

Techno Resin EL

Abrasion resistant epoxy resin lining mortar

Uses

A trowel able epoxy mortar with maximum chemical and abrasion resistance for the protection of concrete and similar substrates. Ideal for rehabilitation of manholes, lining of outfalls, spillages and similar structures.

Advantages

Chemical resistant Unaffected by a wide range of acids, alkalis and industrial chemicals.

High bond strength Superior chemical and physical bond to virtually all substrates, dry or damp.

Simple application No need for priming concrete surfaces, therefore cutting labour costs and reducing the risk of bad priming. Prepacked for ease of mixing. Equipment can be cleaned with water.

Low odor harmful vapor present. High strength strengths in excess of the concrete to which material is applied. Excellent resistance to abrasion and impact.

Waterproof Cured material provides a long lasting waterproof barrier against both positive and negative pressure.

Description

Techno Resin EL is a three component system consisting of epoxy resins without solvents and a special blend of chemical resistant fillers. The two epoxy components (both pour able) change to a gel upon mixing. Addition of the chemically resistant aggregate results in a thixotropic consistency for easy trowel ability.

Techno Resin EL is simple and cost-effective for overhead, vertical, horizontal patching and resurfacing to both dry and damp surfaces. The low odour, non-sag, and chemical resistant properties of Techno Resin EL make it the ideal material for long lasting manhole wall Rehabilitation. Techno Resin EL also makes an effective adhesive for ceramic tiles in aggressive Situations. Techno Resin EL can be used in brick, block and precast concrete manholes. Techno Resin EL provides a permanent impermeable, high strength, monolithic lining to the interior of manhole walls.

Properties

Density	1,750 kg/m ³ at 20 °C
Resin Type	Epoxy
Filler Type	Silica/ Quartz
Pot Life	Approximately 2 hours at 30 °C
Cure Time	Initial 4 hours at 20 °C Full 7 days at 20 °C
Compressive strength	70 N/mm ²
Tensile strength	12 N/mm ²
Flexural strength	28 N/mm ²
Water absorption	0.1% maximum
Chemical resistance (ASTM C267)	
Bleach	Excellent
Detergent	Excellent
Petrol	Excellent

Modern Technologies for Construction Chemicals

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Sodium chloride (20% solution)	Excellent
Sodium hydroxide (20% solution)	Excellent
Sulphuric acid (15% solution)	Excellent

Instructions for use

Surface preparation Surface must be clean and structurally sound. Any loose or unsound brick or concrete should be removed. Surfaces must be entirely free of oil, grease, paint detergents, rust or other surface contaminants.

Surfaces should preferably be abraded by light sand blasting followed by thorough washing to remove dust. Alternatively asphalt and oil contaminants should be removed with detergents and rinsed thoroughly with water. Surfaces should then be brushed with M.T.C. Acid Etch (diluted 4: 1 with water) and thoroughly rinsed with water.

Prior to application of Techno Resin EL all active hydrostatic leaks must be stopped by the use of Techno Plug a hydraulic cement. Mixing Techno Resin EL is supplied in factory pre-measured components.

To mix, pour Base and Hardener into a clean pail. Mix thoroughly with a slow speed flameproof electric drill fitted with a spiral paddle for approximately 5 minutes until a uniform colour and gel-like consistency has been reached. Slowly mix aggregate into per-mixed gel, continuing to mix until consistency is uniform. Application Use gel neat or as a mortar.

Apply with spatula or trowel. To avoid sagging on vertical and overhead surfaces, do not apply gel mortar greater than 12 mm per layer.

Build up to desired level and strike off. To close the surface to a smooth finish lubricate the trowel with water. Note: Do not thin components as solvents will prevent proper cure. Techno Resin EL should be applied only when the substrate temperature and the ambient temperature is above 5 °C. Cleaning Clean equipment with water or Techno solvent

Packing and coverage

Pack size

12 kg (giving an approximate yield of 7 liters).

Coverage

One kit will cover approximately 2 - 2.5 m² to thickness of 3 mm depending on the nature of the substrate.

Storage

12 months shelf life at 20 °C when stored in a dry place.

Technical Service

The company provides a technical advisory service supported by a team of specialists in the field.

Additional information

Techno Resin EL forms part of the M.T.C. Concrete Repair System. The M.T.C. Concrete Repair System ensures a successful economical solution to your concrete problem.

Techno Epoxy Zinc

Active anti-corrosion coating for steel reinforcement.

Techno bond SBR

Acrylic emulsion for priming and curing M.P.C. cementations mortars.

Plastroc TG

Polymer modified high strength mortar for floor and structural repairs.

Plast Roc S

Polymer modified re-facing mortar. Impregnating, breathable anti-chloride and anti-

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carbonation coating.

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