



## **TECHNICAL DATA**

DESCRIPTION: **RAPID SET<sup>®</sup> CEMENT** is a unique dry hydraulic cement. NO CHLORIDES ARE ADDED. When used as a replacement for Portland Cement, and mixed with water and suitable aggregates, it produces a quality concrete which attains 2000+ psi compressive strength in one hour and is ready for use.

PRODUCT USES: As a Portland Cement replacement, **RAPID SET<sup>®</sup> CEMENT** is ideal for applications where quick concrete strength is required, including repairs of highways, runways, sidewalks, and floors.

AVAILABILITY: Through distributors in 50-lb and 88-lb polyethylene lined bags. Also available in some locations in bulk.

## FEATURES AND BENEFITS:

**RAPID SET<sup>®</sup> CEMENT** sets and gains strength rapidly. Almost zero shrinkage results, even when placed at high slump.

Additives available for use include **RAPID SET**<sup>®</sup> **SET CONTROL**<sup>m</sup> and **RAPID SET**<sup>®</sup> **FAST**. These are used to delay the set and to accelerate the set.

As a binder for very low strength concrete, **RAPID SET<sup>®</sup> CEMENT** is used at about 100-lb/yd with sand and water. The resulting mix is typically poured in a utility cut area. The slurry is firm enough to walk on in an hour. Contact **RAPID SET<sup>®</sup>** for details.

- DURABILITY: With 6% air entrainment, **RAPID SET<sup>®</sup> CONCRETE** withstands 1,000 cycles of freeze/thaw when tested in accordance with ASTM C 666.
- DIRECTIONS: Remove all unsound concrete keeping edges and corners square. Adjacent concrete should be free of oil, grease, laitance, and debris. Dampen area with water. Mix **RAPID SET**<sup>®</sup> **CEMENT** with sand, aggregates, water, and, if desired, an air entraining agent for freeze/thaw protection.

A slump of about six inches is used for ease of placement and to assure a good bond. The working time for **RAPID SET<sup>®</sup> CEMENT** concrete is about 20 minutes at 70F. (longer at lower temperatures, shorter at higher temperatures).

It is important that the placement operation be organized within this time limitation. After setting, the concrete will gain strength quickly, and finishing operations may be difficult.

The working time may be extended by using cold materials and/or **RAPID SET**<sup>®</sup> **SET CONTROL™**. In cold weather, warm materials and/or **RAPID SET**<sup>®</sup> **FAST** may be used to hasten the set and strength development.

CONCRETE TEST				
DATA:	Compressive strength, psi (ASTM C 39)			
	1-hr	3-hr	24-hr	, 28-day
	2000	4400	5500	6000
	Freeze/Thaw Durability (ASTM C 666) 1000 Cycles			
	Salt Scaling (ASTM C 672)			
	Number of Cyc	les	<b>Relative Modulus</b>	Remarks
	72		97.9	Slight scale
	180		89.1	Loss of surface lines
	252		84.1	Increase loss
	300		82.4	Moderate scaling
	Flexural Strength, psi (ASTM C 78)			
	5-hr		28-day	
	650		1260	
	Modulus of Elasticity, psi (ASTM C 469) 28-day 4,220,000		)	

Cement specific gravity, 2.98 g/cu.cm

CAUTION: **RAPID SET<sup>®</sup> CEMENT** contains cementitious materials. Freshly mixed materials may cause skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any cementitious material gets into the eyes, rinse immediately and repeatedly with water and get prompt medical attention. **SEE MSDS SHEET**.

WARRANTY: **RAPID SET<sup>®</sup> PRODUCTS COMPANY** warrants its materials to be of good quality and, at its option, within one year from date of sale it will replace material proven defective or refund purchase price thereof, and such replacement or refund shall be the limit of **RAPID SET<sup>®</sup> PRODUCTS COMPANY'S** responsibility. Except for the foregoing, all warranties, expressed or implied, including merchantability and fitness for a particular purpose, are excluded. **RAPID SET<sup>®</sup> PRODUCTS COMPANY'S** hall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the materials.

CTS Cement Manufacturing Company 11065 Knott Ave., Suite A Cypress, CA 90630 Phone: 800-929-3030 Fax: 714-379-8270 Web: <u>www.ctscement.com</u> Email: <u>rapidset@ctscement</u>.com

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