

DESCRIPTION

PENETRON CR-90™ is a high performance, quick turnaround, concrete resurfacer that when mixed only with water “makes old concrete new again.” PENETRON CR-90™ applications are a cost effective durable answer to expensive concrete replacement. PENETRON CR-90™ 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.

APPLICATION

PENETRON CR-90™ can be used anywhere a new concrete finish is needed. PENETRON CR-90™ 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. PENETRON CR-90™ 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
- ▶ Zero VOC – Penetron powdered products contain zero volatile organic content and are safe for use both outdoors and in confined indoor spaces.

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 PENETRON CR-90™. Larger moving cracks must be repaired with a cement based patching compound prior to applying PENETRON CR-90™. Repaired areas must be set firmly prior to applying PENETRON CR-90™. Any non-moving cracks should be “V” saw cut to a solid core and be filled with an acrylic caulk. Crack repairs should be allowed to cure and set completely prior to covering. PENETRON CR-90™ 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 PENETRON CR-90™.

Mixing:

For each 50lb (22.7 kg) bag of PENETRON CR-90™ 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 PENETRON CR-90™ 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:

PENETRON CR-90™ should only be applied to a properly prepared substrate. Remove any material that interferes with bond including dust and dirt by brooming and vacuuming, including expansion joints. Expansion joints likewise should be marked to prevent being filled by PENETRON CR-90™.

Pour the mixed PENETRON CR-90™ 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 PENETRON CR-90™. 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 PENETRON CR-90™ directly onto the properly prepared distressed area and finish as desired.

PENETRON CR-90™ 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). PENETRON CR-90™ 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. PENETRON CR-90™ is a cement based product therefore temperature, wind and substrate conditions will affect performance. To avoid dusting and staining, PENETRON CR-90™ should be sealed using a water based, breathable concrete sealer.

Color Match:

PENETRON CR-90™ 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 PENETRON CR-90™ 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.

PACKAGING

50 lb (22.7 kg) bag.

STORAGE / SHELF LIFE

12 months when stored properly.

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 l) of water.

Set Times (ASTM C191), @ 70°F (21°C):

Working Time	30 minutes
Initial Set	60 minutes
Final Set	120 minutes

Coverage:

Approximately 100 ft² (9.3 m²) at 1/16"

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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SAFE HANDLING INFORMATION

Refer to the product Material Safety Data Sheets (MSDS).

WARRANTY

PENETRON INTERNATIONAL, LTD. 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 INTERNATIONAL, LTD. 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 INTERNATIONAL, LTD. 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.