

# RENEW<sup>®</sup> CR

## POLYMER-MODIFIED CONCRETE SURFACER

### DESCRIPTION

RENEW<sup>®</sup> CR is a high-performance, quick-turn-around concrete resurfacer that, when mixed only with water, “makes old concrete new again.” RENEW<sup>®</sup> CR applications are a cost effective durable answer to expensive concrete replacement. RENEW<sup>®</sup> CR corrects both horizontal and vertical surfaces that are worn, spalled and distressed. The result is a renewed surface, accepting foot traffic in as little as 2 hours and rubber tire traffic within 8 hours.

### APPLICATIONS

RENEW<sup>®</sup> CR can be used anywhere a new concrete finish is needed. RENEW<sup>®</sup> CR is easy to mix and apply, hardens quickly, is freeze/thaw resistant and results in a bonded new surface that can be opened to traffic in as little as 2 hours. Applications can be made using a steel trowel, squeegee, masonry brush for curbs or steps, and broom finished. RENEW<sup>®</sup> CR can be used on indoor and outdoor projects, such as:

- Walkways
- Patios
- Concrete stairs
- Driveways
- Garage floors
- Pool decks

### ADVANTAGES

- Excellent bond to old concrete - down to feather edge
- Less expensive alternative to concrete replacement
- Mix only with water
- Self-curing, no additional curing methods needed
- Excellent coverage and easy to use
- No primer needed
- Fast drying, walkable in 2 hours

### TECHNICAL DATA

#### Color:

Gray or white

#### Mixing water (per 50-lb (22.7-kg) bag):

Use 4.0 to a maximum 5.5 quarts (3.8 to 5.2 liters) of water

#### Set (ASTM C191) @ 70°F (21°C):

Working time	30 minutes
Initial set	60 minutes
Final set	120 minutes

#### Application temperature range:

50-95°F (10-35°C)

**NOTE:** Above 85°F (29°C), use ACI Hot-Weather Application Guidelines.

#### Coverage:

Approximately 100 ft<sup>2</sup> (9.3 m<sup>2</sup>) at 1/16" (1.6 mm)

#### Compressive strength (ASTM C109), air cured:

1 day	2400 psi (16.6 MPa)
7 day	3600 psi (24.8 MPa)
28 day	5000 psi (34.5 MPa)

#### Flexural strength (ASTM C348):

1 day	1000 psi (6.9 MPa)
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### STORAGE / SHELF LIFE

This product has a nominal shelf life of 12 months from the date of manufacture, when unopened bags are properly stored in a cool, dry, and shaded environment.

### PACKAGING

RENEW<sup>®</sup> CR is supplied in 50-lb (22.7-kg) bags / 50 bags per pallet.

### DIRECTIONS FOR USE

#### Surface preparation:

Surface must be solid, completely clean, free of oil, wax, grease, sealers, curing compounds, asphalt, paint, dirt, loose surface material and any contaminate that will act as a bond breaker. Weak concrete surfaces must be cleaned down to solid sound concrete by mechanical means, such as scarifying or high-pressure washing. Acid etching or chemical cleaning is not acceptable. The area should be saturated surface dry (SSD) with no standing water, prior to application.

#### Crack repair:

Moving joints, such as expansion joints, must be clean and reflected through the RENEW<sup>®</sup> CR. Larger moving cracks must be repaired with a cement-

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based patching compound prior to applying RENEW® CR. Repaired areas must be set firmly prior to applying RENEW® CR. Any non-moving cracks should be "V" saw-cut to a solid core and filled with an acrylic caulk. Crack repairs should be allowed to cure and set completely prior to covering. RENEW® CR is a veneer application over cracked concrete. It is possible that existing cracks, particularly those that move even when repaired, may mirror through the thin layer of RENEW® CR.

## Mixing:

For each 50-lb (22.7-kg) bag of RENEW® CR add 4.0 quarts to a maximum 5.5 quarts (3.8 to 5.2 l) of clean potable water into a mixing drum. Then add the RENEW® CR bags, while mixing at full speed with a paddle mixer attached to a heavy duty 1/2" drill. Mix completely for a minimum of 2-3 minutes until lump free, adding no additional water. Do not retemper.

## Installation:

RENEW® CR should only be applied to a properly prepared substrate. Remove any material that interferes with bond, including dust and dirt by brooming and vacuuming. Expansion joints, likewise, should be cleaned and marked to prevent being filled by RENEW® CR.

Pour the mixed RENEW® CR onto the "SSD" substrate. Then spread with a squeegee or flat trowel, using enough pressure, to assure good contact with the entire surface, then broom finish. Work in areas small enough for easy access for broom finishing without having to walk on the fresh RENEW® CR. A broom finish needs to be applied within 10-15 minutes of application, while the product is still fresh. Pour subsequent applications, while the previous application is still wet. On vertical installations, such as stairs, trowel RENEW® CR directly onto the properly prepared distressed area and finish as desired.

RENEW® CR can be applied at a thickness of up to 1/2" (13 mm) and accept foot traffic after 2 hours, and rubber wheel traffic after 8 hours at 70°F (21°C).

## Curing and sealing:

During application, ambient and substrate temperature should be a minimum of 50°F (10°C). RENEW® CR is self-curing; however, do not allow the product to freeze or be exposed to rain, if such should occur within 24 hours of placement. RENEW® CR is a cement-based product, therefore temperature, wind and substrate conditions will affect performance. To avoid dusting and staining, RENEW® CR should be sealed using a water based, breathable concrete sealer.

## APPLICATION TOOLS

Mixing pail, mixing paddle, 1/2" heavy duty drill, trowels, finishing broom, squeegee, masonry brush.

## COLOR MATCH

RENEW® CR dries to a light gray color; however, cements will vary in color, thus affecting the color of concrete. Additionally, age and job site conditions will play a role; therefore, RENEW® CR may not match the surrounding distressed concrete. Should this occur, consult with Penetron Specialty Products Inc. for a procedure to reduce discoloration. A test application is recommended to determine color suitability.

## CLEAN UP

Clean tools and equipment immediately after use with water.

## JOB MOCKUPS

The manufacturer requires that when its Penetron Specialty Products are used in any application or as part of any system that includes other manufacturers' products, the contractor and/or design professional shall test all the system components collectively for compatibility, performance and long-term intended use in accordance with pertinent and accepted industry standards prior to any construction. Written documentation of the tests performed shall be satisfactory to the design professional and contractor. Test results must include the means and methods of application, products used, project specific conditions being addressed, and standardized tests performed for each proposed system or variation.

## SAFE HANDLING INFORMATION

Refer to the product Safety Data Sheets (SDS).

**WARRANTY:** PENETRON SPECIALTY PRODUCTS INC. warrants that the products manufactured by it shall be free from material defects and will conform to formulation standards and contain all components in their proper proportion. Should any of the products be proven defective, the liability to PENETRON SPECIALTY PRODUCTS INC. shall be limited to replacement of the material proven to be defective and shall in no case be liable otherwise or for incidental or consequential damages. **PENETRON SPECIALTY PRODUCTS INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED.** User shall determine the suitability of the product for its intended use and assume all risks and liability in connection therewith.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of Penetron Specialty Products under normal environmental and working conditions. Because each project is different, PENETRON SPECIALTY PRODUCTS INC. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

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