



## **EZ-CURE™ REPAIR MORTAR V/O**

Fast Turnaround Vertical/Overhead Repair Mortar

### **PRODUCT DESCRIPTION**

When used with Five Star® EZ-Cure™ Repair Mortar, Five Star® EZ-Cure™ Repair Mortar V/O Additive forms a rapid-turnaround, cementitious repair mortar for vertical and overhead structural repairs without the need for formwork. Formulated for easy use, Five Star® EZ-Cure™ Repair Mortar V/O requires **no wet cure or curing compounds**.

### **ADVANTAGES**

- Vertical & overhead application
- High early strength
- No wet cure or curing compounds needed
- Excellent freeze/thaw resistance

### **USES**

- Honeycombs and bug hole filling
- Rapid turnaround repairs
- Repair of walls and other vertical structural members
- Applicable for most commercial concrete repair projects

### **PACKAGING AND YIELD**

The Five Star® EZ-Cure™ Repair Mortar V/O Additive is packaged in heavy-duty poly bags weighing 2½ lbs. (1.1 kg), and is to be used with Five Star® EZ-Cure™ Repair Mortar which is packaged in heavy-duty polyethylene lined bags weighing 50 lbs. (22.7 kg). Yield is approximately 0.46 cubic feet (13.0 liters) at maximum water content.

### **SHELF LIFE**

One year in original unopened packaging when stored in dry conditions; high relative humidity will reduce shelf life.

### **TYPICAL PROPERTIES AT 70°F (21°C)**

#### **Compressive Strength, ASTM C 109**

3 Hours	1,500 psi (10.3 MPa)
1 Day	2,200 psi (15.2 MPa)
7 Days	3,000 psi (20.7 MPa)
28 Days	4,000 psi (27.6 MPa)

#### **Bond Strength, ASTM C 882**

1 Day	1,000 psi (6.9 MPa)
28 Days	1,750 psi (12.0 MPa)

#### **Length Change, ASTM C 157**

28 Days Wet	+0.08%
28 Days Dry	-0.10%

#### **Time of Set, ASTM C 266**

Initial Set	Approx. 20 - 40 minutes
Final Set	Approx. 35 - 60 minutes

<b>Working Time at 70°F (21°C)</b>	10 minutes
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*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

- SURFACE PREPARATION:** All surfaces in contact with Five Star® EZ-Cure™ Repair Mortar V/O shall be free of oil, grease, laitance, and other contaminants. Concrete must be clean, sound and rough to ensure a good bond. Mechanically roughen concrete surfaces in accordance with ICRI Technical Guideline 03732 to a minimum concrete surface profile roughness (CSP) 6 or greater. Remove all oxidation from exposed reinforcing steel. A perimeter edge and minimum depth of 1/4 inch (6 mm) should be provided for a durable repair. Featheredging is not recommended. Soak concrete surfaces prior to application with liberal quantities of potable water leaving the concrete saturated and free of standing water. Surfaces shall be conditioned to between 45°F and 90°F (7°C and 32°C) at the time of placement.
- MIXING: Step 1—Mix Five Star® EZ-Cure™ Repair Mortar:** Pre-wet mortar mixer (stationary barrel mixer with moving paddles); empty excess water. A drill and paddle mixer is acceptable for single bag mixes. With the mixer running, add 3 to 3¼ quarts potable water (maximum per 50 lb. bag) to the mixer followed by Five Star® EZ-Cure™ Repair Mortar and mix for 2-3 minutes. **Step 2—Add Five Star® EZ-Cure™ Repair Mortar V/O Additive:** Continue mixing and add Five Star® EZ-Cure™ Repair Mortar V/O Additive to the mixer. Mix for an additional 2 minutes. Use material immediately after mixing is completed. Do not mix more material than can be placed within 10 minutes at 70°F (21°C). **Mixing Less Than Full Units:** For detailed mixing and placement procedures, call the Five Star Products' Engineering and Technical Service Center at 1-800-243-2206.
- METHODS OF PLACEMENT:** Firmly work a thin amount of repair material as a bond coat into damp concrete surface. Immediately apply additional material with trowel taking care not to leave air pockets. Application is from one side of the repair to the other, filling the repair to the desired level. Where multiple lifts are required for deep repairs, rake or scratch surface of initial lift and allow to harden for approximately 45 minutes (70°F/21°C) before applying next lift. Contact the Five Star Products' Engineering and Technical Service Center at 1-800-243-2206 for additional details on multiple lift applications. Finish as necessary. Five Star® EZ-Cure™ Repair Mortar V/O requires **no wet cure or curing compounds**.  
**SPECIAL CONDITIONS:** For use in cold temperatures, Five Star® EZ-Cure™ Repair Mortar V/O must be maintained at a temperature of at least 45°F (7°C). Protect from freezing until a compressive strength of at least 1,000 psi (6.9 MPa) is obtained. Faster strength gain will occur when the Five Star® EZ-Cure™ Repair Mortar V/O and mixing water have been conditioned to a higher temperature prior to placement. In hot temperatures, Five Star® EZ-Cure™ Repair Mortar V/O should be kept as cool as possible, but not exceeding 90°F (32°C). Chilled water should be used for mixing to help maintain sufficient working time.
- POST-PLACEMENT PROCEDURES:** Five Star® EZ-Cure Repair Mortar shall be protected from rapid drying, rain or excessive wind until initial set.

**NOTE: PRIOR TO APPLICATION, READ ALL PRODUCT PACKAGING THOROUGHLY.** For more detailed placement procedures, refer to Five Star® Design-A-Spec™ installation guidelines or call the Five Star Products' Engineering and Technical Service Center at 1-800-243-2206.

## CONSIDERATIONS

- Never exceed the maximum recommended amount of mixing water stated on the package or an amount that will cause segregation.
- Temperature of surfaces must be between 45°F and 90°F (7°C and 32°C) at time of placement.
- Repair material shall be protected from freezing until it reaches 1,000 psi (6.9 MPa).

## CAUTION

Contains cementitious material and crystalline silica. International Agency for Research on Cancer has evaluated that there is sufficient evidence for the carcinogenicity of inhaled crystalline silica to humans. Take appropriate measures to avoid breathing dust. Avoid contact with eyes and contact with skin. In case of contact with eyes, immediately flush with plenty of water for at least 15 minutes. Immediately call a physician. Wash skin thoroughly after handling. 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 Five Star Products' Engineering and Technical Service Center at 1-800-243-2206.

SKU / PRODUCT CODE	DESCRIPTION	UNIT SIZE
29150	EZ-Cure™ Repair Mortar	50 lb. Bag
71785	EZ-Cure™ Repair Mortar V/O Additive	2½ lb. Packet

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**Five Star Products, Inc.**  
**Corporate Headquarters**  
750 Commerce Drive  
Fairfield, CT 06825 USA  
Tel: 203-336-7900 • Fax: 203-336-7930  
www.FiveStarProducts.com



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