



# Crack Resistant Concrete Mix (#1006-80)

**Uses:** QUIKRETE® Crack Resistant Concrete Mix has a unique formulation, offering benefits such as:

- Significantly reduced cracking from drying shrinkage
- Superior workability
- Air entrainment for improved freeze-thaw durability
- Greater impact resistance
- Eliminates the need for wire mesh in typical slab-on-grade applications, such as driveways, floors, patios, and sidewalks

**Composition and materials:** QUIKRETE® Crack Resistant Concrete Mix is a 4000 psi (27.6 MPa) construction-grade concrete, consisting of a uniformly blended and properly proportioned mixture of aggregates, Portland cement, air-entraining admixtures, special synthetic reinforcing fibers, and other concrete approved ingredients.

**Size:** Available in 80 lb. (36.3 kg) bags

**Yield:** Each 80 lb. (36.3 kg) bag of QUIKRETE® Crack Resistant Concrete Mix will yield approximately 0.6 ft<sup>3</sup> (17L) of mixed concrete.

**Technical Data:** QUIKRETE® Crack Resistant Concrete Mix exceeds the compressive strength requirements of ASTM C-387, “*Standard Specifications for Packaged, Dry, Combined Materials for Mortar and Concrete.*” A properly handled mix will exceed 2500 psi (17.3 MPa) in 7 days and 4000 psi (27.6 MPa) in 28 days.

**Mixing:** QUIKRETE® Crack Resistant Concrete Mix can be hand-mixed in a suitable mixing container, or machine mixed in a barrel-type concrete mixer or a mortar mixer. Choose the mixer size most appropriate for the size of the job to be done. Allow at least 3/4 cu ft (21 L) of mixer capacity for each 80 lb. (36.3 kg) bag to be mixed at one time. Add approximately 3 quarts (2.8 L) of clean water for each bag to the mixer. Turn on the mixer and begin adding the concrete to the mixer. If a slump cone is available, adjust water content to produce a slump of 2-3 inches (51-76 mm). Do not exceed a total volume of 1-gallon (3.8 L) of water per bag. If the material becomes too difficult to mix, sparingly add water until a workable mix is obtained. For a decorative

touch, add QUIKRETE® Liquid Cement Color directly to the mixing water following the directions on the bottle. QUIKRETE® Liquid Cement Color is available in five colors: red, brown, buff, charcoal and terra cotta.

**Installation:** Sidewalks and patios should be at least 4" thick. For straight sides, construct the forms out of 2x4's. For curves use 1/4" plywood and stakes. Dampen the sub-grade before concrete is placed. Do not leave standing puddles. Mix the concrete and shovel into the form. After concrete has been compacted and spread to completely fill the forms without air pockets, strike off and float immediately. To strike off, use a straight board (screed), moving the edge back and forth with a saw-like motion to smooth the surface. Use a darby or bull float to float the surface; this levels any ridges and fills voids left by the straight edge. Cut the concrete away from the forms by running an edging tool or trowel along the forms to compact the slab edges. Cut 1" (25.4 mm) deep control joints into the slab every 6' - 8' (1.8 - 2.4 m) using a grooving tool. Allow concrete to stiffen slightly, waiting until all water has evaporated from the surface before troweling or applying a broom finish. Note - For best results, do not overwork the material.

**Finishing:** Any standard concrete finishing technique is acceptable for use with QUIKRETE® Crack Resistant Concrete Mix. Concrete can be hand troweled, power troweled, broom finished or finished with other specialty finishes.

**Curing:** Proper curing increases the strength and durability of concrete. QUIKRETE® Acrylic Concrete Cure & Seal (#8800) provides the easiest and most convenient method of curing. Apply by spray, brush or roller soon after the final finishing operation when the surface is hard. The surface may be damp, but not wet, when applying curing compound. Complete coverage is essential. Alternately, freshly placed concrete can be moist-cured by covering the surface with plastic sheeting or by keeping the surface wet with a lawn sprinkler. Curing should be started as soon as possible and should continue for a period of 5 days in warm weather at 70°F (21°C) or higher or 7 days in colder weather at 50-70°F (10-21°C). Water curing with

lawn sprinklers, nozzles or soaking hoses must be continuous to prevent interruption of the curing process. If plastic sheets are used they must be laid flat, thoroughly sealed at joints and anchored carefully along edges.

**Precautions:**

- Curing compounds should not be applied if rain or temperatures below 50°F (10 °C) are expected within 24 hours. Curing with plastic or burlap can cause patchy discoloration in colored concrete. For colored concrete, wet curing or the use of QUIKRETE Acrylic Concrete Cure & Seal is recommended
- Do not use curing compounds during late fall on surfaces where deicers will be used to melt ice and snow. Using curing compounds at that time may prevent proper air drying of the concrete, which is necessary to enhance its resistance to damage caused by deicers.
- 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).