



CC DOT REPAIR ^{EXT}

PRE-EXTENDED RAPID SETTING CONCRETE MIX

ITEM NUMBER CC DOT REPAIR ^{EXT}

DESCRIPTION

DOT REPAIR ^{EXT} is a single component, shrinkage compensated, pre-extended, proprietary blend of cements, aggregates, and performance enhancing chemical additives. This rapid setting concrete is mixed with water on site, used for large-scale horizontal concrete repairs, and form and pour vertical applications that require high early-strength gain.

INDUSTRY USES

DOT REPAIR ^{EXT} is excellent for all types of concrete repair applications: bridge decks, concrete pavements, concrete joints, airport runways and taxiways, industrial floors, loading docks, general concrete, dowel bar retrofit, pre-stressed and precast. DOT REPAIR ^{EXT} is specifically designed for those applications requiring very rapid strength gain.

BENEFITS AND FEATURES

- Made in America
- High early strength
- Low permeability
- Pre-extended
- Thermally compatible
- Increased durability and freeze-thaw resistance; excellent adhesion; improves flexural strength
- Full depth installation
- Meets ASTM C 928
- Shrinkage compensation minimizes cracking from drying shrinkage
- Ready to use; easily mixed with water on the job-site

TECHNICAL DATA

| LABORATORY TESTS: | RESULTS |
|----------------------------------|--|
| Initial Set Time @ 72°F | 20 Minutes |
| Final Set Time @ 72°F | 40Minutes |
| Working Time @ 72°F | 20- 30 minutes |
| Application Temperature Range | 40° - 90°F (4.4° - 32°C) |
| Compressive Strength: ASTM C 109 | 3 hrs. 3,500 psi (24.1 MPa) 1 day 5,00 psi (34.4 MPa) 28 days 7,500 psi (51.7 MPa) |

COVERAGE

Approx. 0.45ft³/60 lb. bag

PACKAGING

60 lb. bag

3000 lb. bulk bags

Shelf Life: 1 year in original unopened container

Storage Conditions: Store in unopened container in a dry and cool area Application Temperature Range: 40° F – 90° F (5° C – 32° C).

LIMITATIONS

Apply only when the surface and ambient temperature are 45-50°F (7-10°C) and rising. See Cold Weather Application guidelines, per ACI, for applications in temperatures less than 50°F (10°C). Applications made during temperatures greater than 85°F (29°C) should follow Hot Weather Application guidelines, per ACI.

The minimum required thickness is 1 inch (25mm).

Do not add more water than specified.

Do not add additional powder from other units

Do not over mix



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MIXING

Use CC DOT REPAIR ^{EXT} at a preconditioned temperature of $71 \pm 5^\circ \text{F}$ ($22 \pm 3^\circ \text{C}$). Use 2.19 to 2.30 quarts (2.07 to 2.18 L) of water per 60lb (27.2kg) bag. Mixing must be achieved mechanically using a slow-speed, $\frac{3}{4}$ inch (19mm) drill and mixing paddle. Conduct field trials to verify proper slump, (approx. 8") yield and a thoroughly mixed product.

Mix while slowly adding the powder, one-third at a time.

Mix up to 4 minutes to a uniform lump-free consistency. Avoid over mixing which could entrap air.

APPLICATION

Surface Preparation (See ICRI guidelines)

1. Concrete must be sound and fully cured (28 days).
2. Saw cut the perimeter of the area being patched into a square with a minimum depth of 1" (25 mm).
3. Remove all unsound concrete and roughen the surface to min. 1/4" profile amplitude.
4. Remove all laitance, oil, grease, curing compounds, and other contaminants that could prevent adequate bond.
5. The concrete substrate should be saturated surface-dry (SSD), without standing water, before application.
6. Apply the mixed material onto the prepared saturated surface-dry (SSD) substrate by trowel or screed. Ensure proper consolidation of the mortar and compaction around reinforcing steel. Minimum application thickness is 1" based on a 3/8" max. coarse aggregate. Finish the completed repair, as required, taking care not to overwork the surface.

Reinforcing Steel

Remove all oxidation and scale from the exposed reinforcing steel in accordance with ICRI Technical Guideline No. 03730 "Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion."

CLEAN UP

Clean tools and equipment with clean water immediately after use. Cured material must be removed mechanically.

CAUTION

Safety Considerations

- Use adequate ventilation.
- Use of NIOSH/MSHA approved dust vapor respirator, safety goggles and protective gloves are recommended.

First Aid

- **EYE CONTACT:** Flush immediately with water for at least 15 minutes. Contact physician immediately.
- **RESPIRATORY CONTACT:** Remove person to fresh air. If the discomfort persists, breathing difficulty occurs, or if swallowed seek medical attention.
- **SKIN CONTACT:** Remove any contaminated clothing. Wash skin thoroughly with soap and water. If irritation persists, seek medical attention.

KEEP CONTAINER TIGHTLY CLOSED – KEEP OUT OF REACH OF CHILDREN – NOT FOR INTERNAL CONSUMPTION – FOR INDUSTRIAL USE ONLY

LIMITED WARRANTY

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