

PRODUCT NAME

Cem-Kote™ CW Plus



NSF/ANSI/CAN 61

Drinking Water System Components

Crystalline / Capillary Waterproofing

MANUFACTURER

Gemite® Products Inc.

Toll Free: 888-4-GEMITE (888-443-6483)
E-mail: techinfo@gemite.com
Web Site: www.gemite.com

USA	CANADA
160-3480 East Robinson Rd. Amherst, New York 14228	1787 Drew Road Mississauga, Ontario L5S 1J5
Phone 888-443-6483	Phone 905-672-2020
Fax 888-443-6329	Fax 905-672-6780

FEATURES

- Approved ANSI/NSF/CAN - Barrier Materials
- Negative or Positive side Waterproofing
- **Dual Action = Crystalline reactivity + Membrane waterproofing mechanism**
- Permanently Active (in-depth)
- Seals Cracks up to 0.5 mm
- **Fast Cure waterproofing (48 hours)**
- Approved for Potable water tanks >10,000 USG (38 m3)
- Waterproofs highly porous concrete
- **Heavy-Traffic ready**
- More economical than competitive products
- Inorganic & Environment friendly
- Long Working time - over 30 minutes

PRODUCT DESCRIPTION

Basic Use

Cem-Kote CW Plus is a Nano-crystalline (capillary) waterproofing for Negative /Positive side waterproofing of water & waste-water storage tanks, digesters, clarifiers, utility vaults, waterproof retaining walls, basements, floor slabs, swimming pools & other concrete structures.

Cem-Kote CW Plus delivers very tough, hard, abrasion & impact resistant surface suitable even for heavy traffic.

Cem-Kote CW Plus has is ready for water in couple days - not weeks needed by an old-style crystalline waterproofing.

Composition and Materials

Cem-Kote CW Plus deep penetrating Nano-particles react with lime and form insoluble calcium silicate crystals which “plug” the capillary pores.

Concrete becomes watertight even under extreme hydrostatic pressure, while allowing the water vapor to pass (breathable).

Limitations

Cem-Kote CW Plus is a fast setting material. Under normal conditions it should be applied within 15-30 minutes after mixing. Mix only the amount of material which can be applied within this period of time. Do not apply Cem-Kote CW Plus when the temperature is expected to be below 4°C (40°F), or when rain is imminent.

Health and Safety

Cem-Kote CW Plus is nontoxic and nonflammable. Your skin might be sensitive to cement. We recommend use of rubber gloves. If contact with skin occurs, flush immediately with water. Seek medical advice if irritation occurs. Harmful if digested. Keep product out reach of children. Consult SDS for additional information. **FOR INDUSTRIAL USE ONLY.**

Color

Industrial Grey

Packaging

Cem-Kote CW Plus Premix is a 1-component material packaged in 22.7 kg (50 lbs) bags.

Yield

Cem-Kote CW Plus Premix yields 13.2 L (0.47 ft³) & theoretical coverage is 22.7 m² @ 1 kg/ m² (244 ft² @ 1.84 lbs/ yd²).

Specified rate of application depends upon the actual end use,

The actual coverage may vary due to surface roughness and applied thickness. A test application must be done to determine the actual coverage for the given substrate and application rate.

Storage and Transportation

Cem-Kote CW Plus when stored on pallets in a dry, cool area has a shelf-life of 12 months. Packaged 55 bags per pallet.

TECHNICAL DATA

Compressive Strength (ASTM C109 Modified)	56.9 - 62.3 MPa (8,250 - 9033 psi)
Modulus of Rupture (ASTM C348) 28 days	6.2 - 8.3 MPa (900 - 1,200 psi)
Bond Strength with Concrete (Pull off test)	Greater than the tensile strength of the concrete substrate
Water Vapor Permeance 3 mm (1/8 in) thickness	1.8 metric perms
Hydraulic Permeability	Concrete block coated with Cem-Kote CW Plus withstands 156 m (500 ft) water head pressure

INSTALLATION

Current Guide Specification & Application Instructions contain additional information specific to each application and must be followed. Contact Gemite's Technical Service for information specific to your application.

Surface Preparation

Remove all loose and deteriorated concrete, laitance, dust, dirt and efflorescence. Use high-pressure waterblast min. 5,000 psi (35 Mpa), or sandblasting. Correct surface preparation is essential for successful application of *Cem-Kote CW Plus*.

All active water leaks must be stopped using *Fibre-Patch WP* (water plug) and deeper surface deterioration must be repaired with *Fibre-Patch OV*. Leave the surface of *Fibre-Patch OV* rough & clean thoroughly with high pressure water before application of *Cem-Kote CW Plus*.

Cem-Kote CW Plus should be applied within 48 hours after the surface preparation.

Reinforcing Steel

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

Crack Treatment

Any existing cracks must be treated separately using *Cem-Kote Flex ST* or *Cem-Kote Flex Plus*.

Mixing

Mix each 22.7 kg (50 lbs) bag with approx. 4.3-4.5 L (1.1-1.2 USG) of water, depending on required consistency. Use a drill (400-600 rpm) with a suitable mixing paddle.

Gradually add the dry material into water and mix until a smooth and lump free mix is obtained.

Adjust the water to obtain a brushable consistency, or stiffer consistency for trowel application. Do not over mix.

Application

Brush apply *Cem-Kote CW Plus* in 2 (two) consecutive coats to achieve the specified application rate 0.75-1.5 kg/m² (1.4-2.8 lbs/yd²). No wetting is required between coats. The re-coating must be done within ½ to 1 hour.

When layers over 3 mm (1/8 in) are required, apply a thin layer of *Cem-Kote CW Plus* as a bonding agent using brush or broom.

Apply second, stiffer consistency, coat of *Cem-Kote CW Plus* into the wet slurry by trowel. Keep wet edge. Do not build up a layer thicker than 6 mm (1/4 in).

In new construction, *Cem-Kote CW Plus* is dry-sprinkle applied onto the surface of the freshly poured slabs (after the concrete starts to reach initial set) and is power trowel finished.

Follow the current Gemite's Guide Specifications, for Application Instructions.

Curing

Moist cure *Cem-Kote CW Plus* for 3 days. Protect the surface from rapid drying.

When working under tarps at freezing temperatures, do NOT use propane heaters. Use only electrical heaters to prevent "carbonation" of *Cem-Kote CW Plus*.

Clean Up

All tools and equipment must be cleaned with water immediately after use. Cured material must be removed mechanically.

AVAILABILITY AND COST

Cem-Kote CW Plus is available worldwide. Contact Gemite for the nearest Representative or Distributor and current pricing.

MAINTENANCE

None required.

WARRANTY

A limited twelve (12) month Material Replacement Warranty is available. For details, contact Gemite's head office.

TECHNICAL SERVICE

For advice on suitability of *Cem-Kote CW Plus* for specific application, specification assistance and application instructions, contact Technical Service: USA 888-443-6483 or Canada 905-672-2020.

Short Specification

The reactive capillary / crystalline waterproofing shall be *Cem-Kote CW Plus*, as manufactured by Gemite Products Inc., [USA 888-443-6483] [Canada 905-672-2020]. It will meet all the Technical Data specified in the current *Cem-Kote CW Plus* Product Data Sheet.