



Silin Silith

Mineral Coating for Masonry and Over Other Paints



Cathedral Stone Products® Inc. introduces Silin® Silith Paint, for use on all masonry (mineral surfaces), and over latex and acrylic coatings. Silin coatings have been in use in Europe for over 160 years and are now available for the first time in North America. Silin® Silith coatings combine the advantages of silicate/mineral and silicone paints. Unlike latex and acrylic paints, they form a molecular bond with the masonry substrate. **The coatings are 92% vapor permeable.**

Features and Benefits

- ***Specially Formulated for Masonry Surfaces and over Dispersion Coating***
- ***92% Vapor Permeable***
- ***Color Fast***
- ***Retards Corrosion***
- ***Fire Retardant***
- ***Withstands Extreme Climate Conditions***
- ***Water Repellent***

Application Procedures

Surface Preparation

Silin® Silith Coatings should only be used by experienced painters. Silin® Silith Coatings can be applied to any sound masonry or plaster surface. (Do not use on wood, plastic, or apply over oil or gloss paint.) The surface must be clean, solid, dry and free from efflorescence. The surface **must be completely dry** at the time of application. Silin Silith is designed for vertical surfaces only. Horizontal surfaces, especially where water can pool, are not suitable for application. Cracks and spalls must be repaired and cured before painting. Cracks can be filled with Silin silicate caulk (Armierung) or Jahn M30, M40, and M125 mortars. To ensure even penetration of the paint, make sure repairs have been made with repair materials that are compatible to the substrate. Temperature (ambient and substrate) must be at least 45° F (8° C) and below 90° F (32° C). Do not apply the Silin Silith when precipitation is expected

within 48 hours of application. Do not install Silin Silith when the temperature is expected to reach the dew point within 24 hours. Protect adjoining surfaces from splashes. Silin® Silith Coatings can only be removed while wet.

When painting with dark colors, irregularly absorbing surfaces should first be treated with Cathedral Stone Green Etch S-309 (see Cathedral Stone Stripper Section for more information). The difference in substrate absorption can cause small color variations, which are more noticeable on darker colors. The S-309 will etch masonry to create similarly absorbing surfaces.

Freshly poured or finished concrete usually needs to be etched prior to coating so the coating can absorb into the masonry for proper bonding. Contact a Cathedral Stone technician for further questions on proper substrate preparation prior to coating.

Mixing

Silin® Silith Paint must be thinned with 10 to 15% water. Do not add more than 15% water to Silith Paint. When installing multiple units of paint, be sure to “box-mix”. (“Box-mixing” is the blending of paint by pouring alternately between two containers.) This will help alleviate minor color inconsistencies between batches. Before painting, Silin Silith coatings must be mixed according to absorption rate of the substrate (See substrate absorption definition below.)

Substrate absorption definition: The absorption must not be too high or too low for the coating to be applied correctly. Absorption can be tested by applying small amounts of water (drops) on the vertical surface to be coated. Normal absorption can be defined as the water absorbing into the substrate without beading on the surface. High absorption can be defined as water being absorbed so quickly that all traces of water seem to disappear rapidly. Low absorption can be defined as water laying or beading on the surface of the substrate (masonry must be etched in cases of low absorption).

Types of Surfaces:

- **Normally absorptive surfaces**

Apply two coats of Silin® Silith Paint with approximately 10-15% water. Allow drying time of 12 hours (minimum) before applying finish coat.

Apply the second coat (Finish Coat) within 1 week after the application of the first coat.

- **Highly absorptive, sandy surfaces**

A priming coat **may** be necessary (Contact a Cathedral Stone representative for more clarification and see the *italicized* paragraph below)

Priming is only necessary when the coating is absorbed too quickly into the substrate. This results in excessive chalking of the coating. If a priming coat is applied when it is not necessary, the coating will not fully absorb into the substrate, causing drying and cracking of the coating on the surface.

Priming Coat: Prime with Silin-Silicate Primer diluted 1:1 with water. Allow drying time of 12 hours (minimum) before applying subsequent coats. Apply liberally with a brush.

Intermediate Coat: Add 10 to 15% water to Silin Silith Paint.

Finish Coat: Add 10 to 15% water to Silin Silith Paint.

Application

Protect all areas not to be coated prior to application. Substrate must be completely dry before coating. Do not work when precipitation is expected within 48 hours of installation. The coating needs adequate time to bond to the substrate and moisture disrupts this curing process. Apply liberally and spread well, filling all pores and cracks. Work wet into wet. Silin® Silith Coating should be applied with a short bristle brush. Brushing increases the absorption of the coating into the masonry, resulting in a longer lasting, more durable coating. Spraying and rolling the paint is possible. Allow a 12-hour drying period between coats (unless otherwise indicated).

Important Points

- **Make sure the substrate is completely dry and there is no expected dew**
- **Protect coatings from all forms of moisture: rain, dew, snow, etc. for 48 hours.**
- **Temperature must be at least 45°F (8°C)**
- **Protect any surfaces not to be coated**
- **Always thin the Silith with 10-15% water**
- **Always work wet into wet**

Clean Up

Place tools immediately in clean water when pausing work (15-30 minutes or more). Clean tools with clean water immediately after finishing work. Dried Silin® Silith Coating is insoluble in water. Silin® Silith Coating can be removed from non-porous surfaces with clean water while still wet.

Packaging

Standard Kit: Consists of 20 kg of Silin® Silith Coating in a 5-gallon plastic pail.

Silin Silith Paint: 20 kg pail = about 4 gallons

When mixed with water yield is about 5 Gallons.

Coverage

Coverage depends on the absorption and structure of the substrate. Normally absorptive and/or smooth surfaces require **two coats**. Determine coverage with a trial application.

- **Normally absorptive, smooth surfaces with two coats:**
One unit of Silin Silith Coating (approx. 4.5 gallons) will cover about 700 square feet. One unit of Silin Silith paint is 44lbs. (20 kg) of paint mixed with ½ to ¾ gallons (2-3 liters) of water.

Safety Information

Eye protection should be worn during mixing to protect eyes from splashing. Avoid contact with skin and mucous membranes. Work in well ventilated areas.

Permeability Data

Independent testing confirms the permeability of Silin Silith Paint at:

WVT – Water Vapor Transmission Rate (grains/ft ² /hr)	33.7
WVP - Water Vapor Permeance (perms)	70.0

Storage and Shelf Life

Store in a dry area, away from direct sunlight. Storage conditions should be in the range of 40° – 80° F with low to average humidity. Average shelf life is six months in original, unopened packaging.

Warning

Not for internal consumption. Keep out of the reach of children and animals.

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