

VERTICAL/OVERHEAD REPAIR

Master Format #: 03 01 30.71



EUCLID CHEMICAL

SPEED CRETE RED LINE

RAPID SETTING REPAIR MATERIAL

PACKAGING

50 lb (22.7 kg) bag
Code: TR5101650
50 lb (22.7 kg) pail
Code: TR5101750

APPROXIMATE YIELD

50 lb (22.7 kg) unit: 0.47 ft³ (0.013 m³)
per unit when mixed with 5.5 quarts
(5.2 L) of potable water.

MINIMUM/MAXIMUM APPLICATION THICKNESS

1/8 to 2 inches (3 to 50 mm)

CLEAN UP

Clean tools and equipment with water
before the material hardens.

SHELF LIFE

18 months in unopened package

DESCRIPTION

SPEED CRETE RED LINE is a rapid-setting, cement-based concrete and masonry repair mortar. SPEED CRETE RED LINE is a proprietary formulation of blended portland cements, finely processed selected aggregates, and specific chemical additives that undergo a chemical "hyper hydration" and produces a stable, low permeability, cementitious matrix. SPEED CRETE RED LINE can be "shaved" for detailed repairs.

PRODUCT CHARACTERISTICS

FEATURES/BENEFITS

- Initial set in 8 to 20 minutes
- Final set within 30 minutes
- Can be "shaved" to desired shape
- High strength
- Excellent durability
- Compatible with galvanic anodes

PRIMARY APPLICATIONS

- Interior and exterior
- Vertical and overhead repairs
- Used at no slump consistency
- Outstanding repair material for concrete pipe, formed and precast concrete

APPEARANCE

Available in 6 shades of gray

TECHNICAL INFORMATION

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

Test Method	Test Property	Values
ASTM C109	Compressive Strength	1 day 2,550 psi (17.6 MPa) 7 day 4,000 psi (27.6 MPa) 28 days 5,700 psi (39.3 MPa)
ASTM C266	Set Times	Initial Set 8 to 20 minutes Final Set 15 to 30 minutes
ASTM C496	Split Tensile Strength	7 days 240 psi (1.7 MPa) 28 days 290 psi (2.0 MPa)
ASTM C348	Flexural Strength	7 days 700 psi (4.8 MPa) 28 days 918 psi (6.3 MPa)
ASTM C666	Freeze/Thaw Resistance	300 cycles 96.75%
ASTM C157* 50% RH	Shrinkage	28 days - 0.069%
ASTM C157* 100% RH	Expansion	28 days 0.142%
ASTM C672	Scaling Resistance	50 cycles 0% loss
	Volumetric Resistivity	5,250 ohm-cm

*3"x3"x11" specimens were removed from molds @ 24 hours

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 6 - 8 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 to a dry substrate or a scrub coat of SPEED CRETE RED LINE 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 50 lb (22.7 kg) unit requires 5.0 to 5.5 qt (4.7 to 5.2 L) of potable water. All materials should be in the proper temperature range of 60 to 90 °F (15 to 32 °C). Single 50 lb (22.7 kg) units may be mixed with a drill and “jiffy” mixer. Use a rotary mixer with rubber tip blades for mixing quantities up to 100 lbs. (45.4 kg). 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. Thoroughly mix for no more than 60 seconds to a stiff, no slump, putty-like consistency. Do not retemper.

Extending Instructions (Optional): When extended, SPEED CRETE RED LINE may be applied in lifts of up to 4” (10 cm). One 50 lb (22.7 kg) unit may be extended by adding up to 40 lb (18 kg) of clean, SSD, 3/8” (9.5 mm) rounded pea gravel (#8, ASTM C33) to the mix. The pea gravel must be dense and non-absorptive per ASTM C127 and non-reactive (ASR) per ASTM C227, C289 and C1260. DO NOT USE LIMESTONE AGGREGATE. Mixing procedure: Start mixer, load water, load pea gravel, and then load the SPEED CRETE RED LINE. MIX FOR NO MORE THAN 60 SECONDS.

Placement: After mixing, place the mortar into the prepared area to be repaired. Work the material firmly into the bottom and sides of the repair area to ensure good adhesion. SPEED CRETE RED LINE should be placed in 1/8” to 2” (3 to 50 mm) lifts. If multiple lifts are to be applied, score the previous lift after placing to provide a suitable surface for mechanically bonding subsequent lifts. Slightly overfill the repair.

Finishing: Following initial set, shave the material to conform to the contour of the surrounding surface. Always shave SPEED CRETE RED LINE toward the common bonding edge between the repair mortar and the existing surface.

Cold Weather Installation: Application at temperatures below 40°F (4°C) extends the set time. Heating the repair area until warm, using warm water for mixing, and tenting/insulating the repair area after application will increase strength development. Do not use direct heat on the repair after it is installed.

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 away from all moisture.
- Mix to a stiff, putty-like, no slump consistency. Do not add more water than recommended.
- Use only potable water with SPEED CRETE RED LINE.
- Mix no more than 60 seconds.
- Do not re-temper or add sand to SPEED CRETE RED LINE.
- When necessary, follow the recommendations in ACI 305R “Guide to Hot Weather Concreting” or ACI 306R “Guide to Cold Weather Concreting”.
- Do not use as a horizontal topping or as a tile setting mortar.
- In all cases, consult the Safety Data Sheet before use.

Rev. 12.22

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