

SAKRETE Concrete Mix

SAKRETE Concrete Mix is a pre-blended concrete material. It is designed for new concrete construction projects, concrete overlays and repairs where a thickness 5 cm (2") or more is required. Open to foot traffic in approximately 24 hours. Meets or exceeds ASTM C 387 strength requirements.

FEATURES & BENEFITS

- general purpose applications
- ready to use - just add water

USES

For new concrete construction projects, concrete overlays and concrete repairs. Use to construct footings, sidewalks, slabs, steps and patios, setting deck posts, fence posts, poles, etc.

PROCEDURES

Mix and substrate temperatures should be maintained between 5 and 30°C (40 and 86°F) for at least 24 hours prior to and 48 hours after. For temperatures below 5°C (40°F) refer to SAKRETE Fast Set.

Mixing: Empty contents of bag into mortar box, wheelbarrow or mechanical mixer. When mixing by hand form a crater for adding water. Add approximately 2.7 L (2 3/4 quarts) of clean water per 30 kg (66 lb) bag or enough to achieve a workable mix. Avoid a soupy mix. Excess water reduces strength and durability and can cause cracking. In cold weather use warm water to accelerate the set. Use cold water to slow the set in hot weather.

PROJECTS

CONCRETE REPAIRS - concrete overlays, concrete repairs etc.

Surface Preparation: Surfaces to be repaired must be sound and clean. Remove all delaminated or unsound concrete by chipping with a hammer and chisel or using a stiff wire brush. Clean the area to be repaired with potable water, leaving the concrete saturated but free of standing water. Some very porous concretes may require several applications of water to ensure complete saturation. For best results, apply SAKRETE Concrete Adhesive to the existing substrate before pouring.

Placing: After mixing the concrete, place and consolidate inside the repair area. Level concrete moving a straight edged board in a sawing motion across concrete removing any excess and filling low areas. Allow freshly placed concrete to set or until the surface bleed water evaporates before finishing. Time will vary with weather conditions.

Finishing: After bleed water evaporates, finish as desired. It is recommended especially for air-entrained concrete i.e. SAKRETE PSI 6000 to use a wood, magnesium or aluminum float trowel for a smooth surface. For a textured surface use a broom or brush. If the repair overlay is placed over an existing concrete joint or break, it is important to tool a joint into the soft mix over the existing joint or break. Use a jointer tool to form a joint half the depth of the repair. NOTE: Finishing cementitious materials too early, or over-working the materials can cause dusting, cracking, scaling and a weak surface.

Curing: See below.

SETTING POSTS - setting deck posts, fence posts, poles etc.

Surface Preparation: Dig hole with auger or shovel to required depth (hole should extend below the frost line). Allow 5 cm (2") clearance on each side of post. A typical 10 cm x 10 cm (4" x 4") post will require a 20 cm (8") diameter.

Placing: Position the post in hole and pour in mixed concrete. Align post using a level and check the vertical position. Cross brace post for support while mix is wet. Allow to set for 24 hours then remove bracing and top with soil.

Curing: See below.

NEW CONSTRUCTION - making concrete slabs, walks, etc.

1. Planning: Position layout stakes aligned with the project borders. Place corner stakes 30 cm (12") outside the finished slab area. Join stakes together with string, the corners should overlap. String lines will show the planned layout and provide the height form boards are to be set at.

2. Excavating: The total depth of the excavation approx. 13 to 15 cm (5" to 6") should be determined by allowing for 5 cm (2") minimum of compacted crushed stone under 8 to 10 cm (3" to 4") of concrete. Excavate 15 cm (6") beyond string lines to allow room for forms. Spread crushed stone evenly throughout the excavation and compact well using a portable vibrator, roller or hand tamper.

3. Forming: Using straight 5 cm x 10 cm (2" x 4") lumber, cut forms to length, then position so inside edges are below the string line. Drive pointed 5 cm x 10 cm (2" x 4") stakes into ground at 1 m (3 ft.) spacing to support forms. Screw together all forms, braces and corners from outside the work area. Note: Adjust forms before securing to direct rainwater runoff (slope approximately 3 mm (1/8" per ft).

4. Curves: Create curves attaching 3 mm (1/8") hardboard to inside corners of forms. Drive support stakes behind the curved form. Place expansion joint board against adjoining surfaces to allow independent movement. Treat the insides of the forms with a commercial release agent or vegetable oil prior to pouring.

5. Concrete Placement: After mixing the concrete, place and consolidate inside the forms, slightly overfilling and roughly leveled. Work a pointed trowel along inside edges of the forms removing trapped air pockets. Tap the forms with a hammer for smoother sides. NOTE: Mixing, placing and finishing should be timed to make sure concrete does not harden before finishing.

6. Leveling: Level concrete, moving a straight edged board overlapping the forms in a sawing motion across concrete removing any excess and filling low areas. Then float the concrete smooth using a wood, magnesium or aluminum float trowel. Stop floating when bleed water accumulates on surface.

7. Finishing: After bleed water evaporates, finish as desired. It is recommended especially for air-entrained concrete i.e. PSI 6000 to use a wood, magnesium or aluminum float trowel for a smooth surface. For a textured surface use a broom or brush. Use an edger tool to finish edges. NOTE: Finishing cementitious materials too early, or over-working the materials can cause dusting, cracking, scaling and a weak surface.

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8. Joints: Stress control joints are placed to control where slabs crack, along a pre-determined path. Use either a hand jointer while the mix is soft or saw cut 6-18 hours after hardening. The joint should be 1/5 of the full thickness of the slab and every 2.4 m (8 ft.) in both directions. Adjust down for appearances (centering).

9. Curing: See below.

CURING: Curing means maintaining proper moisture and temperature. Allow newly placed material to set until surface is hard to the touch. SAKRETE Concrete Mix will set in approximately 6 hours. Keep material damp or cover with plastic to prevent evaporation of mix water for at least three (3) days. Protect from freezing for at least 24 hours. New concrete can be opened to foot traffic in 24 hours.

TECHNICAL DATA

Compressive Strength 3 days 17 MPa (2500 psi)
 7 days 19 MPa (2755 psi)
 28 days 27.5 MPa (4000 psi)

Meets or exceeds strength requirements of ASTM C 387 when used as directed.

PAINTING

Concrete must be fully cured (approximately 28 days) and dry before painting. Refer to paint manufacturer directions for application instructions.

YIELD

30 kg (66 lb) yields approximately 0.014 m³ (1/2 ft³)

FAST and EASY CALCULATIONS (bags required approximately)

POSTS: # of bags required.

Post Size 10 cm X 10 cm (4" x 4")	
Hole Diameter 20 cm (8")	
Hole Depth	# of Bags
45 cm (18")	1
60 cm (24")	1 ¼
90 cm (36")	1 ¾
120 cm (48")	2

BUILDER'S TUBES: # of bags required each 122 cm (48") length.

Hole Diameter	# of Bags
15 cm (6")	1.5
20 cm (8")	3
25 cm (10")	4.5
30 cm (12")	6.5

SLAB ESTIMATOR: # of bags required for a slab 10 cm (4") thick.

LENGTH	WIDTH			
	30 cm (12")	70 cm (24")	90 cm (36")	120cm (48")
30 cm (12")	0.7	1.3	2.0	2.7
70 cm (24")	1.3	2.7	4.0	5.3
90 cm (36")	2.0	4.0	6.0	8.0
120 cm (48")	2.7	5.3	8.0	10.7
150 cm (60")	3.3	6.7	10.0	13.3

Slab Calculator: Length (m) ___ x Width (m) ___ x Depth (cm) = ___ ÷ 100 = cubic meters ÷ 0.014 = ___ # of 30kg bags required.

Slab Calculator: Length (ft) ___ x Width (ft) ___ x Depth (in) = ___ ÷ 12 = cubic feet ___ x 2 = # of 30kg bags required ___.

PACKAGING

30 kg bag (66 lb)

UPC

055226110668

STORAGE & SHELF LIFE

Material should be stored in a dry covered area protected from the elements. Unopened bags have a shelf life of 12 months.

SAFETY PROCEDURES

CAUSES BURNS. Do not swallow. Do not get in eyes. Do not get on skin or clothing. Do not breathe fumes. Handle with care. Keep out of reach of children. Wear safety glasses, protective clothing and dust mask. Use only in a well-ventilated area.

FIRST AID TREATMENT: Contains cement, when wet forms a calcium hydroxide solution. If swallowed call a poison control center or doctor immediately. Do not induce vomiting. If in eyes, rinse with water for at least 15 minutes. If on skin, rinse well with water. If on clothes remove clothes. If breathed in, move person to fresh air.

WEBSITE

For more information and other projects, visit us at www.king-products.com or call us at 866-725-7383.

Warranty: This product is designed to meet the performance specifications outlined in this product data sheet. If the product is used in conditions for which it was not intended, or applied in a manner contrary to the written recommendations contained in the product data sheet, the product may not reach such performance specifications. The foregoing is in lieu of any other warranties, representations or conditions, expressed or implied, including, but not limited to, implied warranties or conditions of merchantable quality or fitness for particular purposes, and those arising by statute or otherwise in law or from a course of dealing or usage of trade. 1112013

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