

PRODUCTNAME

Cem-Kote® Flex CR

Flexible, Chemical Resistant, Cementitious
Waterproofing



MANUFACTURER

Gemite® Products Inc.

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FEATURES

- Superior flexibility
- Excellent chemical resistance
- Long term crack resistance
- Superior freeze/thaw resistance
- Excellent bond to clean substrate
- Self-curing
- Breathable
- Very low shrinkage
- Vermin proof
- Non-toxic
- Easy application

PRODUCT DESCRIPTION

Basic Use

Cem-Kote Flex CR is designed for waterproofing and concrete restoration in thin sections where a superior flexibility, chemical resistance and breathability are required. It protects and waterproofs structures subjected to various chemicals, such as concrete floors, tanks, secondary containment structures and clarifiers.

Compositions and Materials

Cem-Kote Flex CR is a highly flexible, fibre-reinforced, hydraulic cement based material. It is a two component system consisting of dry Component A and liquid Component B. For additional tensile strength, it may be reinforced with Reinforcing Fabric HD.

Limitations

Do not apply Cem-Kote Flex CR when the temperature is expected to be below 4°C (40°F) within 48 hours or when rain is imminent. Follow Hot Weather concreting procedures when applying Cem-Kote Flex CR at temperatures exceeding 25°C (77°F). Not designed for heavy traffic areas.

Health and Safety

Cem-Kote Flex CR is non-toxic. Your skin might be sensitive to hydraulic cement or the liquid additive. We recommend use of

rubber gloves. Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water. Seek medical advice if irritation occurs. Harmful if ingested. Keep product out of reach of children. FOR INDUSTRIAL USE ONLY. Consult MSDS for additional information.

Color

Dark Grey.

Packaging

Cem-Kote Flex CR, dry Component A is packaged in 16 kg (35.3 lbs) bags and liquid Component B is packaged in 4.9 L (1.3 USG) plastic jugs.

Yield

Cem-Kote Flex CR yields 10.4 L (0.37 ft³) and covers approximately 6.5 m² @ 1.6 mm (73.6 ft² @ 60 mils) thickness per kit applied in two (2) coats.

The actual coverage will depend on surface roughness and the thickness applied. The applicator must carry out a sample application to determine the actual coverage for the given substrate and application thickness.

Storage and Transportation

When stored in a dry area, the material has a shelf life of 12 months. The Component B liquid must not freeze. Packaged 40 kits per pallet.

TECHNICAL DATA

Tensile Elongation	25-30%
Salt Scaling Resistance ASTM 672	excellent
Chemical resistance	available on request

Cem-Kote Flex CR exhibits a high resistance to majority of mineral acids in moderate concentrations for shorter periods of time. It is highly resistant to concentrated salt solutions and caustic environments.

INSTALLATION

Current Guide Specification and Application Instructions contain additional information specific to each application and must be followed. Consult Gemite's Technical Service to ensure correct surface preparation, application procedures and chemical compatibility for your application.

Surface Preparation

Remove all deteriorated and loose concrete, form release agents, oil, grease, laitance, dust, dirt and efflorescence by dry or wet sand blast, shot blast, or high pressure water (min. 6,000 psi). Repair deeper areas using Gem-Plast TC or Fibre-Patch OV. The proper surface preparation is essential for a successful waterproofing using Cem-Kote Flex CR.

Reinforcing Steel

Gemite Products Inc.
July 1998

9 & 7

09920 Flexible Cementitious Coating
07145 Cementitious Waterproofing

Remove all loose rust from any exposed reinforcing steel and apply two coats of *Fibre-Prime* rust proofing.

Crack Treatment

All cracks must be treated using *Cem-Kote Flex CR* and *Reinforcing Fabric HD*. Pre-fill any cracks larger than 2 mm (80 mils) with *Cem-Kote Flex CR*. Apply a thin coat of *Cem-Kote Flex CR*, 15-25 cm (6-10 in) wide, over the crack. Embed a strip of the *Reinforcing Fabric HD*, into the wet *Cem-Kote Flex CR* and apply a second coat to fully cover the *Reinforcing Fabric HD*. The total applied thickness should be 2 mm (80 mils).

Mixing

Thoroughly mix liquid Component B prior to its use. Use clean paddle, helix mortar mixer, or heavy duty drill (400-600 RPM) with a mixing paddle. Pour approximately 80% of the Component B into the mixer and gradually add the dry material into the liquid and mix until a smooth and lump free mix is obtained. Add the remaining liquid as required for a given application consistency. A small amount of water can be added, if required, at higher ambient temperatures.

Application

Apply *Cem-Kote Flex CR* to a saturated surface dry or saturated surface damp surface. Trowel or brush apply two coats to build a 1.6 - 3 mm (60 - 120 mils) thick layer of *Cem-Kote Flex CR*. It can be also spray applied using a hopper gun, or positive displacement (moyno or carrousel) pump with a suitable plastering spray nozzle.

The second coat must be applied into a wet first coat, usually within 10-15 minutes, depending on temperature and relative humidity. The delayed application of the second coat could result in its de-bonding.

Reinforcing Fabric

When using the *Reinforcing Fabric HD*, apply first a thin layer of *Cem-Kote Flex CR* by brushing or spraying. When spraying, brush each coat to eliminate all "pin holes". Embed the *Reinforcing Fabric HD* into the first coat and follow with the second coat. The *Reinforcing Fabric HD* must be fully covered and must not protrude through the surface. The total applied thickness of *Cem-Kote Flex CR*, including the *Reinforcing Fabric HD*, should be 2 mm (80 mils).

The applicator must, prior to bid, confirm the detailing, use of the *Reinforcing Fabric HD* and correct surface preparation and application procedures with Gemite's Technical Service.

Curing

Cure *Cem-Kote Flex CR* by air drying for a minimum of 3 days prior to continuous exposure to water. Protect fresh applications from rain, strong wind and intense sunlight for 12 hours. When working under tarps at freezing temperatures, use electrical heaters to prevent "carbonation" of the material.

Clean Up

All tools must be cleaned with water immediately after use. Cured material can only be removed mechanically.

AVAILABILITY AND COST

Cem-Kote Flex CR is available worldwide. Contact Gemite Products Inc. for the name of the Representative/Distributor nearest you and pricing information.

MAINTENANCE

Some maintenance may be required depending upon the type of chemical environment and the length of exposure.

WARRANTY

A limited twelve (12) month Material Replacement Warranty is available. For complete details contact Gemite's Head Office.

TECHNICAL SERVICE

For technical advice on the suitability of *Cem-Kote Flex CR* for a specific application, specification assistance and application advice, contact Gemite Technical Service: USA 888-443-6483, Canada 905-672-2020.

Short Specification

The surfacing will be *Cem-Kote Flex CR*, highly elastic, fibre reinforced and polymer modified cement, manufactured by Gemite Products Inc. [USA 888-443-6483] [Canada 905-672-2020]. It will be mixed and applied according to manufacturer's specifications and recommendations. The suitability of *Cem-Kote Flex CR* for each use and the surface preparation method must be checked with Gemite Technical Service before application for each project.