1. Product Name
ARMOR-HARD KIT

2. Manufacturer
METZGER/MCGUIRE
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3. Product Description
Composition
Armor-Hard Kit is a concrete floor repair kit consisting of a two-component, structural, epoxy liquid binder and a pre-measured bag of custom blended sand aggregate. When epoxy and aggregate are combined they produce a mortar that is easily worked and troweled. This is an early-set system designed specifically for the repair of industrial concrete floors subject to hard wheeled traffic.

Related Products/Versions
Armor-Hard Liquid - Early-Set properties (faster than standard structural epoxies, slower than Extreme); use limited to temperatures of 50°F +.
Armor-Hard Extreme Liquid or Kit - Quick-set properties, multiple temperature applications.
Armor-Hard LV – lower viscosity epoxy for repairing small defects, bolt holes, etc.
Armor-Hard HDR – heavy duty resurfacing epoxy
Armor-Hard Primer – For use in priming repairs with Armor-Hard Kit or Armor Hard HDR

Typical Use
As a mortar;
• Spall repair/rebuilding of joint shoulders
• As a topping for delaminated slabs
• Fill in holes, gouges, ruts, popouts
• Repair broken slab panel corners

4. Limitations
• Should not be used in joints or cracks that move
• For deep repairs, install in 1” (25 mm) lifts to avoid fracturing due to exotherm
• Not for use as a surface coating
• Should be installed at 50°F (10°C) or higher

5. Packaging
Kit contains epoxy liquid (pre-measured “A” and “B” components in cans) and custom blended aggregate mix designed for smooth, easy troweling. One unit will yield approximately 540 cubic inches of mortar (approximately 2.35 gallons). Product is packaged in a 5 gallon pail which includes both liquid and aggregate.

6. Color
Epoxy liquid color is a translucent/clear. When blended with aggregate, mortar color will become aggregate color. Standard aggregate color for kits is Dovetail Gray. Optional aggregate colors in kits are Standard Gray, Natural (light tan/brown in color), Porpoise and Red.

7. Availability
Armor-Hard Kit is available through quality construction supply distributors in most major U.S. cities or through our New Hampshire headquarters.

8. Advantages
• Early set allows for:
  - Pedestrian/construction traffic in 3-5 hours
  - Grinding/sanding in 3-5 hours
  - Hard wheeled traffic in 8 hours or less (at 70°F)
• USDA/FDA acceptable
• Superior impact, wear and chemical resistance
• Excellent abrasion resistance
• Very low odor

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>10,500 psi</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>1,400 psi</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>3,700 psi</td>
</tr>
<tr>
<td>Adhesive Strength</td>
<td>Concrete breaks</td>
</tr>
<tr>
<td>Shore Hardness (D)</td>
<td>D86+</td>
</tr>
<tr>
<td>Solids Content</td>
<td>100%</td>
</tr>
<tr>
<td>Working Time (as mortar)</td>
<td>30-35 mins. @ 70°F</td>
</tr>
<tr>
<td>Initial Set</td>
<td>3-4 hrs. @ 70°F</td>
</tr>
<tr>
<td>Grindable Time</td>
<td>3-5 hrs. @ 70°F</td>
</tr>
<tr>
<td>Foot Traffic Ready</td>
<td>3-5 hrs. @ 70°F</td>
</tr>
<tr>
<td>Heavy-Duty Traffic</td>
<td>4-8 hrs. @ 70°F</td>
</tr>
<tr>
<td>Color, Mixed, Of Liquid.</td>
<td>Translucent/clear*</td>
</tr>
<tr>
<td>Mix Ratio, By Volume</td>
<td>4A:1B</td>
</tr>
</tbody>
</table>

*Mortar color will be aggregate color

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Customer Service - (800) 223-MM80 - Technical Assistance
E-Mail: info@metzgermcguire.com • Web Site: www.metzgermcguire.com
10. Installation Instructions (continued)

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.

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.

11. Coverage
One unit will yield approximately 540 cubic inches of mortar (approximately 2.35 gallons), enough to apply 7½ 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.

12. Shelf Life and 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. See complete installation instructions for information.

13. 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 and installation instructions for additional information prior to using material.

WARRANTY: Metzger/McGuire Co. solely and expressly warrants that its product shall be free from defects in material and workmanship for 12 months from the date of purchase. Unless authorized in writing by an officer of Metzger/McGuire, no other representations or statements made by Metzger/McGuire or its representatives, in writing or orally, shall alter this warranty. Metzger/McGuire makes no warranties, implied or otherwise, as to the merchantability or fitness for ordinary or particular purposes of its products and excludes the same.

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Metzger/McGuire does not authorize anyone on its behalf to make any written or oral statements which in any way alter the installation information or instructions. Purchaser shall be solely responsible for determining the suitability of Metzger/McGuire’s products for the purchaser’s intended purpose.

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