

PRODUCT NAME

Tuff-Flex™ CA

Super Flexible Waterproofing Decorative Wall Coating



MANUFACTURER

Gemite® Products Inc.

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

USA

160-3480 East Robinson Rd.
Amherst, New York 14228
Phone 888-443-6483

FEATURES

- Permanently seals moving cracks
- Totally waterproofs
- Excellent elongation and recovery at low temperatures
- Continuous Elongation (built into the “molecular chain”)
- Long term adhesion and durability
- Highly breathable
- Highly resistant to carbon dioxide diffusion
- Does not contain “plasticizers”
- Exceptionally UV light resistant
- Dirt resistant = stays clean
- Excellent “hide”
- Excellent color stability and unlimited color selection
- Excellent chemical resistance in acid environment
- Easy application = spray or roll
- Low sensitivity to substrate moisture content
- VOC compliant & not regulated by WHIMS or TDG

PRODUCT DESCRIPTION

Basic Use

Tuff-Flex CA is a high-performance flexible waterproofing wall coating for protection of new, and restoration of cracked & deteriorated concrete, masonry and stucco.

Tuff-Flex CA bridges over & seals substrate cracks due to its high elongation at ambient and very low temperatures.

Tuff-Flex CA is an excellent protection against acid rain (does not contain carbonate fillers) and airborne pollutants, making it an ideal protective coating for industrial applications.

Tuff-Flex CA permanently waterproofs, while remaining fully breathable (allow water vapor escape from the substrate).

Composition and Materials

Tuff-Flex CA is a water-based formulation with internally cross-linked acrylic copolymer to provide a superior weatherability, no chalking, no leaching, color stability and very high resistance to water ponding.

Limitations

Do not apply when rain is imminent. Surface & ambient temperature must not be below 5°C (41°F), or above 32°C (90°F) during and 24 hours after the application. Fresh (green) concrete or cement plaster must be cured for at least ten (10) days prior to the application of *Tuff-Flex CA*.

Health and Safety

Tuff-Flex CA is nontoxic and nonflammable. If contact with skin occurs, wash with water. Harmful if digested. Keep the product out of reach of children. **FOR INDUSTRIAL USE ONLY.** Consult SDS for additional information.

Color

A wide variety of colors are available. The color suitability must be confirmed by Gemite before an order can be accepted.

Every effort is made to fill each order using the same batch number, but different batch numbers of the same color may be occasionally used to complete an order. It is the sole responsibility of the applicator to make certain that only one batch number is used on any one side of the building. Different batch numbers cannot be used on the same wall unless they are mixed together to ensure total color uniformity.

Packaging

Tuff-Flex CA is available in 20 L (5.3 USG) pails, drums & totes.

Yield

Primer #300: 6-8 m²/ L (244-326 ft²/ USG).

Tuff-Flex CA Smooth & Textured: 3.5-4.5 m²/L @ 0.22-0.29 mm (143-183 ft²/ USG @ 9-11 mils) thickness per one (1) coat.

The actual coverage depends on surface roughness, application technique 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

Shelf life of *Tuff-Flex CA* in unopened containers is one year. Must not freeze. Packaged 36 pails per pallet.

TECHNICAL DATA

Viscosity (Ford Cup)	110±KU
Specific Density	1.38 g/cm ³
Elongation at break	400 %
(ASTM D2370)	100 %
Adhesion (pull-off)	
Before freeze/thaw	> 2 MPa
After freeze/thaw	>1.5 MPa
Water absorption decrease	> 30%

Gemite Products Inc.
July 1998

7 & 9

071416 Cold Fluid Applied Waterproofing
099653 Elastomeric Coatings

Freeze thaw 150 cycles	No changes
Water Vapor Diffusion Resistance, Engelfried-Klopfer	$S_d < 4$ m
Permeance (ASTM E-96) at 7-9 wet mils	1280 ng/P.s.m (22.3 perms)
Carbon Dioxide Diffusion Resistance, Engelfried-Klopfer	$R_b > 50$ m
Coat thickness (incl primer)	Approx. 0.3 mm
Water Penetration Resistance	passes 160 km/hr (98 mph) wind-driven rain test over concrete block
Weatherability	unaffected by wetting and drying, freeze/thaw or ultraviolet exposure

INSTALLATION

Current Guide Specification and 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 dirt, efflorescence, loose particles, paint, cement scaling & other foreign matter which can interfere with the adhesion of the coating. Use pressure water (at least 2-3,000 psi), or sandblast as required.

Primers

Primer #300, tinted to the same color as *Tuff-Flex CA*, must be always used.

Crack Treatment

Tuff-Flex CA can be applied directly over hairline cracks.

Cracks above 0.25 mm (10 mils) have to be prefilled by brushing *Tuff-Flex CA* into the crack and *Reinforcing Fabric LW* may have to be applied over the crack, before the overall application.

Cracks larger than 0.8 mm (1/32") must be opened and pre-filled with a flexible caulking. Contact Gemite Technical Service for further information.

Application

Do not add water to *Tuff-Flex CA*. Mix thoroughly before application. Short, medium or long nap roller can be used to apply *Tuff-Flex CA*. The type of the roller and the application technique will determine the appearance. Keep a wet edge. *Tuff-Flex CA* can also be spray applied using airless paint equipment.

In some cases, due to the porosity and roughness of the substrate, two coats of *Tuff-Flex CA* may be necessary. Apply the second coat as soon as the first coat is dry to touch, or within 48 hours.

Curing

Tuff-Flex CA will cure sufficiently by air drying in 12-24 hours, depending on temperature and relative humidity.

Clean Up

Clean tools and equipment immediately after use with water. For dry material use MEK or Xylol.

AVAILABILITY AND COST

Tuff-Flex CA is available worldwide. Contact Gemite for the name of the nearest Representative / Distributor and pricing information. When ordering, specify the finish (smooth or textured) and color. The color suitability and pricing must be established by Gemite before order can be processed.

MAINTENANCE

None required. *Tuff-Flex CA* is self-cleaning. Surface dirt and dust can be easily cleaned using a detergent and water.

WARRANTY

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

TECHNICAL SERVICE

For advice on suitability of *Tuff-Flex CA* for a specific application, specification assistance and application instructions, contact Technical Services at US 888-443-6483, or Canada 905-672-2020.