

SILPRO

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

TEST DATA

Set Time		Vicat (ASTM C-191)
20 Minutes — Initial		30 Minutes — Final
Compressive Strength		ASTM C-109
1 Hour 2000 psi		1 Day 5000 psi
3 Hour 3500 psi		28 Day 7500 psi
Tensile Strength		ASTM C-190
7 Day 400 psi		28 Day 470 psi
Flexural Strength		ASTM C-348
7 Day 1250 psi		28 Day 1400 psi
Shear Bond Adhesion		ASTM C-882
7 Day 1950 psi		28 Day 2550 psi
Modulus of Elasticity		ASTM C-469-94
4.22 x 10 ⁶ psi		

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.

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.

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

MIXING (CONT.)

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.

APPLYING

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 **Speedtop** (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.

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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.

PACKAGE SIZE

50# Plastic lined bag (22.7 kg)

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

1 Year

CAUTION!

Contains Portland cement and silica. Irritating to eyes and skin. Product is alkaline upon contact with water. During mixing and application avoid contact with eyes. In case of such contact, flood eyes repeatedly with water and CALL PHYSICIAN. Avoid breathing dust. Avoid prolonged contact with skin. Use of gloves is recommended. Wash hands thoroughly after use and before smoking or eating. Do not take internally.

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, LLC 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.

Made in the USA 5/09