



# HIGH STRENGTH CONCRETE MIX

◆ The Pro's Choice Since 1936



Sakrete® High Strength Concrete Mix is a preblended mixture of sand, coarse aggregate, and cementitious materials. For new construction or repairs where concrete thickness exceeds 2" (51 mm).

## Features:

- 4,000 psi
- Full depth applications 2" (51 mm) or greater

## Use For:

- Driveways, slabs, patios, walkways
- Curbs
- Stairs
- Ramps
- Setting fence posts
- Foundation walls and footings
- Structural applications requiring a small volume of concrete

## Yield/Water/Coverage:

Bag Size	Yield	Water
40 lb (18.1 kg)	0.30 ft <sup>3</sup> (.008 m <sup>3</sup> )	1.75 qt (1.7 L)
60 lb (27.2 kg)	0.45 ft <sup>3</sup> (.012 m <sup>3</sup> )	2.5 qt (2.4 L)
80 lb (36.3 kg)	0.60 ft <sup>3</sup> (.017 m <sup>3</sup> )	3.5 qt (3.3 L)
90 lb (40.8 kg)	0.66 ft <sup>3</sup> (.019 m <sup>3</sup> )	4.5 qt (4.3 L)

To determine coverage: Multiply Length (feet) x Width (feet) x Thickness (inches) and divide by 12. Then divide by the yield in the chart above to determine the numbers of bags needed. See Calculator on Sakrete.com for additional assistance. Yield and water are approximate.

## Technical Data:

Sakrete High Strength Concrete Mix meets or exceeds the compressive strength requirements of ASTM C387.

Compressive Strength ASTM C39

7 day = 2,500 psi (17 MPa)

28 days = 4,000 psi (28 MPa)

Slump Range = 2" - 3" (50 - 75 mm)

DIVISION 3

Structural Concrete – 03 31 00

**Color:** Gray

## Preparation/Application:

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

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

## Flatwork (Slabs, sidewalks, walkways, etc.):

1. Stake out the area where the concrete will be placed.
2. Cut and remove all soil, grass, sod, etc.
3. 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" (102 mm) of concrete.
4. Place forms in the desired area assuring that they are level, square, and all corners sealed so no premixed material can escape once placed.
5. Place the concrete into the forms to full depth.
6. Consolidate by moving into corners and low areas to assure there are no voids.
7. Using a straight edge (a 2 x 4 works well) level the surface of the concrete using a back and forth sawing motion.
8. Using a float or trowel smooth the surface to remove imperfections. This is not a final trowel finish, so complete this quickly. Too much troweling at this point will cause dusting and weaken the surface.
9. Using a concrete grooving tool, cut joints into the concrete every 3 - 4 ft (.9 - 1.2 m). Expansion joints should be placed every 8 ft x 12 ft (2.4 x 3.7 m) in each direction and must extend through the entire depth of the slab.
10. Once the concrete has stiffened slightly and all water has evaporated from the surface use the trowel to put a smooth level surface on the concrete. Applying a light broom finish will aid with traction and remove any imperfections left from the trowel.
11. Forms can be removed the following day.

## Posts and Poles:

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

## Repairs (greater than 2" (51 mm) in depth):

1. Surfaces to be repaired must be sound, dimensionally stable, and clean.
2. Slick or sealed surfaces must be thoroughly roughened to an ICRI CSP of 3 to 5.
3. Sides of repair area must be squared off.
4. Clean all reinforcing steel to bare white metal and coat with a rust preventative if not covering within 8 hours.



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5. 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.
6. Clean and remove all loose materials and debris before proceeding.
7. Place the mixed concrete mix into the area that is being repaired.
8. Use a float to remove any surface imperfections.

## Mixing:

1. Empty contents of Sakrete High Strength 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.
2. Add clean potable water (see table above for water amounts) or enough to achieve a workable mix. Add additional water if needed but AVOID A SOUPY MIX. Excess water reduces strength and durability and can cause cracking, dusting or scaling.

## Curing:

1. Proper curing is critical for sound results. Curing means maintaining proper moisture and temperature. The concrete must be kept continuously moist for several days.
2. Covering the concrete slab with plastic is a practical way to help retain moisture. Place plastic after concrete has set.
3. If surface begins to appear dry remove the plastic moisten the surface and replace the plastic.
4. New concrete can be opened to foot traffic in 24 hours and vehicular traffic in 72 hours.

## Precautions:

Air, mix and substrate temperatures should be between 40°F (4°C) and 90°F (32°C) with no rain in the forecast within 24 hours of application. For applications outside this range of temperatures and conditions, contact Sakrete Technical Service.

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

*NOTE: Proper application and installation of all Sakrete products are the responsibility of the end user.*

## Safety:

READ and UNDERSTAND the Safety Data Sheet (SDS) before using this product. WARNING: Wear protective clothing and equipment. For emergency information, call CHEMTREC at 800-424-9300 or 703-527-3887 (outside USA). KEEP OUT OF REACH OF CHILDREN.

## 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 or defective products or, at the manufacturer's option, refund of the purchase price. CONSEQUENTIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY.



**PROPOSITION 65 WARNING:** This product can expose you to crystalline silica, hexavalent chromium, (other trace metal compounds) which are known to the State of California to cause cancer; and lead, (other trace metal compounds) which are known to the State of California to cause reproductive harm. For more information, to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**PROPOSICIÓN 65 ADVERTENCIA:** Este producto puede exponerle a la sílice cristalina, cromo hexavalente, (otros compuestos de metal traza) que son conocidos por el Estado de California para causar cáncer; Y plomo, (otros compuestos de metal traza) que son conocidos por el Estado de California para causar daño reproductivo. Para obtener más información, vaya [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).