



webertec epo 450 PC

Epoxy mortar for pile capping system

Technical and repair mortars

Leb	Egypt	Jordan	UAE	Qatar	Kuwait	KSA	Oman
27.8kg	27.8kg	27.8kg	27.8kg	27.8kg	27.8kg	27.8kg	27.8kg
110kg	110kg	110kg	110kg	110kg	110kg	110kg	110kg

2.8kg epoxy + 25kg fillers
10kg epoxy + 2x50kg fillers

PRODUCT

webertec epo 450 PC is a three-component epoxy mortar. It is mainly used for pile capping. It has high bonding power, and high mechanical strength.

PROPERTIES

webertec epo 450 PC adheres to most building materials: iron, concrete, bricks, etc. It has the following characteristics:

- Fast setting mortar, with no shrinkage
- High chemical resistance to: Petroleum, oil, grease, acids, alkalis, solvents, salt water
- High strength and excellent adhesion to its substrate
- Waterproof
- Simple mixing techniques

SCOPE OF USE

webertec epo 450 PC can be used as an epoxy mortar with good workability (Resin + Hardener + Filler) for grouting and pile top encapsulating system. tec epo 450 PC is used in the following applications:

- Pile cap repair: designed to encapsulate pile tops in a range of 5-50 mm thickness

- Bonding or Anchoring: Steel bars and bolts in concrete or masonry, base plates, railway tracks, ground anchors
- Patching and repair: concrete surface patching for walls and floors
- Chemical proof and anti-acid treatment: floor screed
- Grouting bearing plates and column bases.
- Heavy machinery and equipment foundations.

CHARACTERISTICS

Description	3-components epoxy mortar
Composition	Resin, Hardener, selected fillers
Density	2.1 ± 0.05 kg/lit
Setting time	5 hrs at 25°C
Bond strength on concrete (BS 1881 Part 207) @ 14 days	> 2.8 MPa
Pot life	50 mins ± 10

*Compressive strength - ASTM C 579

Age	Result at 25°C	Result at 35°C
1 day	70N/mm ²	80N/mm ²
3 days	80N/mm ²	85N/mm ²
7 days	90N/mm ²	95N/mm ²

*Values subject to a variation of ± 10%

*Flexural strength - ASTM C 580

Age	Result at 25°C	Result at 35°C
7 days	28N/mm ²	31N/mm ²

*Values subject to a variation of $\pm 10\%$

CHEMICAL RESISTANCE

To caustic soda 10%: excellent
To muriatic acid 10%: excellent
To sulfuric acid 10%: excellent
To xylene: some surface softening

APPLICABLE STANDARDS

BS 1881 Part 107& 207, ASTM C413, ASTM C 579, ASTM C 307, ASTM C 642-97 and BS 4551, ASTM C 642-97

INSTRUCTIONS FOR USE

SUBSTRATE PREPARATION

The substrate must be structurally sound, clean, dry.
Mechanical scarifying or blasting with light sand shall be performed in order to cause 1/16" (1.6mm) deep irregularities on the substrate.

Make sure that the surface is free from laitance, dirt and loose concrete remains, by floor scabbing or vacuuming. All transitions between two different floor finishes or at floor drains shall be saw-cut in a 1/2" (13mm) wide by 1/2" (13mm) deep slot.

All cracks over 1/16" (1.6mm) wide should be widened to the dimensions of 1/4" (6.3mm) wide and 1/4" (6.3mm) deep prior to the application of **weberep epo 420 SC**.

PRODUCT PREPARATION

All material should be within the proper temperature range of (10°C) to (40°C) for at least 24 hours prior to mixing. Part B, the hardener is added to Part A, the base.

Mix with a special slotted paddle by using a low speed drill. The paddle should touch the inside surface of the can, bottom and sides, to insure complete mixing of the liquids. Mixing time should be 1 to 2 minutes with the proper tools.

Then add gradually the fillers to the mixture and mix thoroughly until all the aggregate is mixed and a uniform epoxy mortar is obtained.

PRIMING

After the surface has been prepared, prime any smooth areas with **weberfloor eposil plus** (Primer and sealer).

Mix thoroughly and apply in a thin, even coat with squeegee, roller or brush. Make sure the primer thoroughly wets the surface, but do not allow it to puddle.

Allow to cure for a maximum 24 hours before applying the mortar. All areas must be covered and the epoxy Mortar must be laid over tacky primer before it cures.

PRODUCT APPLICATION

Apply **weberep epo 420 SC** with a steel trowel and then either finish by hand or finish with a spiked roll.

CONSUMPTION

App. 2kg/m² for 1mm

YIELD

App. 14 lit/kit

STORAGE

weberep epo 420 SC can be stored 12 months after manufacturing date in its original packaging, in a dry location, away from extreme temperatures.

SAFETY PRECAUTIONS

The product contains cement powders which, when mixed with water, release alkalis that could be harmful to the skin. It is preferable that the application be done in a ventilated area, and to wear protective gear for hands, eyes and respiratory system and to avoid breathing of the dust. Splashes on the skin should be washed away by cleaning thoroughly with soap and water. In case of contact with eyes, wash thoroughly with clean water and seek medical attention. If swallowed, do not induce vomiting and seek medical attention. The product is non-flammable.

DISCLAIMER

While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest one. The company may modify it without prior notice. Technical characteristics are listed for guidance only. For more information, please contact the company's office in your location.

NOTE

The information included on this Technical Data Sheet is the sole property of Saint-Gobain Middle East Holding SAL (Previously SODAMCO Holding SAL). The unauthorized disclosure, use, dissemination or copying (either whole or partial) of this data sheet or any information it contains, is prohibited and subject to legal pursuit.