





Resurface Worn, Old, Spalled Concrete





# Highlights:

- Self-curing technology (sct)
- Concrete gray color
- Rapid strength gain
- Foot traffic in 2-3 hours
- 30 minute working time
- Interior/exterior

# **MANUFACTURER:**

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# **PRODUCT NAME:**

Rapid Set® CR CONCRETE RESURFACER

# **DESCRIPTION:**

Rapid Set CR CONCRETE RESURFACER is an advanced hydraulic cement-based mortar that can be used both indoors and outdoors to resurface worn, old, spalled concrete, giving a new concrete look. CR has been specially formulated to match the color of typical portland cement concrete. Cutting-edge self-curing technology (SCT) means wet curing is not required in most applications. CR has a working time of up to 30 minutes and can receive foot traffic in as soon as 2-3 hours.

# RECOMMENDED USE:

Use CR when a new wear surface is desired to repair old, damaged or discolored concrete.

# ENVIRONMENTAL ADVANTAGES:

Use CR to reduce your carbon footprint and lower your environmental impact. Production of Rapid Set cement emits far less  $CO_2$  than portland cement. Contact your CTS representative for LEED values and environmental information.

# **APPLICATION:**

Typical application thicknesses range from 1/32" to 1/8" (0.08 to 0.32 cm). In smaller areas, CR may be applied up to 1/2" (1.2 cm) thick.

# **SURFACE PREPARATION:**

Surface must be clean, sound, and free of oil, curing compound, dust, mastic and other bond breakers. Surface shall be prepared to a minimum profile of ICRI CSP 2. Mechanical methods of surface preparation such as shotblasting are preferred. Acid etching is not recommended. Surface must be dry and have a minimum temperature of 50°F (10°C).







Advanced Hydraulic Cement Material

## **PRIMING:**

Priming is not required. For porous substrates, use Rapid Set<sup>®</sup> Acrylic Primer to minimize the formation of pinholes on the surface. Follow all product application instructions.

## 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 personnel and equipment are in place before mixing. Use clean potable water. **Rapid Set® CR CONCRETE RESURFACER may be mixed using 2.5 to 3 quarts (2.3 to 2.8 L) of water per 25-lb (11.3 kg) bag. Use less water to achieve higher strengths. Do not exceed 3 quarts (2.8 L) of water per bag. Place the desired quantity of mix water into the mixing container. While the mixer is running, add material. Mix for the minimum amount of time required to achieve a lump-free, uniform consistency (usually 2 to 3 minutes). Do not retemper. Avoid mixers that entrap large amounts of air. Mixed CR should be used within 30 minutes at 70°F (21°C).** 

#### PLACEMENT:

CR may be placed using traditional methods. Place quickly to allow for maximum finishing time. Once applied, typical finishing time is 5 - 10 minutes. Thinner applications will set faster. Do not wait for bleed water; apply final finish as soon as possible. CR may be troweled, floated or broom finished. Do not install on frozen surfaces.

## **COLD WEATHER:**

Environmental and material temperatures below 70°F (21°C) may delay setting time and reduce the rate of strength gain. Lower temperatures will have a more pronounced effect. Thinner sections will be more significantly affected. To compensate for cold temperatures, keep material warm, use heated mix water and follow ACI 306 Procedures for Cold Weather Concreting.

#### WARM WEATHER:

Environmental and material temperatures above 70°F (21°C) may shorten setting time and increase the rate of strength gain. Higher temperatures will have a more pronounced effect. To compensate for warm temperatures, keep material cool, use chilled mix water and follow ACI 305 Procedures for Hot Weather Concreting. The use of Rapid Set<sup>®</sup> SET Control<sup>®</sup> set retarding admixture will help offset the effects of high temperatures.

## **CURING:**

CR does not require water curing or curing compound under moderate conditions at 70°F (21°C). In dry, windy or hot conditions, mist with water to maintain a continuously wet surface until the product has achieved sufficient strength. CR cures to a light gray color. Walk on time is approximately 2 to 3 hours.

## **YIELD & PACKAGING:**

One 25-lb (11.3 kg) bag of CR will yield approximately 0.24 cubic foot. The coverage at 1/16" (0.16 cm) is approximately 45 ft<sup>2</sup> (4.2 m<sup>2</sup>).

### SHELF LIFE:

One year when stored in cool, dry conditions, out of direct sunlight.

# PHYSICAL DATA

Compressive Strength, ASTM C109 Mod.1 day2000 psi28 days4000 psi

Data obtained at 3 quarts of water All data produced at 70°F (21°C)

## **USER RESPONSIBILITY:**

Before using Rapid Set products, read current technical data sheet, bulletins, product label and material safety data sheet at www.ctscement.com. It is the user's responsibility to review instructions and warnings for any Rapid Set product in current technical data sheet, bulletins, product label and material safety data sheet prior to use.

## WARNING: DO NOT BREATHE DUST. AVOID CONTACT WITH SKIN AND

EYES. Use material in well-ventilated areas only. Exposure to cement dust may irritate eyes, nose, throat, and the upper respiratory system/lungs. Silica exposure by inhalation may result in the development of lung injuries and pulmonary diseases, including silicosis and lung cancer. Seek medical treatment if you experience difficulty breathing while using this product. The use of a NIOSH/MSHA-approved respirator (P-, N- or R-95) is recommended to minimize inhalation of cement dust. Eat and drink only in dust-free areas to avoid ingesting cement dust. Skin contact with dry material or wet mixtures may result in bodily injury ranging from moderate irritation and thickening/ cracking of skin to severe skin damage from chemical burns. If irritation or burning occurs, seek medical treatment. Protect eyes with goggles or safety glasses with side shields. Cover skin with protective clothing. Use chemical resistant gloves and waterproof boots. In case of skin contact with cement dust, immediately wash off dust with soap and water to avoid skin damage. In case of skin contact with wet concrete, wash exposed skin areas with cold running water as soon as possible. In case of eve contact with cement dust. flush immediately and repeatedly with clean water and consult a physician. If wet concrete splashes into eyes, rinse eyes with clean water for at least 15 minutes and go to the hospital for further treatment.

**PROPOSITION 65 WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Please refer to the MSDS and www.ctscement.com for additional safety information regarding this material.

## LIMITED WARRANTY:

CTS CEMENT MANUFACTURING CORP. (CTS) warrants its materials to be of good quality and, at its option, will replace or refund the purchase price of any material proven to be defective within one (1) year from date of purchase. The above remedies shall be the limit of CTS's responsibility. Except for the foregoing, all warranties expressed 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 materials.

