ITEM NUMBER  CC DOT REPAIR MORTAR

DESCRIPTION
DOT REPAIR MORTAR is a cement BASED blend of specialty aggregates and admixtures providing a rapid setting, high strength, durable concrete repair for use on airport runways, taxiways, concrete floors, highway pavements, bridge decks and other applications requiring early resumption of traffic or use. Formulated to meet the requirements of ASTM C928 Packaged, Dry, Rapid Hardening Cementitious Material for Concrete Repair.

DOT REPAIR MORTAR is pre-mixed, requiring only the addition of potable water. This unique mortar provides outstanding results and enables the project to be completed more rapidly than with conventional patching & repair materials.

INDUSTRY USES
DOT REPAIR MORTAR 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 MORTAR is specifically designed for those applications requiring very rapid strength gain.

BENEFITS AND FEATURES
- Made in America
- High early strength – open to traffic in 3 hours
- Low permeability
- Non-corrosive
- Thermally compatible
- Increased durability and freeze-thaw resistance; excellent adhesion; improves flexural strength
- Aggregate extension: Up to 60 % on repairs greater than 2”
- Meets ASTM C 928: Specification for Very Rapid Hardening Cementitious Repair Materials
- Shrinkage compensation minimizes cracking from drying shrinkage
- Ready to use; easily mixed with water on the job-site

TECHNICAL DATA

<table>
<thead>
<tr>
<th>LABORATORY TESTS</th>
<th>RESULTS</th>
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<tbody>
<tr>
<td>Initial Set Time @ 72°F</td>
<td>45 – 60 Minutes</td>
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<tr>
<td>Final Set Time @ 72°F</td>
<td>70 – 90 Minutes</td>
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<tr>
<td>Working Time @ 72°F</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Application Temperature Range</td>
<td>40°F - 90°F (4.4° - 32°C)</td>
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<tr>
<td>Bond Strength</td>
<td>24 hours: 1500 psi (10 MPa)</td>
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<td>Length Change - dry shrinkage</td>
<td>-0.12 %</td>
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<tr>
<td>Compressive Strength: ASTM C 109</td>
<td>3 hrs. 3,500 psi (24.1 MPa)</td>
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<td></td>
<td>1 day 5,200 psi (35.0 MPa)</td>
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<tr>
<td></td>
<td>28 days 8,500 psi (58.0 MPa)</td>
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COVERAGE
Approx. 0.45ft³/50 lb. bag
0.60ft³/50 lb. bag with 50 % extension of 3/8” pea gravel.

PACKAGING
50 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 1/2 inch (12.6mm).
Do not add more water than specified.
Do not add additional powder from other units
Do not over mix or retemper
Do not featheredge

MIXING
Use CC DOT REPAIR MORTAR at a preconditioned temperature of 71 ± 5° F (22 ± 3° C). Use 4.75 – 5.25 (2.25 – 2.48L) pints of water per 50lb (27.2kg) bag. Mixing must be achieved mechanically using a slow-speed, ¾ inch (19mm) drill and mixing paddle.
Mix while slowly adding the powder to the water.
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 1/2” (12.5 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 1/2” based on a 3/8” max. coarse aggregate. Finish the completed repair, as required, taking care not to overwork the surface.
7. For repairs over 2” deep the material should be extended 50 % by weight with clean, SSD, 3/4” pea gravel conforming to ASTM C 33.

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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