



CE220 BONDING AGENT

BONDING AGENT

ITEM NUMBER CE220

DESCRIPTION

CE220 Bonding Agent is a two-component, 100% solids, moisture-insensitive, medium viscosity, high strength, multi-purpose liquid epoxy adhesive. It meets the current ASTM C881 and AASHTO M235, Types I, II, IV & V Grade 2, Classes B & C specifications.

INDUSTRY USES

Use to bond freshly mixed concrete to hardened concrete. Fill voids and crack in concrete, masonry. Use as a binder in epoxy mortar. Can be used as an anchoring adhesive.

FEATURES AND BENEFITS

- May be used on damp or dry surfaces
- High strength structural adhesive
- Made in America
- Convenient 1:1 mix ratio by volume

COVERAGE

50 to 100 sq. ft. per gallon (1.2 to 2.4 m² / L)

PACKAGING

- 1 gal / 3.8 L units
- 2 gal / 7.6 L units
- 10 gal / 38 L units
- 600 ml cartridge

TECHNICAL DATA

Shelf Life:	2 years year in original unopened container.
Storage Conditions:	40°F – 95°F (5°C – 35°C).
Condition material to:	65°F – 85°F (18°C – 29°C) before using.
Mix Ratio	1:1 by volume
Viscosity	3,300 cps
Gel Time (60 g mass)	45 minutes
Tack Free Time (73° F or 23° C)	3 to 4 hours
Tensile Properties (ASTM D638), 7 day cure	
Tensile Strength:	7,500 psi (51.7 MPa)
Tensile Elongation:	3%
Bond Strength (ASTM C882)	
2 day cure:	2,300 psi
7 day cure:	3,360 psi
Compressive Properties (ASTM D695), 7 day cure	
Compressive Strength:	10,400 psi
Compressive Modulus:	406,400 psi
Shear Strength (ASTM D732)	5,500 psi (37.9 MPa)
Flexural Strength (ASTM D790)	6,000 psi (41.4 MPa)
Shrinkage on Cure (ASTM D2566)	0.2%
Thermal Compatibility (ASTM C884)	Pass
Heat Deflection Temperature (ASTM D648)	122° F (50° C)
Water Absorption (ASTM D570)	0.11% (24 hr)



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APPLICATION

SURFACE PREPARATION: Concrete shall have reached its design strength and be dimensionally stable. All surface contamination must be removed by mechanical means, creating a surface profile of exposed sound aggregate. Metal surfaces should be sandblasted to white metal finish and wiped clean with solvent.

MIXING: Pre-mix each component. Mix only the amount of material that can be used within its pot life. Proportion each component carefully into a clean pail. Mix thoroughly for 3 minutes with a Jiffy mixer on low speed (400-600rpm). Scrape the sides and bottom of the container. To prepare an epoxy patching mortar, slowly add 2-3 parts of oven-dried silica sand to 1 part of mixed epoxy by volume. Mix only until all aggregate is wetted out.

TO BOND FRESH CONCRETE TO OLD: Use a brush, roller or squeegee to apply about 15 to 30 mils (0.38 to .76 MM) thick bond line. Place fresh concrete when epoxy is still tacky.

TO GRAVITY FEED CRACKS: Blow vee-notched crack with oil-free compressed air. Seal underside if cracks reflect through. Pour mixed epoxy into cracks. Repeat until completely filled.

TO PATCH AND GROUT: Prime substrate with neat mixed epoxy. Place epoxy mortar using trowels before primer become tack-free.

LIMITATIONS

Minimum substrate temperature is 40° F (5° C). Do not thin. Solvents will prevent proper cure.

CLEAN UP

Collect with absorbent material. Flush area with water. Dispose of in accordance with local, state and federal disposal regulations. Uncured material can be removed with Natural Clean or other approved solvent. Cured material can only be removed mechanically.

LIMITED WARRANTY

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