



Rapid Set® Concrete Mix — DATASHEET

Very Fast-Setting Concrete

PRODUCT DESCRIPTION:

When mixed with water CONCRETE MIX produces a workable, high quality concrete material that is ideal where fast strength gain, high durability and low shrinkage are desired. Apply CONCRETE MIX in thicknesses from 2-in to 24-in. Durable in wet environments. *SETS IN 15 MINUTES & IS READY FOR TRAFFIC IN 1-HOUR.* One 60-lb. bag of Rapid Set® CONCRETE MIX will yield approximately 0.5 cubic feet.

USES:

CONCRETE MIX is a multipurpose, Fast-Setting product that can be used for repair and construction of pavements, formed work, footings, setting posts, industrial floors, machine bases, and concrete repair.

COMPOSITION:

Rapid Set® CONCRETE MIX is a high performance blend of Rapid Set® hydraulic cement and quality aggregates. CONCRETE MIX is non-metallic and no chlorides are added. Rapid Set® CONCRETE MIX is similar in appearance to portland cement concrete and may be applied using similar methods.

COLOR: [Light Grey]

The final color of CONCRETE MIX may vary due to application techniques and environmental conditions.

LIMITATIONS:

Not intended for applications thinner than 2-in, for thin sections use Rapid Set® Cement ALL or Rapid Set® Mortar Mix. For applications where bonding is important, at least one test section should be prepared to evaluate the suitability of the materials and procedures.

TECHNICAL DATA:

- **Set Time**
ASTM C-191 (Mod.) at 70°F
Initial Set 15-minutes
Final Set 35-minutes
- **Compressive Strength**
ASTM C-109 Mod.
Age: Compressive Strength:
1-hour* 2800-psi
3-hour 3600 -psi
7-day 5000 -psi
28-day 6000-psi
- **Flexural Strength**
ASTM C-78 Mod.

2-hour* 420-psi
1-day 650-psi
28-day 750-psi

* After Final Set.

Using CONCRETE MIX

SURFACE PREPARATION:

Where bonding is important, the adjacent surfaces shall be clean, sound and free from any materials that may inhibit bond such as oil, asphalt, curing compounds, acids, dirt and loose debris. Roughen surfaces and remove all unsound concrete. Immediately prior to placement the repair surface shall be thoroughly saturated with no standing water.

MIXING:

The use of a power driven mechanical mixer, such as a mortar mixer or a drill mounted mixer, is recommended. Organize work so that all personnel and equipment are in place before mixing. Use clean Potable water. Rapid Set® CONCRETE MIX may be mixed using 3 to 5 quarts of water per 60 lb. bag. Use less water to achieve higher strengths. Do NOT exceed 5 quarts of water per bag. For increased fluidity and workability use Rapid Set® FLOW CONTROL® plasticizing admixture from the Concrete Pharmacy®. Place the desired quantity of mix water into the mixing container. While the mixer is running add Rapid Set® CONCRETE MIX. Mix for the minimum amount of time required to achieve a lump-free, uniform consistency (usually 1 to 3 minutes). Do NOT re-temper.

PLACEMENT:

Rapid Set® CONCRETE MIX may be placed using traditional methods. Organize work so that all personnel and equipment are ready before placement. Place, consolidate and screed quickly to allow for maximum finishing time. Do NOT wait for bleed water, apply final finish as soon as possible. Rapid Set® CONCRETE MIX may be troweled, floated or broom finished. On flat work Do NOT install in layers, install full depth sections and progress horizontally. Do NOT install on frozen surfaces. Use a method of consolidation that eliminates air voids. To extend working time use Rapid Set® SET CONTROL® set retarding admixture.

CURING:

Water cure all Rapid Set® CONCRETE MIX installations. Begin curing as soon as the surface has lost its moist sheen. Keep exposed surfaces wet for a minimum of 1 hour. When experiencing extended setting times, due to cold temperature or the use of retarder, longer cure times may be required. The objective of water curing shall be to maintain a continuously wet surface until the product has achieved sufficient strength.

TEMPERATURE:

Warm environmental and materials temperatures will reduce the working time of CONCRETE MIX. To compensate for warm temperatures, keep material cool and use chilled mix water. Temperatures below 70°F (21°C) will decrease the rate of strength gain and CONCRETE MIX should not be applied if surface or ambient temperature is below 45°F (7.2°C).

LIMITED WARRANTY:

CTS Cement Manufacturing Corporation warrants its material to be of good quality, and, at its sole option, within one year from date of sale, will replace defective materials or refund the purchase price thereof and such replacement or refund shall be the limit of CTS's responsibility. Except for the foregoing, all warranties, express or implied including merchantability and fitness for a particular purpose are excluded. CTS shall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the material.

CAUTION:

CONCRETE MIX contains cementitious materials and may cause irritation to lungs, eyes and skin. Avoid contact. Use only in adequate ventilation. Do NOT breath dust. Wet mixture may cause burns. Wear suitable gloves, eye protection and protective clothing. In case of skin contact, wash thoroughly with soap and water. In case of eye contact, flush immediately and repeatedly with large quantities of water and get prompt medical attention. In case of difficulty breathing, remove person to fresh air. If difficulty breathing persists, seek medical attention.