

# PRODUCT DATA

## FIVE STAR RAPID SURFACE REPAIR EASY MIX FAST TURNAROUND SURFACE REPAIR FOR ROADS & BRIDGES

### DESCRIPTION

Five Star Rapid Surface Repair Easy Mix is a self-leveling, low viscosity, two-part liquid polyurethane-hybrid polymer. When supplemented with its proprietary blended aggregate, this product is used to repair and rehabilitate concrete and asphaltic concrete pavements. The enhanced polymer is high performance, rapid setting, and can be used to make an impact and traffic resistant polymer concrete that can be used at temperatures down to 0°F (-18°C). Within minutes of placement, durable, long-lasting repairs are able to handle vibration, heavy traffic, and thermal movement.

### ADVANTAGES

- No priming required to bond to concrete, asphalt, steel or wood
- Waterproof, chemically resistant membrane protects substrates from freeze-thaw spalling
- Use neat or with aggregate
- Stops further corrosion of reinforcing steel
- Traffic ready in as little as 30 minutes\*
- Very low odour
- Make repairs year round — can be used in temperatures down to 0°F (-18°C)

### USES

- Expansion joint and bridge header reconstruction
- Control joint filler
- Repair cracks, potholes, spalls
- Airport runways, walkways, floors, and parking lots
- Airport lighting cans and conduit channels

### PACKAGING AND YIELD

Five Star Rapid Surface Repair Easy Mix is packaged in a .64 gal. (2.42 L) kit containing .32 gal. (1.21 L) "A", .32 gal. (1.21 L) "B" and 50 lbs. (22.7 kg) of aggregate yielding approximately .41 ft<sup>3</sup> (.011 m<sup>3</sup>) per kit.

### SHELF LIFE

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

\*Traffic time dependent upon air and substrate temperature.

### TYPICAL PROPERTIES @ 77°F (25°C)

Mix Ratio by Volume	(1) Part A : (1) Part B
Viscosity @ 77°F (25°C) - mixed	60 cps
Gel Time, Neat	2 to 3 minutes
Working time with Aggregate	Approx. 5 minutes

#### Cured

- Colour Dark Grey
- Cure Time (reopen to traffic) 30 minutes
- Hardness, Durometer D, ASTM D-2240 70
- Tensile Strength, ASTM D-412 3,000 psi (20.7 MPa)

#### Compressive Strength, ASTM C-579B

- 1 Hour 2,000 psi (13.8 MPa)
- 1 Day 6,000 psi (41.3 MPa)
- 7 Days 7,000 psi (48.2 MPa)
- 28 Days 8,000 psi (55.1 MPa)

Elongation, ASTM D-638 10 - 15%

Bond Strength, ASTM C-882 2,000 psi (13.8 MPa)

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

### PLACEMENT GUIDELINES

#### Surface Preparation:

1. Prepare concrete surfaces to a minimum CSP-4 (Concrete Surface Profile per ICRI Technical Standard 03732). Ensure surfaces are clean, sound and rough prior to repair.
2. For overlays, cut keyway channel (groove) using concrete saw equipped with dry cut diamond blade around perimeter of area to be resurfaced. Keyway channel (groove) depth shall be a minimum of 1/2 inch (12.7 mm). Surfaces adjacent to a vertical plane (such as curbs, walls, tanks, etc.) shall have keyway channels cut approximately 4 – 6 inches (101.6 - 152.3 mm) back from vertical plane towards the interior of area to be resurfaced. Keyway channel shall be 1/2 inch (12.7 mm) deep by 1/2 inch (12.7 mm) wide.
3. For overlays, chip 2 inch (50.8 mm) wide taper back from interior edge of keyway channel at all termination edges (i.e., drains, doors, etc.). Using bush hammer or chipping gun equipped with a 1 – 2 inch (24.4 - 50.8 mm) wide spade

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blade, chip a 2 inch (50.8 mm) wide taper back from edge of interior keyway channel (groove) inward towards the area being resurfaced. Taper shall match depth of keyway channel at its deepest point, which is the edge of the keyway, and taper out to 0 inches at its most shallow point, 2 inches (50.8 mm) towards the interior of the area to be resurfaced.

4. For crack filling, route out as necessary to a maximum 1/2 inch wide by 1/2 inch deep, minimum.
5. Vacuum dust and dirt from all surfaces.
6. Surfaces must be completely dry and free of moisture prior to installation.

**Mixing Instructions:** Mix ratio is 1:1 by volume. Mix a small sample and test prior to actual placement. Larger mix volumes can generate significant exotherm. Mix Components A & B thoroughly with drill and paddle for 30 seconds then add aggregate. Continue mixing for 30 seconds until aggregate is completely wetted.

**NOTE: Prior to application, read all product packaging thoroughly.** For more detailed placement procedures, refer to Design-A-Spec™ installation guidelines or call Stonhard at 800-263-3112.

**Clean Up:** Clean tools immediately after use with xylene or MEK.

### CONSIDERATIONS

- Product should be stored at 50–80°F (10–27°C).
- Product may be installed between 0–100°F (-18–37°C). For temperatures above or below these limits please consult Stonhard at 800-263-3112.
- Keep material out of sun or hot areas prior to applying, as this may cause working time to be diminished and could cause poor appearance and/or adhesion.

### CAUTION

This product may cause skin and eye irritation. Do not inhale vapours. Provide adequate ventilation. Protect against contact with skin and eyes. Wear rubber gloves, long sleeve shirt, goggles with side shields. In case of contact with eyes, flush repeatedly with water and contact a physician. 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 sales representative, or call Stonhard at 800-263-3112.

SKU / PRODUCT CODE	DESCRIPTION	UNIT SIZE
30928	Five Star Rapid Surface Repair Easy Mix Kit	Resin (A): 0.32 gal (1.2 L) Hardener (B): 0.32 gal (1.2 L) Aggregate (C): 50 lb. (22.7 kg) bag

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