



MVEP

Product Information

Category: Epoxy Flooring System

Clear and tinted colors

Series 2200

1.5 gal kit

2:1 A to B

Description and Use:

This two component, 100% solids, low viscosity, moisture accepting epoxy primer can reduce the hydrostatic pressure emitted by the floor from 12 lbs. per 1000 sq. ft. to less than 1 lb.

MVEP can even cure underwater without affecting its adhesion. When applied at 73°F / 50% humidity, MVEP has a 5-7 hour cure.

MVEP can be used to prime concrete, metal, and wood. Corrosion inhibitors can be added (by special request) for use over metal substrates. It is an excellent all around concrete primer/sealer with incredible adhesion.

MVEP is a key component of the Granicrete 1-Day Epoxy Garage Floor system when used as the primer for a full-broadcast until refusal decorative acrylic chip system.

This engineered product used in the following Granicrete Systems:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Floor Overlays / Micro-Toppings | <input type="checkbox"/> 3D |
| <input checked="" type="checkbox"/> Interior | <input checked="" type="checkbox"/> Epoxy Flooring |
| <input checked="" type="checkbox"/> Exterior | <input type="checkbox"/> Shower FX |
| <input type="checkbox"/> Countertop | <input type="checkbox"/> Outdoor Islands |

Its significant characteristics include:

- ✓ Meets USDA COMPLIANCE criteria
- ✓ 100% Solids
- ✓ Low Viscosity
- ✓ High Build
- ✓ Moisture Tolerant
- ✓ Convenient 2:1 Mix; A:B=2:1
- ✓ Superior adhesion and initial tackiness

Finish:

Not for finishing but only as a primer

Color:

Clear and tinted options

Coverage:

The proper coverage of MVEP varies on the level of moisture vapor emissions discovered on the job. **Typical application should cover 200 sq. ft./gal at 8 mils (= 300sf/kit)**. If an excessive amount of Vapor Pressure is present (> 8 lbs./1000 ft²/24hr), MVEP should be applied at 100 ft²/gal (16 mils).

With the right surface preparation, this extra protection should provide protection up to 15lbs. MVEP may be applied at a heavier rate to achieve a higher build system or to accommodate the broadcasting of aggregates.

Packaging:

1 1/2 gallon kits: (1-gallon part A to 1/2-gallon part B)

Inspection:

Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be porous and can absorb water. A minimum of 14 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170).

Before starting flooring work, test existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the cement called efflorescence. These salts tend to prevent or destroy the bonding of coatings to the concrete. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floors pH reading ranges between 5-9 to ensure adhesion. The testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is ran and cannot be used to predict long-term conditions.

Calcium chloride tests should be conducted to determine if the concrete is sufficiently dry for an epoxy flooring installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained.

Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or all together failure of the coating system. Testing is the responsibility of the installer as Granicrete bears no responsibility for failures due to any of the above conditions.

Surface Preparation:

Concrete surfaces shall be bead blasted or diamond grinded to remove all surface contaminants and laitance. The concrete should be at least 2500 psi and have an ICRI concrete surface profile within 3-5. After initial preparation, has occurred, inspect the concrete for imperfections and treat as necessary.

Allow concrete to breathe for a minimum of 24 hours after preparation. Any voids need to be filled using Granicrete Crack Patch Gel. Any high spots need to be ground smooth. For surface preparation recommendations consult the Technical Service Department. All expansion joints should be honored. Cracks should be chased with a diamond crack chaser (approximately 1/4" x 1/4"), swept or blown clean.

Mixing:

Mix 2 parts A with 1 part B (by volume) together for 3 to 4 minutes with a slow speed drill mixer. Be sure to scrape sides and bottom during mixing. Mixed material should be promptly used and spread out as MVEP will have approximately 30 minutes of working time. Mix smaller amount at 2:1 for cutting in perimeter and promptly follow by mixing the rest of kit for roll out.

Thinning:

May be thinned with up to 10% (16oz) of Acetone to aid in penetration. Thinned material should be applied at less than 6 mils (and not puddle) to cure properly.

Application:

As a primer: Immediately after mixing, spread a strip of the batch onto the surface along the edges where it will be cut in using a brush. Pour the remaining material near the cut in area and spread evenly using a trowel or squeegee and back roll using a 3/8" nap non-shedding roller.

As an intermediate coat: For extra protection from moisture vapor emissions: Mix and apply without solvent at the desired thickness using a notched trowel or squeegee and backroll using a 3/8" nap non-shedding roller.

Drying Time:

You may re-coat as soon as the surface is dry to touch or in about 8 hours (but not later than 24 hours). If re-coat time has been exceeded, lightly sand the surface and wipe with acetone before next application.

Light foot traffic may be permitted in 24 hours, light vehicle traffic in 72 hours, heavy- traffic in 7 days.

All times are based on average temperature of 70 degrees and 50% humidity. Cooler temperatures will increase drying time.

Handling Precautions:

Refer to SDS before using

Limitations:

- Do not apply at any temperature below 50° F or above 95°F.
- Concrete must be cured for a minimum of 10 days and have less than 15 lbs. of moisture per thousand square feet.
- For interior use only unless protected by a U.V. resistant coating such as urethane.
- Epoxy must be cured for a minimum of 24 hours before encountering water.
- Concrete should be a minimum of 2500 psi.

Clean Up:

Uncured material can be removed with a solvent. Cured material can only be removed mechanically.

Technical Data:

Mix Ratio, by Volume	2 parts resin / 1 part hardener			
Test Temperature / Relative Humidity	41°F / 80%	59°F / 60%	73°F / 50%	95°F / 35%
Mixed Viscosity, cP	<4000	2,400	1,150	500
Gel Time (100g mass), minutes	391	154	47	34
Tack-free Time, hours	14	6.5	4	1
Dry-through Time, hours	21	8.5	6	2
Visual Appearance	Semi-gloss	Semi-gloss	Glossy	Glossy
Mechanical Properties				
Pencil Hardness	2H			
Persoz Hardness, seconds	167			
Cross-cut Adhesion	5A			
Impact Resistance (D/R), in lb.	42 / 0			
Elcometer Pull-off Adhesion 73°F / 50%	800 psi (dry concrete)			

Wear Personal Protective Equipment
Read SDS before using this product

DOT/Flash Point – Flammable Liquid Classification, regulated

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