# Fibre-Prime®

## **Rustproofing Primer/Coating for Steel**

#### **MANUFACTURER**

## Gemite® Products Inc.

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#### **FEATURES**

- Rustproofs Reinforcing Steel
- Contains Migrating Corrosion Inhibitors
- Active on Anodic and Cathodic sites
- Reduces rebound of shotcrete
- · Allows an easy overhead patching
- Self-curing
- Economical
- Hard and durable
- Superior adhesion
- Bonds to wet steel
- Crack resistant
- Excellent freeze/thaw durability
- Waterborne = VOC Compliant
- Non-toxic
- Easy to Apply

## PRODUCT DESCRIPTION

#### **Basic Use**

Rustproofing primer (slurry) for reinforcing steel in concrete. *Fibre-Prime* provides an excellent profiled surface, unlike smooth and non-absorbent epoxy, allowing easy overhead or vertical application of repair mortar or shotcrete.

## **Composition and Materials**

Fibre-Prime is a two component material, consisting of a dry Component A and a liquid Component B. Fibre-Prime contains highly effective migrating corrosion inhibitors active on both, anodic as well as cathodic corrosion sites.





#### Limitations

Do not apply *Fibre-Prime* when the temperature is expected to be below 40°F (4°C) within 24 hours or when rain is imminent. Consult the manufacturer for applications over previously treated steel surface.

#### Health and Safety

Fibre-Prime is non-toxic and non-flammable. Your skin might be sensitive to cement. We recommend use of rubber gloves. Avoid contact with skin. If contact occurs, flush immediately with water. Seek medical advice if irritation occurs. Harmful if digested. Keep product out reach of children. FOR INDUSTRIAL USE ONLY. Consult MSDS for additional information.

## Color

Dark Grey.

#### **Packaging**

*Fibre-Prime* consists of dry Component A supplied in a 9 kg (19.8 lb) bag and liquid Component B, supplied in 2.3 L (0.61 USG) plastic jug.

#### Yield

One unit of *Fibre-Prime* yields 5.5 L (0.23  $\text{ft}^3$ ) and will cover approximately 5.5  $\text{m}^2$  (59.0  $\text{ft}^2$ ), or 116.8 lineal m (383 lineal ft) of 15 mm (5/8 in) rebar, applied in two (2) coats around the circumference of the rebar in total thickness of 1 mm (40 mils).

## Storage and Transportation

When stored on pallets in a dry, cool area the shelf-life of the dry Component A is 12 months. The liquid Component B <u>must</u> not freeze. Packaged 60 kits per pallet.

#### TECHNICAL DATA

Compressive Strength (ASTM 109 Modified)	41.0-43.0 MPa (5940-6230 psi)
Adhesion to steel (Direct Tension Pull Off)	2.6-3.5 MPa (380-500 psi)
Freeze/Thaw Resistance (ASTM C666-A)	0% loss
Resistance to Chloride Penetration (AASHTO T277)	430-520 Coulombs
Carbonation Resistance (R), 1.5 mm thick layer , Klopfer (R>50 m)	Equivalent air thickness R=1280 m Equivalent concrete thickness (assume i concrete = 400 ) 3.2 m
H <sub>2</sub> S Resistance (Gemite ISO TP 012)	Very good - for excellent resistance, over-coat with Cem-Kote Flex CR
Cathodic Disbondement (CSA – Z245)	No disbondment

#### **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 loose rust, grease, dust and dirt from the rebar surface using sandblasting or steel wire brush.

#### Mixing

Place the liquid Component B into a clean container. Add dry Component A while mixing, using a drill (400-600 rpm) with a mixing paddle, until a smooth and lump-free brushable mix is obtained. Allow to sit for 3-5 minutes, then re-mix. Mix only the amount of material which can be applied within 45 minutes after mixing. Discard any material not used within 50 minutes.

#### **Application**

Apply a thin coat of *Fibre-Prime* by brushing onto the steel surface or spraying. Let dry for 10-15 minutes and apply the second coat. Apply a minimum of two coats. Repair mortar or shotcrete should be applied within 24 hours.

#### Curing

Cure by air drying.

### - Clean Up

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

#### **AVAILABILITY AND COST**

*Fibre-Prime* is available worldwide. Contact the manufacturer for the name of the nearest Gemite Representative or Distributor and pricing information.

#### **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 *Fibre-Prime* for a specific application, specification assistance and application instructions, contact Technical Service: US 888-443-6483 or Canada 905-672-2020.

## **Short Specification**

The steel rustproofing will be *Fibre-Prime*, manufactured by Gemite Products Inc., [USA 888-443-6483] [Canada 905-672-2020]. It will meet all the following requirements:

Compressive Strength(ASTM C 109 Modified)	41.0-43.0 MPa (5940-6230 psi)
Adhesion to Steel (Direct Tension Pull-Off)	2.6-3.5 MPa (500 psi)
Freeze/Thaw Resistance (ASTM C666-A)	0% loss
Resistance to Chloride Penetration (AASHTO T277)	430-520 Coulombs
Cathodic Disbondement (CSA – Z245)	No disbondement
Carbonation Resistance (R), 1.5 mm thick layer , Klopfer (R>50 m)	Equivalent air thickness R=1280 m Equivalent concrete thickness (assume i concrete = 400 ) 3.2 m
H <sub>2</sub> S Resistance (Gemite ISO TP 012)	Very good - for higher performance over-coat with Cem-Kote Flex CR