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, overhead and horizontal repairs
- Used at no slump consistency
- Outstanding repair material for concrete pipe, curbs, sidewalks, formed and precast concrete

Features/Benefits

- Initial set in 8 to 10 minutes
- Final set within 20 minutes
- · Can be "shaved" to desired shape

- High strength
- · Excellent durability
- · Compatible with galvanic anodes

Technical Information

Material Properties at 75°F (24°C)	
Compressive Strength, psi (MPa) ASTM	C 109
24 Hour2,	550 (17.6)
7 Day4,	
28 Day5,	700 (39.3)
Set Time, ASTM C 266	
Initial	8 - 20 Min
Final1	5 - 30 Min
Split Tensile Strength, psi (MPa) ASTM C 496	
7 Day	240 (1.7)
28 Day	290 (2.0)
Flexural Strength, psi (MPa) ASTM C 348	
7 Day	700 (4.8)
28 Day	, ,

Freeze Thaw Durability Factor ASTM C 666 300 Cycles96.75%	
Shrinkage 50% RH ASTM C 157 (3"x3"x11" specimens were removed from molds @ 24 hours) 28 Day0.069%	
Expansion 100% RH ASTM C 157 (3"x3"x11" specimens were removed from molds @ 24 hours) 28 Day0.142%	
Scaling Resistance ASTM C 672 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

1 year 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:** Clean and prime exposed steel with DURALPREP AC. Concrete should be primed with a spray or brush coat of DURALPREP AC. The primer coat of DURALPREP AC must be allowed to thoroughly dry prior to the application of SPEED CRETE RED LINE. Alternately, a Saturated Surface Dry (SSD) concrete surface can be primed with a scrub coat of SPEED CRETE RED LINE. The repair must be made 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: Place SPEED CRETE RED LINE in 1/8" - 2" 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 or insulating the repair area after application, will assist in greater strength development. Do not use direct heat on the repair after its installation.

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.
- SPEED CRETE RED LINE should not be used for repairs that will be underwater. Use SPEED CRETE BLUE LINE for these applications.
- Use only potable water with SPEED CRETE RED LINE.
- · Mix to a stiff, putty-like, no slump consistency.
- Do not retemper or add sand to SPEED CRETE RED LINE.
- In all cases, consult the Safety Data Sheet before use.