# **FAST TRAFFIC CONCRETE MIX**

**DIVISION 03 31 00 - STRUCTURAL CONCRETE** 





## **KNOW YOUR MIX**

Sakrete Fast Traffic High Early Strength Concrete Mix is a precise blend of coarse aggregate, sand and cement designed to reach higher strengths at a faster pace than typical concrete mixes. Use for new construction or repairs where application depth exceeds 2 inches (51 mm).









IN 8 HOURS

OPEN TO VEHICLE TRAFFIC IN 24 HOURS

STRENGTH

**C387** 

\*Compared to standard (4000PSI) concrete.

## **TECHNICAL DATA**

PACKAGE SIZE	YIELD	WATER REQUIRED	SLUMP RANGE
50 lb	0.45 ft <sup>3</sup>	2.5 qts	2 – 3 in
22.7 kg	0.010 m <sup>3</sup>	2.37 L	50 – 75 mm

PSI - 8 HOUR	PSI - 1 DAY	PSI - 7 DAY	PSI - 28 DAY	ASTM CERTIFICATIONS
500 psi	3,000 psi	5,000 psi	6,500 psi	ASTM C387
3.4 MPa	20.4 MPa	34 MPa	44.2 MPa	

INITIAL SET TIME	FINAL SET TIME
2 – 3 hours	3 – 4 hours

## **LEED ELIGIBILITY**

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

## **PRECAUTIONS**

Air, mix, and substrate temperatures should be between  $40^{\circ}F$  ( $4^{\circ}C$ ) and  $90^{\circ}F$  ( $32^{\circ}C$ ) 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 products are the responsibility of the end user.

## 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 for Hot Weather Concreting
- ACI 305R Guide for Cold Weathering Concreting

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



# **FAST TRAFFIC CONCRETE MIX**

**DIVISION 03 31 00 - STRUCTURAL CONCRETE** 



### MIXING

- 1. Wet down mixer and drain all water. Turn the mixer on and add the recommended amount of water shown in the table.
- 2. Empty the concrete mix into the mixer. If the mix is too stiff or dry, add additional water to achieve a forming consistency. Avoid excess water that results in a flowable mix. This will result in decreased strengths and durability. Mix for approximately 2 3 minutes to ensure that the concrete is mixed thoroughly with no dry pockets/lumps
- 3. Fast Traffic High Early Strength Concrete Mix can also be hand-mixed using a wheelbarrow or mortar pan. Pour the dry mix and form a crater in its center. Add water (refer to table) to the crater.
- 4. Mix using a garden hoe or shovel until a stiff forming consistency and mixed thoroughly with no dry pockets/lumps.
- 5. If a concrete cone is being used, the recommended slump is 2" to 3" (50 75 mm) to achieve the published strengths.

### **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.
- 9. Do not apply on frozen surfaces.

## APPLICATION: FLAT WORK (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 mixed 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. 12 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 of gravel at the base to help with drainage.
- 4. Place the post or pole in the center of the hole.
- 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 12 hours before posts or poles are subjected to any strain.

### **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 8-10 hours and vehicular traffic in 24 hours.

# **FAST TRAFFIC CONCRETE MIX**

**DIVISION 03 31 00 - STRUCTURAL CONCRETE** 



#### SAFETY







**DANGER HAZARD STATEMENTS:** 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. KEEP OUT OF REACH OF CHILDREN.

CONTAINS: Portland cement, calcium oxide and sulfuric acid, aluminum salt.

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

#### KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.

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

### 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.

Sakrete® and the background design are registered trademarks of SAKRETE of North America LLC, 400 Perimeter Center Terrace, Ste. 1000, Atlanta, Georgia 30346 ©2022.

400 Fermileter Center Terrace, Ste. 1000, Attanta, Georgia 30346 @2022.

SAKRETE® is manufactured under license from SAKRETE of North America LLC.

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