



SAKRETE PSI 6000

SAKRETE PSI 6000 is a pre-blended, high strength, synthetic fibre reinforced, air-entrained concrete material. It is reinforced with alkali-resistant fibres to resist cracking and eliminate the need for wire mesh in many non-critical applications. It also contains an air-entraining admixture which will produce a concrete with superior freeze-thaw and salt-scaling durability. Use for new concrete construction projects, concrete overlays and repairs where a thickness of 5 cm (2") or more is required. Open to foot traffic in approximately 24 hours. Exceeds ASTM C 387 strength requirements.

FEATURES & BENEFITS

- High strength (42 MPa/6000 psi)
- Reinforced with alkali-resistant fibres to resist cracking
- Air-entrained for cold weather durability
- Excellent workability

USES

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

PROCEDURES

Mix and substrate temperatures should be maintained between 5 °C (40 °F) and 30 °C (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 2.2 L (2.25 qts) 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. In hot weather, use cold water to slow the set.

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 by 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 by 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 wait 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, 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.

Excavation: Dig hole with auger or shovel to required depth (hole should extend below the frost line). Allow 2 inches (5 cm) clearance on each side of post. A typical 4 inch (10 cm) x 4 inch (10 cm) post will require a 8 inch (20 cm) 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 12 inches (30 cm) 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 an excavation approx. 5 inches (13 cm) to 6 inches (15 cm) should be determined by allowing for 2 inches (5 cm) minimum of compacted crushed stone under 3 inches (8 cm) to 4 inches (10 cm) of concrete. Excavate 6 inches (15 cm) 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 2 inches (5 cm) x 4 inches (10 cm) lumber, cut forms to length, then position so inside edges are below the string line. Drive pointed 2 inch (5 cm) x 4 inch (10 cm) stakes into ground at 3 ft (1 m) spacing to support forms. Screw together all forms, braces and corners from outside the work area. NOTE: Adjust forms before securing to direct rainwater run-off, with a slope approximately 1/8 inch (0.32 cm) per 1 ft (30 cm).
- 4. Curving:** Create curves by attaching 1/8 inch (0.32 cm) 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. Placing:** After mixing the concrete, place and consolidate inside the forms, slightly overfilling and roughly levelling. 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, 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. Jointing:** 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 to 18 hours after hardening. The joint should be 1/5 of the full thickness of the slab and every 8 ft (2.4 m) 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 PSI 6000 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. Placed concrete can be opened to foot traffic in 24 hours.

TECHNICAL DATA

Compressive Strength:	1 Day	10 MPa (1450 psi)
	3 Day	14 MPa (2000 psi)
	7 Day	35 MPa (5000 psi)
	28 Day	42 MPa (6000 psi)

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 & EASY CALCULATIONS

(bags required, approximately)

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

LENGTH	WIDTH			
	30 cm (12")	70 cm (24")	90 cm (36")	120 cm (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

POSTS: # of bags required.

Post Size: 10 cm (4") X 10 cm (4")	
Hole Diameter: 20 cm (8")	
Hole Depth	# of Bags
45 cm (18")	1
60 cm (24")	1.25
90 cm (36")	1.75
120 cm (48")	2

BUILDERS' TUBES: # of bags required for 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 Calculator (dimensions in metres):

$$\frac{\text{Length (m)} \times \text{Width (m)} \times \text{Depth (cm)}}{\div 100} = \text{m}^3 \div 0.014 = \text{30 KG bags required.}$$

Slab Calculator (dimensions in feet):

$$\frac{\text{Length (ft)} \times \text{Width (ft)} \times \text{Depth (in)}}{\div 12} = \text{ft}^3 \times 2 = \text{30 KG bags required.}$$

PACKAGING

30 KG (66 lb) bag

UPC

055226110682

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.sakretecanada.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. [REV.0006_07/18/19]

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