



SILKON
ADDITIVES (INDIA) PVT LTD

Silkon Zink Primer

Silkon Zink Primer two component epoxy zinc rich primer. It is recommended for priming exposed steel reinforcement for use with Silkon concrete repair mortars. The product actively resists corrosion within the confines of the repair location and avoids the generation of incipient anodes in immediately adjacent locations. Silkon Zink Primer is compatible with all Silplast mortars and micro concretes.

Product usages and advantages:

- Anti corrosive - Active 'Zinc-rich' system combats corrosion by electro chemical means.
- Two component product - Easy to mix and use.
- Timesaving - Touch dry after 30 to 45 mins.
- Excellent adhesion - Exhibits excellent bond strength in cementitious repairs.

Description

Silkon Zink Primer is supplied as a two component system based on metallic zinc and epoxy resin which on mixing gives a grey colored liquid. One or two coats of Silkon Zink Primer are generally required, dependent largely on the nature and profile of the substrate. Silkon Zink Primer is recoatable generally between 30 minutes and one hour after the application of first coat. Application of top coat may also proceed at this time. At elevated temperatures, the recoatable and overlay times will be reduced. The minimum application temperature for Silkon Zink Primer is 10⁰C. The local Silkon office may be consulted for further information.

Technical support

Silkon offers a comprehensive range of high performance, high quality concrete repair and construction products. In addition, Silkon offers technical support service to specifiers, end users and contractors, as well as on site technical assistance in locations all over the country can be provided for Silcrete and other products.

Properties:

Specific gravity	1.75	
Wet film thickness/coat	100 microns	
Dry film thickness/coat	40 microns	
Adhesive bond strength with steel (ASTM)	> 1.5 N/mm2	
Pot life	30 minutes @ 30.C	
Application thickness per coat	100 microns (wet)	
Drying times	@ 20 ⁰ C	@ 35 ⁰ C
Touch dry	45 mins	15 mins
Fully dry/Recoat able	45 minutes to 1 hour.	
Surface drying time	@27 ⁰ C 20 to 40 mins.	

Note : At temperatures below 20⁰C, the drying times will be slower. Conversely, at temperatures above 35⁰C, the drying times will be faster.

Steel reinforcement primer

Performance specification

The steel reinforcement primer shall be an epoxy, two component, zinc rich liquid packed and supplied ready to use. An unbroken 40 microns DFT coating shall be capable of providing 'active' galvanic protection and avoiding the generation of incipient anodes in the immediately adjacent locations. It shall be of suitable viscosity to enable the coating to penetrate into imperfections and pits within the surface of the structural steel. The formulation of the primer shall be such that drying occurs to allow the application of the repair mortar after 45 minutes at 35⁰C or after one hour at 22⁰C. It shall be fully compatible with the reinstatement methods adopted.

Application Methodology:

Preparation

Any corroded steel shall be fully exposed and all loose scale and corrosion deposits shall be removed. Steel should be cleaned to a bright condition paying particular attention to the back of exposed steel bars. Grit-blasting is recommended for this process. Where corrosion has occurred due to the presence of chlorides,



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Mixing

Both components shall be mixed until a homogenous mixture is obtained. It is important that both components are intermixed thoroughly and that no traces of the components remain unmixed. A slow speed heavy duty drill fitted with a paddle is recommended for mixing.

Application

The application of Silkon Zink Primer must take place as soon as possible to a dry steel surface after completion of the preparation work but always within 3 hours. One full and unbroken coat of Silkon Zink Primer shall be applied using a suitable brush, making sure the surfaces of the steel are properly coated. A small brush is generally suitable for this purpose. It shall be allowed to dry fully before continuing. If in doubt of having achieved an unbroken coating, a second application should be made as soon as the first coat is fully dry (generally between 30 minutes and one hour). The primed surfaces should not be left exposed to the elements for longer than necessary before over coating. Silkon Zink Primer will, however, protect steel under clean interior exposed conditions for a period of several months. In non-aggressive exterior environments, a maximum interval of 14 days will be tolerated but in industrial and/or marine environments this interval should be reduced to the practical minimum. The application of concrete repair materials should proceed as soon as the Silkon Zink Primer is fully dry (generally 45 min. to 1 hour - Refer properties).

Low temperature working

The minimum application temperature is 10⁰C. The material should not be applied when the substrate and/or air temperature is 10⁰C and below.

Cautions

Silkon Zink Primer should not be applied when the temperature is below 10°C. If any doubts arise concerning temperature or application conditions, the local Silkon office shall be contacted.

Packaging

1 & 5 Liters Pack

Coverage

4 - 5 m² / litre

Note : This coverage figure is theoretical - due to wastage factors, variety and nature of possible steel substrates, the practical coverage figures may be reduced.

Shelf life

6 months if kept in dry store in the original, unopened containers. If stored at high temperature and/or high humidity conditions the shelf life may be reduced.

Health & Safety instructions

Silkon Zink Primer and Silkon Solvent should not come in contact with the skin and eyes, or be swallowed. Adequate ventilation should be ensured and inhalation of vapors should be avoided. Some people are sensitive to resins, hardeners and solvents. Hence suitable protective clothing, gloves and eye protection shall be worn. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams, provide additional skin protection. In case of contact with skin, it shall be rinsed with plenty of water, then cleansed with soap and water. In case of skin contact with Silkon Zink Primer, it shall be removed immediately with resin removing cream followed by washing with soap and water. Solvent should not be used. In case of contact with eyes, it shall be rinsed immediately with plenty of clean water and medical advice shall be sought immediately. If swallowed, medical attention shall be sought immediately - Vomiting should not be induced.

Fire

Silkon Zink Primer and Silkon Solvent are flammable. It shall be kept away from source of ignition. Smoking is prohibited during handling / application of the product. In the event of fire, it shall be extinguished with Carbondioxide or foam. Use of water jet is not recommended.

Flash points

Silkon Zink Primer	16 ⁰ C
Silkon Solvent	33 ⁰ C