# Technical Data Sheet



# **REPEL ZX**

# Water Based Silane-siloxane Water Repellent

# **Description:**

REBEL ZX is a single component water based penetrative water repellent sealer, based on silane – siloxane resins for concrete and masonry substrates. The chemistry of silane-siloxane is to react with moisture and water content of substrate to form a hydrophobic capillary blocking product. Therefore, it serves as a high quality, general purpose water repellent breathable sealer for impregnating and priming mineral and highly alkaline substrates.

REBEL ZX can be applied to concrete structure, cement plasters, bricks, light weight concrete, porous natural stones, and natural stone facades.

# **Applications:**

REBEL ZX used as a water repellent penetrative sealer at:

- Building facades, car parks, bridges.
- Natural stone facades for villas and buildings.
- Protection against the salt effects.
- Protection against weathering and rain.
- Primer for anti-carbonation system to prevent CO2 and chloride ions ingress.
- Sealer and top coat for stained and stamped concrete after full curing.
- Maintenance of facades without altering colors and features.
- Primer for acrylic topping (anti-carbonation coatings or weather shield coatings) for porous surfaces.
- As a concrete sealer on a variety of surfaces such as EIFS System, colored plaster and exposed aggregate.

## Advantages:

- High penetration and water repelling efficiency
- Prevents carbon dioxide and chlorine ingress
- Resistant to UV, weathering and freeze/thaw cycles

- Integral application, durable
- Ease of application, applied manually or by a manual spray pump
- Allows concrete to breath, as water vapor permeability is unaffected
- Protects surface from discoloration
- No change in surface texture or appearance

## Instructions for Use:

#### Surface Preparation:

The surface of the concrete or plaster must be clean, solid, free from grease, and totally dry to guarantee maximum penetration. Oil or grease stains must be completely removed. All necessary repairs or crack filling should be completed before starts of application.

Surfaces with salty efflorescence must be cleaned mechanically or rinsed with water, allow surface to totally dries, before proceeding with the application

New concrete must be cured before applying REPEL ZX. All concrete curing compound must be mechanically removed, along with any foreign material.

#### Mixing:

Product is ready to use directly. It does not require thinning or other special preparations prior to application.

# Application:

REPEL ZX must penetrate deep enough for greatest protection. To determine the ability to surface penetrate, apply on a smaller area first and observe if any excess liquid residue on surface that indicates improper penetration. In spite that one coat application will be sufficient, it is recommended to apply two coats to guarantee complete deep protection especially for porous surfaces.

REBEL ZX is applied directly to the substrate with a brush, roller, or spray machine which is highly recommended for wide areas. After testing the



characteristic of the surface penetration. Apply a sufficient coat of REBEL ZX allow to become dry. Ensure proper coverage of first coat in a rate of 0.15 liter per square meter. The second coat should then be applied to the surface to provide the best possible protection. In case of porous surfaces Apply second coat within 3-6 hours from the application of the first coat.

The main indicator of full saturation is the tearing of the product while applying. However, excess material remaining on the surface after application should be spread out evenly or wiped off.

In case of applying REBEL ZX as a primer for anticarbonation system, apply two rich coats of the product and then within 3 hours apply the subsequent coating of CARBOSHIELD Anti – carbonation coating.

## Standards:

REPEL ZX conforms to:

- ASTM C 309, Type 1, Classes A & B, ASTM C 1315, Type 1, Class A, ASTM D2697, ASTM D70
- AASHTO M 148, Type 1, Classes A & B

# **TECHNICAL PROPERTIES**

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Description	:	Colorless Liquid
Density	:	0.8 Kg./Lt.
Drying Time	:	3 hours
Chloride Permeability	:	NIL
Flash Point	:	40°C
Solid Contents	:	27%
Chloride ingress	:	1%
Penetration through subs.	:	4-8 mm
VOC	:	>50 g/l
Viscosity	:	9 cPs

#### **Coverage:**

REPEL ZX coverage rate 7.0-9.0 square meters per liter per coat dependent highly on surface type and porosity. Testing the consumption rate by a sample application is highly recommended.

# **Storage Conditions:**

Store in original packing in dry conditions away from direct sunlight.

# **Cleaning:**

Clean all tools with organic solvent prior to full drying of product.

## Shelf Life:

REPEL ZX can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

#### **Remarks:**

- Good ventilation must be provided during application and curing.
- It should not be applied in outdoor applications during rainy weather or if rain is expected before complete curing can take place.
- Normally, the surface will become water resistant within 3–6 hours, but in cloudy, damp, cool or high humid conditions, curing may take longer.
- Spray application should be performed only with low pressure spray units to prevent excessive misting of the product.
- If spray application is used, a good painter's mask should be worn as a protective measure. Exposed food stuffs or other items which might be contaminated should be totally sealed or removed from the working area.
- This material reacts with atmospheric moisture.
  Prolonged contact with air should be avoided.
  Keep containers sealed when not in use.

## Health and Safety:

- Use goggles and gloves during application. Do not breathe vapor of product.
- Avoid contact with eyes or skin.
- In case of eye contact, flush thoroughly with plenty of water and seek immediate medical help.

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This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.

