SPEED CRETE RED LINE



RAPID SETTING REPAIR MATERIAL

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.

PRIMARY APPLICATIONS

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

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

TECHNICAL INFORMATION

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

Compressive Strength, psi (MPa)	ASTM C109
24 Hour	2,550 (17.6)
7 Day	4,000 (27.6)
28 Day	5,700 (39.3)
Set Time, ASTM C266	
Initial	8 - 20 Min
Final	15 - 30 Min
Split Tensile Strength, psi (MPa) ASTM C496	
7 Day	240 (1.7)
28 Day	290 (2.0)
Flexural Strength, psi (MPa) ASTM	C348
7 Day	700 (4.8)
28 Day	918 (6.3)

Freeze Thaw Durability Factor ASTM C666 300 Cycles96.75%
Shrinkage 50% RH ASTM C157 (3"x3"x11" specimens were removed from molds @ 24 hours) 28 Day0.069%
Expansion 100% RH ASTM C157 (3"x3"x11" specimens were removed from molds @ 24 hours) 28 Day
Scaling Resistance ASTM C672 50 Cycles0% loss
Volumetric Resistivity5,250 ohm-cm
Appearance: Available in 6 shades of gray

PACKAGING

SPEED CRETE RED LINE is packaged in 50 lb (22.7 kg) poly-lined bags, and 50 lb (22.7 kg) pails

SHELF LIFE

18 months in original, unopened packaging

COVERAGE

One 50 lb (22.7 kg) bag yields approximately 0.47 ft3 (0.013 m3) when mixed with 5.5 qt (5.2 L) water

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 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: SPEED CRETE RED LINE will require approximately 5 to 5.5 qt (4.7 to 5.2 L) of potable water per 50 lb (22.7 kg) bag to achieve the proper mix consistency. Pour the measured amount of water into a clean mixing container, then add the SPEED CRETE RED LINE, and thoroughly mix for no more than 60 seconds to a stiff, no slump, putty-like consistency. Mix small quantities of SPEED CRETE RED LINE in a clean pail with a hand trowel. Use a rotary mixer with rubber tip blades for mixing quantities up to 100 lbs. (45.4 kg). To fill patches 2" (5.1 cm) deep or greater, add clean, pre-dampened, 3/8" (0.96 cm) size pea gravel. DO NOT USE LIMESTONE AGGREGATE. The mix ratio must not exceed 40 lbs. (18 kg) of pea gravel to each 50 lb (22.7 kg) bag or pail of SPEED CRETE RED LINE. **Mixing procedure:** Start mixer, load water, load pea gravel, and then load the SPEED CRETE RED LINE. MIX FOR NO MORE THAN 60 SECONDS.

Application: For vertical repairs, place SPEED CRETE RED LINE in 1/8" - 2" (3.2mm - 50.0 mm) lifts. To ensure a complete bond with the entire surface, force the SPEED CRETE RED LINE firmly into the SSD area by hand or with a trowel. Slightly overfill the repair, and 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. Cure material using standard curing practices.

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.

CLEAN-UP

Clean application tools and mixing equipment with water immediately following use.

PRECAUTIONS/LIMITATIONS

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

Rev. 03.19