

**Premium Penetrating Silane Sealer** 

#### PRODUCT DESCRIPTION

Z-Sil SL -100 is a clear, penetrating silane treatment which causes concrete, masonry and many natural stones to become repellent to water, chloride, waterborne contaminants and weathering elements, preventing the premature deterioration of parking decks, bridge decks, pavements and other types of concrete and masonry structures. Performance testing makes Z-Seal SL -100 an excellent choice for any project requiring the highest quality clear water repellent

#### **KEY BENEFITS**

- Prevents chloride and contaminants from penetrating
- Penetrates deep and increases adhesion for subsequent coatings
- Works concrete, natural stone, and pavements
- Increases repellency for treated surface
- Creates chemical bond to seal surfaces to prevent damage through freeze-thaw cycles

#### **PACKAGING**

5 Gal Plastic Pail 43.25 lbs. 55 Gal Drum 475.75 lbs. 275 Gal tote (IBC) 2,378 lbs.

#### **USES**

Z-Sil SL -100 is an effective treatment for brick, masonry, cementitious mortars, stucco, many natural stones and cast-in place, precast, prestressed and architectural concrete.

Structures that can be treated include:

- Parking decks
- Bridges
- Commercial buildings
- Airport pavements
- Highways
- No masking of windows required



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#### **APPLICATION**

Z-Sil SL 100 can be applied to the surface by low-pressure spray, brush, roller or squeegee. It can be stored on the jobsite at temperature extremes, eliminating storage problems associated with emulsified silane products that can deteriorate on the jobsite, prior to use, if not properly stored.

Z-Sil SL 100 chemically bonds with the substrate forming a penetrated layer below the surface that acts as a one-way filter. Water, chloride and other waterborne contaminants are repelled without restricting the substrates natural vapor permeability.

#### INSTRUCTIONS FOR USE

- 1. Test a small area prior to general application to ensure compatibility, desired results and coverage rates.
- 2. Treatment is most effective when the surface to be treated is clean and dry. Remove dirt, dust, oil, grease, curing compounds, coatings and other surface contaminants. Water blasting, sandblasting or shotblasting may be required.
- 3. Please refer to Ziis Americas for concrete and masonry detergents and cleaners.
- 4. Do not proceed unless surface and air temperature is between 20°F and 110°F. Do not apply if frost, ice, or standing water are visible on the surface to be treated.
- 5. Windows, metals, etc. are not affected by Z-Sil SL 100. No masking of windows required. However, avoid unnecessary overspray. If necessary, clean overspray areas with a clean dry cloth, soap and water or alcohol. Protect plants and vegetation from overspray. Prior to Z-Sill SL 100 installation check for preexisting contamination.
- 6. Spray, brush or roll Z-Sil SL 100 treatment on surface to be treated at the recommended application rate. See equipment section of this catalog or contact your Ziis Americas, LLC. representative for spray equipment options.
- 7. Apply to saturation. When spraying at low pressure, if necessary, follow with broom or squeegee for even distribution.
- 8. Normal coverage rate is approximately 150 to 400 square feet per gallon.
- 9. Clean equipment with Equipment Cleaner.
- 10. Partially used containers should be properly sealed and protected from contamination by water or other foreign substances.
- 11. Contact your Ziis Americas, LLC representative if you have questions regarding temperature and concrete moisture content concerns.

#### **ESTIMATED COVERAGE**

Typical Coverage Rates: Concrete requires an application rate of approximately 150-400 sq. ft. per gallon. The application rate is determined by the porosity of the surface.

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TECHNICAL DATA		
PROPERTY	TEST	Z-SiL SL 100
Active Ingredient		Alkyltrialkoxysilane
Specific Gravity @ 25°C	Method 24, ASTM D-5095	0.92
Density		7.68 lb/gal
Active Content		100% active
VOC Content		< 350 g/L
Appearance		Clear
Surface Appearance after		
Application		Unchanged
Drying time at 70°F		1 hour
Depth of Penetration	OHD-L34	.18 Inch
Moisture Vapor Permeability	OHD-L35/NCHRP 244 Series II	100.00%
Waterproofing After Abrasion	Alberta Trans. & Utilities	(1c) 85.7%
Alkali Resistance	Alberta Trans. & Utilities	(1c)83.9%
Vapor Transmission	Alberta Trans. & Utilities	(1c) 85.4%
Moisture Absorption Resistance	ASTM C-642-82	.3 @ 48 Hours
		1.0 @ 50 Days
Chloride Penetration-Chloride Ion	AASHTO T 259/60	0.008 @ 1/2 - Inch
Chloride i chetration-Chloride ion		Depth
Content (applied at 250		0.005 @ 1 - Inch
ft2/gallon/one coat)		Depth
Chloride Penetration-Chloride %	% AASHTO T 259/60	97.6 @ 1/2 - Inch
		Depth
Reduction (applied at 250		96.7 @ 1 - Inch
ft2/gallon/one coat)		Depth
Reduction in Water Weight Gain	NCHRP 244 Series II	83.20%
Reduction in Absorbed Chloride	NCHRP 244 Series II	86.7%
	NCHRP 244 Series IV - Southern Climate	90.4%



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#### **CLEAN UP**

Use soap and water to clean tools and equipment. Although Z-Sil SL 100 is non-toxic and environmentally safe, it is alkaline. Use up or dry out extra material and dispose of according to local regulations. Don't pour into sewer systems or storm drains..

#### SAFETY/HEALTH INFORMATION

**KEEP OUT OF REACH OF CHILDREN.** This product is alkaline. Do not drink. If swallowed, do not induce vomiting, drink 2 glasses of water and call physician. Keep container closed tightly when not in use. Wear goggles and gloves. If splashed eyes, rinse eyes immediately with clean water and call a physician if irritation persists. Z-Seal SL 100 will dry out and irritate the skin. Clean skin with soap and water promptly. **CAUTION:** Surfaces wet with Z-Sil SL 100 may be slippery. Additional precautions, safety information and first aid treatments are contained in the Material Safety Data Sheet.

#### WARRANTY

Limited warranties are available for all Ziis America products. Contact Ziis representative for details. Z-Sil SL 100 is covered by several patents including U.S. 4.931.319

NOTICE: This brochure was prepared as an introduction to a product manufactured all Ziis America, LLC. The information provided herein is based upon typical installation conditions and is believed to be reliable. However, due to the wide variety of possible intervening factors, Ziis America, LLC does not warrant the expected results to be obtained. Details concerning product specifications and warranty may be obtained from Ziis America, LLC. Specifications are subject to change. Sale of subject system is limited to Ziis America, LLC and authorized applicator's conditions of sale including those limiting warranties and remedies.