vg TechnoProof® SilicoRepel Super

Silane/Siloxane Emulsion Penetrative Water-Repellent Impregnating Breathable Protective Coatings For Natural Stone, Concrete & Masonry

Description:

TechnoProof® SilicoRepel Super is a Silane/siloxane emulsion ready-to-use penetrating, vapor-permeable water repellent coating for use on concrete, brick, concrete masonry units and some natural stones. It reduces the ingress of water and waterborne contaminants into the substrate and thereby prevents premature deterioration. TechnoProof® SilicoRepel Super is designed to penetrate into the capillaries of masonry surfaces, pores of concrete and reacting there with the moisture / water vapour present to form a hydrophobic polysiloxane lining to the capillaries and chemically bonds with silica to form a permanent attachment of water repellent molecule.

Application:

TechnoProof® SilicoRepel Super is recommended as a water repellent sealer for porous masonry building substrates such as

- Natural stones, concrete pavers, clay bricks, and unglazed terracotta tiles.
- Single wall block constructions in industrial premises.
- Precast panel construction.
- Natural stone heritage construction.
- · Brick and sandstone paving.
- Prevention of rising damp.

Features:

- Penetrates into masonry substrate surface.
- Permanently bonds to the substrate with no peel or blister.
- UV, alkali stable and durable formulation.
- Reduces water penetration, efflorescence and water-borne staining.
- Does not significantly change the surface appearance and vapour permeability.
- · Easy application and cost effective.

Method of Application:

Surface Preparation

TechnoProof® SilicoRepel Super can only work if structural defects have been repaired and the surface is clean. Algae and moss growth must be removed. Soiled surfaces must be steam cleaned. Faulty mortar joints have to be recaulked. Cleaning shall be done by light blast cleaning, steam cleaning, low pressure water jet cleaning (less than 18 MPa - 180 bars), grinding, etc. No surface tension reducing / active cleaning products / detergent blends must be used in this process. Best results are obtained on dry, very absorbent substrates; therefore, allow sufficient time for the substrate to dry out after surface cleaning & preparation. New brick structures shall be cleaned with suitable cement remover /Cleaner to remove cement laitance, then rinse thoroughly with clean water.

Mixing

TechnoProof® SilicoRepel Super is supplied ready for use and must not be diluted or mixed with water or solvents as this could break down the emulsion and thixotropic properties of the product but stir before use.

Procedure

Apply by low pressure spray or brush ensuring complete surface coverage. On vertical surfaces TechnoProof® SilicoRepel Super should be flooded on starting at the bottom, working steadily upwards. When used as a protective impregnation a minimum of two application is recommended "wet-on-wet" with immediate application of second. Application should be at the given coverage rate of 3m²/litre. For smaller areas, TechnoProof® SilicoRepel Super can also be applied by brush or longhaired/ long-piled roller. For large areas, the best method of application is by airless spray or automatic feed long haired roller in a single operation.

Typical Properties at 20°C:

Composition	Silane/siloxane blend
Colour	White to yellowish cream
Relative Density	~0.80
Dry film thickness	n/a - penetrating impregnant
Drying time	Surfaces become water repellent after 8 hours
Ambient Air Temperature	+5 °C min. / +40 °C max
Resistance to Alkalinity	<10%
Application temperature	Between 10 and 30°C
Over coating time	"Wet-on-wet" application. Second coat can be applied immediately.

Packaging:

TechnoProof® SilicoRepel Super is supplied in 20 and 210 litre drums.

Coverage:

Coverage will depend upon the porosity of the substrate. Optimum coverage is $3-5m^2/\text{litre/coat}$

Shelf Life & Storage:

Store under cover, out of direct sunlight and protect from extremes of temperature. Shelf life is at least 12 months when stored as above in unopened containers. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.

Equipment care/Cleanup:

Equipment should be cleaned with TechnoFix® Ecocleaner immediately after use.

Points to remember or watch:

- Surfaces must be dry.
- High winds will interfere with application.
- Protective barriers may be required.
- Ensure adequate ventilation.
- Trial applications should be carried out to ensure compatibility with substrate.

Health and Safety instructions:

Protect your health while working with this material, always use safety goggles, gloves and safety clothing. When handling hazardous materials or pressurized materials, or during any application that may result in spills, splashes or airborne particles, a full face shield is strongly recommended. Protect yourself and others on the jobsite. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals.

Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area.

Precaution & Limitations:

TechnoProof® SilicoRepel Super should not be contaminated with water. Do not apply TechnoProof® SilicoRepel Super if the temperature of the substrate is below 5°C. Ensure that all glass is adequately protected before applying TechnoProof® SilicoRepel Super. Since TechnoProof® SilicoRepel Super reacts with atmospheric humidity, prolonged contact with air should be avoided. Keep containers sealed when not in use. For best results do not apply TechnoProof® SilicoRepel Super in direct sunlight.

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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Please note that this datasheet supersedes all previous versions.