

EXPRESS REPAIR

RAPID SETTING REPAIR MORTAR WITH CORROSION INHIBITOR



EUCLID CHEMICAL

PACKAGING

EXPRESS REPAIR is packaged in 25kg polyethylene lined bags

APPROXIMATE YIELD

25kg bag: 12 litres per bag when mixed with 3.3 litres of potable water.

Extended: 16 litres per bag when extended with up to 12.5kg of Pro-Struct 53-MC. See full extending instructions under "Directions of Use".

MINIMUM / MAXIMUM APPLICATION THICKNESS

Neat: 12 to 38mm

Extended: 25 to 75mm

CLEAN-UP

Clean tools and equipment with water before the material hardens.

SHELF LIFE

18 Months in original, unopened container.

SPECIFICATIONS AND COMPLIANCES

ASTM C928 Standard Specification for packaged, dry, rapid-hardening cementitious materials for concrete

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 50% with Pro-Struct 53-MC. Requiring only the addition of water, EXPRESS REPAIR is easy to use for fast track projects.

PRODUCT CHARACTERISTICS**FEATURES / BENEFITS**

- Fast setting
- Rapid strength gain
- Contains an integral corrosion inhibitor
- Excellent durability
- Compatible with galvanic anodes

PRIMARY APPLICATIONS

- Interior and/or exterior
- Highways
- Bridge decks
- Parking decks
- Loading docks
- Pavement joints
- Industrial floors

TECHNICAL INFORMATION

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

TEST METHOD	TEST PROPERTY	VALUE AT 25 °C
	Setting Time	Initial Set: 10 to 15 minutes
ASTM C109	Compressive Strength	1 Hour: 12 MPa 1 Day: 35 MPa 7 Days: 55 MPa
ASTM C348	Flexural Strength	1 Day: 5.5 MPa 7 Days: 10.3 MPa 28 Days: 11.7 MPa
	Volumetric Resistivity	13.390 ohm-cm
ASTM C496	Split Tensile Strength	1 Day: 2.1 MPa 7 Days: 3.8 MPa 28 Days: 5.5 MPa
ASTM C672	Scaling Resistance	25 Cycles: Rating 2
ASTM C666 Procedure A	Freeze / Thaw Resistance	300 Cycles: 95%
ASTM C157	Shrinkage	3 Days: -0.040% 7 Days: -0.078% 28 Days: -0.093%

EXPRESS REPAIR (1) July 2023

To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. User must contact StonCor Africa to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to StonCor Africa Quality Control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. Prices and cost data, if shown, are subject to change without prior notice. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY STONCOR AFRICA, EXPRESS OR IMPLIED, STATUTORY BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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. Application of EUCOWELD 2.0 to a dry substrate 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: One 25kg bag requires 3.3 to 3.5 litres of potable water. All materials should be in the proper temperature range of 20°C to 32°C. Single 25kg units may be mixed with a drill and “jiffy” mixer. A paddle type mortar mixer or pan mixer may be used for large jobs. Add the appropriate amount of potable water to a clean mixing vessel, then gradually add the dry product. Do not exceed maximum water or add any additional additives. Mix for 2 to 4 minutes. Do not mix longer than 4 minutes and do not retemper. EXPRESS REPAIR should be mixed, placed and finished within 15 minutes.

Extending Instructions (Optional): When extended, EXPRESS REPAIR may be applied in lifts of up to 75mm. One 25kg bag may be extended by adding 12.5 of Pro-Struct 53-MC to the mix. When extending, mix order should be water, followed by aggregate, followed by EXPRESS REPAIR while following above mix instructions.

Placement: Ambient and surface temperatures should be in the range of 5°C to 32°C. Working time at 25°C is approximately 10 to 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. Do not use EXPRESS REPAIR for repairs less than 12mm deep. If placing thicker than 38mm, material should be extended or placed in multiple lifts. If multiple lifts are to be applied, score the previous lift after placing to provide a suitable surface for mechanically bonding subsequent lifts.

Cold Weather Placement: 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.

Finishing: Screed and trowel the material level with the existing concrete and finish the surface as desired. Do not over-trowel and do not add water to the surface during the finishing operation. Always re-establish floor and slab joints when using this product as a finished surface.

Curing and Sealing: Proper curing procedures are important to ensure the durability and quality of the repair. For best results, cure with wet burlap, plastic or a Euclid Chemical high solids cure and seal.

PRECAUTIONS / LIMITATIONS

- Store in a dry place.
- The application temperature range is 5°C to 32°C.
- The repair area should be free of frost prior to application.
- When necessary, follow the recommendations in ACI 305R “Guide to Hot Weather Concreting” or ACI 306R “Guide to Cold Weather Concreting”.
- Do not feather edge, over-work, retemper or over-trowel the patching material.
- Minimum depth of patching is 12mm.
- In all cases, consult the Material Safety Data Sheet before use.

EXPRESS REPAIR (1) July 2023

To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. User must contact StonCor Africa to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to StonCor Africa Quality Control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. Prices and cost data, if shown, are subject to change without prior notice. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY STONCOR AFRICA, EXPRESS OR IMPLIED, STATUTORY BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.