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SURECOTE 500ARFR Fibre Reinforcing Epoxy resin

PRODUCT DESCRIPTION

Surecote 500ARFR has been specifically formulated as a multi-purpose coating for the prevention of corrosion and cracking on concrete surfaces by laminating with fibres such as glass and carbon fibre

Surecote 500ARFR can be used by roller applications onto concrete surfaces. May be *coloured*.

TYPICAL USES

For use on concrete where a tough, hardwearing chemical and slip resistant coating is required. Typical applications may include the following:

- Construction
- Fibre wrapping and laminating.
- Used with carbon and/or glass fibre
- Concrete column strengthening
- Earthquake repair and strengthening to prevent damage
- Mining – mineral processing
- Chemical containment bunds
- Older resin floor renovation

FEATURES AND BENEFITS

- Seamless – no joints other than existing in the concrete.
- Excellent mechanical properties.
- Chemical & heat resistant
- Versatile application
- High heat distortion temperature
- Colours – available in a limited colour range in factory batch quantities. On site colouring by tints or oxides.

CHEMICAL RESISTANCE

(Splash & Spillage)

- Very good all round resistance

No loss of hardness after 6 months of exposure to splash and spillage on 7 day cycles.

PRIMING:

Use Surecote 500 ARFR itself

MIX RATIO:

Surecote 500ARFR Part A (Resin) : Part B (Hardener)
3 : 1 parts by weight. Eg 8kg mix= 6kg Resin + 2Kg Hardener

LIMITATIONS

Surecote 500ARFR is susceptible to chalking and colour change in extended environments. Coat with acrylic coating to prevent UV xidation.(Flexiglaze)
Vertical surfaces may need the addition of Aerosil 200 to prevent slumping.

This data sheet refers to the resin system only.

NB: Please refer to the Nuplex carbon fibre reinforcement system data for full details on the full process.

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SPECIFICATION

How to Specify

"The concrete shall be prepared correctly as per the Nuplex ARFR data and smoother with K125.

The laminating system shall be Surecote 500ARFR as supplied by Nuplex Building Products and as applied to the specific application by roller technique described in Nuplex's written instructions."

The degree of fibre reinforcement (grams/m²) shall be applied to the specification submitted and approved prior to the installation commencing.

The cured reinforcement shall be overcoated with Flexiglaze low sheen."

CONCRETE

Concrete Specifications

New Concrete

Shall have a surface which has been formed without defects.

A minimum compressive strength of the specified by the engineer.

A moisture content less than 18% or 75% RH.

A surface free of cement latence or other contaminants and any roughly screeded or floated patches or areas.

No traces of cure membranes or release agents.

OLD concrete

Shall be inspected by the engineer and approved for fibre reinforcement.

SURFACE PREPARATION

IMPORTANT:

- Grind .
- Rough surfaces can be filled prior to the installation of the Surecote 500ARFR by using Nuplex K125.
- Ensure all corners are round radiused
- Ensure all surfaces are smooth and no sharp angles or protrusions exist.

INSTALLATION

Prime the prepared concrete surface with a thin coat, 5m²/lt of Surecote 500ARFR.

Neatly mask out all areas not covered by the proposed work.. Allow to tack free.

Accurately weigh and mix Surecote 500ARFR and Hardener in the correct proportions in a separate container.

Primer and laminating mix:

Surecote 500 AR Resin (as above) 3 Kgs

Surecote 500 AR hardener (as above) 1 Kgs

Always mix in full kits or by weight.

Mix well with power mixer

Roll onto the primed surface and commence placement of the carbon fibre laminate.

Take great care not to crease, break or leave bubbles in the mesh.

Roll with laminating rollers carefully to fully embed the mesh and resin and to exclude bubbles.

Allow to tack cure and apply further 500ARFR to fully laminate.

When cured apply Flexiglaze low sheen in any slected colour..

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