



# 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, 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.

#### **SURFACE PRIMING**

Metzger/McGuire recommends the use of **Armor-Hard Primer** (sold separately) to prime all repairs prior to kit placement. Alternatively, the repair can be primed using some liquids from the kit. If doing so hold back a partial or proportional amount of the aggregate provided in the kit to ensure a proper mix. A primer coat (brush applied) will enhance mortar adhesion to the substrate.

#### **MIXING**

(Read product container labels and SDS before using)

**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 or helix paint mixer and a variable speed drill. Keep drill speed low (below 800 rpm) to avoid air entrapment.

Mortar mixing is best achieved using a 1/2" slow speed heavy-duty drill with a mortar mixing paddle or a rotating pail mixer. Thoroughly mix epoxy liquid first, then gradually add sand aggregate from kit until all sand aggregate is "wetted" with the epoxy.

*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.*

After optimum aggregate loading is achieved, mix mortar for an additional 2-3 minutes.

#### **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).....	30-35 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. Mortar should be compressed with trowel into the repair area. 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 denatured alcohol. The final surface density and appearance will reflect trowel pressure and intensity. Working time for mortar is approximately 30-35 minutes at 70°F.

#### **CLEAN-UP**

Spills of unmixed components can be cleaned up with solvent (Toluol, Xylol, MEK, 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 7.5 sq. ft. of mortar 1/2" (12 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 SDS prior to using material.