



## **MP EPOXY PATCH**

Multi-Purpose, High-Strength, Non-Shrink,  
Epoxy Patching Mortar

### **PRODUCT DESCRIPTION**

Five Star® MP Epoxy Patch is a three-component, 100% solids, multi-purpose, high-strength, non-shrink epoxy patching mortar for the repair of floors, decks, trenches and ramps. Five Star® MP Epoxy Patch is specifically engineered to provide superior patching while demonstrating similar physical characteristics to the concrete substrate.

### **ADVANTAGES**

- Chemically bonds to concrete
- Excellent workability— withstands freeze / thaw cycles
- High tensile, compressive and early strengths
- Semi-rigid for shock absorption
- User-friendly
- Low modulus
- Compatible with Type III epoxy overlays
- Provides textured bonding profile

### **USES**

- Concrete repair on industrial floors, bridge and parking decks, columns, and structural beams
- Repair of spalled areas
- Quick maintenance and repair in plants and manufacturing facilities

### **PACKAGING AND YIELD**

Five Star® MP Epoxy Patch is a three-component system packaged in pre-measured containers and is available in a unit yielding of approximately 0.5 cubic feet (14.1 liters).

### **SHELF LIFE**

Two years in original unopened packaging when stored in dry conditions; high relative humidity will reduce shelf life. Store in dry conditions between 40°F and 95°F (5°C and 35°C).

<b>TYPICAL PROPERTIES AT 70°F (21°C)</b>	
<b>Compressive Strength, ASTM C 579</b>	
1 Day	6,000 psi (41.3 MPa)
7 Days	6,500 psi (44.9 MPa)
<b>Tensile Strength, ASTM C 307</b>	1,300 psi (8.9 MPa)
<b>Bond Strength, ASTM C 882</b>	1,800 psi (12.4 MPa)
<b>Flexural Yield Strength, ASTM D 790</b>	2,500 psi (17.2 MPa)
<b>Shrinkage, ASTM C 883</b>	Pass
<b>Thermal Compatibility, ASTM C 884</b>	Pass
<b>Working Time at 70°F (21°C)</b>	25 minutes

*\*The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result. Test methods are modified where applicable.*

## PLACEMENT GUIDELINES

1. **SURFACE PREPARATION:** Minimum substrate temperature should be 40°F (5°C) at time of placement. Concrete must be clean, sound, roughened, and completely dry to ensure a good bond. A perimeter edge and minimum depth of ½ inch should be provided for a durable repair. All exposed reinforcing steel should be blasted to an oxidation free condition removing all contaminants. Vacuum or blow out repair area with oil free compressed air prior to placement to remove all dust and loose particles.
2. **MIXING:** For optimum performance, all components of the Five Star® MP Epoxy Patch should be conditioned to between 65°F and 85°F (18°C and 29°C) prior to use. Pre-mix each liquid component thoroughly. Pour Components A (resin) and B (hardener) into pail and mix thoroughly for 3 minutes with a slow speed drill and paddle mixer (300 rpm) until material is of uniform consistency. Keep mixer at bottom of pail to avoid introducing air. Slowly add Component C (aggregate) to mixed liquid components. Mix thoroughly until all aggregate is wet. Working (gel) time is approximately 25 minutes when temperatures are at 70°F (21°C).
3. **METHODS OF PLACEMENT:** Prime patch area with mixed Components A and B with brush or roller. Immediately pour Five Star® MP Epoxy Patch into repair area. Float or trowel to desired level. For more detailed placement instructions call the Five Star Products, Inc. Engineering and Technical Service Center at (800) 243-2206.
4. **CLEAN UP:** Equipment — Uncured material can be removed with a suitable solvent. Cured material can only be removed mechanically. Material — Collect with absorbent material. Flush area with water. Dispose of in accordance with local, state, and federal disposal regulations.

**NOTE: PRIOR TO APPLICATION, READ ALL PRODUCT PACKAGING THOROUGHLY.** For more detailed placement procedures, refer to *Design-A-Spec™* installation guidelines or call the Five Star Products, Inc. Engineering and Technical Service Center at (800) 243-2206.

## CONSIDERATIONS

- Minimum substrate temperature is 40°F (5°C).
- Minimum age of hardened concrete for bonding should be between 5 and 7 days.

## CAUTION

Component A is an irritant, and toxic. Component B is corrosive. This product causes skin irritation and is a strong sensitizer. Do not inhale vapors. Provide adequate ventilation. Protect against contact with skin and eyes. Wear rubber gloves, long sleeve shirt, goggles with side shields. Use of a NIOSH/MSHA organic vapor respirator is recommended if ventilation is inadequate. In case of contact with eyes, flush with water for at least 15 minutes and contact a physician immediately. Areas of skin contact should be promptly washed with soap and water. Do not take internally. Keep product out of reach of children. **PRIOR TO USE, REFER TO MATERIAL SAFETY DATA SHEET.**

*For worldwide availability, additional product information and technical support, contact your local Five Star® distributor, local sales representative, or you may call the Five Star Products, Inc. Engineering and Technical Service Center at (800) 243-2206.*

**WARRANTY:** \*FIVE STAR PRODUCTS, INC. (FSP) PRODUCTS ARE MANUFACTURED TO BE FREE OF MANUFACTURING DEFECTS AND TO MEET FSP'S CURRENT PUBLISHED PHYSICAL PROPERTIES WHEN APPLIED IN ACCORDANCE WITH FSP'S DIRECTIONS AND TESTED IN ACCORDANCE WITH ASTM AND FSP STANDARDS. HOWEVER, SHOULD THERE BE DEFECTS OF MANUFACTURING OF ANY KIND, THE SOLE RIGHT OF THE USER WILL BE TO RETURN ALL MATERIALS ALLEGED TO BE DEFECTIVE, FREIGHT PREPAID TO FSP, FOR REPLACEMENT. THERE ARE NO OTHER WARRANTIES BY FSP OF ANY NATURE WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IN CONNECTION WITH THIS PRODUCT. FSP SHALL NOT BE LIABLE FOR DAMAGES OF ANY SORT, INCLUDING PUNITIVE, ACTUAL, REMOTE, OR CONSEQUENTIAL DAMAGES, RESULTING FROM ANY CLAIMS OF BREACH OF CONTRACT, BREACH OF ANY WARRANTY, WHETHER EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR FROM ANY OTHER CAUSE WHATSOEVER. FSP SHALL ALSO NOT BE RESPONSIBLE FOR USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT HELD BY OTHERS.\*

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