QUIKRETE HIGH PERFORMANCE Cement

FastSet™ Repair Mortar

Product No. 1241-56, -26

DIVISION **3**

03 01 00 Maintenance of Concrete

PRODUCT DESCRIPTION

FastSet™ Repair Mortar is a polymer-modified and shrinkage-compensated rapid setting, high strength repair material designed for vertical and overhead structural repairs to concrete and masonry surfaces.

PRODUCT USE

FastSet™ Repair Mortar demonstrates low sag, making it ideal for vertical or overhead repairs. FastSet™ Repair Mortar is also available with integral corrosion inhibitor in cases where maximum corrosion protection is desired. The addition of corrosion inhibitor has no adverse effect on the other physical properties of the product. This product can be built up to at least 1-1/2 in (38 mm) in one application. Its unique properties allow the user to actually sculpt the material during application. Use to repair concrete cracks, curbs, steps, pre-stressed panels, pipe, tunnels, sewers, loading docks, silos, retaining walls, culverts, catch basins, decorative moldings, bridge columns, parapet walls, septic tanks, cold storage vaults, virtually any vertical or overhead concrete surface.

SIZES

- FastSet™ Repair Mortar - 55 lb (24.9 kg) bags and 20 lb (9 Kg) pails.

YIELD

- Each 55 lb (24.9 kg) bag of FastSet™ Repair Mortar will yield approximately 0.50 cu ft (14 L) of material. FastSet™ Repair Mortar can be extended with up to 27.5 lb (12.4 kg) of high quality minus 1/2 in (minus 13 mm) clean maximum size aggregate per 55 lb (24.9 kg) bag for deep repairs.

TECHNICAL DATA

APPLICABLE STANDARDS

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm]
- Cube Specimens)
- ASTM C157 Standard Test Method for Length Change of Hardened Hydraulic-Cement, Mortar, and Concrete
- ASTM C191 Standard Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle
- ASTM C882 Standard Test Method for Bond Strength of Epoxy-Resin Systems Used with Concrete by Slant Shear
- ASTM C928 Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repairs

PHYSICAL/CHEMICAL PROPERTIES

Typical test results for FastSet™ Repair Mortar, when tested in accordance with applicable ASTM Test Methods, are shown in Table 1. Product exceeds the requirements of ASTM C928 Type R2 with reduced flow for vertical and overhead applications.

TABLE 1 TYPICAL PHYSICAL PROPERTIES

Setting time, ASTM C191	
Initial	Approx. 20 minutes
Final	20 to 40 minutes
Approximate water content per 55 lb (24.9 kg) bag	9 pints (4.3 L)
Consistency	Gel-like
Unit weight	128 lb/cu ft (2051 kg/m3)
Compressive strength, ASTM C109 modified	
3 hours	2000 psi (13.7 MPa)
24 hours	4000 psi (27.5 MPa)
7 days	5000 psi (34.4 MPa)
28 days	6000 psi (41.3 MPa)
Slant shear, ASTM C882 modified	
24 hours	1000 psi (6.9 MPa)
7 days	1500 psi (10.3 MPa)
28 days	2000 psi (13.7 MPa)
Length change, ASTM C157	
28 days, air	≥ -0.05%
28 days, water	≤ 0.05%

INSTALLATION

SURFACE PREPARATION

- Remove all spalled areas, as well as areas of unsound concrete and previous patching materials.
- Holes should be chipped out to create a new sound substrate.

- If rusty reinforcing steel is present, it must be abrasive blasted to remove rust. Wear appropriate personal protective equipment. In many cases, it will be best to remove enough material to completely expose the reinforcing steel.
- Large vertical or overhead patches deeper than 2 in (50 mm) should contain reinforcing steel. If none is present, new steel should be inserted using appropriate techniques.
- Holes should be dampened with clean water before patching. No puddles of water should be left in the hole.

MIXING

- **WEAR IMPERVIOUS GLOVES**, such as nitrile when handling product. Add approximately 9 pints (4.3 L) of water to the mixer for each 55 lb (24.9 kg) bag of FastSet™ Repair Mortar being mixed.
- Add the product and mix for approximately 3 minutes. Adjust water as needed to achieve a stiff gel-like consistency.
- Where large quantities of material are used for patches deeper than 2 in (50 mm), FastSet™ Repair Mortar may be extended up to 27.5 lb (12.4 kg) of high quality minus 1/2 in (minus 13 mm) clean maximum size aggregate per 55 lb (24.9 kg) bag. This will require a small addition of water depending on the dampness of the aggregate.

APPLICATION

FastSet™ Repair Mortar should be trowel applied to the damp surface. Apply a thin layer with heavy trowel pressure, and then go back and build up to the desired thickness. FastSet™ Repair Mortar obtains high bond strength without the use of bonding adhesives or acrylic additives. After initial set, the material may be trimmed and shaped to match the existing contours of the patch area.

CURING

During the first 24 hours, it is best to keep the patch covered or damp to prevent excessive loss of water. Under hot, dry and windy placement conditions, all concrete tends to lose moisture unevenly and may develop plastic shrinkage cracks. The use of QUIKRETE® Acrylic Concrete Cure & Seal (No. 8730), plastic sheeting, or an application of a very fine fog spray of water avoids shrinkage cracking.

PRECAUTIONS

- Do not apply when temperatures are below 40 ºF (4 ºC) or are expected to drop below 32 ºF (0 ºC) within 24 hours.
- In hot weather, use cool mixing water to lengthen setting time.
- Mix no more material than can be used in 15 minutes.
- Do not re-temper with additional water.

WARRANTY

NOTICE: Obtain the applicable **LIMITED WARRANTY** at www.quikrete.com/product-warranty or send a written request to The Quikrete Companies, LLC, Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured by or under the authority of The Quikrete Companies, LLC.