

# **Crack Resistant Concrete Mix**

Fiber reinforced concrete mix for repairs over 2" depth

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# PRODUCT DESCRIPTION

Formulated to reduce the risk of shrinkage cracks, SAKRETE<sup>®</sup> Crack Resistant Concrete Mix is a professional strength blend of cementitious materials, sand, gravel, and fibers. For repair and building jobs where concrete thickness exceeds 2 in. (5 cm). Ideal for building walks, drives, patios, and steps, as well as pouring footings and setting posts and poles. Pre-blended, just add water and mix. Eliminates the need for wire mesh in many non-critical applications.

# WHEN/WHERE TO USE

- Foundation walls and footings
- · Driveway repairs
- · Pipe and post footings
- Floor slabs and patios
- Forming splash-blocks and bird baths
- Appliance and equipment platforms
- Pools, ponds, and stepping stones
- Sidewalks, curbs, steps, and ramps

# **ADVANTAGES**

- Pre-blended mix
- Easy to use
- Eliminates need for wire mesh in many non-critical applications

## PACKAGING

Safety (

50 lb. (22.7 kg) pail (BOM 120018)

## **TYPICAL YIELD**

One 50 lb. (22.7 kg) pail will yield approximately 0.38 cu. ft. (0.01 m<sup>3</sup>)

To determine coverage: Multiply Length x Width x Thickness all in feet (meters) = cubic feet (cubic meters): divide by 0.375 cubic feet (0.016 cubic meters) per bag = Number of 50 lb. (22.7 kg) bags needed for given job.

NOTE: Convert all measurements in inches (mm) to feet (meters). 4 inches (100 mm) = 0.33 feet (0.1 m).

# **TECHNICAL DATA**

When used as directed and in accordance with ASTM C 387 Specification 50 lb. SAKRETE Crack Resistant Concrete Mix exceeds 4,000 psi after 28 days.

ASTM C387 COMPRESSIVE STRENGTH					
7 Days	2,500 psi (17 MPa)				
28 Days	4,000 psi (28 MPa)				

# **SURFACE PREPARATION**

When repairing concrete, remove all loose and foreign material. Dampen adjoining concrete surfaces. Use only when the product, air, and surface temperature are above  $40^{\circ}F$  (4°C) and remain above  $40^{\circ}F$  (4°C) for a minimum of 24 hours. For best results all materials should be stored between  $40^{\circ}$ -80°F (4°-27°C) 24 hours prior to installation.

# MIXING

Empty the contents into a mortar box, wheelbarrow, or mechanical mixer. When mixing by hand, form a crater for adding water. Add approximately 1<sup>3</sup>/<sub>4</sub>-2 qt. (1.6-1.9 L) of clean water per 50 lb. (22.7 kg) pail or enough to achieve a workable mix. If too stiff, add more water a little at a time. AVOID A SOUPY MIX. Excess water reduces strength and durability and can cause cracking. In cold weather use warm water to accelerate the set. In hot weather conditions, cold water will help to slow the set time.

## APPLICATION

Read all directions before starting work.

**Flatwork (Slabs, sidewalks, walkways, etc.)**: Stake out the area where the concrete will be placed. Cut and remove all soil, grass, sod, etc. For improved drainage place several inches of gravel into the excavated area. Remember to allow enough depth for both the gravel and a minimum of 4 in.(10 cm) of concrete. Pre-treat forms to be used with a release agent to prevent water absorption and for the ease of removing them once the concrete mix has set up. Place forms in the desired area assuring that they are level, square, and all corners sealed so no premixed material can escape once placed. Dampen the sub-grade before placing concrete, do not leave standing water. Place and consolidate the Crack Resistant Concrete Mix to full depth. Work the material into voids, then level the surface with a straight edge board or screed, rodding back and forth to level with the top of the forms and allow the bleed water to evaporate. Use a trowel or edging tool to compact the slab edges for easier removal of the forms. Use a grooving tool to cut 1 in.(25.4 m) deep control joints every 6-8 ft. (1.8-2.4 m) into the slab Expansion joints should be placed every 8 ft. x 12 ft. (2.4 m x 3.6 m) in each direction and must be completely through the slab with enough allowance for movement. Allow freshly placed concrete to set about 1 hour or until the surface water has begun to disappear before finishing, time will vary with conditions. Use a float to weather remove surface imperfections and trowel to a smooth finish. For a rougher surface. use a broom. Refer to ACI 302. Finishing cementitious materials too early, or overworking the materials can cause dusting, cracking, scaling, and a weak surface.

**Posts and Poles:** Dig hole to required depth and diameter (depth should be  $\frac{1}{3}$  the length of the post or pole and hole should be 3 times the diameter of the pole or post width). Place 4-6 in. (10-15 cm) of gravel as a base and compact. Place the post or pole in the center of the hole and onto the gravel base. Level and support post or pole in place. Fill hole with  $\frac{1}{3}$  full of water, then add Crack

#### WARNING: INJURIOUS TO EYES

**KEEP OUT OF REACH OF CHILDREN** 

ipful items:	How Much Concrete Do You Need? Estimate the number of whole 50 lb. (22.7 kg) bags of SAKRETE Crack Resistant Concrete Mix to place a slab.							
-	Area in Sq. Ft. (sq. m)	3 (.03)	6 (.06)	9 (0.8)	15 (1.4)	24 (2.2)	45 (4.2)	
> (*) 📀 😥 🔁	Slab 4" thick (100 mm)	3	6	7	13	20	35	Bags
y Glasses Gloves Mortar Tub Concrete Mixer Trowel	Slab 6" thick (150 mm)	4	7	10	18	28	52	Bags

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Resistant Concrete Mix directly from bag. If surface is dry add more water. Excess surface water is not a problem. Re-check the level of the post. Slope top of mix to allow water to drain away. If load bearing consult with your local building code requirements before proceeding.

Repairs: Surfaces to be repaired must be sound, dimensionally stable, and clean. Slick or sealed surfaces must be thoroughly roughened to an ICRI CSP of 3 to 5. Sides of repair area must be squared off. Clean all reinforcing steel to bare white metal and coat with a rust preventative if not covering within 8 hours. All surfaces that will come in contact with the concrete mix should be brought to a SSD (Surface Saturated Dry condition) before application of the material. Clean and remove all loose materials and debris before proceeding. Place the mixed concrete mix into the area that is being repaired. Use a float to remove any surface imperfections

## **CURING** (required only for Flatwork)

Curing means maintaining proper moisture and temperature, account for local environmental conditions when selecting the curing method. High heat, low humidity or wind will increase the evaporation of water. Keep the surface damp using a sprinkler, wet burlap, SAKRETE Cure 'N Seal, or cover with plastic for several days as needed. In cold weather protect from freezing for a minimum of 48 hours. Refer to ACI 308.

## **CLEAN UP**

Use warm, soapy water for cleaning hands and tools while product is wet. SAKRETE Concrete Mortar Dissolver can be used if dried or hardened on tools and equipment.

## **NOTES AND LIMITATIONS**

- Rubber gloves and goggles are recommended safety equipment
- Store in tightly closed container off the floor in a dry place

Proper application and installation of all SAKRETE products are the responsibility of the end user.

#### WARNING

WARNING! CAUSES IRRITATION -Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Exposure may result in irritation of the skin, eyes or nasal passages from alkali in Portland cement. When wet, contact with the skin or eyes may result in irritation or burns. FIRST AID: In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get prompt medical attention; for skin, wash thoroughly with plenty of soap and water. If irritation persists, get medical attention. WARNING! HAMFUL IF INHALED - Avoid breathing dust. Keep container closed. Use with adequate ventilation. Excessive exposure by inhalation over an extended period of time may result in the development of pulmonary diseases including pneumoconiosis and silicosis. Crystalline Silica has been classified by IARC and NTP as a carcinogen. WARNING: Wear protective clothing and equipment. KEEP OUT OF REACH OF CHILDREN. READ and UNDERSTAND the Safety Data Sheet (SDS) before using this product.

#### LIMITED PRODUCT WARRANTY

The manufacturer warrants that this product shall be of merchantable quality when used or applied in accordance with the manufacturer's instructions. This product is not warranted as suitable for any purpose other than the general purpose for which it is intended. This warranty runs for one (1) year from the dates the product is purchased. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE DURATION OF THIS WARRANTY. Liability under this warranty is limited to replacement of defective products or, at the manufacturer's option, refund of the purchase price. CONSEQUENTIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY.

#### **ENVIRONMENTAL ADVISORY**

Uncured or crushed cured cement is an environmental hazard, which may adversely affect fish and wildlife. Dispose of construction debris containing cement, including empty bags, at a permitted municipal disposal firm. Do not use crushed concrete as a fill near an aquatic habitat.

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Shelf Life	One year in original, unopened container.
Storage Conditions	Store dry in tightly sealed container.
Color	Gray.