

HIGH PERFORMANCE, LOW MODULUS, EPOXY PATCHING MORTAR

DESCRIPTION

EP-PATCH is a three-component, high performance, 100% solids, multi-purpose, non-shrink epoxy patching mortar. It is characterized by high early strength, low modulus, excellent workability and excellent bond strength. The system combines a high quality epoxy resin and curing agent with an engineered blend of graded aggregate.

INDUSTRY USES

EP-PATCH is ideal for high stress applications such as bridge decks, airport runways, loading docks, warehouse floors and other concrete repair applications. EP-PATCH is the recommended choice for patching concrete prior to installing epoxy polymer overlays and other top coatings since there is no hydration or shrinkage during cure.

BENEFITS

- Made in America
- High impact resistance, high early strength, low modulus, non-shrink.
- Open to traffic in less than 3 hours (@75F)
- High oil and chemical resistance
- Excellent workability
- Chemically bonds to concrete
- Pre-measured units
- Withstands freeze thaw cycles
- Easy soap and water clean up
- Complies with FAA specification for patching Item P-501.19
- Excellent choice for spalls and deteriorated joint edges

PACKAGING

- 2.0 cu. ft.
Component A – (5) gallon pail
Component B – (5) gallon pail
Component C - (4) 50 lb pails aggregate
- 0.5 cu. ft.
Component A - (1) gallon can
Component B – (1) gallon can
Component C – (1) 50 lb pail aggregate

Appearance: Component A- gray, Component B- amber
Shelf Life: 2 years in original unopened container
Storage Conditions: Store at 40° F – 95° F (5° C – 35° C). Condition material to 65° F – 85° F (18° C – 29° C) before using.

SURFACE PREPARATION

Concrete shall have reached its design strength and surface shall be free of standing water (a saturated surface dry condition, although not necessary, is acceptable). All surface contamination must be removed by mechanical means, creating a surface profile of exposed sound aggregate that will provide a strong bond surface for the EP-PATCH. All metal surfaces to come in contact with EP-PATCH should be sandblasted to white metal finish and wiped clean with solvent.

Step 1: Saw cut approx. 1/2 in./1.2 cm deep around perimeter of area to be patched and remove all deteriorated and unsound concrete with chipping hammers not to exceed 30 lbs.

Step 2: Thoroughly clean patch area and exposed reinforcing steel by sandblasting to white metal finish. Vacuum all dust and loose particles from area.

MIXING

EP-Patch is shipped in pre-measured .5cu ft or 2.0 cu ft units. Mix these products ONLY in complete units. DO NOT THIN or add any solvents prior to mixing.

.5cu ft/.014m3 kit: Components A-Resin, and B-Hardener are packaged in separate 1 gal containers. Pour B-Hardener into A-Resin and mix thoroughly for 3 minutes with a Jiffy mixer on low-speed (300 rpm) until material is a uniform consistency. NOTE: Keep mixer at bottom of can to avoid introducing air. After liquid components are mixed, pour into 5 gallon pail, slowly add component C-Aggregate. Mix on low speed until all aggregate is wetted out, stop mixer. DO NOT OVER mix!

2.0 cu ft / .056 m3 kit: Component A-Resin is packaged in a 5gal /18.8L pail, component B-Hardener is packaged in a 5gal pail, component C-Aggregate is packaged in (4) 50 lb pails. Pour component B-Hardener into 5 gal pail containing component A-Resin. Mix material thoroughly for 3 minutes with a Jiffy mixer on a low-speed (300 rpm) drill motor until a uniform consistency is achieved. NOTE: Keep mixer at bottom of pail to avoid introducing air. Pour liquids into mortar mixer, making sure to remove all resins from sides and bottom of pail with spatula or similar tool. Introduce first pail of component C-aggregate prior to starting mixer. Start mixer and slowly add the remaining three pails of aggregate. Mix on low speed until all aggregate is wetted out, stop mixer. DO NOT OVER mix!

HIGH PERFORMANCE, LOW MODULUS, EPOXY PATCHING MORTAR

APPLICATION

Prime patch area with mixed components A and B with brush or roller. Immediately place patch. Set screeds or float to desired level, strike off, thoroughly compact and finish the surface. Do not over finish as this will cause the resin to float leaving the patch slick and may be weaker on the surface. Approved solvents may be used on tools to aid in finishing. This material is designed for small patch areas, if using on full depth or area larger than 4'x4' consult E-Chem technical department for recommendations.

Temperature Considerations: **Important** - Epoxy Resins are temperature sensitive and care should be taken to condition all components (including component "C" aggregate) to between 65°F - 90°F (24°C -32°C) for a minimum of 24 hrs prior to mixing and placement. Temperatures colder than stated range increase viscosity of resins and inhibit mixing and flow of patching materials. Temperatures warmer than stated range decrease viscosity of resins, hasten the cure" and reduce the working time of the patch. Mixing and curing at less than ideal temperatures, <65°F - >90°F will require special considerations.

CLEAN UP

EQUIPMENT: Uncured material can be removed with approved solvent. Cured material can only be removed mechanically.

CAUTION

Safety Considerations

- Component A – Irritant
- Component B – Corrosive
- Product is a strong sensitizer. Use of safety goggles and chemical resistant gloves are recommended
- Use of NIOSH/MSHA organic vapor respirator is recommended if ventilation is inadequate
- Avoid breathing vapors
- Avoid skin contact

First Aid

- **EYE CONTACT:** Flush immediately with water for at least 15 minutes. Contact physician immediately.
- **RESPIRATORY CONTACT:** Remove person to fresh air.
- **SKIN CONTACT:** Remove any contaminated clothing. Remove epoxy immediately with a dry cloth or paper towel. Solvents should not be used as they carry the irritant into the skin. Wash skin thoroughly with soap and water.
- **CURED EPOXY RESINS ARE INNOCUOUS.**

WARRANTY

This product is, warranted and guaranteed to be of good quality. Manufacturer, as its sole and exclusive liability hereunder, will replace material if proved defective. This warranty and guarantee are expressly in lieu of all others, express or implied, including any implied warranty of merchantability or fitness for a particular purpose and may not be extended by representatives or any persons, written sales information, or drawing in any manner whatsoever. While the manufacturer recommends uses for the product based on tests believed reliable, no warranties express or implied, or guarantee can be given as to particular methods of use or application, nor can performance be warranted, expressly or impliedly, or guaranteed under special conditions. Distributors, salespersons or company representatives are not authorized to extend or vary any warranties or guarantees beyond those outlined herein nor may the manufacturers or sellers, limitation of liability be waived or altered in any manner whatsoever.