EXPRESS REPAIR
RAPID SETTING REPAIR MORTAR WITH CORROSION INHIBITOR

DESCRIPTION
EXPRESS REPAIR is a cementitious, ready to use, rapid strength gaining repair mortar containing an integral corrosion inhibitor. EXPRESS REPAIR is capable of being extended up to 100% with pea gravel. Requiring only the addition of water, EXPRESS REPAIR is easy to use for fast track projects.

PRIMARY APPLICATIONS
Interior and exterior, horizontal concrete repairs on:
• Highways
• Bridge decks
• Parking decks
• Loading docks
• Pavement joints
• Industrial floors

FEATURES/BENEFITS
• Fast setting
• Rapid strength gain
• Contains an integral corrosion inhibitor
• Excellent durability
• Compatible with galvanic anodes

TECHNICAL INFORMATION
The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Initial Set, ASTM C266
Gilmore Needle ........................................20 to 30 min

Compressive Strength, ASTM C109 psi (MPa)
3 hours ................................................3,200 (22.0)
24 hours ...............................................5,800 (40.0)
7 days ..................................................7,000 (48.3)
28 days ..............................................9,000 (62.1)

Flexural Strength, ASTM C348 psi (MPa)
1 day ...................................................800 (5.5)
7 days ...............................................1,500 (10.3)
28 days ..............................................1,700 (11.7)

Volumetric Resistivity .................................................13,390 ohm-cm

Split Tensile Strength, ASTM C496 psi (MPa)
1 day ........................................................300 (2.1)
7 days ......................................................550 (3.8)
28 days ....................................................800 (5.5)

Scaling Resistance ASTM C672
25 cycles ...............................................Rating 2

Freeze Thaw Durability Factor, ASTM C666
300 cycles .................................................95%

Shrinkage, ASTM C157
3 days .....................................................-0.040%
7 days .....................................................-0.078%
28 days ...................................................-0.093%

PACKAGING
EXPRESS REPAIR is packaged in 50 lb (22.7 kg) poly-lined bags

SHELF LIFE
18 months in original, unopened package

SPECIFICATIONS/COMPLIANCES
Complies with ASTM C 928, Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repairs

COVERAGE
One 50 lb (22.7 kg) bag yields approximately 0.42 ft³ (0.01m³) when mixed with 3 qt (2.8 L) of potable water. Extending with 50 lb (22.7 kg) of 3/8” (9.5 mm) pea gravel per bag increases the yield to approximately 0.75 ft³ (0.02 m³).
### Directions for Use

**Surface Preparation:** Concrete surfaces must be structurally sound, free of loose or deteriorated concrete and free of dust, dirt, paint, efflorescence, oil and all other contaminants. Mechanically abrade the surface to achieve a surface profile equal to CSP 5 - 7 in accordance with ICRI Guideline 310.2. Properly clean profiled area.

**Priming & Bonding (Saw Cut & Chipped Out Repairs):** Thoroughly clean any exposed reinforcing steel, and apply DURALPREP A.C. to the concrete and the reinforcing steel within the repair area. Refer to the DURALPREP A.C. technical data sheet for full instructions. Alternatively, application of EUCOWELD 2.0 or a scrub coat of EXPRESS REPAIR to the saturated surface dry (SSD) concrete surface may be used for bonding. The repair material must be placed on the scrub coat before the scrub coat dries out.

**Mixing:** EXPRESS REPAIR requires 2.75 to 3 qt (2.6 to 2.8 L) of mix water per 50 lb (22.7 kg) bag. Use a drill with a “jiffy” type mixer for mixing single bags. For larger applications use a paddle type mortar mixer or a standard concrete mixer. Do not add additional water. For repair areas over 1½” (38.1 mm) deep, extend by adding up to 50 lbs (22.7 kg) of 3/8” (9.5 mm) clean, well-graded SSD pea gravel per 50 lb (22.7 kg) of EXPRESS REPAIR. Proper mixing sequence involves first, adding the measured quantity of water to the mortar mixer; second, adding the pea gravel; and third, adding the EXPRESS REPAIR and thoroughly mixing for 2 to 4 minutes. Do not mix longer than 4 minutes.

**Application:** EXPRESS REPAIR should be mixed, placed and finished within 15 minutes. Place the mixed material into the prepared area to be repaired. Work the material firmly into the bottom and sides of the repair area to ensure good adhesion. Screed and trowel the material level with the existing concrete, and finish the surface as desired. Thickness of EXPRESS REPAIR must be a minimum of ½” (12.7 mm) and a maximum of 1½” (38.1 mm) neat. Repair areas over 1½” (38.1 mm) must be extended or applied in multiple lifts. When applying multiple lifts, allow the initial repair to reach final set, score the surface and then place the subsequent lift. Do not overtrowel or featheredge. Follow ACI guidelines for proper curing. On windy or hot days or when under direct sunlight, wet curing is recommended.

**Cold Weather Application:** Application at temperatures below 45°F (7°C) extends the set time. Heating the repair area, using warm water for mixing, and tenting or insulating the repair area after application will increase rate of strength development. Do not use direct, unvented heat on the repair after installation.

### Clean-Up

Clean application tools and mixer with water immediately after use. Hardened EXPRESS REPAIR will be difficult to remove.

### Precautions/Limitations

- Do not featheredge, overwork, retemper or overtrowel the patching material.
- Minimum depth of patching is 1/2” (13 mm).
- Do not add any admixtures or bonding agents to EXPRESS REPAIR.
- The repair area should be frost free prior to application.
- Do not apply at temperatures below 35°F or above 90°F (1.7°C or above 32°C).
- When necessary, follow the recommendations in ACI 305R “Guide to Hot Weather Concreting” or ACI 306R “Guide to Cold Weather Concreting”.
- Store in covered storage away from all moisture.
- In all cases, consult the Safety Data Sheet before use.

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