



# EXPRESS REPAIR

**RAPID-SETTING REPAIR MORTAR WITH CORROSION INHIBITOR EUCLID CHEMICAL**

HORIZONTAL REPAIR

EXPRESS REPAIR

MASTER FORMAT #: 00 00 00

## DESCRIPTION

**EXPRESS REPAIR** is a cement-based, ready to use, rapid strength gaining repair mortar containing a migratory 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 turn-around projects.

## PRIMARY APPLICATIONS

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| Interior and exterior, horizontal concrete repairs on: <ul style="list-style-type: none"> <li>• Highways</li> <li>• Bridge decks</li> </ul> | <ul style="list-style-type: none"> <li>• Parking decks</li> <li>• Loading docks</li> <li>• Pavement joints</li> <li>• Industrial floors</li> </ul> |
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## FEATURES / BENEFITS

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| <ul style="list-style-type: none"> <li>• Fast setting</li> <li>• Rapid strength gain</li> <li>• Contains a migratory corrosion inhibitor</li> </ul> | <ul style="list-style-type: none"> <li>• Excellent durability</li> <li>• Develops tenacious bond</li> <li>• Compatible with galvanic anodes</li> </ul> |
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## TECHNICAL INFORMATION

### Material Properties @ 24°C

**Initial Set**, ASTM C 266  
 Gilmore Needle..... 20 to 30 min

### Compressive Strengths ASTM C109 MPa

3 hours.....22 MPa  
 24 hours.....40 MPa  
 7 days.....48.3 MPa  
 28 days.....69.2 MPa

### Flexural Strength ASTM C 348

1 day.....5.5 MPa  
 7 days.....10.3 MPa  
 28 days.....11.7 MPa

**Volumetric Resistivity**.....13,390 ohm/cm

### Split Tensile Strength, ASTM C 496 MPa

1 day.....2.1  
 7 days.....3.8  
 28 days.....5.5

### Scaling Resistance ASTM C 672

100 cycles ..... no scaling

**Freeze Thaw**, Durability Factor..... ASTM C 666  
 350 cycles.....100%

### Shrinkage, ASTM C 157

3 days.....-0.040%  
 7 days.....-0.078%  
 28 days.....-0.093%

## PACKAGING

**EXPRESS REPAIR** is packaged in 22.7kg poly-lined bags

## SHELF LIFE

1 year in original, unopened package.

## COVERAGE

One 22.7 kg bag yields approximately 10L when mixed with 2.8L of potable water. Extending with 22.7 kg of 9.5 mm pea gravel per bag increases the yield to approximately 20L.

## SPECIFICATIONS/COMPLIANCE

Complies with ASTM C 928 Standard Specification for Packaged, Dry, Rapid-Hardening, Cementitious Materials for Concrete Repair

## DIRECTIONS FOR USE

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**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:** Clean and prime exposed steel with DURALPREP A.C. Concrete should be primed with a spray or brush coat of DURALPREP A.C. The primer coat of DURALPREP A.C. must be allowed to thoroughly dry prior to the application of EXPRESS REPAIR. Alternatively, a Saturated Surface Dry (SSD) concrete surface can be primed with a scrub coat of EXPRESS REPAIR. The repair must be made before the scrub coat dries out.

**Mixing:** EXPRESS REPAIR requires 2.6 to 2.8 L of mix water per 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 38.1 mm deep, extend by adding up to 22.7 kg of 9.5 mm clean, well-graded SSD pea gravel per 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 12.7 mm and a maximum of 38.1 mm neat. Repair areas over 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 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

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

## PRECAUTIONS / LIMITATIONS

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- Do not featheredge, overwork, retemper or overtrowel the patching material.
- Minimum depth of patching is 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 1.7°C or above 32°C.
- Store in covered storage away from all moisture.
- In all cases, consult the Safety Data Sheet before use.

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