



BI-COMPONENT, EPOXY-BASED STUCCO FOR SMOOTHENING CONCRETE STRUCTURES BEFORE REINFORCEMENT WITH CARBON FABRIC.



## PRODUCT DESCRIPTION

EPO FLAT ST is two-component epoxy resin based products with selected fine graded aggregates and special additives. After mixing component A with hardener component B, they become a thixotropic paste, easy to apply both on vertical surfaces and on soffits. EPO FLAT ST harden without shrinkage, becoming extremely tacky and mechanically strong. EPO FLAT ST respond to the principles defined in EN 1504-9 “Products and systems for protecting and repairing concrete structure and the minimum requirements for EN 1504-4 “Structural bonding”.

## FIELD OF APPLICATION

Leveling concrete, reinforced concrete or masonry surfaces before applying Ma-peWrap fabrics.

## LIMITATIONS

- Not be used on wet surfaces.
- Not be used on dirty or crumbling surfaces.

## APPLICATION PROCEDURE

### A) Preparation of the support

Treat the substrate with Epo Primer ST before applying EPO FLAT ST.

### B) Preparing the product

The two parts of EPO FLAT ST must be mixed together. Pour part B grey into part A White and mix at a Fast speed with a drill fixed with an agitator until a uniform paste is obtained (a uniform grey). The product is already pre-dosed. To avoid incomplete hardening of EPO FLAT ST, do not use partial quantities. When partial quantities are necessary, use a precision electronic scale. The mixing ratio is:

- 1 parts by weight of component A;
- 1 part by weight of component B.

### C) Applying the product

EPO FLAT ST can be applied on concrete, stone, brick or metal with a flat trowel after the substrate has been primed with Epo Primer ST. In order to obtain good leveling, it is recommended to let the product penetrate well into particularly uneven areas. Apply, with a notched trowel, approximately a 1 mm layer of EPO FLAT ST, depending on the temperature, over the still fresh Epo Primer ST. Use a flat trowel to completely level even the most uneven parts of the surface. Use the same product to fill and round the corners in or-

der to create a profile with a bending radius not less than 2 cm. EPO FLAT ST must be applied within their pot-life, therefore timing is vital in order to use the whole pack within the given time. The CF W 200 fabrics must be applied over the still fresh EPO FLAT ST.

## **COVERAGE / CONSUMPTION**

Approximately 1.55-1.65 kg/m<sup>2</sup> per mm of thickness.

## **PACKAGING**

EPO FLAT ST is supplied in 5 and 15Kg plastic bucket A+B.

## **SHELF LIFE**

Original sealed bags of this product are guaranteed to be of first quality for 24 months if stored off of the ground in a dry area. High humidity will reduce the shelf life of the bagged product.

## **SAFETY INSTRUCTION**

EPO FLAT ST component A is irritant for the skin and the eyes, both components A and B may cause sensitization in those subjects sensitive to such substances. EPO FLAT ST component B is corrosive and may cause burns. The product contains low molecular weight epoxy resins that may cause sensitization if cross-contamination occurs with other epoxy compounds. When applying the product, we recommend the use of protective gloves and goggles and to take the usual precautions for handling chemical products. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention. EPO FLAT ST component A is also hazardous for aquatic life. Do not dispose of this product in the environment. For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet. **PRODUCT ONLY FOR PROFESSIONAL USE.**

# TECHNICAL DATA

Product identity		
	Component A	Component B
Consistency	Thick paste	Thick paste
Color	White	Beige
Density (Kg/Lt)	1.6	1.6
Dry solids content (%)	100	100
Brookfield viscosity (mPa-s)	800,000 (# F - 5 rpm)	650,000 (# F - 5 rpm)
Application data (at +23°C and 50% R.H.)		
Mixing ratio	1	1
Brookfield viscosity of mix (mPa-s)	1,000,000 (# F - 2.5 rpm)	
Density of the mix (kg/Lt)	1.45	
Pot life of mix	30 minutes	
Application temperature range	from +10°C to +30°C	
Open time (according to EN 1346)	45 minutes	
Adjustment time	1-2 hours	
Complete hardening	after 3 days	
Final performances		
Linear shrinkage (%)	0	
Compressive modulus of elasticity (N/mm <sup>2</sup> )	6,000	
Coefficient of thermal expansion	43 x 10 <sup>-6</sup> K <sup>-1</sup>	
Glass transition temperature	> +40°C	
Reaction to fire	B-s1, d0	
Bond strength on damp concrete according to EN 12636 (N/mm <sup>2</sup> )	5.2	
Concrete-steel bond strength (N/mm <sup>2</sup> )	4.8	
Concrete-Carboplate bond strength (N/mm <sup>2</sup> )	5.5	



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