



REPEL

Penetrating Silane Sealer for Concrete Decks

1. Product Description

a. **Basic Use:** Repel is a silane based penetrating sealer designed to protect concrete from the adverse effects of salt and water penetration. By impregnating the upper surface of the concrete, it reacts chemically within the pore structure of the cement matrix to form a blocking crystal that virtually waterproofs the concrete. Repel is intended for use primarily on textured concrete subject to freeze/thaw cycling and de-icing salt attack. Repel is available in both 20% and 40% solids.

b. **Features/Benefits:**

- Penetrates deep into pore structure of concrete.
- Provides a 95% rejection of water and salt.
- Helps keep concrete from scaling and spalling.
- Easy to apply with limited skilled labor.
- Suitable for treating new or old concrete.
- No effect on skid resistance of concrete surface.

c. **Typical Applications:** Parking decks, bridge decks, marine structures, pavements, sidewalks, ramps, splash zones on bridges, warfs and lane barriers.

d. **Limitations:** Repel should not be used below 40°F (4°C) or when a steady 10 mph wind is present. Concrete coated with sealers, coatings or curing membranes must be stripped to provide an open surface.

e. **Composition:** Repel is a solution of silane based active ingredients with other proprietary ingredients.

f. **Color/Appearance:** Concrete treated with Repel will take on a wet look and dry within a 24 hour period. Heavy applications will make concrete slightly darker.

2. Packaging

Repel is available in 5-gal. (18.9 liter) pails and 55-gal. (208 liter) drums

3. Estimating/Coverage

Coverage rate for Repel at 20% solids is 100 to 150 sq. ft./gal. (2.5 to 3.7 sq. m/liter) depending on surface texture and porosity of the concrete. Repel at 40% solids may be extended to 200 to 250 sq. ft./gal. (4.9 to 6.1

sq. m/liter) or applied at heavier rates for added protection.

4. Technical Data

(Based on Repel at 40% solids and 125 sq. ft./ gal. (3.1 sq. m/liter)

a. **Applicable Standards:**

- NCHRP #244 Test Method.
- ASTM C 642, Standard Test Method for Specific Gravity, Absorption, and Voids in Hardened Concrete.

b. **Water Absorption:**

- ASTM C 624, 1 day vs. Reference: 92% repellency.
- NCHRP #244, 21 days vs. Reference: 90% repellency.

c. **Scaling Resistance:** ASTM C 672 at 50 cycles:

- Reference: 3 Rating (Moderate Scaling)
- Treated Sample: 0 Rating (No Scaling)

d. **Ultraviolet Resistance:** Excellent

e. **Chemical Resistance:**

<i>Gasoline:</i>	<i>Excellent</i>
<i>Oil:</i>	<i>Excellent</i>
<i>Brake Fluid:</i>	<i>Excellent</i>

5. Directions for Use

a. **Preparation:** Concrete should be free of any paint, curing compounds, dust or dirt. Remove any oil and grease spots. Power wash surface for best results. Allow concrete to dry. New concrete should be cured with wet burlap or polyethylene. Do not apply to new concrete less than 14 days old.

b. **Ambient Conditions:** Concrete and air temperature must be at 40°F (4°C) or higher. Do not apply when a steady wind of 10 mph is present. Use in a well ventilated area. Keep glass and metal protected from overspray or splashing.

c. **Application:** Apply Repel as a two coat application. Spray, broom or flood material over deck at twice the anticipated coverage rate. Spread any puddles or birdbaths evenly over surface. After the material has soaked in, apply a second coat at that same coverage rate. (Note: On vertical surfaces, spray application is recommended over a brush or roller). Second coats should be applied while the concrete surface is still wet from the first coat. Follow recommended coverage rates.

d. **Clean Up:** Tools and equipment may be cleaned with DL Solvent or xylene.

e. **Maintenance:** Periodic reapplication should be anticipated every 5 to 7 years depending on the severity of wear or weathering.

6. Availability

Repel is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

7. Warranty

Repel is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



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