

CEILCOTE® 820 COROCRETE®

High grade, epoxy novolac, sprayable flooring

DESCRIPTION:

CEILCOTE® 820 COROCRETE® Flooring is a heavy duty, epoxy novolac design that resists attack by aggressive chemicals such as concentrated sulfuric acid, and will also withstand mechanical abuse.

CEILCOTE 820 COROCRETE is a 1/8" to 3/16" thick topping which is designed to be spray applied to both vertical and horizontal surfaces. The slip resistant finished surface is tight and non-porous, eliminating the need for topcoating.

Unique Novolac technology permits the extended working time of CEILCOTE 820 COROCRETE, making this product user friendly, resulting in easier application and less waste.

TYPICAL USES:

- The protection of concrete against the attack of corrosive chemicals.
- Areas subjected to severe spillage, including:
 - Process areas.
 - Tank farms.
 - Flooring & pump pads.
 - Secondary containment areas.
 - Drum storage.

ADVANTAGES:

- Superior resistance to 98% Sulfuric Acid.
- Extended working time.
- Tough, durable system.
- Moisture tolerant cure.
- Seamless surface.
- Low odor.
- 100% Solids.

COLORS:

Available in Gray, Tile Red.

PHYSICAL PROPERTIES:

Generic Type

Epoxy Novolac

Volatile Organic Compounds (VOC)

Lab 23 method of Reg. 8-4-111 of California Code
0 lbs/gallon (0 grams/litre)

Compressive Strength

ASTM C 579-82 9,800 to 12,500 psi (68 to 86 MPa)

Flexural Strength

ASTM C 580-85 3,000 to 4,000 psi (21 to 28 MPa)

Flexural Modulus

ASTM C 580-85 1.4 x 10⁶ psi (9.6 GPa)

Linear Shrinkage

ASTM C 531-85 4 x 10⁻⁴ in/in (cm/cm)

Taber Abrasion

ASTM D 4060-84 52 mg

Coefficient of Thermal Expansion

ASTM C 531-85 {73°F to 210°F (23°C to 99°C)}
14 x 10⁻⁶ in/in/°F (25 x 10⁻⁶ cm/cm/°C)

Bond Strength to Concrete

ASTM D 4541, failure in concrete
450 psi (3.1 MPa)

Flash Point

(Seta Flash)

- Liquid >200°F (93°C)
- Hardener >208°F (97°C)

Frequent or Severe Spills 150°F (66°C)

Occasional Splash/Spill 200°F (93°C)

Shelf Life

Shelf life for material is one year minimum, if kept tightly sealed.

COVERAGE:

(Estimated)

- 60 to 80 ft²/unit (5.6 to 7.4 m²/unit) @ 1/8"
- 40 to 55 ft²/unit (3.7 to 5.1 m²/unit) @ 3/16"

MIXING RATIO:

1.6:1, Part A to Part B (by volume)
(Use CEILCOTE 810 Corocrete Resin and CEILCOTE #12 Hardener)

PACKAGING:

Available in US measured units.

CEILCOTE 820 COROCRETE 2.6 gal unit consists of:

- CEILCOTE 810 Corocrete Resin
16.2 lbs in 3.5 gal pail
- CEILCOTE #12 Hardener
8.7 lbs in a 1 gal pail
- CEILCOTE S-20 aggregate
50 lb (22.68 kg) bags

(Use two 50 lb bags per 2.6 gal unit)

HANDLING PROPERTIES:

(Approximate Time)	50°F (10°C)	73°F (23°C)	90°F (32°C)
Working Time	100 min	45 min	25 min
Recoat Time	24 hrs	12 hr	8 hrs
Time to Traffic*	48 hrs	24 hrs	16 hrs

* For concentrated sulfuric acid exposure information, consult Master Builders.

LIMITATIONS:

Do not apply CEILCOTE 820 COROCRETE when the surface temperature is below 50°F (10°C) or above 110°F (43°C).

APPLICATION:

The following information is abbreviated application information. Install only in accordance with complete instructions found in the current, published Master Builders Installation Procedure #3.142I

Surface Preparation:

Abrasive blasting or scarification to remove laitance and surface contaminants is recommended. Concrete must be thoroughly cured, free of oils, curing solutions, mold release agents or dust and must be dry at time of application. Use plastic sheet test method to ensure concrete is moisture free (ASTM D 4263). If moisture is detected, re-test until dry.

For Concrete (when needed)

- CEILCOTE 680 PRIMER
 - CEILCOTE 680C (Conductive) PRIMER
- Mix and apply PRIMER per instructions.

Placement:

1. Prior to mixing material, set up "Swinger Pump" and wet fluid hose with Part A resin.
2. Mix resin and hardener for at least two minutes. Slowly add aggregate and mix only long enough to completely wet out the aggregate (approximately 4 minutes).
3. Add material to hopper and gently start pump.
4. Aim nozzle into a bucket and adjust fluid pressure and atomizing air until appropriate pattern is observed.
5. Apply floor to desired thickness in a circular motion. Apply to vertical surfaces at 1/16" to 1/8".
6. Finish with trowel or back roll.

CLEAN UP:

Use Toluene, Xylene, T-410 or lacquer thinner.

SAFETY:

- Store in cool, dry area 50°F to 90°F (10°C to 32°C) away from direct sunlight, flame or other hazards.
- CEILCOTE 820 COROCRETE contains epoxy resins and polyamine catalyst. The product's components have been formulated to optimize physical characteristics such as filling capacity, abrasion, moisture and chemical resistance while minimizing hazardous physical and health factors encountered during handling and application. A concerted effort is made to be aware of the latest chemical toxicological information and to apply this knowledge in a responsible manner to ensure product safety.
- During application of CEILCOTE 820 COROCRETE materials, always wear gloves and appropriate work clothing to minimize contact. Ventilation is required with special consideration for enclosed or confined areas. Air movement must be designed to ensure turnover at all locations in work area and adjacent areasto avoid buildup of heavy vapors. Use caution when handling flammable liquids, eliminate sources of ignition from work area, and containers with residues.
- Observe safe storage practices by separating resins from hardeners, by keeping solvents in a cool area free of sources of ignitions.
- Product Material Safety Data Sheets (MSDS) are available and should be consulted when handling products. These products are for industrial and professional use only; application directions must be followed.

MAINTENANCE:

Periodically inspect the applied material and repair localized areas as needed. Consult your Master Builders representative for additional information.

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