

# SILPRO

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## FASTCRETE®

**Structural Repair and Leveling Mortar**  
**Rapid-Setting / One Component**  
**Portland Cement-Based**  
**Polymer-Modified / Fiber Reinforced**  
**1/8" - 3/4" Use Neat**  
**3/4" - 3" Add Crushed Stone**

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SILPRO FASTCRETE® is a Portland cement-based, polymer-modified, fiber-reinforced, rapid-setting, one component, structural repair and leveling mortar.

Use FASTCRETE® for interior and exterior restoration of deteriorated concrete elements and slabs. It may be placed into forms or used in horizontal applications. FASTCRETE® may be used as an exposed industrial wear surface or as an underlayment for resilient, carpet, laminate, ceramic tile, and wood flooring.

### ADVANTAGES

- Provides a compatible bonding surface for tile and carpet adhesives
- Can be nailed into
- Unaffected by water after cure
- Reduces down time - can be in service in 1-3 hours depending on use and conditions
- Low shrinkage - provides a stable bond line for improved adhesion
- Excellent abrasion and impact resistance
- Resists freeze/thaw damage
- Thermally compatible with concrete
- Excellent adhesion and increased flexural strength

### TECHNICAL DATA

<b>Set Time</b>	Initial	20 minutes
Vicat (ASTM C-191)	Final	30 minutes
<b>Compressive Strength</b> (ASTM C-109)	1 hour	2000 psi
	3 hours	3500 psi
	1 day	5000 psi
	28 days	7500 psi
<b>Shear Bond Adhesion</b> (ASTM C-882)	7 days	1950 psi
	28 days	2550 psi
<b>Modulus of Elasticity</b> (ASTM C-469-94)	4.22 x 10 <sup>6</sup> psi	

*Test data is based on a mixing ratio of 2.75 quarts (2.6l) of water per bag.*

### SURFACE PREPARATION

**Floors:** All surfaces must be clean and sound. Remove all deteriorated concrete, loose material, oil, grease, wax, water-soluble materials and all foreign matter. A mechanical method of surface preparation is recommended.

**Road and Bridge repair:** In addition to the above, saw cut area square at least 1" deep.

### APPLY A TEST PATCH

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.

### SURFACE CONDITIONING

For ease of application and optimum performance dampen the area to be coated, except wooden floors, with clean water to create a Saturated Surface Dry (SSD) condition. Remove any standing water and let the surface dry before applying the **C-21 ALL ACRYLIC®** primer. In place of **C-21 ALL ACRYLIC®** primer a slurry of FASTCRETE® mixed with water may be applied over a rough mechanically prepared surface.

### PRIMING

Surfaces will be easier to work and yield a better bond if they are primed with Silpro **C-21 ALL ACRYLIC®**.

**Over concrete:** For optimum performance prime concrete surfaces with undiluted Silpro **C-21 ALL ACRYLIC®**.

**Over wood (interior only):** A primer coat of 1 part **C-21™** : 1 part water should be applied directly to wooden surfaces and allowed to dry. Re-prime with undiluted **C-21™** just prior to coating with FASTCRETE®.

**Note:** Use only new plywood decking as a substrate.

Prime the surface just prior to applying FASTCRETE®. FASTCRETE® may be applied while the surface is either tacky or dry.

### MIXING

**Mixing Proportions:** Use 3 1/2 quarts of clean, potable water for each 50# bag of FASTCRETE®. Small adjustments in water (several ounces) may be made to adjust workability.

**Mixing Procedures:** Mechanical mixing is preferred for best results.

**Applications 1/8" - 3/4":**

**In a clean container:** Using a slow speed 1/2 inch drill (500-650 rpm) with a plaster-type mud paddle, slowly add the FASTCRETE® to the mixing water while the drill is turning. Mix for only 2-3 minutes until a lump-free, trowelable consistency is achieved.

**In a mortar mixer:** Place the water in the mixer. Break a minimum of two bags of FASTCRETE® in the turning blades. Mix for only 2-3 minutes until a lump-free, trowelable consistency is achieved. Avoid over mixing as this will entrap air reducing adhesion and strength.

**In a mortar box with hoe:** Place a little of the water in the mortar box, add the FASTCRETE® powder, then add the rest of the water. Mix FASTCRETE® until a lump-free, trowelable consistency is achieved. Do not over water.

**Applications 3/4" - 1 1/2" thick:**

Add 25# of clean, washed and drained 3/8" crushed stone to each bag of mixed FASTCRETE®. Thoroughly blend in the stone to achieve a uniform distribution in the mix.

**Applications 1 1/2" - 3" thick:**

Add 40# of clean, washed and drained 3/8" crushed stone to each bag of mixed FASTCRETE®. Thoroughly blend in the stone to achieve a uniform distribution in the mix.

**Do not mix more material than can be placed in 15 minutes.**

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

## APPLICATION

Immediately place the **FASTCRETE**® after mixing, working the material into all holes and crevices, eliminating any air pockets to assure maximum bond. Trowel surface to achieve proper elevation.

All control and expansion joints must be carried through the **FASTCRETE**®. Do not bridge them because they may crack.

**Note:** If featheredging is needed, or if application is from 1/8" to featheredge, use Silpro **PATCHCO**® (rapid-setting) for interior applications, or Silpro **MASCO**® (normal-setting) for interior or exterior applications. See Product Data Sheets.

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

## CURING

**FASTCRETE**® does not require special curing under normal conditions. When exposed to extreme heat or drying winds, however, ultimate strength and bonding will be improved by applying it to a substrate that is Saturated Surface Dry (SSD) and keeping the surface of the **FASTCRETE**® damp. Cover with sheet plastic as soon as dry to the touch but do not soak or saturate with water.

## WAITING TIMES BEFORE COVERING

- Thinset mortar with ceramic tile can be placed in approximately 1 hour.
- Floor coverings that are not moisture sensitive (most carpets), can be placed in approximately 2 hours.
- Moisture sensitive floor coverings, such as sheet vinyl, rubber, VCT, and carpets with non-porous backings, may usually be placed after 12 hours under normal conditions.

Follow flooring manufacturer's requirements on waiting times.

### Test for moisture emission rate:

The Carpet and Rug Institute (CRI) says, "In order to prevent glue-down installation failures due to moisture and alkalinity, concrete floors should be tested for moisture emission rate."

The moisture emission rate of a concrete floor is expressed in lbs./1,000 sq. ft./24 hours. Many manufacturers recommend 3-5 lbs. Consult manufacturers of floor coverings and adhesives for their requirements on moisture emission rates for specific coverings.

## WAITING TIMES BEFORE USING

**Floors:** Patched areas can be opened to foot traffic in 1 hour and to forklift traffic in approximately 3 hours.

**Road and bridge repair:** Repaired areas can be put back into use for light traffic in 1 hour and for heavy traffic in 3 hours at 70°F. (21°C). Lower temperatures will result in slower set times and slower strength gains, so plan accordingly.

## LIMITATIONS

- **FASTCRETE**® should be applied only when the temperature of the air, surface, and material is above 50°F. (10°C.) and rising and will not fall below that for 24 hours after application.
- Protect **FASTCRETE**® from strong winds and/or direct sun during placement and finishing.
- Minimum depth for road and bridge repair is 1".
- Do not re-temper.

## PACKAGING

50# Plastic lined bag (22.7 kg)

## APPROXIMATE COVERAGE

Per 50# bag:

**Neat (as it comes from the bag):** 25 sq. ft. at 1/4" thickness

**Extended with 25# of stone:** 4 sq. ft. at 2" thickness

## SHELF LIFE

2 years

## CAUTION!

SILPRO offers products that may contain cement, latex, epoxy, and other chemicals. Please review the Safety Data Sheet before the use of this product.

## GUARANTEE

Please call **SILPRO, LLC** for copy of guarantee.

