Description:

TechnoProof® SilicoRepel WR is an advance technology based on silane/siloxane-blend, water-repellant impregnating, breathable protective sealer/coatings offering superior performance for impregnating concrete or masonry to provide long term weatherproof protection.

TechnoProof® SilicoRepel WR is water-based, is easy to apply and provides a breathable, dirt- and stain-resistant water-repellency for the protection of concrete surfaces. TechnoProof® SilicoRepel WR penetrate and chemically bond deep within the substrate to provide long lasting protection against deterioration or staining due to water conditions.

Application:

- 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.

Features:

- Penetrates deep into the substrate for longlasting protection
- Improves cleanliness of concrete by reducing dirt pickup
- Provides fast-beading water repellency; helps to protect concrete from such moisture-related problems as staining and freeze/thaw damage
- Breathes- Excellent vapor transmission thus allowing interior moisture to escape.
- Water-based composition provides low odor and VOC compliance.
- Resistant- Greatly improves resistance to moisture, deicing salts, chemical attack
- Performance- Rapid development of water
- repellency

 VOC Compliant- No solvents
- Pre-Blended- Ready to use
- Efficient- Easy application and clean up
- Consistent-Strict Quality Control testing and standards

Typical Properties at 20°C:

Chemical composition	Silane/siloxane blend
Colour	Milky white liquid, when applied dries up invisible.
Relative Density	~1.0 Kg/Ltr
Dry film thickness	n/a - penetrating impregnant
Drying time	Surfaces become water repellent after 8 hours
FLASH POINT	Non-Flammable
VOCs	< 99 g/L
Consistency	Pourable liquid
Over coating time	"Wet-on-wet" application. Second coat can be applied immediately.

Method of Application:

Suitable Substrates

- Properly prepared concrete substrates at least 28 days old
- Porous concrete masonry, bricks and pavers
- Porous stone

Surface Preparation

TechnoProof® SilicoRepel WR 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.

All substrates must be structurally sound, dry, solid and stable. Remove all dust, efflorescence, oil, dirt and any other contaminants before application. TechnoProof® SilicoRepel WR will not seal cracks or voids. Avoid any areas (or mask areas) where caulking or sealants will be applied after TechnoProof® SilicoRepel WR is applied.

TechnoProof® SilicoRepel WR may interfere with the bond of these materials. Sealants should have at least 12 hours of curing time before being exposed to TechnoProof® SilicoRepel WR. Surfaces that have been exposed to water (such as rainfall) require at least 2 to 3 days for concrete to dry before TechnoProof® SilicoRepel WR is applied.

Mixing

TechnoProof® SilicoRepel WR 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.

On-site Application:

Apply by low pressure spray or brush ensuring complete surface coverage. On vertical surfaces TechnoProof® SilicoRepel WR 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 WR 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.

Coverage:

Coverage will depend upon the porosity of the substrate.

Optimum coverage is 3-5m²/litre/coat

Packaging:

 $\label{thm:constraint} \mbox{TechnoProof} \mbox{\ensuremath{\mathfrak{B}}\xspace{0.05em} SilicoRepel WR is supplied in 20 \& 210 litre drums.}$

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® Eco cleaner immediately after use.

Precaution & Limitations:

TechnoProof® SilicoRepel WR should not be contaminated with water. Do not apply TechnoProof® SilicoRepel WR if the temperature of the substrate is below 5°C. Ensure that all glass is adequately protected before applying TechnoProof® SilicoRepel WR. Since TechnoProof® SilicoRepel WR 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 WR in direct sunlight.

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.

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.