



5000 Plus Concrete Mix

For repair and building where concrete thickness exceeds 2"

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PRODUCT DESCRIPTION

SAKRETE® 5000 Plus Concrete Mix is a high-strength professional grade blend of Portland cement, sand, and gravel that is formulated to reach strength quicker and for superior durability. For repair and building jobs where concrete thickness exceeds 2 in. (5 cm).

WHEN/WHERE TO USE

- Driveways, slabs, patios, walkways
- Curbs, stairs, and ramps
- Setting fence posts
- Foundation walls and footings
- Countertops

ADVANTAGES

- High strength (5,000 psi)
- Full depth for applications 2 in. (5 cm) or greater
- Ideal for structural applications requiring a small volume of concrete
- Rapid setting ready for foot traffic in 12 hours
- Faster set than normal concrete in cold weather
- Pre-blended mixture

PACKAGING

50 lb. (22.7 kg) pail (BOM 120020)

TYPICAL YIELD

50 lb. (22.7 kg) pail will yield approximately 0.375 cu. ft.

One cubic yard will need approximately 68 pails.

TECHNICAL DATA

SAKRETE 5000 Plus Concrete Mix meets or exceeds the compressive strength requirements of ASTM C 387.

SURFACE PREPARATION

For best results all materials should be stored between 40°-80°F (4°-27°C) 24 hours prior to installation.

Lab Test Results		5000+ HSCM
Compressive Strength (ASTM C 39)		
3 days		2,500 (17 MPa)
7 days		3,500 (28 MPa)
28 days		5,000 (34 MPa)
Water Demand (lb./bag) 4.4 (2 kg)		
Slump Range (inches) 2-3" (50-75mm)		

Refer to:

- ACI 302.1 Guide for Concrete Flooring and Slab Construction
- ACI 305R Guide to Hot Weather Concreting
- ACI 306R Guide to Cold Weather Concreting

MIXING

Empty contents of SAKRETE 5000 Plus Concrete into a wheelbarrow or mortar pan forming a crater in the center of the dry mix for the addition of clean potable water. Projects requiring multiple bags are mixed much easier with a mechanical concrete mixer. Add clean potable water, approximately 2-2½ qt. (1.9-2.4 L) or enough to achieve a workable mix. Add additional water if needed a little at a time, but AVOID A SOUPY MIX. Do not add any other materials other than clean potable water or SAKRETE Bonder & Fortifier. (See Bonder and Fortifier Technical Data Sheet for mixing instructions. Excess water reduces strength and durability and can cause cracking, dusting or scaling.

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. Place forms in the desired area assuring that they are level, square, and all corners sealed so no premixed material can escape once placed. Place the concrete into the forms to full depth. Consolidate by moving into corners and low areas to assure there are no voids. Using a straight edge strike the surface by rodding back and forth to level with the top of the forms, allow the bleed water to evaporate. Float surface to remove any imperfections. Cut 1 in. (2.5 cm) deep control joints using a grooving tool every 6-8 ft. (1.8-2.4 m). Expansion joints should be placed every 8x12 ft.. (2.4x3.6 m) in each direction and must be completely through the slab with enough allowance for movement. Use a trowel or edging tool to compact the slab edges for easier removal of the forms. Once concrete has stiffened slightly and the water has evaporated from the surface a broom finish can be applied. Forms can be removed the day following placement. Finishing cementitious materials too early, or over-working the materials can cause dusting, cracking, scaling, and a weak surface.

WARNING: INJURIOUS TO EYES

KEEP OUT OF REACH OF CHILDREN

Helpful Items:



How Much Concrete Do You Need?
Estimate the number of whole 50 lb. (22.7 kg) bags of SAKRETE 5000 Plus 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	5	8	13	20	38	Bags
Slab 6" thick (150 mm)	4	8	15	24	39	56	Bags



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Posts and Poles: Dig hole to required depth and diameter (depth should be 1/5 the length of the post or pole and hole should be 3 times the diameter of the pole or post width). Place the post or pole in the center of the hole. Level and support post or pole in place. Fill hole with mixed concrete and consolidate to remove any air voids. Slope concrete at the surface to allow water to drain away. Wait a minimum of 24 hours before posts or poles are subjected to any strain. If load bearing consult with your local building code requirements before proceeding.

Countertops: The higher strength provided by 5000 Plus Concrete Mix allows it to be used in making concrete countertops as thin as 1.5 in. (3.8 cm). For complete details on the manufacture and installation of concrete countertops visit chengdesign.com.

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 into the area that is being repaired. Use a float to remove any surface imperfections

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.

CURING (required only for Flatwork)

Proper curing is critical for sound results. Curing means maintaining proper moisture and temperature. The concrete must be kept continuously moist for several days. Covering the concrete slab with plastic is a practical way to help retain moisture. Place plastic after concrete has set. If surface begins to appear dry remove the plastic moisten the

surface and replace the plastic. New concrete can be opened to foot traffic in 24 hours and vehicular traffic in 48 hours.

NOTES AND LIMITATIONS

Air, mix and substrate temperatures should be between 40°-90°F (4°-32°C) with no rain in the forecast within 24 hours of application.

- Colder temperatures or higher humidity conditions will retard set times.
- Use only clean mixing container and tools.
- Do not over trowel.
- Do not over water.
- Do not add any materials other than clean potable water or SAKRETE Bonder and Fortifier.
- Protect from freezing for 48 hours

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! HARMFUL 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 Condition material to 40-80°F (4°C -27° C) 24 hours prior to installation
Color	Gray