# **EPOXY MORTAR RESURFACER**



## TECHNICAL DATA SHEET



RESINWERKS EPOXY MORTAR RESURFACER (EMR) is a 100% solids, high-strength epoxy mortar system engineered for demanding industrial environments. Formulated for superior impact and abrasion resistance, EMR is ideal for resurfacing deteriorated concrete or as a durable solution for new installations requiring high compressive strength. Additionally, it functions effectively as a binder for troweled and polished terrazzo applications. EMR delivers a robust, long-lasting surface that can be top-coated with any Resinwerks resinous flooring system to meet specific performance and aesthetic objectives.

#### **USES**:

- » Existing substrates that have been damaged or spalled.
- » Heavy traffic industrial floors
- High impact resistance applications

#### **ADVANTAGES:**

- » Low Odor, 0 VOC
- » High compressive strength
- » Used in conjunction with Resinwerks' topcoats

## **PACKAGING & SHELF-LIFE**

Epoxy Mortar Resurfacer is available in the following kits:

- » 3-gallon kits (2-gallons part A in 3.5-gallon pail + 1-gallon part B)
- » 15-gallon kits (two 5-gallon pails part A + one 5-gallon pail part B)
- » TC-98, Multi-Cast "F" or similiar Aggregate Blend

#### Shelf-Life::

» 24 months factory sealed and stored at room temperature.

## SUGGESTED APPLICATION:

## Suitable Substrate(s): Concrete

» Apply at 3/16" - 1/4" thickness to floor areas that have been damaged or spalled. Also suitable for applications where enhanced durability and impact resistance is required.

#### **ANCILLARY PRODUCTS:**

Epoxy Mortar Resurfacer may be used as a base-layer in conjunction with any other Resinwerks resinous coating product(s).

MATERIAL COVERAGE @ 1/4"		
COAT	APPROXIMATE COVERAGE	
Primer:	130 ft² / gallon	
Binder:	35 ft² / gallon	
Aggregate:	2 lb. per ft <sup>2</sup>	

#### GENERAL PRODUCT INFORMATION

Colors: Clear Solids Volume: 100%

V.O.C.: 0 grams per liter

Pot-life: 25 Minutes @ 72° F

Mix-Ratio: 2-Parts A to 1-Part B by volume.

Mix with TC98 Epoxy Matrix Aggregate

Cure Schedule: 72° F @ 50% R.H.

To touch: 6-Hours

To re-coat: 10-Hours Minimum

12-Hours Maximum

Foot Traffic: 12-Hours Heavy Traffic: 72-Hours

Clean-up: Acetone / MEK

**Application Temp:** 60°F(15.6°C) - 90°F(32.2°C) **Environment:** For Interior Use Only

## GENERAL PRODUCT PERFORMANCE

TEST TYPE	TEST METHOD	RESULT
Hardness	ASTM D-2240 Shore D	80
Compressive Strength	ASTM C-579	13,500 psi
Tensile Strength	ASTM C-307	2,100 psi
Flammability	ASTM D 635	Self extinguishing
Impact Resistance	ASTM D 2794	220lb
Flexural Strength	ASTM C-580	4,300 psi
Adhesion	ASTMD-4541	500+ PSI concrete fracture
Coefficient of Friction	ASTM D-2047	> 0.6 / pass

## **EPOXY MORTAR RESURFACER**

## **DATA SHEET**



#### **SURFACE PREPARATION**

Ensure substrate to be coated is clean, dry, and in sound condition. All laitance, curing compounds, concrete hardeners, and other surface contaminants must be removed. Prepare concrete in accordance with ASTM D 4259-83. Mechanical Shot Blasting is recommended to achieve a surface profile of ICRI CSP 3-5. Surface to be coated must be completely porous and free of excessive dust & contaminants.

#### MOISTURE IN CONCRETE

Concrete slabs should be tested prior to application for elevated moisture vapor emission levels. Resinwerks recommends ASTM F2170-19 standard for determining relative humidity in concrete slabs using RH probes. For slabs exhibiting elevated moisture levels in excess of 75% RH, Resinwerks™ Vapor Barrier Epoxy should be substituted as a primer. For more information, please contact your Resinwerks technical representative.

#### **DE-GREASING OF CONTAMINATED SUBSTRATES**

For concrete substrates containing oil, animal fats, or other carbon based contaminants, slabs should be de-greased appropriately using an enzymatic based concrete de-greasing agent. Multiple applications may be required depending on the level of contamination. For more information, please contact your Resinwerks technical representative. .

## TREATMENT OF JOINTS & CRACKS

Prior to installation of any Resinwerks primer, all joints, cracks and other substrate irregularities must be addressed. For more information on specific joint treatment procedures, please contact your Resinwerks technical services representative.

## MIXING INSTRUCTIONS: AS BINDER / MATRIX

- » Prior to mixing, all products should be properly acclimated to the local ambient room temperature of  $60^{\circ}F(15.6^{\circ}C)$   $80^{\circ}F(26.7^{\circ}C)$ .
- » Charge 50 lb of TC-98 trowel aggregate to a mortar mixer
- » Thoroughly agitate both part A and Part B separately prior to mixing. In a 5-gallon pail, mix by volume, 2-quarts Part A to 1-quart Part B. Once mixed, pour into tumbling TC-98 Aggregate and mix for approximately 10-12 revolutions.

#### **APPLICATION INSTRUCTIONS**

» Immediately following mixing, pour onto substrate in a uniform ribbon and spread evenly with a 3/16"-1/4" gauge rake depending on desired thickness. Immediately trowel smooth either by hand or with a power trowel. Depending on ambient environmental and slab temperatures, material will be dry to the touch and ready for subsequent coats within approximately 6-8 hours following application. Contact Resinwerks directly for additional application specifics.

» Must be sanded prior to topcoat

#### **LIMITATIONS**

- » Product is designed as a resurfacer and will amber when exposed to UV
- » Not Intended as a wear surface
- » Do Not Freeze
- » Do not apply over concrete experiencing ASR
- » Do not apply over existing Coatings
- » Do not apply to new slabs < 28-days old</p>
- » Do not apply to concrete < 3500 PSI compression strength</p>
- » Do not apply product when ambient or room temperature is below 60°F or over 90°F or if the relative ambient humidity is above 85%.
- » This product is not recommended for immersion service.
- » DEW POINT: Do not apply when dew point is within 5°F of the ambient temperature.

#### **MAINTENANCE**

The long-term performance, appearance, and life expectancy of wear surface products are dependent on an adequate routine maintenance program designed specifically for the installed wear surface. Resinous floor coating systems are nonporous, causing dirt and contaminants to remain on the surface. Recommended maintenance programs consist of frequent and thorough cleaning utilizing a neutral PH cleaner. The frequency of washing will vary depending on floor usage type, traffic and age. Please contact your local Resinwerks technical representative for more information.

#### **NOTES**

Thoroughly read all Material Safety Data Sheets prior to use and maintain copies on job-site at all times.

Mock-ups and field test areas are strongly recommended in order to validate performance and appearance related characteristics (including but not limited to color, inherent surface variations, wear, anti dusting, abrasion resistance, chemical resistance, stain resistance, coefficient of friction, etc.) to ensure system performance as specified for the intended use, and to determine approval of the coating system.

Variability in job site conditions (including but not limited to surface preparation, sunlight, humidity, dew point, temperature, etc.) during application of Epoxy products may lead to fish-eyes, blistering, pinholes, wrinkling, or out-gassing of air in the concrete and are not product defects.

**TECHNICAL ASSISTANCE** 

PHONE: 720-484-5160
WEB: www.resinwerks.com



