# **Cem-Kote Flex GP**

# **General Purpose**

# Flexible Cementitious Waterproofing

#### **MANUFACTURER**

## Gemite® Products Inc.

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#### **FEATURES**

- Flexibility
- Long term crack resistance
- Freeze/thaw resistant
- Excellent salt scaling resistance
- Effective protection against acid rain
- Self-curing
- Continuous water immersion possible
- Superior negative/positive waterproofing
- Highly breathable
- Very low shrinkage
- Salt resistant
- Nontoxic
- Easy mixing, application & Sprayable
- Excellent abrasion resistance

#### PRODUCT DESCRIPTION

#### **Basic Use**

Cem-Kote Flex GP is designed for positive and negative waterproofing of concrete structures in new construction and restoration. It is suitable for water and waste water tanks, secondary containment structures, tunnels, concrete slabs, balconies and patios with light to medium traffic. It should only be used in situations when crack spanning is not required.

When exposed to low temperatures and in new construction (e.g. waste water treatment facilities), where a superior flexibility is required, use Cem-Kote Flex ST. Cem-Kote Flex GP is an economical coating with limited flexibility when compared with Cem-Kote Flex ST and Cem-Kote Flex Plus.

# **Composition and Materials**

Cem-Kote Flex GP is a two-component, flexible, breathable, INSTALLATION polymerized cementitious slurry.

#### Limitations

Do not apply Cem-Kote Flex GP when the temperature is expected to be below 4°C (40°F) within 48 hours, or when rain is imminent. Follow "hot weather" concreting precautions when applying Cem-Kote Flex GP at temperatures exceeding 25°C (77°F) or under sunny and windy conditions.



# **Health and Safety**

Cem-Kote Flex GP is nontoxic. 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 digested. Keep product out of reach of children. FOR INDUSTRIAL USE ONLY. Consult MSDS for additional information.

#### Color

Cem-Kote Flex GP is available in Industrial Gray & Light Gray

## **Packaging**

*Cem-Kote Flex GP Kit* - Comp. A 22.7 kg (50 lbs) bag + Comp. B 5.7 L (1.5 USG) plastic jug.

#### Yield

Cem-Kote Flex GP kit yields 13.8 L (0.49 ft<sup>3</sup>) & covers approx.  $8.6 \text{ m}^2$  @ 1.6 mm (92.2 ft<sup>2</sup> @ 63 mils) per kit, applied in two (2) coats. The actual coverage depends on surface roughness & the thickness applied. The applicator must carry out a test application to determine the actual coverage for the given substrate and application thickness.

## **Storage and Transportation**

Cem-Kote Flex GP, when stored on pallets in a dry cool area, free from moisture & direct sunlight has 12 months shelf-life. The liquid Comp. B must not freeze. Packaged 40 kits per pallet.

#### TECHNICAL DATA

Flexibility (ASTM D522 Mod.) at 20°C, non-reinforced	20%
Crack Spanning (Gemite ISO TP 005) at 20°C, reinforced	0.4 mm (16 mils)
Water Vapor Permeability, Engelfried-Klopfer Sd < 3 m	$S_d = 0.140 \text{ m}$

Salt Scaling Resistance, (ASTM C672) Hydraulic Impermeability TTP 1411 water head >38.4 m (negative side), 2 mm thickness (>126 ft)

A high porosity concrete block, coated with Cem-Kote Flex GP, "burst" at 38.4 m (126 ft) water head pressure with Cem-Kote Flex GP showing no sign of wetness.

Current Guide Specification and Application Instructions contain additional information specific to each application and must be followed.

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

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#### **Surface Preparation**

Remove all deteriorated and loose concrete, form release agents, oil, grease, laitance, dust, dirt and efflorescence by dry or wet sandblast, shotblast, or high pressure water (min. 3,500 psi). Repair deeper areas using Gem-Plast TC or Fibre-Patch. Prefill all the cracks with Cem-Kote Flex GP.

The proper surface preparation is essential for a successful waterproofing and concrete repair using Cem-Kote Flex GP. Contact Gemite Technical Service for detailed surface preparation instructions.

### **Mixing**

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

#### **Application**

Trowel or brush apply Cem-Kote Flex GP to a minimum thickness of 1.6 mm (1/16") in two (2) coats to a saturated surface dry (SSD) concrete. (The first coat 0.8 mm and the second also 0.8 mm thick). Cem-Kote Flex GP can be also spray applied using a WARRANTY hopper gun or positive displacement (moyno or carrousel) pumps, with a suitable plastering spray nozzle. When using spraying, brush each coat to eliminate all "pinholes". The second coat must be applied into a "wet" first coat, as possible, usually within 10-15 minutes, depending on temperature and relative humidity. The delayed application of the second coat could result in its de-bonding.

#### **Crack Treatment**

All moving cracks need to be treated using *Cem-Kote Flex Plus* and Reinforcing Fabric HD. Pre-fill any open cracks with Cem-Kote Flex GP. Apply a thin coat *Cem-Kote Flex Plus*, 15-25 cm (6–10 in) wide, over the crack. Embed a strip of the *Reinforcing* Fabric HD, 15-25 cm (6-10 in) wide, into the wet Cem-Kote Flex Plus and apply a second coat to fully cover the Reinforcing Fabric HD. The total applied thickness should be 1.6-2 mm (60-80 mils).

### **Reinforcing Fabric**

When using the Reinforcing Fabric HD, apply first a thin layer of Cem-Kote Flex GP by brushing or spraying. When spraying, brush each coat to eliminate all "pinholes". Embed the Reinforcing Fabric HD into the first coat and follow with the second coat. The fabric must be fully covered and must not protrude through the surface. The smooth surface is required to minimize the solids "pickup" (e.g. waste water treatment facility). The minimum applied thickness of Cem-Kote Flex GP, including the Reinforcing Fabric HD, is 1.6 mm (60 mils) applied in two (2) coats.

#### Curing

Cure Cem-Kote Flex GP by air drying for a minimum of 3 days prior to a continuous exposure to water. Protect fresh applications from rain, strong wind and intense sunlight for 12 hours. When working under tarps at freezing temperatures, avoid using propane heaters. Use only electrical heaters should be used to prevent "carbonation" of Cem-Kote Flex GP.

#### **AVAILABILITY AND COST**

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

#### **MAINTENANCE**

None required.

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 GP for a specific application, specification assistance and application advice contact Gemite Technical Service: USA 888-443-6483 Canada 905-672-2020.

#### **Short Specification**

The waterproofing coating (slurry) will be *Cem-Kote Flex GP*, an elastomeric, polymer modified cement [reinforced with the Reinforcing Fabric HD], manufactured by Gemite Products Inc. [USA 888-443-6483] [Canada 905-672-2020]. It will be mixed and applied according to current manufacturer's specifications and recommendations. Contact Gemite Products Inc., or a local Representative for current application instruction. The suitability of the surface preparation method must be checked with Gemite's Technical Service before starting each project.

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