

# **METALLIX Epoxy**

Product Information Category: Epoxy Floor System 2:1 Mix Ratio (Available in Clear) 3.0-gal kit Series 2222

#### **Description and Use:**

This is two-component, 100% solids, high-build, low viscosity, low odor, **cyclo-aliphatic**, chemical resistant epoxy that is **fast drying**. This highly versatile epoxy is engineered for metallic floor coatings purposes.

It is designed to work without premix of activator and does not need a topical activator alcohol or solvent.

Metallix Epoxy is an excellent high build concrete sealer for interior use over many other types of coatings such Granicrete textures.

This engineered product used in the following Granicrete Systems:

Floor Overlays	3D
Interior	X Epoxy Flooring
Exterior	Interior Walls
X Countertop	Outdoor Islands

#### Its significant characteristics include:

- ✓ Meets USDA COMPLIANCE criteria.
- ✓ 100% Solids
- ✓ Chemical Resistant
- ✓ High Strength
- ✓ Durable yet Flexible
- ✓ Low Odor
- ✓ High-Build
- ✓ Superior Adhesion
- ✓ Normal 6-8 Hour Dry Time
- ✓ No amine blush residual and high color stability.
- ✓ Enhance modifiers for UV resistance.

#### **Color:**

Clear for infusion of Granicrete Mica Essence metallic powders at 1 8oz jar per 1.5 gallons mixed material.

## Packaging:

3-gallon kit

#### Coverage:

Coverage will vary depending on the condition of surface and desired thickness. At 20-25 mil thickness anticipate 50-75 sf per gallon (150-225sf/kit). Some installers stretch coverage even further.

#### 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 at least 2500 psi and feel like 100-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 28 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. A rate of 4.5lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure for an epoxy flooring installation. If the reading ranges from 4.5lbs to 15lbs, a moisture barrier system such as Granicrete MVEP can be installed to reduce the emissions.

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

#### Surface Preparation:

Over Concrete Surfaces: Before coating is applied, concrete must be dry with no wet areas. Surface must clean with all contaminants removed. Surface should be profiled to feel like 100 grit sandpaper and all cracks and spalled areas repaired. Note: Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, are acceptable.

#### Thinning:

No thinning is required of MetalliX Epoxy.

#### Mixing:

- 1. Premix each component separately.
- 2. Mix ratio is 2 Parts-A to 1 Part-B, by volume.
- 3. Mix Part A thoroughly with a low speed (300- rpm) drill motor for 3-4 minutes while including Mica Essence Metallic Power at a rate of 8oz to 1.5 gallons total A+B mixture.
- 4. Allow the Part A with Mica Essence to stand 5-10 minutes to allow entrapped air to escape.
- 5. Now add measured Part B into the colored Part A. Make sure to scrape the sides and bottom of the container during mixing and continue to mix for another 1.5 2minutes.
- 6. Pour out of mixing container and spread immediately onto the floor. Product will overheat in mixing container but yields a long working time by spread it out. (40+ minutes working time at 70°F degrees). Do not overwork the epoxy as will begin to lose you desired looks.

# Drying Time:

6-8 hours at 77°F. Initial cure 24 hours. Full cure 5-7 days.

#### Handling Precautions:

Refer to SDS before use.

#### Slip and Fall Precautions:

A non-skid surface can be achieved by broadcasting and/or back rolling Granicrete SRA (slip reduction additive).

#### Limitations:

- Do not apply at temperatures below 50°F or above 95°F.
- After mixing completely (3-4 minutes remove from mixing container an apply to floor)
- Do not apply over concrete with Moisture Vapor Emissions above 4.5lbs/1000 ft²/24hr period.
- For interior use only.
- Concrete must be cured for a minimum of 28 days.
- If solvent is added, the products must be applied thinly to allow the solvent to escape or proper curing will occur.

#### **Clean Up:**

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

## **Technical Data:**

Tensile Strength (ASTM-D-638-86)	3,900 psi
Shore D Hardness (ASTM-D-2240-86) *	75-80
Thin Film Set Times at 70 F (BK Drying Recorder)	6 hrs.
Flexural Strength (ASTM-D-790-88)	3,700 psi
Compressive Strength @ yield (ASTM 695-85)	7,800 psi
VOC	0 g/l
Critical Recoat Time	12-20 hours

Wear Personal Protective Equipment Read SDS before using this product.

**Manufacturer/Distributor Warranty**: As neither the manufacturer nor the distributor has control over the actual installation of this product, the manufacturer and distributor disclaim any and all warranties expressed or implied regarding color shade, appearance, and product performance at and after opening product containers. Manufacturer and distributor recommendations and suggestions are made without guarantee. Conditions of installer's and consumer's use of this product are beyond the control of manufacturer and distributor. Manufacturer and distributor disclaim any liability incurred in connection with the use of this product or information contained herein.