METALCRETE SINCE 1908

CRACKBOND

Low Viscosity, Penetrating Epoxy Crack Filler

1. Product Description

a. Basic Use: Crackbond is a very low viscosity two-component epoxy, joint and crack filler designed to penetrate and rebond cracks in concrete. This free flowing liquid is installed by simply allowing the material to penetrate the crack by gravity feed. Crackbond may also be installed by pressure injection methods. It permanently bonds non-moving cracks and joints in concrete.

b. Features/Benefits:

- Consists of 100% solids epoxy to allow total compliance with VOC regulations.
- Very low viscosity epoxy is capable of penetrating cracks as small as 0.004 in. (0.10 mm).
- Contains no volatile solvents permitting interior applications with no risk of fire or toxic odors.
- Excellent adhesive properties bonds together concrete cracks caused by drying shrinkage and most structural deficiencies.
- Rapid cure time drastically reduces operational downtime and allows for exposure to traffic in less than 24 hours.
- Flexible epoxy compound permits use where slight crack movement is possible.
- Easy to use gravity feed system does not require special tools, equipment and workman skills.
- May be pressure injected into vertical and overhead concrete cracks.
- Low modulus formulation accommodates floor slab crack movement due to thermal variations.
- Self-leveling consistency may be used to repair random cracking and fill control joints in concrete floors.
- **c. Typical Applications:** Sealing, filling, and bonding cracks in concrete parking decks, industrial floor slabs, bridge decks, walls, pedestals, driveways, sidewalks and road pavements.
- **d. Limitations:** Crackbond should not be used to bond and fill cracks in concrete floors or other structural members that are less than 60 days old. Do not install when ambient and substrate temperatures are less than 40°F (4°C).

- **e. Composition:** Crackbond is a two-component, very low viscosity, moisture insensitive, 100% solids, penetrating epoxy crack filler and bonding compound.
- **f. Color/Appearance:** Crackbond hardens to an amber/cloudy color.

2. Packaging

Crackbond is supplied in two unit sizes, each containing the proper proportion of liquid components. Standard packaging information is show below:

Unit Size	Binder	Activator	Shipping Wt.
1.5 gal.	1 gal.	0.5 gal.	17 lbs.
(5.7 liter)	(3.8 liter)	(1.9 liter)	(7.7 Kg)
3 gal.	2 gal.	1 gal.	33 lbs.
(11.4 liter)	(7.6 liter)	(3.8 liter)	(15.0 Kg)

3. Estimating/Coverage

One mixed gal. (3.8 liter) of Crackbond will fill 231.0 cu. in. (3785 cu. cm) of cracks or joints. The exact amount of Crackbond is determined by the surface texture, porosity, and profile of the crack or joint.

4. Technical Data

a. Compressive Strength: ASTM D 695; 5,100 psi (35.2 MPa).

b. Tensile Strength: ASTM D 638; 4,200 psi (28.0 MPa).

c. Elongation: ASTM D 638; 9.9%.

d. Flexural Strength: ASTM D 790; 5,600 psi (38.6 MPa).

e. Flexural Modulus of Elasticity: ASTM D 790; 204,000 psi (1,407 MPa).

f. Heat Distortion Temperature: ASTM D 648; $110^{\circ}F$ (44°C).

g. Hardness: ASTM D 2240, Shore D 80.

h. Viscosity: 400 CPS.

i. Mixing ratio: 3.5 to 1.0 by volume.

5. Directions for Use

a. Preparation: The surface to be treated must be physically sound, thoroughly clean, free of oil, wax, rust,

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scale, curing compounds and other deleterious materials that will prevent proper adhesion. Grinding, wire brushing, sand blasting or cleaning with a combination of water and compressed air may be required to expose a sound and clean bonding surface.

- **b. Priming:** Crackbond does not require a primer.
- **c. Mixing:** Thorough blending of all components is essential. Use a power drill with a Metco Jiffy mixing blade. First, mix the binder separately; then, mix the activator separately. Next, add the mixed activator to the mixed binder and thoroughly blend for at least two minutes at revolution speeds that will not entrap air bubbles into the freshly mixed Crackbond epoxy compound.
- **d. Application:** Crackbond is applied by simply pouring the mixed epoxy compound into the properly prepared crack or joint. Continue placing Crackbond until the material completely fills the crack or joint. Care should be taken to continually fill the crack as the mixed epoxy compound penetrates into the crack or joint. Spread the mixed epoxy with a squeegee or putty knife.
- **e. Working Time/Pot Life:** Crackbond must be installed within one hour after mixing.
- **f. Cure Time:** Crackbond will be tack-free in 8 hours depending on air and substrate temperature. Final cure is achieved in 3 to 5 days.

- **g. Clean-Up:** Use DL Solvent or Waterzall Concentrate and water to clean tools and equipment.
- **h. Maintenance:** Crackbond surfaces should be cleaned with DL Solvent or a Waterzall Concentrate and water solution. Crackbond may be reapplied to itself after proper surface preparation such as sanding or wire brushing.

6. Availability

Crackbond is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

7. Warranty

Crackbond is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



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