



# INSTALLATION INSTRUCTIONS

Early Set, Structural Epoxy Mortar Kit for Repairing Concrete Floors

## ARMOR-HARD KIT

### **SURFACE/DEFECT PREPARATION**

All surfaces must be clean, dry, structurally sound and free of grease, oil, coatings, sealers, paint, etc. Surface preparation may be accomplished by grinding, sawing, chipping, sandblasting, etc. Prevent featheredging by creating a vertical edge at outer point of defect to be repaired (1/2" minimum, 3/4" preferred). See Metzger/McGuire's Guide to Basic Floor Repair and related information on repair procedures for recommendations. New concrete should have minimum cure of 30 days.

### **MIXING**

*(Read product container labels and MSDS prior to use.)*

**Caution**—Due to 4:1 ratio, the entire contents of both epoxy parts should be used. If using less than full unit, "A" and "B" ratio must be measured precisely by volumetric comparison.

Ambient temperature should be at least 50°F (10°C). Combine parts "A" and "B" in a plastic pail and mix for 2-3 minutes using a Jiffy-type mixer and a variable speed drill. Keep drill speed below 800 rpm to avoid air entrapment. If using as a liquid, dispense promptly. Application of mixed liquid as a primer coat (brush-applied) will enhance mortar adhesion.

Mortar mixing is best achieved using a 1/2" heavy-duty drill with a mortar mixing paddle or a rotating pail mixer. Thoroughly mix epoxy liquid, then gradually add sand aggregate from kit. Blend until all sand aggregate is "wetted" with the epoxy or until you reach the desired consistency for your placement or comfort level. Mix for an additional 2-3 minutes after optimum aggregate loading.

*Note: It is acceptable to use less than the full amount of aggregate blend provided. The amount used will depend upon whether you are using rotating drum mixer or drill-and-paddle, size of drill, type of paddle, etc. If using the full aggregate load, priming the repair area with liquid **Armor-Hard** is recommended.*

If using liquid **Armor-Hard** as primer, ensure that the liquid does not cure prior to the placement of the mortar mixture. If a primed area does cure prior to mortar placement, scarify or abrade the primed area prior to mortar placement to ensure enhanced adhesion.

### TECHNICAL INFORMATION

The following properties are for the installed mortar using aggregate blend provided in Metzger/McGuire's **ARMOR-HARD KIT**.

Working Time (as mortar) .....	30-40 mins. @ 70°F
Initial Set .....	3-4 hrs. @ 70°F
Grindable Time .....	3-5 hrs. @ 70°F
Foot Traffic Ready .....	3-5 hrs. @ 70°F
Heavy-Duty Traffic .....	4-8 hrs. @ 70°F
Color, Mixed, Of Liquid .....	Translucent/clear*
Mix Ratio, By Volume .....	4A:1B

*\*Mortar color will be grayish-tan or gray depending upon aggregate color selected.*

### **DISPENSING**

Promptly install mortar into defect, spread evenly using clean steel trowel. Finish installing each unit before mixing the next. Trowel mortar to desired density and finish texture. If mortar starts to stiffen and creates trowel drag, wipe trowel with isopropyl alcohol or acetone. The final surface density and appearance will reflect trowel pressure and intensity. Working time for mortar is approximately 30-40 minutes at 70°F.

### **CLEAN-UP**

Spills of unmixed components can be cleaned up with solvent (Xylo, denatured alcohol, etc). Clean tools and spills before epoxy or mortar has set using solvent or warm, soapy water.

### **COVERAGE**

One unit will yield approximately 540 cubic inches of mortar (approximately 2.35 gallons), enough to apply 15 sq. ft. of mortar 1/4" (6 mm) thick. Coverage will be less if you choose to use less than the full amount of aggregate blend provided.

### **SHELF LIFE/STORAGE**

**Armor-Hard Kit** has a guaranteed shelf life of 12 months if containers remain unopened. Store in dry, cool areas away from excessive heat, freeze/thaw and sunlight.

### **SAFETY**

This product is for industrial use only. Use only in well ventilated areas. Practice all normal jobsite safety precautions (clear work area, etc). Thoroughly read and understand MSDS prior to using material.

### **FOOD FACILITY CAUTION**

USDA prohibits the use of chemicals in areas where existing food or food packaging can be contaminated. Contact Metzger/McGuire for assistance if food products are present.

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