with materials that are substituted for Maverick products. Warranty is nontransferable.

CORPORATE OFFICE:

Maverick Performance Solutions
25911 Northline Commerce Drive, Suite 306
Taylor, MI 48180
313-889-2526