



HIGH-STRENGTH CONCRETE MIX

DIVISION 03 31 00 – STRUCTURAL CONCRETE

KNOW YOUR MIX

The original bagged concrete mix, trusted by pros since 1936. This professional-grade mix delivers consistent performance, high strength and a smooth finish that makes it ideal for every concrete project from slabs to footings and everything in between.



OPEN TO FOOT TRAFFIC
IN 24 HOURS



APPLICATIONS
2"+



FINAL
STRENGTH



C387
C39

TECHNICAL DATA

PACKAGE SIZE	YIELD	WATER REQUIRED	SLUMP RANGE
40 lb 18.1 kg	0.30 ft ³ .008 m ³	1.75 qts 1.7 L	2 – 3 in 50 – 75 mm
60 lb 27.2 kg	0.45 ft ³ .012 m ³	2.5 qts 2.4 L	
90 lb 40.8 kg	0.66 ft ³ .02 m ³	4.25 qts 4.0 L	
25 kg Canada	0.41 ft ³ .012 m ³	2.4 qts 2.3 L	
30 kg Canada	0.50 ft ³ .014 m ³	2.9 qts 2.7 L	

*Water demands shown are to be used as a starting reference. More water may be required to achieve desired consistency. Avoid overwatering.

PSI - 7 DAY	PSI - 28 DAY	ASTM CERTIFICATIONS
2,500 psi 17 MPa	4,000 psi 27.6 MPa	ASTM C387

LEED Eligibility:

Regional Materials (MR-c5)
Recycled Material (MR-c4)

PRECAUTIONS

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

- Colder temperatures or higher humidity conditions will retard set times.
- Use only clean mixing containers and tools.
- Do not over trowel.
- Do not overwater.
- Do not add anything other than clean potable water or Sakrete Bonder & Fortifier.
- Protect from freezing for 48 hours.

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

ESTIMATE
YOUR JOB



SAKRETE.COM/
CALCULATORS



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PREPARATION/APPLICATION

For best results, all materials should be stored between 40° F (4° C) and 90° F (32° C) 24 hours prior to installation.

REFER TO:

- ACI 302.1 Guide for Concrete Flooring and Slab Construction
- ACI 304.1 Guide for Measuring, Mixing, Transportation and Placing Concrete
- ACI 305R Guide to Hot Weather Concreting
- ACI 306R Guide to Cold Weather Concreting

NOTE: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

MIXING

1. Mix only the amount of material that can be placed within 15 minutes.
2. Empty contents of Sakrete Fast Setting Concrete Mix into a wheelbarrow or mortar pan forming a crater in its center. Add clean potable water (refer to table for amount) to the crater or enough to achieve a workable mix. AVOID A SOUPY MIX. Excess water that results in a flowable mix will result in decreased strengths and durability and can cause cracking, dusting and scaling.
3. Mix using a garden hoe or shovel until a stiff forming consistency is achieved.
4. Ensure that the concrete is mixed thoroughly with no dry pockets/lumps.
5. If a concrete cone is being used, the recommended slump is 2" to 3" (50 mm to 75 mm) to achieve the published strengths.

APPLICATION: FLATWORK (SLABS, SIDEWALKS, WALKWAYS, ETC.)

1. Stake out the area where the concrete will be placed and remove all soil, grass, debris, etc.
2. 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" (102mm) of concrete.
3. Pre-treat forms with a release agent to prevent water absorption and for the ease of removal.
4. Place forms in the desired area, ensuring that they are level, square, and that all corners are sealed so no material can outflow.
5. Place the concrete into the forms to full depth.
6. Fully fill the form, working the mix into corners and compacting to minimize voids.
7. Using a straight edge, strike the surface level with the top of the forms using a sawing motion.
8. Use a float to smooth the surface and remove any imperfections. Use an edging tool to smooth the edges along the forms.
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. in each direction and must extend through the entire depth of the slab.
10. Once concrete has stiffened slightly, a broom finish can be applied. Forms can also be removed once the material has set (after approx. 24 hours).

APPLICATION: POSTS AND POLES

1. If the pole or post will be load-bearing, consult with your local building code requirements before proceeding.
2. Dig a hole to the required depth and diameter. A general rule of thumb is that the depth should be 1/3 the length of the post or pole and the diameter should be 3 times that of the pole or post).
3. Place 3-4 inches (102 mm to 152 mm) of gravel at the base to help with drainage.
4. Place the post or pole in the center of the hole and onto the gravel base.
5. Level and support the post or pole in place.
6. Fill the hole with mixed concrete and consolidate by rodding.
7. Over fill the hole to slope the concrete at the surface, allowing water to drain away.
8. Wait a minimum of 24 hours before posts or poles are subjected to any strain.

APPLICATION: REPAIRS

1. Surfaces to be repaired must be sound, dimensionally stable, and clean.
2. Slick or sealed surfaces must be roughened to an ICRI CSP of 3 to 5.
3. Sides of repair area must be squared.
4. Clean all reinforcing steel to bare metal and coat with a rust preventative if not covering within 8 hours.
5. Clean and remove all loose materials and debris.
6. All surfaces that will come in contact with the concrete mix should be brought to a SSD (Surface Saturated Dry) condition.
7. Fill the repair area fully and compact the mixed material with a float to ensure there are no voids.
8. Use the float to remove any surface imperfections and to achieve the desired finish.



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CURING

1. Proper curing is critical for sound results. After the concrete is set, it must be kept continuously moist for 3-5 days and kept from freezing for 48 hours.
2. Covering the concrete slab with plastic is a practical way to help retain moisture. Place plastic after the concrete has set. If the surface begins to appear dry, remove the plastic, moisten the surface, and replace it.
3. If temperatures are predicted to go drop below 40° F, tenting and heating the area are required.
4. New concrete can be opened to foot traffic in 24 hours and vehicular traffic in 72 hours.

SAFETY

For additional information, call the manufacturer at 866-725-7383 or Chemtrec at 800-424-9300 or 703-527-3887. Refer to Safety Data Sheet (SDS) for further information. **KEEP OUT OF THE REACH OF CHILDREN.**



DANGER


HAZARD STATEMENT

Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. Causes damage to organs (lungs) through prolonged or repeated exposure.

PRECAUTIONARY STATEMENTS

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. 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 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 or doctor. Store locked up. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

CONTAINS: Portland cement

 **WARNING:** This product can expose you to Quartz, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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.

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For current and complete product information, contact SAKRETE Technical Services toll-free at 866-725-7383 or visit Sakrete.com