

QUIKRETE®

1. Product Name

QUIKRETE® Fast-Setting Concrete #1004-50

2. Manufacturer

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3. Product Description

BASIC USE

QUIKRETE Fast-Setting Concrete is used for setting posts, sleeves and anchors, for pouring slabs 2" (51 mm) or thicker, and for other applications where a fast-setting general purpose concrete is desirable.

COMPOSITION & MATERIALS

QUIKRETE Fast-Setting Concrete consists of a uniformly blended mixture of stone or gravel, sand and special cements.

SIZE

- 50 lb (22.7 kg) bags

YIELD

- For posts - Two 50 lb (22.7 kg) bags will set a 4" (102 mm) diameter post in a 10" (254 mm) diameter hole 2' (0.6 m) deep
- For slabs - Approximately 0.375 cu ft (11 L) per 50 lb (22.7 kg) bag

4. Technical Data

APPLICABLE STANDARDS

ASTM International

- ASTM C39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
- ASTM C191 Standard Test Method for Time of Setting of Hydraulic Cement by Vicat Needle
- ASTM C387 Standard Specification for Packaged, Dry, Combined Materials for Mortar and Concrete

PHYSICAL/CHEMICAL PROPERTIES

Fast-Setting Concrete meets or exceeds the compressive strength requirements of ASTM C387. When mixed to a 2" - 3" (51 - 75 mm) slump, QUIKRETE Fast-Setting Concrete will achieve the typical physical properties shown in Table 1.

5. Installation

FOR SETTING POSTS

1. Place post into hole and temporarily stand straight. The hole diameter should be 3 times the post diameter. The depth of the post hole should be one-half of the above ground post height.
2. Pour dry mix into the hole until it is approximately 3" - 4" (76 - 102 mm) from the top.
3. Pour water into the dry mix until the powder is saturated with water. Depending on soil conditions, this will require about 1 gallon (3.8 L) of water per 50 lb (22.7 kg) bag. For holes deeper than 2' 6" (0.8 m), place the material in lifts of 2' 6" (0.8 m) or less to allow water to soak all the way through.
4. Fill the remainder of the hole with soil dug from the hole. Sets in 20 - 40 minutes. Wait 4 hours before placing heavy objects.

FOR POURING SLABS

Mix only as much material as can be placed in 20 minutes.

MACHINE MIXING INSTRUCTIONS

QUIKRETE Fast-Setting Concrete can be mixed in a barrel-type concrete mixer or a mortar mixer.

- Allow at least 3/4 cu ft (20 L) of mixer capacity for each 50 lb (22.7 kg) bag to be mixed at one time
- Add approximately 4 pt (1.9 L) of fresh water to the mixer for each bag to be mixed
- Turn on the mixer and begin adding concrete. If the material becomes too difficult to mix, add small amounts of water at a time



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and continue to work the mix until a workable consistency is obtained. Do not add more than 5 pt (2.4 L) of water per 50 lb bag

HAND MIXING INSTRUCTIONS

- Empty bags into a suitable mixing container
- Add approximately 4 pt (1.9 L) of clean water for each 50 lb (22.7 kg) bag
- Work the mix with a shovel, rake or hoe; add water as needed until a plastic-like consistency is achieved
- Do not add more than 5 pt (2.4 L) of water per 50 lb (22.7 kg) bag
- Be sure all material is uniformly mixed
- Do not leave standing puddles

TEMPERATURE OF WATER

Because of the rapid setting time, special precautions must be taken, as set times will fluctuate in extremely hot or cold weather. Use cold water or water mixed with ice cubes in severely hot weather. Use hot water when mixing in severely cold weather.

APPLICATION

- Shovel or place concrete into form. Fill to the full depth of the form. Start in a corner and do not drag or flow the concrete unnecessarily
- After the concrete has been spread to completely fill the forms, strike off and float immediately
- To strike off, simply use a straight board, moving the edge back and forth with a saw-like motion to smooth the surface. Then use a darby or bull float to float the surface. This helps level any ridges and fills voids left by the straight edge
- Allow the concrete to stiffen slightly, waiting until all water has evaporated from the surface before troweling or applying a broom finish

TABLE 1 PHYSICAL PROPERTIES

Property & test	Results
Setting time, ASTM C191	20 - 40 min.
Compressive strength, ASTM C39	
2 hrs	400 psi (2.8 MPa)
24 hrs	1000 psi (6.9 MPa)
7 days	2500 psi (17.2 MPa)
28 days	4000 psi (27.6 MPa)



Note - For best results, do not overwork the material. QUIKRETE Fast-Setting Concrete is walkable in 2 hours. Wait at least 4 hours before placing heavy objects on the slab.

CURING

General

Curing is one of the most important steps in concrete construction. Proper curing increases the strength and durability of concrete. Proper water content and temperature are essential for good curing. In near freezing temperatures, the hydration process slows considerably. When weather is too hot, dry or windy, water is lost by evaporation from the concrete and hydration stops, resulting in finishing difficulties and cracks. The ideal circumstances for curing are ample moisture and moderate temperature and wind conditions.

Specific Methods

Because QUIKRETE Fast-Setting Concrete is often used a few hours after placement, initial curing is very important. The most convenient curing method is to cover the concrete with plastic.

6. Availability

QUIKRETE Fast-Setting Concrete is available at leading concrete construction supply houses and distributors. Contact QUIKRETE Construction Products for the name of the nearest dealer.

7. 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.

8. Maintenance

None required.

9. Technical Services

The QUIKRETE Companies maintain technical field representatives throughout the country. Contact a local distributor for the name and

number of the nearest representative or call QUIKRETE Construction Products.

10. Filing Systems

Additional product information is available from the manufacturer.