



# 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.
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.



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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:

For additional information, call manufacturer at 866-725-7383 or CHEMTREC at 800-424-9300 or 703-527-3887 outside of the USA. Refer to Safety Data Sheet (SDS) for further information.

**KEEP OUT OF REACH OF CHILDREN.**

**HAZARD STATEMENT: Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. Causes damage to lungs through prolonged or repeated exposure. PREVENTION: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust.**

**RESPONSE: If swallowed: Immediately call a poison center/doctor. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If exposed or concerned: Get medical advice/attention.**

**STORAGE: Store locked up.**

**DISPOSAL: Dispose of contents and container in accordance with all local, regional, national and international regulations.**

**⚠ Warning: Cancer and reproductive harm. [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**



## Limited Product Warranty:

The manufacturer warrants that this product is free from defects in material and workmanship and will perform per the manufacturer product literature in effect at the time of purchase. This warranty is for one (1) year from the date of purchase. Any implied warranty of merchantability or fitness for a particular purpose is limited to the duration of this express warranty. This warranty applied only if the product is used, in strict accord with manufacturer published instructions. The sole and exclusive remedy under this warranty is replacement of the defective product or refund of the purchase price, at manufacturer's option. **CONSEQUENTIAL, SPECIAL, AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY.** All claims under this warranty must be submitted to manufacturer by calling 866-725-7383. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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