

QUICK-SETTING CEMENT

PRODUCT NO. 1240

DIVISION 3

Maintenance of Concrete
03 01 00

PRODUCT DESCRIPTION

QUIKRETE® Quick-Setting Cement is a Portland cement based formula that is specially formulated for making structural repairs to vertical and overhead surfaces.

PRODUCT USE

QUIKRETE® Quick-Setting Cement can be used anywhere that rapid setting is necessary, as it sets in approximately 10 minutes. Its unique properties allow the user to actually sculpt the material as it begins to harden. Quick-Setting Cement is used to repair:

- Concrete pipes, sewers and culverts
- Floors, steps and curbs
- Bridges and pavement
- Cold storage vaults and freezers
- Pre-stress panels
- Loading docks and tunnels
- Retaining walls
- Catch basins and septic tanks

SIZES

- QUIKRETE® Quick-Setting Cement –
 - 50 lb (22.7 kg) bags
 - 10 lb (4.5 kg) pails
 - 6 lb (2.7 kg) pails

YIELD

- Each 50 lb (22.7 kg) bag of QUIKRETE® Quick-Setting Cement will yield 0.45 cu ft (13 L) of material.

TECHNICAL DATA

APPLICABLE STANDARDS

ASTM International

- ASTM C109/C109M Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)
- ASTM C191 Standard Test Method for Time of Setting of Hydraulic Cement by Vicat Needle
- ASTM C666 Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing
- ASTM C672 Standard Test Method for Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals

PHYSICAL/CHEMICAL PROPERTIES

Typical results obtained with Quick-Setting Cement when tested in accordance with the applicable ASTM standards are shown in Table 1. Additionally, Quick-Setting Cement can be built up to a thickness of 1" - 2" (25.4 - 51 mm) without sag on overhead surfaces.



TABLE 1 TYPICAL PHYSICAL PROPERTIES

Setting time, ASTM C191	
Initial set	5 - 10 minutes
Final set	10 - 20 minutes
Compressive strength, ASTM C109	
24 hours	3000 psi (20.7 MPa)
7 days	5000 psi (34.5 MPa)
28 days	6000 psi (41.3 MPa)
Post-freeze/thaw Compressive strength	6430 psi (44.3 MPa)
Scaling resistance, ASTM C672	Excellent

INSTALLATION

SURFACE PREPARATION

The surface to be repaired should be free of all foreign matter and loose materials. The bond will be enhanced if all smooth surfaces are roughened or etched. The application of QUIKRETE® Concrete Bonding Adhesive (#9902) to the area to be patched will further enhance bonding if the application is greater than 1" (25.4 mm) in thickness. QUIKRETE® Acrylic Fortifier (#8610) should be used with QUIKRETE® Quick-Setting Cement to enhance bond on applications less than 1" (25.4 mm) in thickness. After initial set, the material may be trimmed and shaped to match the existing contours of the patch area.

MIXING

- Add 1 part water to 5 - 5 1/2 parts QUIKRETE® Quick-Setting Cement by volume. Reducing the water will hasten the set time.
- When using Acrylic Fortifier, replace 1/2 gal (1.9 L) of mixing water with Acrylic Fortifier per 50 lb (22.7 kg) bag. Add only enough water to get the proper consistency.

• Where large quantities of material may be used for deep patching, QUIKRETE® Quick-Setting Cement can be extended with up to 25 lb (11.4 kg) of 3/8" (9.5 mm) maximum size aggregate per 50 lb (22.7 kg) bag

CURING

Efficient damp curing is required for at least 48 hours.

PRECAUTIONS

- Mix no more than can be used in ~10 minutes
- During periods when temperatures are in the area of 40 degrees F (4 degrees C) or lower, precautions must be taken to prevent freezing. Warm water should be used and insulation applied to protect the QUIKRETE® Quick-Setting Cement after placing. Hot weather conditions require cool water for mixing and steps to prevent rapid drying.

WARRANTY

The QUIKRETE® Companies warrant this product to be of merchantable quality when used or applied in accordance with the instructions herein. The product is not warranted as suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of its product (as purchased) found to be defective, or at the shipping companies' option, to refund the purchase price. In the event of a claim under this warranty, notice must be given to The QUIKRETE® Companies in writing. This limited warranty is issued and accepted in lieu of all other express warranties and expressly excludes liability for consequential damages.

The QUIKRETE® Companies
One Securities Centre
3490 Piedmont Rd., NE, Suite 1300, Atlanta, GA 30305
(404) 634-9100 • Fax: (404) 842-1425