Enviro-Shield 40%

Alcohol based penetrating water repellent

Product Datasheet

Product Description:

Enviro-Shield 40% is a premium grade masonry water repellent based on a silane and siloxane blend. Under the influence of atmospheric humidity, it chemically reacts with and bonds to masonry, forming a highly effective poly-siloxane repellent. It is highly alkaline resistant and designed for use on brick, concrete block, precast concrete, stucco, limestone, fieldstone, and many other natural stones.

Basic Uses:

Providing superior protection against water penetration, Enviro-Shield 40% prevents the damaging effect of efflorescence. The deep penetrating application retains the natural appearance with no surface build up or darkening. Masonry remains completely breathable. Enviro-Shield 40% is also very effective on horizontal surfaces such as parking garages, sidewalks and decks and it reduce the attack from de-icing salts.

Product Highlights:

- Penetrates deeply into surfaces
- Non-film forming
- Does not contain silicone, wax or gum resins
- Resists water up to 10 years
- Fast Drying
- Does no soil/stain glass surfaces
- Does not break down due to alkali
- High solids content

Surface Preparation:

Repair all defective masonry to a structurally sound surface. Caulk all expansion and control joints. Flash roofing as required. Wash dirty masonry with AC-3 Cleaner or other masonry cleaner.

Application:

For best results apply Enviro-Shield 40% with a low pressure sprayer and completely soak the surface until a 6" rundown is achieved. If the surface is extremely porous, apply a second coat right away, wet on wet. This will allow the material to penetrate deeper into the surface. Do not apply on windy days.

On horizontal surfaces apply one heavy coat, being sure to apply evenly. Remove any puddles by brushing or rolling out the excess material with a clean and dry roller.

Coverage:

These are estimated coverage rates based on years of experience. All jobs conditions are different and a test area is recommended in order to best figure coverage.

Common brick: 100-150 ft^2 per gallon
Concrete decks: 150-200 ft^2 per gallon
Stucco: 150- 200 ft^2 per gallon
Concrete block: 75-125 ft^2 per gallon
Natural stone: 100-250 ft^2 per gallon

Test Results:

The following tests have been performed on Enviro-Shield 40%:

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DL Laboratories, New York, April 301 1992
Product: Enviro-Shield 40% (125 sq. feet/gallon)
Federal Specification SS-W-110C, Water Repellent, Colorless, Silicone Resin Base
Result: Water absorption: .02%

Wiss, janne, Elstner Associates, Inc. Northbrook, Illinois
Product: Enviro-Shield 40% (125 sq. feet/gallon)
NCHRP 244 Report "Concrete Sealers for the Protection of Bridge Structures"
Series II: (January 26, 1990):

Reduction of water absorption: 87%
Reduction of chloride ion content: 89%
Water vapor transmission: > 100% (within 7 days)
Average penetration depth: 0.20 in.

Law Engineering, Atlanta, Georgia
Product: Enviro-Shield 40% (125 sq. feet/gallon)
NCHRP 244 Report "Concrete Sealers for the Protection of Bridge Structures"
Results Series I: (April 12, 1988):

Reduction of water absorption: 85.1%
Reduction of chloride ion content: 92.1%
Water vapor transmission: > 120.1%

Results Series IV: January 13, 1989):

Northern Climate: very slight scaling, 97.5% chloride reduction, no corrosion
Southern Climate: very slight scaling, 97.6% chloride reduction, no corrosion

ASTM C 666 "Resistance of Concrete to Rapid Freezing and Thawing: (April 2, 1988)
Result: Slight degree of scaling, durability factor 139%
ASTM C 672 "Scaling Resistance of Concrete Surfaces" (May 6, 2988)
Result: Slight degree of scaling
Ontario Provincial Standard 1351.08.01 "Salt Scaling Acceptance Test" (December 14,1988) 12.2 g/m2 (allowed max 800 g/m2) visually no scaling detected.

EBA Engineering Consultants Ltd., Edmonton, Alberta, Canada September 20, 1988
Product: Enviro-Shield 40% (125 sq. feet/gallon)
Alberta DOT specification B388-90 ' Evaluation of Sealers Used on Concrete Bridge Elements"
Result: Initial reduction of Water Absorption: 89.9%
Reduction of water absorption after sandblasting: 82.6%