



# FORM & POUR CONCRETE MIX

Product No. 1120-80 & NR810065

## DIVISION 3

Maintenance of Concrete  
03 01 00  
Structural Concrete  
03 31 00

### PRODUCT DESCRIPTION

Form & Pour Concrete Mix is a high strength, high flow, shrinkage compensated, pumpable material. It consists of Portland cement, microsilica, fine and coarse aggregate, air-entraining admixture and other approved ingredients for densification, shrinkage compensation, and increased freeze-thaw durability. It includes a migrating corrosion inhibitor for maximum corrosion protection.

The product exceeds the compressive strength requirements of ASTM C387 and is tested according to ASTM C1202 for reduced permeability.

### PRODUCT USE

Form & Pour Concrete Mix is designed for the following uses:

- Large volume, full depth structural repairs to concrete bridges, parking structures, industrial floors, and balconies.
- Structural repairs where the quantities or placement conditions make ready-mixed concrete impractical.
- General or keyway grouting where a maximum aggregate size of 3/8 in (9.5 mm) is desirable.
- Leveling beds with a thickness of 2 in (50 mm) or more.

### SIZES

- QUIKRETE® Form & Pour Concrete Mix is packaged in both 80 lb (36.2 kg) bags and 3000 lb (1360 kg) bulk bags.

### YIELD

- An 80 lb (36.2 kg) bag yields approximately 0.55 ft<sup>3</sup> (15.6 L).
- A 3000 lb (1360 kg) bulk bag yields approximately 20.6 ft<sup>3</sup> (583 L).

### TECHNICAL DATA

#### APPLICABLE STANDARDS

ASTM International

- ASTM C39 Standard Test Method for Compressive Strength of Cylindrical Concrete 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 C1202 Standard Test Method for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration

### PHYSICAL/CHEMICAL PROPERTIES

Typical test results for QUIKRETE® Form & Pour Concrete Mix, when tested in accordance with applicable ASTM Test Methods, are shown in Table 1.

TABLE 1 - TYPICAL PHYSICAL PROPERTIES

Slump	7 in to 9 in (175 mm to 225 mm)
Setting Time, ASTM C191	
Initial	3 to 5 hours
Final	7 to 9 hours
Compressive strength, ASTM C39	
1 day	2000 PSI (13.7 MPa)
7 days	5000 PSI (34.4 MPa)
28 days	6500 PSI (44.8 MPa)
Rapid Chloride Permeability, ASTM C1202	
28 days	< 1000 coulombs
Length Change, ASTM C157	
28 days, air	-0.15%
28 days, water	+0.15%
Slant Shear Bond Strength, ASTM C882	
7 days	1200 PSI (8.3 MPa)

### PRECAUTIONS

- Minimum application thickness: 2 in (50 mm)
- QUIKRETE® Form & Pour Concrete Mix is formulated for low plastic shrinkage; however, it should be used with caution in large exposed areas.
- For large or deep pours, follow project and engineering specifications to ensure proper placement and to control heat generation within the pour.
- Use hot water when mixing in severely cold weather and cold water with ice in extremely hot weather.
- Protect concrete from freezing during the first 48 hours. Plastic sheeting and insulation blankets should be used if temperatures are expected to fall below 32 °F (0 °C).

## **INSTALLATION**

### **SURFACE PREPARATION**

- Prepare existing concrete surfaces for application by thoroughly cleaning, using appropriate techniques to remove loose or unsound concrete and foreign materials such as dirt, dust, paint, sealer, or bond breakers.
- If rusty reinforcing steel is present, it must be abrasively blasted to remove rust. **Wear personal protective equipment.** In many cases, it will be best to remove most material to completely expose the steel reinforcement.
- Dampen the substrate before product is placed. Do not leave standing puddles. Before placement, existing surfaces should be SSD (Saturated Surface Dry).

### **MIXING**

- **Wear impervious gloves**, such as nitrile, when handling the product.
- Mechanically mix with a barrel mixer, mortar mixer, drum mixer, or drill and paddle mixer.
- Add approximately 3 qt (2.8 L) of clean, potable water to the mixer for each 80 lb (36.2 kg) bag.
- Add the product to the water. Mix for 3 to 5 minutes or until thoroughly blended.
- If more water is needed to obtain the required slump of 7 in to 9 in (175 mm to 225 mm), add small amounts at a time and continue to mix. **Do not exceed the required slump.** Additional water will yield a higher slump and can impact the compressive strengths as well as other physical properties.
- For best results, place and consolidate within one hour of mixing. **Do not re-temper with additional mixing water.**

### **CURING**

Proper curing increases the strength and durability of concrete. Concrete must be moist cured by keeping the surface wet or by covering the concrete surface with plastic sheeting. Curing should be continued for a period of five days. To eliminate the need for moist curing, seal the surface with QUIKRETE® Acrylic Concrete Cure & Seal (No. 8730) using a sprayer, brush or roller after finishing and when the concrete surface has hardened but is still damp (not wet).

### **WARRANTY**

The QUIKRETE® Companies, LLC warrant this product to be of merchantable quality when used or applied in accordance with the instructions herein. This 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) if 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, LLC in writing at One Securities Centre, 3490 Piedmont Road, Suite 1300, Atlanta, GA 30305. **THIS WARRANTY IS ISSUED AND ACCEPTED IN LIEU OF ALL OTHER EXPRESS WARRANTIES AND EXPRESSLY EXCLUDES LIABILITY FOR CONSEQUENTIAL DAMAGES.**