



FARCO TOP SA46

Bonding Agent and Additive for Modification of Cement based mixtures and Water proofer

Product Description

- FARCOTOP SA46 is a water based carboxylated styrene - butadiene copolymer.
- SA46 is a multipurpose, concentrated liquid polymer for making modified concrete, mortars, screed and render with better performance, improved mechanical properties and lower penetration against water, chloride and some typical chemicals and higher bond strength to the substrate.

● Application

- Water proofing mortars and slurries for water reservoirs, swimming pools and sewage treatment plants.
- In combination with FARCOTOP 50 (kas-matic)
- Flooring of industrial factories
- Repair mortars
- Modification of cement based tile adhesive
- As a bonding bridge for new to old concrete

● Advantages

- Improve adhesion properties of cement based mixture to various substrates like (cement, concrete, brick, polystyrene and most building Materials)
- Increase mortar tensile, flexural and abrasion resistance.
- Reduces cracking and shrinkage
- Lower permeability against water and chloride.

- Increases durability under freeze/thaw cycling
- Recommended for water proofing potable water tanks
- Improve flexibility
- Contains no chloride

● Standard Compliance

- SA46 can be evaluated according to the following
- Standards:
- ASTM C 1059-TYPE II, C 1404, C 1042,
- C 109, C 348

● Technical specification

The prepared mortar: SA46 (1part): water (2parts) volumetric

Sand (0-3mm) (3parts): cement (1part)

The prepared dry mixture is added to the diluted SA46 while mixing until a workable mortar with required consistency for application is achieved.

Compressive strength ASTM C 109	> 350kg/cm ²
Flexural strength ASTM C 348	> 100kg/cm ²
Bonding strength ASTM C 1404	> 18kg/cm ²
Bond strength new to old concrete by slant shear ASTM C 1042	> 35kg/cm ²

● Instruction for Use

Surface Preparation

- The surface to be treated should be clean and sound.
- Remove the laitance by mechanical methods to sound material

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- Clean back corroded reinforcing to bright metal
- All areas should be pre-dampened to SSD to reduce moisture loss

Priming

- Priming is used for improvement the bonding of the mortar to the substrate and enhancement the quality of the surface.
- The mixing ratio of the primer(volumetric)is: SA46(1part):Cement(1 TO 3parts): Water (1 to 2parts)
- The pot life of prepared primer is 1 hour
- Apply the primer on exposed rebars, 24 hours before starting the mortar application
- All areas should be pre-dampened to reduce moisture loss. Do not place primer on standing water.
- Apply the primer on the prepared substrate, 10 minutes before mortar application. The ready to use mortar is applied with a steel trowel.

Making modified concrete with sand and gravel

In order to reduce water penetration and improve the durability and quality of concrete, 60 to 80 kg of SA46 is added to concrete mix design

Mix design of repair and water- proofing mortar

- Powder mix: cement: 50kg + sand(0-3mm): 150kg+ FARCOFIBER PP: 100gr

- Diluted adhesive: Water (1 to 2parts) + SA46(1part), (Volumetric)
- Add enough liquid to the dry mixture while mixing until lump free, homogenous and workable mortar Suitable for application is achieved
- The ready to use mortar is applied with a steel trowel.
- The maximum recommended thickness in a layer is 15mm, for higher thicknesses, subsequent layers is performed after 5 hours.

Mix design of fairing coat with cement and quartz sand

- Powder Mix: Cement (1)+ Fine quartz sand or Fine sand (3), (Volumetric)
- Diluted Adhesive: Water (1 to 2) + SA46 (1) (Volumetric)
- Add enough liquid to the dry mixture while mixing until lump free, homogenous and workable cosmetic suitable for application is achieved.
- The prepared mortar is applied with a steel trowel max 3 mm after priming.
- For reinforcing the fairing coat and particularly avoiding any cracks, plastic (acrylic) net is recommended

Water proofing the concrete water reservoirs

1. For poor and unsound concrete surfaces with high porosity, it is recommend, applying the primer, modified mortar and faring coat on the entire surface after local repair.

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2. For concretes with low penetration and good quality Apply just primer with fairing coat on the entire surface.

Curing

- Avoid direct sun light and wind to prevent drying out at initial stages.
- Proper curing procedures are important to ensure the durability and quality of the repair and treated areas. To prevent surface cracking, moist cure should be maintained for 24 hours and 5 days for water tanks, following with 10 days drying then can be used afterwards.

Consumption

Primer: 100 to 150 gr, per m²

Fairing coat: 300 g to 400 gr, per m² for 4 mm thickness

Mortar: 800 gr to 1000 g, per m² for 10 mm thickness

Packaging

SA46 is supplied in 4, 20 gallons, 200 kg drums and 1000 kg IBCs.

Safety and Handling Precautions

SA46 is non- hazardous and non-dangerous product.

Incase of contact with skin And eyes, rinse with plenty of water.

Storage and Shelf life

Shelf life is approx. 12month when stored in the original unopened packaging. In a dry place at 5 - 35°C. Do not allow to freeze.

Technical Service

The SHIMISAKHTEMAN Technical Service Department is available to assist you in the field and correct use of our products.



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