

Techno Struc Rep GP 40

Cementitious Structural Grade Repair Mortar

Product Description

Techno Struc Rep GP 40 is a ready to use single component polymer modified repair mortar containing fibres and silica fume. It contains specially selected materials to provide a fine, smooth repaired surface.

Techno Struc Rep GP 40 is reinforced with specially designed acid & alkali resistant synthetic fibres with excellent elongation characteristics and exceptional resistance to cracking.

Uses

Techno Struc Rep GP 40 is a fine, ready to use repair mortar for repairing load bearing structures, precast concrete elements, etc. It can also be used to repair honeycombs, surface defects, blowholes, tie rod holes and minor damages. It can be used in vertical, overhead and floor patch repair situations with ease. It can also be used as dry pack mortar of various consistencies by adjusting the water content of the mix.

Advantages

- Non-shrink mortar
- Fibres help in reducing micro cracking of repaired surfaces
- User friendly, excellent workability
- Non-toxic and non-corrosive
- Extremely low permeability
- Excellent resistance to aggressive environmental elements
- Dense surface helps in resisting carbon dioxide penetration
- Excellent adhesion and mechanical strength
- Chloride free, safe to use in repairs of reinforced concrete surfaces

Application

Surface Preparation

The area to be repaired should be clearly marked and saw cut for at least 5 mm depth to avoid feather edges. The surface should be clean and sound. Remove dirt, dust, oil, grease, laitance, sealers, release agents, curing compounds and paints using suitable mechanical means. Exposed rebar should be cleaned and protected with Techno BarCote E2P. The concrete should be saturated with water prior to application.

Priming is generally not required. Surfaces to receive Techno Struc Rep GP 40 should be well saturated with water prior to application and excess water is to be removed before application of Techno Struc RepGP 40. In some critical cases appropriate bonding agent can be used.

Techno Struc Rep GP 40 should be mixed with water using a heavy duty slow speed drill machine fitted with a paddle. Amount of water to be added is 4 ltrs per 25 kg bag. Mix for at least 3 minutes to ensure a homogeneous lump free consistency is achieved. Do not try to remix the product after it loses its workability by adding more water.

Techno Struc Rep GP 40 can be applied by hand or wet spray. It should be firmly placed to ensure proper bonding to the prepared surface. Wooden float or plastic float may be used for levelling and initial finishing. Final finish can be carried out just before the initial set of material using a steel trowel. Single layer application can be carried out to a maximum thickness of 40 mm. Thicker repairs may be achieved by working in layers.

Application Thickness

Techno Struc Rep GP 40 can be applied at a thickness of 5 mm up to 40 mm in a single layer.

- 5 mm to 40 mm in a single layer for horizontal surface
- 5 mm to 20 mm in a single layer for vertical surface
- 5 mm to 15 mm in a single layer for overhead surface

Technical Specifications

Property	Test Method	Value
Component	-	Single
Form	-	Powder
Colour	-	Grey
Fresh Wet Density	BS EN 12350-6	2.05 kg/ltr +/- 0.05
Working Time	-	20mins
Comp. Strength	ASTM C109	13 MPa at 1day 25 MPa at 3days 33 MPa at 7days 45 MPa at 28days
Tensile Strength	BS 6319-7	5 N/mm ² at 28days
Bond Strength	ASTM D4541	>1.5N/mm ² at 28days (Concrete failure)
Flexural Strength	S 6319-3	7 N/mm ² at 28days
Water Absorption	BS 1881-208	< 0.01 ml/m ² /sec at 2hrs
Water Permeability (ISAT)	BS EN 12390-8	< 10mm

Curing

To prevent rapid surface drying and crazing, repair mortar should be cured by spreading wet burlap or moist hessian cloth over the surface. Repaired area can also be cured using suitable curing compound.

Estimating

Packaging

Techno Struc Rep GP is available in 25kgs HDPE Bag

Coverage

1 m²/25 kg bag at 14 mm thickness

Health & Safety

Techno Struc Rep GP 40 is non-toxic and should not be swallowed or allowed to come into contact with skin and eyes. Wear suitable protective gloves and goggles. Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

Fire

Techno Struc Rep GP is powder based and non-flammable but should be stored away from combustible materials.

Shelf Life

12 months if stored in original packing under shed and at normal ambient temperature

Important: Technokem products are guaranteed against defective materials and are sold subject to its standard terms and conditions of sale. It is the Customer's responsibility to satisfy themselves by checking with the Company whether the information is still current at the time of use. The customer must be satisfied that the product is suitable for the use intended. All products comply with the properties shown on current Technical Literatures. However, Technokem does not warranty or guarantee the installation of the products as it does not have any control over installation or end use of the product. All information and particularly the recommendation relating to application and end use are given in good faith.

For Complaints/Suggestions:

Please write to our Customer Care Executive at

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