



american coating technologies
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Product Technical Data

AM 105 Economical Formulation Epoxy Mortar Patch Kit/Resurfacer

Product Description

AM 105 Epoxy Mortar Patch Kit/Resurfacer (Economical Formulation) is a three component 100% solids epoxy mortar designed for applications where excellent wear characteristics are required.

Recommended For

- Walkways
- Loading Docks
- Seamless Floors
- General Patching

Not Recommended For

- Immersion applications for acids and chemicals

Solids By Weight:

100%

Volatile Organic Content:

Zero pounds per gallon

Standard Colors:

Light Gray, Red, Dark Gray and Natural

Recommended Thickness:

1/8" to 1/4"

Coverage Per Unit:

19.15 sq. ft. @ 1/4" and 38.3 sq. ft. @ 1/8"

Packaging:

1/4 Unit .10 (Approximately)
Unit .40 (Approximately)
Bulk 2.0 (Approximately)

Cubic Feet:

1/4 Unit .10 (Approximately)
Unit .40 (Approximately)
Bulk 2.0 (Approximately)

*UNIT = 4.7# part A, 2.3# part B, 50# aggregate. A bulk is approximately five units (all weights approximate)

Mix Ratio:

*UNIT = .49 -.51 gallons part A to .29 gallons part B plus 50# aggregate. (weight and volumes approximate)

Shelf Life:

2 years in unopened containers

Flexural Strength:

11,500 psi @ ASTM D790

Compressive Strength:

8,400 psi @ ASTM D695

Tensile Strength:

6,700 psi @ ASTM D638

Ultimate Elongation:

4.75%

Impact Resistance:

Excellent

Abrasion Resistance:

Excellent

Heat Deflection Temperature:

131.7 degrees Fahrenheit @ ASTM D648

Weathering:

Good (Chalks)

Dot Classification:

Part A & C "not regulated"
Part B "CORROSIVE LIQUID N.O.S., 8, UN1760, PGIII"

Viscosity:

Part A = 500-800 cps, Part B = 250-500 cps

CURE SCHEDULE:

Pot Life 20-30 minutes @ 70°F
(.40 cu. ft. mix)

Re-Coat 6-7 hours @ 70°F
(or topcoat)

Light Foot Traffic 12-14 hours @ 70°F

Full Cure 2-7 days @ 70°F
(Heavy Traffic)

Application Temperature:

55°-90° degrees Fahrenheit.

Primer:

USE THE MIXED LIQUIDS PRIOR TO ADDING AGGREGATE

Topcoat:

None required. For increased performance and reduced porosity, topcoat with AM 94 or AM 95

Chemical Resistance:

REAGENT	RATING
Xylen	A
1, 1, 1 Trichloroethane	A
Mek	A
Methanol	A
Ethyl Alcohol	A
Skydrol	A
10% Sodium Hydroxide	C
50% Sodium Hydroxide	C
10% Sulfuric Acid	B
70% Sulfuric Acid	A
10% HCl (aq)	B
5% Acetic Acid	B

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion.

NOTE: Extensive chemical resistance information is available through your sales representative.

Limitations:

Color stability may be affected by environmental conditions such as high humidity or chemical exposure. Product is not UV color stable and certain lighting such as sodium vapor lights may cause color changes. Colors may vary from batch to batch due to variations in the silica filler. Mortar colors are not from our standard color chart. Substrate temperature must be 50 F above dew point. For chemical exposure areas, we recommend a suitable topcoat to reduce porosity and chemical migration. All new concrete must be cured for at least 30 days prior to application. Test data based on neat resin. Physical properties are typical values and not specifications.

WARNING: Keep out of the reach of children and read the MSDS and warranty and limitations to liability information before using.

See reverse side for application instructions.

AM 105 Mixing And Application Instructions:

1) PRODUCT STORAGE: Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be above 55°F to prevent product crystallization.

2) SURFACE PREPARATION: All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free bond to the substrate. We recommend that an aggressive shot blast be performed prior to the application of this product. A less adequate method would be acid etching, but the etch should properly profile the substrate. All edges and around columns or beams should be mechanically scarified.

All termination points should not be feather edged, but should be saw cut with the termination ending at the saw-cut. All large cracks should be V cut and filled with appropriate crack filler. All expansion joints should be filled with appropriate joint filler. When overlaying an expansion joint, a single saw cut through the epoxy overlay will prevent random fracturing.

A test should be made to determine that the concrete is dry; this can be done by placing a 4'x4' plastic sheet on the substrate and taping down the edges; if after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause dis-bonding.

3) PRIMER: No primer is necessary. This material is self priming. However, any suitable primer can be used.

4) PRODUCT MIXING: It is important that the liquids be mixed together first. Mix the liquids in an oversized container thoroughly and until streak free. After the liquids are thoroughly mixed, add in the aggregate. Mix in the aggregate with slow speed mixing equipment such as a jiffy mixer or rotating bucket/stationary mixing blade assembly. It is equally important that enough time is spent mixing in the aggregate to insure that the aggregate is thoroughly wetted out. No induction time is necessary. Improper mixing may result in product failure.

5) PRODUCT APPLICATION: Apply the mixed material at 1/8 to 1/4 inch thickness. Apply the material with a hand trowel or other suitable application equipment. Maintain temperatures within the recommended ranges during the application and curing process. Do not over-trowel the mortar as this can cause blistering. Air currents directly across or above the mortar may also cause blistering.

6) RECOAT OR TOPCOATING: No re-coating or topcoating is necessary. However, if you opt to topcoat the applied mortar, allow it to cure before topcoating. Many epoxies and urethanes can be used. Contact your sales representative for suitable topcoat selections.

7) CLEANUP: Use xylol

8) FLOOR CLEANING: Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

9) RESTRICTIONS: Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications.

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