

CEILCOTE® EJ3 and EJ4

Elastomeric joint sealant systems

DESCRIPTION:

CEILCOTE® EJ3 two component, pourable polysulfide elastomer joint sealant is designed for use in applications requiring a chemical resistant sealant for horizontal joints. CEILCOTE EJ4 trowel grade, joint sealant is developed for use on vertical and overhead surfaces. The CEILCOTE EJ3 system or CEILCOTE EJ4 system, when cured, each form a tight fitting synthetic rubber compound to effectively seal out water and many aggressive chemical solutions

TYPICAL USES:

- Sealing joints in concrete, tile, monolithic and acid proof brick floors
- Control and expansion joints
- Chemical environments

ADVANTAGES:

- Flexibility to accommodate cyclic movement
- Good adhesion to concrete, steel and other common construction materials.
- Chemical resistance:*

Acids	Good to pH 3.0
Alkalis	Good
Salts	Excellent
Solvents	Good

 (exceptions are chlorinated solvents, ketones and acetates)

Water	Excellent
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* Chemical resistance data should only be used as a guide. Due to the complexity of chemical resistance, contact Master Builders for information regarding your specific application.

COLOR:

Gray

PHYSICAL PROPERTIES:

Flexibility	Excellent, no age hardening
Elongation (ASTM D 412)	200% minimum
Tensile strength (ASTM D 412)	180 psi (1.24 MPa)
Density (wt/gal)	10.5 lb/gal (1.3 g/ml)
Temperature resistance	-50 to 200 °F (-45 to 93 °C)
Shore "A" Hardness	30 to 35
Consistency	EJ3 - heavy liquid
Consistency	EJ4 -paste caulk
Flash Point: (Pensky-Martens Closed Cup)	

EJ3 - 106 °F (41 °C)
EJ3/EJ4 Primer - 22 °F (-5.5 °C)
Hardener #2 - 175 °F (79 °C)

Shelf Life (Expiration dates printed on labels)

1 year @ 40 to 90 °F (4 to 32 °C)

Coverage

CEILCOTE EJ3/EJ4 Primer: approximately 100 ft²/gal
CEILCOTE EJ3/EJ4: approximately 200 in³/gal

Joint Size	Lineal Feet/gal
1-1/2 in. wide x 3/4 in. deep	15
1-1/4 in. wide x 5/8 in. deep	21
1 in. wide x 1/2 in. deep	33
3/4 in. wide x 3/8 in. deep	59

Handling Properties

73 °F (23 °C)

Working time	1 h
Open to traffic	24 h
Full cure Time	72 h

PACKAGING:

- Gallon Unit
CEILCOTE EJ3 Liquid or CEILCOTE EJ4 Paste (1 gal)
8 fl oz No. 2 Hardener
1/2 lb CEILCOTE EJ3 primer or CEILCOTE EJ4 primer (1/2 pint)
- Gallon Unit
CEILCOTE EJ3 Liquid or CEILCOTE EJ4 Paste (5 gal)
42 fl oz No. 2 Hardener
3 lb CEILCOTE EJ3 primer or CEILCOTE EJ4 primer (3 pints)

Design Information

For optimum performance the distance allowed between expansion joints should be engineered to prevent sealant elongation in excess of 25% during extreme temperature fluctuations. Both maximum and minimum temperatures should be taken into consideration. As the distance between expansion joints increases, the width of the joint should also be increased proportionally.¹

Shape Factor - The maximum depth should not exceed the width of the joint. Best results will be obtained when the sealant depth is equal to 1/2 of the joint width.

Backing Material - To ensure the proper depth of sealant in an expansion joint, it is necessary to have a backing material installed in the joint at the desired depth prior to applying the sealant. This backing material may consist of any compressible material which will not bond to either the sealant or the joint walls. Some commonly used backing materials are soft wood, rubber, rope, sponge, or polyethylene foam. A suitable material is Ethafoam SB Brand, Dow Chemical, U.S.A.

LIMITATIONS:

- Store in a cool, dry place away from fire hazards.
- Usable Temperature range:
Substrate temperature - 45 to 95 °F (7 to 35 °C)

APPLICATION:

(For complete details, refer to Installation Procedure #5.211)

1. Remove joint material installed by the concrete contractor to a depth of at least 1 in. (25 mm).
2. Joint walls must be clean, dry and free of dust and weak, contaminated or deteriorated concrete. Joint walls should be prepared by abrasive blasting.
3. If adjacent concrete surfaces are protected with a lining or coating, the coating should be applied to the walls of the joint.
4. Place backing material.
5. Prime joint with CEILCOTE EJ3 or CEILCOTE EJ4 primer. Primer must be tack-free [approximately 20 minutes @ 73 °F (23 °C)] before placing CEILCOTE EJ3 or CEILCOTE EJ4 material. If sealant is not placed within 24 hours of priming, joint must be reprimed.

Placement

After priming the surface, mix the two components (Part A and Part B) together for two minutes using a jiffy mixer (Jiffy Mixer Co., Irvine, Calif.), or equal, powered by a low speed (400 to 600 rpm) electric drill.

Pour thoroughly mixed CEILCOTE EJ3 or CEILCOTE EJ4 material into the prepared joint until flush with top surface of slab. Tool surface to a smooth finish.

SAFETY:

CEILCOTE EJ3 and CEILCOTE EJ4 sealing compound products contain polysulfide resins and solvent. The hardener is an organic peroxide. Observe the following health, physical, and storage precautionary measures before using products.

Health Protection Information

Wear glove, eye protection, and appropriate work clothing as required to avoid contact with components. Ventilation is required with special consideration for enclosed or confined areas (provide sufficient ventilation to exchange room air every minute). Air movement must be designed to insure turnover at all locations in work and adjacent areas to avoid buildup of heavy vapors.

CEILCOTE EJ3 and CEILCOTE EJ4 components are combustible and flammable. Heat, sparks and flames or any source of ignition must be kept at least 50 feet from working area. Empty containers with residues may ignite from source of ignition explosively.

Observe safe storage practices by separating resins from hardeners, by avoiding any contamination in hardeners, by keeping solvents and hardeners in cool area free of sources of ignition. Observe a special CEILCOTE warning **RED** and **YELLOW** labeled products. The CEILCOTE **RED** label represents amine type chemicals, and the CEILCOTE **YELLOW** label represents organic peroxide type chemicals which should not be stored adjacent or mixed together because of possible violent reaction between them.

Hardeners No. 2 organic peroxides must be stored at temperatures below 100 °F (38 °C) to avoid decomposition and below 140 °F (60 °C) to avoid ignition from sparks or flame.

Product Material Safety Data Sheets and Installation Procedures are available and should be consulted when handling products. These products are for industrial and professional use only. Application directions must be followed.

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