

SILPRO

CONCRETE FINISH

Protects and Decorates
Concrete and
Masonry Surfaces

1/8" – 3/8"

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Silpro Concrete Finish™ is a trowel-applied, Portland cement-based coating specifically designed to protect and decorate concrete and masonry surfaces. It gives an attractive, durable, water-resistant finish to brick or block walls. **Concrete Finish** covers color and texture variations in poured concrete with a uniform finish eliminating the need for costly rubbing.

Available in gray or white. **White Concrete Finish** can be integrally colored with **Silpro Hawk & Trowel Pigment**, available in 7 earth-tone shades.

ADVANTAGES

- Provides a uniform texture and architectural finish
- Portland cement-based
- Will protect and make any masonry wall water-resistant
- Will give poured concrete a more uniform color and texture than rubbing
- Can be finished in a variety of textures
- Bonds to cast-in-place or pre-cast concrete, block, brick, Portland cement plaster
- Covers imperfections up to 3/8" deep

ADVANTAGES (CONT.)

- Does not obscure architectural details such as moldings or grooves
- Use on all surfaces except floors and sidewalks
- Use inside and outside, above and below grade
- Impact resistant
- Low maintenance
- May be used in new or old construction

TEST DATA

Compressive Strength	ASTM C-109	28 Days	4000 psi
Water Absorption	ASTM C-67	24 Hr. soak	4.4%
Saturation Coefficient			.29
Density			1.8 gm./cc

SURFACE PREPARATION

Surfaces must be clean and sound. Remove fins, bumps, loose material, mildew or bond-inhibiting materials such as form oils, paints, etc. Use either mechanical means or high-pressure water at a minimum of 3500 psi. The tip of the wand should be close enough to clean and scour the surface.

For Customer Service, Call Silpro at 1-800-343-1501

SURFACE PREPARATION (CONT.)

Previously painted surfaces must be brushed or sand blasted to expose at least 90% of the substrate.

Fill cracks and holes with **Silpro Easy Patch** and **Silpro C-21 All Acrylic** mixed 1:1 by volume with clean, potable water. Exposed metal should be wire brushed or sand blasted free of rust and corrosion and coated with an anti-rust sealer, such as a slurry of **Silpro C-21 All Acrylic** mixed with Portland cement.

All expansion joints should be carried through the finish. Place expansion joints so the panels contain 150 square feet or less of surface area with no dimension greater than twenty feet. It is especially important to have expansion joints every twenty feet, or less, where decorative bands of **Concrete Finish** four feet or less in width are being used as design elements. This reduces the chance of shrinkage cracking and allows the entire panel to be plastered continuously with no overlaps or cold joints. Expansion joints may be aligned with architectural elements such as windows.

PATCHING AND LEVELING ROUGH CONCRETE

Fill honeycombed areas and form-tie holes in poured concrete with **Silpro Easy Patch** and **Silpro C-21 All Acrylic** mixed 1:1 by volume with clean, potable water. Also apply this mixture to any areas of non-uniformity on the surface to create a flat plane. Just before applying prime the surface with **C-21 All Acrylic** mixed 1:1 by volume with clean, potable water.

The base coat of **Concrete Finish** may be applied within one hour of patching.

LEVELING BRICK AND BLOCK

Eliminate the mortar joints in brick and block by installing a base coat of **Silpro FSB Fiberglass Surface Bonding Cement**, which contains dry polymer and waterproofing ingredients to fortify and densify the coating, or **Concrete Finish**, mixed per the product instructions.

You could also make your own cement mortar, conforming to ASTM C-926 or ANSI A42.2. Acceptable proportions consist of one (1) volume Portland cement, up to one-half (1/2) volume hydrated lime, and sand equal to two and one-half to three and one-half (2 1/2 to 3 1/2) times the sum of cement and lime. Blend a mixing solution of **C-21 All Acrylic** mixed 1:1 by volume with clean, potable water. Use enough of this mixing solution to achieve a trowelable consistency.

To apply, dampen the wall with a solution of **C-21 All Acrylic** mixed 1:1 by volume with clean, potable water and trowel on enough base coat mix to cover the entire surface. Float to blend in and create a flat plane. Allow the base coat to cure for 24 hours. If the finish coat is not applied the next day, dampen the base coat with a fine mist spray of clean, potable water on the day following application to aid in curing.

Job detail of walls in photos: Walls were first repaired with **Silpro Easy Patch** mixed with **Silpro C-21** 1:1 with water, then coated with **Concrete Finish** mixed with **C-21** 1:1 with water.



S&F Concrete, Inc., Natick Mall, Natick, MA

MIXING

Mixing Solution Proportions:

Gray and White Concrete Finish: Mix **Silpro C-21 All Acrylic Admix** 1:1 by volume with clean, potable water. Use approximately 6-7 quarts of this mixing solution per 80 lb bag of **Concrete Finish**. It is critical to use the same amount of mixing solution per bag. Inconsistent measuring will cause greater-than-normal color variation.

Integrally Colored Concrete Finish White with Hawk and Trowel Pigments: Check all jars of pigment for the same batch number. Carefully measure the quantity of mixing solution the same way as for the **Gray and White Concrete Finish** above. Set aside some of this mixing solution. Pour one jar of **Hawk and Trowel** pigment into the remaining mixing solution. Take the reserved mixing solution and pour it into the empty pigment jar until about 2/3 full. Cap and vigorously shake the jar to thoroughly remove all pigment. Empty the contents of the jar, and any remaining mixing solution, into the mix. It is strongly suggested that one person be given the responsibility for measuring and mixing.

Mixing Directions for Gray, White, and Colored Concrete Finish:

In a clean container: Place the carefully measured mixing solution. Using a slow speed (450-650 rpm) drill and a plaster-type mud paddle, slowly add the **Concrete Finish** powder to the mixing solution, mixing thoroughly for 2-3 minutes. Allow the mixture to stand for 3-5 minutes, then re-mix, adding a small amount of liquid if necessary.



Joe Quintillio Masonry, Keene, NH

MIXING (CONT.)

If a mortar mixer is used, it should have clean rubber blades that are in contact with the mixer walls. Place the measured mixing liquid into the mixer, being exact with the appropriate amount of mixing solution per bag. With blades turning, add the **Concrete Finish** powder to the mixing solution. Mix for approximately 2 to 3 minutes, until the mixture is lump free and uniform. Allow the mixture to stand for 3-5 minutes and then remix for 1 to 2 minutes.

When mixing by machine, do not overmix. Mixing for too long or at too high a speed may entrap air, giving mix a fluffy feel and reducing strength and bond.

In a mortar pan with a hoe: Place some of the mixing liquid into the pan, add the **Concrete Finish** powder, add the rest of the mixing liquid, and mix to a lump free, trowelable consistency. Allow the mixture to stand for 3-5 minutes and then remix for 1 to 2 minutes.

Do not mix more material than can be used in less than one hour.

Notes on Colored Concrete Finish:

A sample of the colored **Concrete Finish** no smaller than 4 square feet should be placed on the wall or on a sheet of cement board and allowed to cure and dry for approval of the final color and texture by the owner's representative.

Colors will be darker than the **Hawk and Trowel** color chart when first applied. It will take a period of time, depending on temperature, humidity, thickness, and texture of the coating, for the color to lighten. The colors on the chart are only approximate representations of the dry **Concrete Finish** color. The final

MIXING (CONT.)

color shade depends on application, finishing technique, and curing conditions.

*When matching colors from the **Hawk & Trowel Color Chart**, cut the chips off of the chart and view in natural light. Do not match colors under artificial light.*

Because **Concrete Finish** is like other natural materials, such as wood, brick, and stone, some variation in the color and texture is to be expected. This variation is part of the beauty of a natural finish and therefore paint-like uniformity should not be expected.

Note: On retaining walls and/or walls where the top of the wall is exposed to weather cover the color coat until dry, then spray on a protective coating of **Silpro Silocks VOC Clear Water-Repellent Treatment**. If the wall is not sealed it may stain, over time, from rain water running down the face.

APPLYING

Uniformly dampen the substrate with a solution of **C-21 All Acrylic** mixed 1:1 by volume with clean, potable water. Do not saturate or allow solution to run down the surface. Do not allow the substrate to dry out.

Under extremely hot and dry conditions, wet the wall with water first, allow the surface to dry, and then uniformly dampen the wall with a solution of **C-21 All Acrylic** mixed 1:1 by volume with clean, potable water.

Trowel: Pinch on a tight coat of **Concrete Finish** over the entire surface and then immediately double back and apply the second layer to produce a minimum final thickness of 1/8". (This application is considered one coat.) Finish the entire panel in one application with no overlaps or cold joints. Allow the material to start to firm up; float, or texture, with a green, foam float or wood float. All those applying the finish should use the same type of floats and follow the same direction and pattern. Floats should be damp, not wet. Excess water will change the color of the coating.

Spray: The **Concrete Finish** may need to be adjusted to achieve the proper consistency to be sprayed. It is critical that the same amount of solution be used to adjust each batch.

Pinch on a tight coat of **Concrete Finish** by trowel. If the first coat is sprayed, it must be back-troweled into the substrate. Spray the finish coat onto the wet bond coat to a minimum thickness of 1/8". (This application is considered one coat.) Keep the nozzle of the spray gun perpendicular to the surface and make steady, even passes. Any variation in spray pattern may result in uneven color and/or texture.

Note: Brick, block, and rough concrete will always require two coats to achieve a uniform color and texture. The coat(s) used to level brick and block is/are considered the base or first coat.

Second Coat: The next day uniformly dampen the substrate with a solution of **C-21 All Acrylic** mixed 1:1 by volume with clean, potable water. Follow directions above for either a trowel or spray application, remembering to pinch on a tight coat and immediately double back with a second coat for a minimum final thickness of 1/8". (This application is considered the second coat.)

APPLYING (CONT.)

Clean up: Clean all tools with water before **Concrete Finish** hardens. If **Concrete Finish** hardens on tools it must be mechanically removed.

CURING

C-21 All Acrylic modified coatings do not normally require dampening. Under hot, dry, windy conditions, however, dampen the finished surface uniformly with a fine mist spray of clean, potable water twice a day for 4-5 days.

PROTECT THE FINISH COAT:

- From heavy rain and runoff (as from a roof with no gutters), for 7 to 10 days.
- From direct sun, and hot, dry, and windy conditions by installing a sunshade or windbreak.

COVERAGE

Per 80# Bag:

Over concrete or base coat: 50-80 sq. ft. (5-8 sq. m.)

Over brick or block: 30-60 sq. ft. (4-6 sq. m.)

Exact coverage depends on surface covered, thickness, and texture of finish.

PACKAGE SIZE

80# bags (36.29 kg.)

SHELF LIFE

1 Year

LIMITATIONS

- To confirm the suitability of the surface for adhesion of the coating, and that the final appearance and function will be as the owner, architect, and contractor expect, install a 10' X 10' test patch at the maximum designed thickness anticipated on the project and subject it to anticipated service conditions before beginning the entire job.
- **Concrete Finish** should be applied only when the temperature of the air, surface, and material is above 50° F. (10° C.) and will not fall below that for 48 hours after application. Then keep coated area above 32° F. (0° C.) for a total of 7 days.
- Do not apply if wall temperature is over 90° F.
- Do not re-temper
- Do not add set-accelerating admixtures
- Protect the **Concrete Finish** coating from strong winds and/or direct sun during placement and finishing. It is best to work ahead of the sun whenever possible.

LIMITATIONS (CONT.)

- Do not apply color coat immediately before a rainstorm.
- Do not apply the finish coat after a rain or while the substrate appears wet. Allow the substrate to dry. Areas where there is heavy splash and runoff may require 48 hours or more to dry.
- During cool, damp weather water-soluble salts may leach out of the cement and lime in base and finish coats leaving a white haze, efflorescence, on the surface.
- **Concrete Finish** consists of natural materials that will have minor variations throughout the finish.
- Remove all scaffolding as soon as possible to eliminate any shadows on the finish.
- Store in a cool dry place. Keep out of direct sunlight.

CAUTION!

Irritating to eyes and skin. Contains Portland cement and hydrated lime. Product is alkaline upon contact with water. During mixing or application avoid contact with eyes. In case of such contact, flood eyes repeatedly with water for 15 minutes and CALL PHYSICIAN. DO NOT RUB EYES. Avoid breathing dust. Avoid prolonged contact with skin. Use of gloves is recommended. Wash hands thoroughly after handling and before smoking or eating.

See Material Safety Data Sheet for detailed information.

Use adequate ventilation. The use of a NIOSH/MSA approved dust respirator, safety goggles, and protective gloves is recommended.

**FOR COMMERCIAL USE ONLY.
NOT FOR INTERNAL CONSUMPTION.
KEEP OUT OF REACH OF CHILDREN.**

Dispose of in accordance with local, state, and federal regulations.

In case of a medical emergency or for information regarding spillage clean up or disposal call INFOTRAC: 800-535-5053.

GUARANTEE

Silpro Corporation guarantees that their products are made of the finest raw materials under exacting care to produce products of the highest quality and will perform as stated when used in accordance with the manufacturer's printed instructions.

Improper mixing, incorrect application or other factors beyond the control of the manufacturer may produce unsatisfactory results and cannot be held to be the manufacturer's responsibility. Silpro accepts no responsibility beyond the purchase price of the Silpro product used.

For further product information on **Concrete Finish** consult your local dealer or call Silpro Corporation at: 1-800-343-1501, 1-978-772-4444, FAX 1-978-772-7456.

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