



Green-Safe Technology

High performance, cement based concrete resurfacer used for resurfacing virtually any concrete substrate

DESCRIPTION:

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

CR-90 can be applied by trowel, sponge float, squeegee or brush then left as is or broom finished. In addition it can be spray applied for knockdown and stencil applications or used as a thin stamp overlay. CR-90 is available in Concrete Grey or White and can be integrally colored or stained.

PRODUCT FEATURES:

- ▶ Ideal for resurfacing walkways, patios, concrete stairs, driveways, garage floors and pool decks
- ▶ Stronger and more durable than conventional concrete - 5000 psi
- ▶ Freeze Thaw stable
- ▶ Quick return to service - Walkable in just 1 - 2 hours
- ▶ Available in concrete grey and white
- ▶ Accepts stains, dyes or integral colors
- ▶ Can be applied by spray, sponge float, brush, squeegee or trowel
- ▶ Can be broom finished, knocked down or stamped
- ▶ Suitable for commercial or residential applications
- ▶ Environmentally friendly - Contributes points to LEED Certified Projects

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 or spalling surfaces must be cleaned down to solid sound concrete by mechanical means such as shot-blasting, grinding or scarifying. High pressure washing can be used where only cleaning of sound concrete is required. Acid etching or chemical cleaning is NOT acceptable.

Expansion and Control Joints: Moving joints such as expansion or control joints must be clean and reflected through the CR-90. After application they should be filled with a urethane joint filler specifically designed for this purpose. Follow manufacturers directions for application.

Cracks Repair: Use CMP's CM-10 and follow specific detailed instructions for repair.

Note: Cracking is an indication of stress on a substrate which can occur in new or existing concrete. Even proper crack repair does not guarantee the elimination of an existing crack or future crack development.

PRIMING (IF REQUIRED):

CR-90 does not require priming. If primer is not applied, maintain “SSD” substrate throughout application. Substrate must only be damp, with no sheen or standing water. Priming will eliminate the need to maintain “SSD” substrate, reduce pin holing and increase working time.

Poly-bond Prime Coat: To apply prime coat first dilute CMP's Polybond 1:1 with water. Apply prime coat with soft exploded tip broom. Pour out and disperse with broom, leaving no puddles or bare spots. Broom out excess primer and allow to dry 1 hour. (Only prime what will be resurfaced that day)

03 92 00
Concrete Resurfacing



03 35 00
Decorative Concrete



Packaging:

50 lb. bag : 48 per pallet
20 lb. pail: 100 per pallet

Color: Light Grey & White

Shelf Life: 1 Year in original package

Water Requirements:

50 lb. bag: 5 quarts
20 lb. pail: 1.75 quarts

Coverage (Yield):

1/16" : 100 - 120 sq. ft. per 50 lb. bag
1/8" : 50 - 60 sq. ft. per 50 lb. bag

Installed Weight (per Sq. Ft.)

2.15 lbs. @ 1/4"

Installation Thickness:

Up to 1/2" without extension and up to 3" properly extended.

Application Temperature Range:

50° F - 90° F

Set Times: ASTM C-191

Flow Time: 20 minutes
Final Set: 60 minutes

Accepts Coatings: (70° F, 50% RH)

Epoxy up to 20 mils:
24 hours
Water based sealers:
3-5 hours

Compressive Strength: (ASTM C-109)

4 Hours	3000 psi	20.7 MPa
1 Day	4500 psi	31.0 MPa
28 Days	5500 psi	37.9 MPa

MIXING AND APPLICATION:

50 lb bag: For each 50 lb bag of CR-90 add 4.0 quarts to a maximum 5.5 quarts of water.

20 lb pail: For each 20 lb pail of CR-90 add 1.75 quarts to a maximum 2.25 quarts of water.

First add water to a pail then add the CR-90, 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. The water range allows CR-90 to be mixed at different thicknesses. Determine the best ratio for your particular application and mix all subsequent batches the same. Do not re-temper.

Pour the mixed CR-90 onto the "SSD" or Primed substrate. Then spread with a squeegee or flat trowel using enough pressure to assure good contact with the entire surface. Immediately broom finish while the material is still fresh. Work in areas small enough for easy access for broom finishing without having to walk on the fresh CR-90. Pour subsequent applications while the previous application is still wet. For heavily spalled concrete or concrete where large aggregate is exposed, a base coat should be applied first by trowel. This will create a smooth surface for the application of the thin broom coat. On vertical installations, such as stairs or walls a rubber sponge float can be used to apply CR-90. Work the float in a circular motion to achieve the desired finish over the properly prepared distressed area.

For thin stamp overlay, mix CR-90, pour out on to properly prepared (SSD) or Primed surface and screed or gauge rake material. Follow standard application methods for release agents, tooling, staining, coloring and sealing.

CR-90 can be applied at a thickness of up to 1/2" and accept foot traffic after 2 hours, and rubber wheel traffic after 8 hours at 70°F.

CURING:

During application ambient and substrate temperature should be a minimum of 50°F. CR-90 is self curing however do not allow the product to freeze or be exposed to water from rain or sprinklers within 24 hours of placement. CR-90 is a cement based product therefore temperature, wind and substrate conditions will affect performance and working time. For best performance, to maintain color, protect applied stains and appearance CR-90 should be sealed. Sealers can normally be applied after 24 hrs.

SEALERS:

For commercial applications and best protection from salt, water and staining use CMP-1000. Its unique penetrating properties offer long lasting protection in an invisible barrier formed in the concrete rather than on top.

COLOR MATCH:

Standard CR-90 dries to a light gray color; however cements vary in color from region to region, thus affecting the color of concrete. Additionally age and job site conditions will play a role therefore CR-90 may not match the surrounding distressed concrete. Should this occur consult CMP Specialty Products for a procedure to reduce discoloration. A test application is recommended to determine color suitability.

APPLICATION NOTES:

- 1.To insure installation success, be sure to test a small area for compatibility, bond strength and performance.
- 2.During application and for first 24 hrs. after prevent excessive air movement but maintain adequate ventilation. Also protect material from direct sunlight. These variables can cause uneven curing patterns and cracking.

Taber Abrasion (H22 500 g)
7 days, 200 cycles 0.04 (1.08 g)

Flexural Strength: (ASTM C348)
28 Days >1200 psi 8.2 MPa

Flammability: (ASTM E84)
Flame Spread: -0-
Fuel Contribution: -0-
Smoke Development: -0-

Eligible LEED credits : 5

Recycled Content (MR 4.1 & 4.2)
2 Points

Regional Materials (MR 5.1 & 5.2)
2 Points

Low Emitting Materials (EQ 4.1)
1 Point

Qualifying Warranties:

1 Year, 10 Year, Lifetime

Health & Safety:

Please refer to the Material Safety Data Sheet (MSDS) prior to using this product. MSDS sheets are available by calling 215.672.6364 or you can visit www.levelingcements.com.

Clean Up:

Immediately clean tools with water.

Manufactured By:

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