

SUPER REP RAPID

Rapidly Setting, Fiber Reinforced Shrinkage Compensated Repairing Mortar

Description

SUPER REP RAPID is a quick setting, Portland cement-based structural mortar for the durable repair of concrete which cannot be taken out of service for long periods, or in areas subjected to heavy wear such as roads, runways, bridges, decks, floors and footpaths. It can be used as supplied or bulked out with sharp sand or aggregate.

SUPER REP RAPID is a single component, polymer modified, fiber-reinforced, Portland cement based concrete repair compound, which is physically and chemically compatible with the host concrete. It exhibits unique hydraulic properties to produce a rapid curing mortar with enhanced polymeric properties and reliable strength development. It is used horizontally up to 75 mm thickness and fit to be applied vertically up to thickness of 35 mm in a single coat.

Features & Benefits

- Reliable strength development gives rapid return to service.
- High bond strength exceeds tensile strength of concrete.
- Shrinkage compensation - reduces the risk of cracking.
- Pre-packaged material requiring mixing with clean water.
- Low permeability, Sulphate and chloride resistance
- Excellent workability.
- Non-Toxic, Eco-friendly.

Uses

SUPER REP RAPID is used for the fast restoration and repair of degraded reinforced concrete for repairing of edges of beams and pillars, risers of balconies, terraces, parapets, etc. Its particular fine compensation and the rapid hardening allow an easy application, and a fast finishing touch

Technical Properties

Consistency	Thixotropic mortar
Mix Density	2,000 Kg/m ³ approx.

Mixture Pot Life	15 minutes
Initial Setting time	30 minutes
Final Setting time	90 minutes
Adhesion to concrete	≥1.6 N/mm ²
Compressive strength	30 N/mm ² @ 1 day 40 N/mm ² @ 7 days 55 N/mm ² @ 28 days
Drying shrinkage	<500 macrostrain
Water impermeability	<10mm
Water Absorption	<2%

All values are subject to 5-10% tolerance

Standards Compliance:

- BS 1881 Pt 207
- ASTM C157, C580
- EN 1504-3 Class R4

Application Procedures

Surface preparation:

It is essential that adequate preparation is carried out prior to the application of SUPER REP RAPID. This preparation should ensure the removal of all grease, oil and loose material.

The area to be reinstated using SUPER REP RAPID should be cut back to a depth of at least 10mm.

To avoid "feather edging", it is advisable to neatly delineate the repair boundary by saw cutting to a depth of 10mm. It is recommended to prime the surface with ULTRABOND AR.

All corroded steel should be completely exposed including the rear of the bar to enable thorough cleaning. It is recommended that grit blasting be used to clean the reinforcing steel and attention should be paid to the rear of the bar to ensure all corrosion products have been removed.

Once the reinforcing steel has been cleaned it should be coated immediately with one coat of EPOPRIME ZINC (zinc rich primer) or SUPERFER protective coating.

Mixing Instructions:

To prepare the mortar, pour 3.75 to 4.25 liters of clean water into container and add slowly the content of **SUPER REP RAPID** (25 Kg.). Mix using spiral paddle in

slow speed heavy duty drill for few minutes till a homogeneous lump free consistency mix is achieved. Always add powder to water and not the other way around.

Application Instructions:

Every time prepare the quantities that can be used within 15 minutes. Apply the mortar manually, with a trowel or spatula. For vertical surfaces, the minimum applicable thickness is of about 5 mm, and the maximum is about 35 mm. horizontal application can be done in a thickness up to 75mm.

If the application of a second coat is necessary, the first coat must be applied directly roughened to increase bonding with the second coat. After application, avoid rapid evaporation for the water of mix.

For curing apply one or two coats of one of SBI curing agent products.

Yield

A 25kg bag of **SUPER REP RAPID** will yield approximately 13.5 Liters of mortar.

Packaging

SUPER REP RAPID is available in 25kg bag.

Storage

Keep the product in dry and sheltered place at temperature between +5°C to +35°C. In these conditions and in closed original containers, the product will have a shelf life of at least 12 months.

Health and Safety

Wear gloves, goggles to avoid any contact with eyes and skin. In case of splashes in the eyes wash abundantly with warm water and consult a doctor.

For further information or particular use, contact SBI Technical Department.

Quality & Care

All products produced in SBI facilities are manufactured under a management system certified to conform to the requirements of the quality and environmental health & safety standards ISO 9001 & ISO 14001.

SBI products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service. All SBI datasheets are updated on a regular basis. It is the user's responsibility to obtain the recent version.

REV 03-1010