



## Rapid Set® Cement All™ — DATASHEET

### Fast-Setting, High-Strength, Multi-Purpose, Non-Shrink Grout

#### PRODUCT DESCRIPTION:

When mixed with water CEMENT ALL™ produces a workable, high quality repair material that is ideal where rapid strength gain, high durability and low shrinkage are desired. Apply CEMENT ALL™ in thicknesses from featheredge to 4-inches. Durable in wet environments. *SETS IN 15 MINUTES & IS READY FOR TRAFFIC IN 1-HOUR.* One 55 lb. bag of Rapid Set® Cement ALL™ yields approximately 0.5 cubic feet.

#### USES:

CEMENT ALL™ is a multipurpose product that can be used for general concrete repair, doweling and anchoring, industrial grouting, formed work, airport projects, and highway repair.

#### COMPOSITION:

Rapid Set® Cement ALL™ is a high performance blend of Rapid Set® Cement and specialty sand. CEMENTALL™ is non-metallic and no chlorides are added. Rapid Set® Cement ALL™ is similar in appearance to portland cement repair materials and may be applied using similar methods.

#### COLOR: [Light Grey]

The final color of CEMENT ALL™ may vary due to application techniques and environmental conditions.

#### LIMITATIONS:

Not intended for applications over 4" deep, for deeper sections use Rapid Set® Concrete Mix or Rapid Set® Mortar Mix. For overlay applications 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:

1-hour\* 3000-psi

3-hour 4500 -psi

7-day 6000 -psi

28-day 9000-psi

##### Slant Shear:

ASTM C-882 Mod.

1-day 1400-psi

28-day 2600-psi

\* = After Final Set

## Using CEMENT ALL™

### **SURFACE PREPARATION:**

For repairs, 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 surfaces 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® Cement ALL™ may be mixed using 3 to 5 quarts of water per 55 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® Cement ALL™. 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® Cement ALL™ 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® Cement ALL™ 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® Cement ALL™ 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 CEMENT ALL™. 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 CEMENT ALL™ should not be applied if surface or ambient temperature is below 45°F (7.2°C).