

# SUPER REP T40

## Fiber Reinforced Shrinkage Compensated Repair Mortar

### Description

**SUPER REP T40** is a premixed, cementitious polymer modified, shrinkage compensate mortar. It is composed of hydraulic binders, silica sand, selected aggregates, special additives and reinforcing fiber, supplied as a ready to use blend of dry powder which requires only the addition of clean water to produce a highly consistent, lightweight repair mortar suitable for general purpose concrete and masonry repairs.

### Features & Benefits

- Ready to use just required addition of water.
- Excellent bond to all concrete substrates.
- Shrinkage compensation - reduces the risk of cracking.
- High impact resistant finished layer.
- High build achievable with excellent mechanical strength.
- Excellent workability.
- Low permeability provides protection against chlorides, atmosphere gases and salts penetration.
- Contains no asbestos, chloride & sulphate admixture

### Uses

**SUPER REP T40** is suitable for wide range of concrete and masonry surface repairing, such as:

- General repairing to concrete and masonries.
- Vertical, horizontal and overhead repairing
- Prefabricate of unit joints
- Pre-cast repairing
- Repairing voids greater than 10mm deep
- Repairing of honeycombing
- Restructuring of concrete structural elements.

### Technical Properties

Consistency	Thixotropic mortar
Density	2,000 Kg/m <sup>3</sup> approx.
Workability time	30 minutes @ 25 °C
Adhesion to concrete @ 28 days	1.6 N/mm <sup>2</sup>
Compressive strength	32 N/mm <sup>2</sup> @ 7 days 42 N/mm <sup>2</sup> @ 28 days
Flexural Strength	5 N/mm <sup>2</sup> @ 7 days 7 N/mm <sup>2</sup> @ 28 days
Tensile Strength	3.5 N/mm <sup>2</sup> @ 28 days
Linear thermal expansion	1X10 <sup>-6</sup> µm
Water impermeability	<10mm
Water Absorption	<2%
Drying Shrinkage @28 days	<500 macrostrain

All values are subject to 5-10% tolerance

### Standards Compliance:

- BS 1881 Pt 207, 121
- BS 6431, BS 6319
- ASTM C157, C580
- UNI-EN 196

### Application Procedures

#### Surface preparation:

It is essential that adequate preparation is carried out prior to the application of SUPER REP T40. This preparation should ensure the removal of all grease, oil and loose material.

The area to be reinstated using SUPER REP T40 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 coating. Before applying SUPER REP T40 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 T40** (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 T40** 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 50 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 T40** will yield approximately 14 Liters of mortar.

## Packaging

**SUPER REP T40** 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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