



STERLING TechnoCem™ MortarSeal Extra

High Performance, fast setting, repair fill and Finish
 Mortar for concrete and brickwork.

Description:

TechnoCem™ MortarSeal Extra is a trowelable finish fast setting repair mortar with non-shrinkage effect and thixotropic high strength formulation for structure repair and also for brickwork. It is suitable for placing in thickness of 6mm to 30mm both vertically and overhead. It provides a durable, strong structure repair fully compatible with host concrete.

Application Includes:

TechnoCem™ MortarSeal Extra is recommended for use in the following areas of application-

- All types of structural repair which can be applied by trowel or wet spray.
- Repair of structural members subjected to repetitive loading including application in trafficked areas.
- Repairs to reinforced or pre-stressed beams or columns.
- Repairs in industrial area, especially those containing mineral oils, lubricants etc.
- Repairs in marine environments.

Features & Benefits:

- **Fast setting** – it sets very quickly to decrease the time of application.
- **Non-shrinkage** – volume stable in wet and hardened state thus reducing cracking tendency.
- **One component** – only addition of water provides uniform predictable performance even in remote situations.
- **No adhesive required** – simple installation without using any bonding agent.
- **Impermeable to aggressive elements** – long life repairs.
- **Sprayable** – with minimum rebound able to repair complex profiles easily.
- **Fast and easy placing** – less time for repairs required.

Applications Instructions:

Substrate Preparation

Remove all grease, oil, dust, residual curing compound, loose concrete and mortar particles, mould release agent or other contaminant shall be removed to obtain a keyed aggregate exposed surface. Non-impact/ vibrating cleaning methods, e.g. grit or high pressure water blasting are recommended. Cut the edges of the repair vertically to a minimum depth of 5 mm. Clean all exposed reinforcement to a minimum grade of SA 2 according to ISO 8501-1 / ISO 2944-4. Ensure back of rebar is also clean. Where reinforcing bars are corroded, cut back the concrete to at least 20mm behind the reinforcing bars. Grit blast to remove corrosion products from around reinforcing bars and replace the affected part of rebar if the diameter after grit blasting is found reduced by more than 20% of the original diameter on the advice of the structural engineer responsible for the works.

For removing surface undulation after removing dirt apply coat of TechnoCrete@URP K10-P and neat cement to ensure better bonding on it.

Mixing

Mix **TechnoCem™ MortarSeal Extra** in a pan mixer, or with a helical paddle attached to a low speed (300-600rpm) mixer for 3 minutes until a lump free, thixotropic consistency is achieved. Only use clean water. Mixing water needed: 4 to 4.5 litres per 30kg bag. Allow the mortar to rest for 2- minutes and then remix briefly before applying. Only full bags are mixed. Damaged or opened bags should not be used.

Note: W/P shall not be increased under any circumstances.

Typical Properties at 25°C:

Appearance:	Grey powder
Compressive strength (ASTM C109) * 7cm cube, @ w/p ratio = 0.15	> 25 MPa @ 1 day > 34 MPa @ 3 days > 42 MPa @ 7 days > 50 MPa @ 28 days
Mixing Water per bag (30 Kg)	Approx. 4 – 4.5 litres
Standards	ASTM C1107
Fresh wet density	2100 - 2200 kg/m ³ (Mixed density @27°C)
Working time:	20 - 25 min @ 20°C 10 - 15 min @ 40°C
Minimum application Temperature:	5°C
Setting time:	Initial : 6 - 7 hr @ 25°C Final 22-24 hr. @ 25°C

Thicknesses and Size Limitations

TechnoCem™ MortarSeal Extra can be applied in a single application for large repair voids at thicknesses between 12-15 mm. For greater thicknesses, apply second layer followed by a coat of TechnoCoat® Bond EP – Epoxy Bonding agent for old to new concrete or mortar. Please consult your local STIPL representative for Technical advice.

Curing

As TechnoCem™ MortarSeal Extra is a cementitious based material, it should be cured in a similar method to concrete. Curing can be conducted by using a good concrete curing compound such as TECHNOFINISH™ CONKURE 101/102 or by curing wet hessian sheets covered with polyethylene sheets.

Cleaning

All tools should be cleaned immediately after application on using fresh water. Hardened materials must be cleaned mechanically

Packaging

TechnoCem™ MortarSeal Extra is available in 30 kg bags.

Storage

TechnoCem™ MortarSeal Extra has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 40°C in original unopened bags. If these conditions are exceeded, STIPL Technical representative should be contacted for advice.

Health and Safety instructions

TechnoCem™ MortarSeal Extra may cause irritation to skin or eyes. In case of accidental contact with eyes, immediately flush with plenty of water and seek medical advice if necessary. For further information refer to the Material Safety Data Sheet.

Fire

TechnoCem™ MortarSeal Extra is nonflammable.

Mortar Application:

- The minimum temperatures of at least 5°C must be maintained during application and for at least 24 hours thereafter for optimum curing of the product. The prepared substrate should be pre-soaked, preferably for 24 hours, but at least 2 hours before applying **TechnoCem™ MortarSeal Extra**. The surface must be saturated surface dry, but without standing water **TechnoCem™ MortarSeal Extra** can be spray- or hand-applied. Apply mixed product directly to the prepared damp substrate, or wet on wet onto the primed surface. Spraying the material with the necessary pressure will ensure good adhesion of the material.
- A thin scrape coat or contact layer before building up to the required thickness, wet on wet, will improve adhesion especially in case of hand application. Apply to the desired layer thickness of 12 to max 50 mm and level using a screeding bar, trowel or wooden board. Can be applied in thicker layers in smaller patches or where additional reinforcement is present. Smoothing with a trowel or finishing by float or sponge can be done as soon as the mortar has begun to stiffen.

Additional Information: Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

*Separate datasheet are available on these products.

Disclaimer: The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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