

SUPER REP T60

High Strength Fiber Reinforced Shrinkage Compensated Structural Repair Mortar

Description

SUPER REP T60 is a thixotropic cement base mortar composed of high resistance hydraulic binders, polymer latex, silica sand, selected aggregates, special additives and reinforcing fiber, supplied as a ready to use dry powder which required only the site addition of clean water to produce easily workable mortar with excellent bond characteristics to steel reinforcement and concrete. It is shrinkage compensated with low permeability and high durability.

Features & Benefits

- Shrinkage compensation reduce the risk of cracking.
- Ready to use just required mixing with water
- Excellent bonding to all concrete substrates.
- High impact resistant finished layer
- High mechanical resistance.
- Thixotropic, suitable for vertical and overhead repairs.
- Low permeability provides protection against chlorides, atmosphere gases and salts penetration.
- Not require formwork, saves time and cost.

Uses

Super Rep T60 is designed to provide a structural grade repair mortar particularly in situations where abrasion resistance and low permeability are required, such as:

- Repairs to structural concrete elements, e.g. reinforced beams, columns, risers of balconies, terraces, parapets, bridges, channels, viaducts, dams, tunnels, concrete pavements...etc.
- Highly trafficked surfaces, particularly transition strips adjacent to mechanical bridge joints
- Repairs in marine environments or other situations where concrete is in contact with chloride or sulphate solutions.

Technical Properties

Consistency	Thixotropic mortar
Density	2,100 Kg/m ³ approx.
Workability time	30 minutes @ 25 °C
Adhesion to concrete @ 28 days	1.8 N/mm ²
Compressive strength	45 N/mm ² @ 7 days 60 N/mm ² @ 28 days
Flexural Strength	5.2 N/mm ² @ 7 days 7.5 N/mm ² @ 28 days
Tensile Strength	3.6 N/mm ² @ 28 days
Linear thermal expansion	1X10 ⁻⁶ μm
Water impermeability	<10mm
Water Absorption	<1.8%
Drying Shrinkage @28 days	<500 macrostrain

All values are subject to 5-10% tolerance

Standards Compliance:

- BS 1881, Pt 122, 207& 116
- ASTM C579, C580, C157
- BS EN 12390 Part 3& 8
- BS EN 1542
- DIN 1048
- UNI – EN 196, UNI 6556& 9532

Application Procedures

Surface preparation:

It is essential that adequate preparation is carried out prior to the application of SUPER REP T60. This preparation should ensure the removal of all grease, oil and loose material.

The area to be reinstated using SUPER REP T60 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.

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 coatings. Before applying SUPER REP T60 damp the substrate with water, allow excess water to evaporate. In some cases of weak substrate, it is recommended to prime the surface with ULTRABOND AR.

Mixing Instructions:

To prepare the mortar, pour 4.0 to 4.5 liters of clean water into container and add slowly the content of **SUPER REP T60** (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:

Apply **SUPER REP T60** mortar manually with a trowel, spatula. The product remains workable for 30 minutes at temperature of +25°C.

Minimum application thickness is 10mm and maximum for vertical surfaces is 35 mm and 25mm for overhead sections. On horizontal surfaces, repair thickness can reach up to 100 mm per layer.

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

Yield

A 25kg bag of **SUPER REP T60** will yield approximately 14 Liters of mortar.

Packaging

SUPER REP T60 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.

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