

SILPRO

PATCHCO

Ramping/Patching/Leveling
Featheredge to 1 inch (2.5cm)
Up to 3 inches (7.6cm) for transitions
Low Shrink Calcium Aluminate Formula
Fast-Setting
Qualifies for LEED points

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Silpro Patchco is a one component, fast-setting, polymer modified, Calcium Aluminate cement-based mortar. **Patchco** has been developed for the successful flooring contractor who is interested in meeting demanding schedules without compromising quality. As a superior patching, ramping, and leveling material for use over concrete, tile, and approved wooden substrates, **Patchco** facilitates the same day installation of floor coverings because of its ease of installation and short cure time of as little as 60 minutes.

USE PATCHCO FOR

- Creating a strong, smooth and uniform underlayment for carpet, vinyl, rubber, wood, tile, sheet goods, athletic surfaces, etc.
- Repairing concrete floors, ramps, and stairways.
- Restoring pitch, drainage, and nonskid surfaces
- Can be transitioned from a featheredge to 3 inches (7.6cm) or fill localized areas to a uniform depth of 2 inches (5.1cm)

ADVANTAGES

- **Short Cure Time:** Floor coverings can be installed in as little as 60 minutes. **Patchco** is ready for light foot traffic in 1 to 3 hours.
- **Improved Dimensional Stability:** **Patchco** is shrinkage compensated, which improves the bond to the substrate and minimizes the potential for cracking.
- **Excellent Adhesion:** **Patchco** bonds readily to clean and absorbent concrete, wood, tile, cement plaster, and stone.



- **Superior strength:** Permits featheredging or thin patches on clean absorbent concrete surfaces without the need for special preparation like roughening or cutting edges square.
- **Versatility:** **Patchco** can be troweled or screeded for applications from skim coats to 3" (7.6 cm) in limited areas, thereby eliminating the need for multiple thin lifts and reducing both labor and material costs.
- **Use over adhesives:** **Patchco** can be installed over residual water-insoluble adhesive and cut back adhesive if primed with Silpro's C-21 All Acrylic admixture.
- **Nailability:** **Patchco** can be nailed into without shattering or splitting.



TEST DATA

Working Time	15-25 minutes	
Setting Time Vicat	ASTM C-191	30 to 50 minutes
Compressive Strength		
ASTM C-109	5 hours	700 psi
	24 hours	1000 psi
	28 days	4000 psi

SURFACE PREPARATION

Surfaces must be clean, sound, and free of standing or flowing water.

Remove deteriorating concrete, loose material, oil, grease, wax, water-soluble materials, and any foreign matter and all coating materials that may prevent the topping from developing adequate bond. A mechanical method of surface preparation is recommended.

If you find there is something on the surface of the floor and you can definitely determine what it is, you may be able to apply **Silpro Patchco** over specific, securely adhered surfaces.

Tile: All waxes, sealers, glazes, and any bond-inhibiting materials must be removed prior to applying **Patchco**. Undiluted **C-21 All Acrylic** should be applied and allowed to dry completely. Once dry, a second coat of **C-21 All Acrylic** should be applied and the **Patchco** should be applied while the **C-21** is still damp or wet.

Cutback: A black adhesive made from asphalt diluted with solvents, which has been used to glue down many types of flooring including vinyl tiles, sheet goods, wood etc. Do not apply **Patchco** over soft, cutback adhesive. It may be applied over cutback residue after priming with **C-21 All Acrylic**. See note below.

Carpet Adhesive: A soft adhesive, usually light in color, often water based, used to stick down carpet. Some adhesives are also water soluble. These water soluble adhesives must be removed. Even if not water soluble, all soft adhesive must be removed.

If the adhesive has hardened over time and it cannot be scraped off the floor, a 1/8 inch (3.2mm) application of **Patchco** can be used to cover the adhesive after priming with **C-21 All Acrylic**.

Note: For both cutback and carpet adhesive scrape off all buildup. A floor stained by cutback residue is satisfactory to receive 1/8" (3.2mm) of **Patchco** after priming with **C-21 All Acrylic**. Let the **C-21** dry completely. Once dry, a second coat of **C-21 All Acrylic** should be applied and the **Patchco** should be applied while the **C-21** is still damp or wet. For applications of **Patchco** over 1/8" (3.2mm) thick, even the residue must be removed (usually by shot blasting method.)

Remove mold and mildew using commercial cleaners made for this purpose following the manufacturer's instructions and rinsing thoroughly. Any removal agent must be removed thoroughly from the surface before proceeding.

Floors that have been polished smooth or sealed should be tested for adhesion. If the sealer is chemically stripped from the floor, retest adhesion to insure bonding.

Apply a sample at a representative thickness of at least 1 sq. ft. (30.5 sq. cm.) and wait 3 to 5 hours prior to manually prying off the patch with a stiff putty knife. The sample should be firmly bonded and show no signs of lifting. If there is any question about **Patchco** adhering, please call Silpro prior to proceeding with the application.

Note: even if the sample patch bonds adequately to the smooth or sealed surface, do not apply **Patchco** over 1/4" (6.4mm) thick if any dimension is longer than 15 feet (4.6m) as the cumulative dimensional change may cause cracks and adhesion failure. Instead clean and roughen the surface mechanically, or place control joints at intervals of 15' (4.6m) or less.

In lieu of testing, polished or sealed floors should be mechanically prepared to remove all contamination.

Rusted or corroded metal within the patch area must be sand blasted or wire brushed clean. Coat all metal with an anti-rust sealer such as slurry of **Patchco** and **C-21 All Acrylic**.

Wooden floors must be clean, rigid and well fastened. Nail and screw heads should be set level with or below the surface.

CRACKS IN THE SUBSTRATE

Active: If the crack is still active, i.e. still moving due to forces such as settlement, frost, expansion, contraction, etc. consult an engineer.

Static: If the crack is not active, cut out to 3/4" (1.9cm) depth or greater and fill with Silpro **Fastcrete** mixed with water, Silpro **Mascrete** mixed with undiluted **C-21 All Acrylic** admix or Silpro **Easy Patch** fast-setting repair mortar mixed with undiluted **C-21 All Acrylic** admix.

APPLY A TEST PATCH

To confirm the suitability of the surface for adhesion of the coating, and that the final function and appearance shall be as the owner, architect, and contractor expect, install a 10' x10' test patch at the maximum designed thickness anticipated on the project and subject it to anticipated service conditions before beginning the entire job.

PRIMING:

Clean Absorbent Concrete: Clean, absorbent concrete does not need to be primed prior to application of **Patchco**.

Non-Absorbent Surfaces: Non-absorbent concrete, and other non-absorbent surfaces, i.e., burnished concrete, terrazzo, quarry and ceramic tile all require priming with **C-21 All Acrylic** admix.

Floor Residues on concrete: After the appropriate Surface Preparation, prime the surface with **C-21 All Acrylic** admix.

Wood: A primer coat of 1 part **C-21 All Acrylic**: 1 part clean potable water shall be applied directly to the wooden surfaces and allowed to dry. Re-prime with undiluted **C-21 All Acrylic** just prior to coating with **Patchco**.

Note: Use only new plywood decking.

When priming, apply Silpro **C-21 All Acrylic** to the surface just prior to applying **Patchco**. **Patchco** may be applied while the surface is wet, however if slippage occurs let the surface tack up and dry.

MIXING

Mixing Proportions: Use 3.5 quarts (3.3 liters) of water per 40# (18.2kg) bag of **Patchco**.

Mixing Procedures: In a clean container, mortar box or paddle mixer, add the **Patchco** powder to the water. Mix thoroughly to achieve a trowelable consistency, but do not over mix. Too much mixing will entrap air, reducing adhesion and strength. Consistency can be adjusted by adding small amounts of water if necessary.

For ramping or transitioning, withhold some of the water to increase body. For skimming large areas, add slightly more water to facilitate troweling or screeding.

APPLYING

Place and trowel **Patchco** to the desired thickness. Do not use a power trowel. **Patchco** may be steel troweled, floated or broom finished for a non-skid surface.

Patchco can be applied up to 1 inch (2.54 cm) thick in a single application.

It can be applied up to 2 inches (5.1cm) thick in areas no larger than 2 ft. by 2 ft (61cm x 61cm)

It can be ramped from a featheredge up to 3 inches (7.6cm) for transitions not exceeding 5 feet (1.5 m).

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

Working time is from 15 to 25 minutes, depending on surface conditions, thickness, temperature, humidity and air movement.

Recoating: **Patchco** can be recoated as soon as the first coat can withstand light foot traffic.

Clean up: Clean equipment and tools with water during and immediately after use.

CURING

Patchco is self curing and should not be wet cured.

Patchco will be ready for light foot traffic in 1 to 3 hours and can be put into service within 5 to 8 hours. Thick patches or those in heavy work or high traffic areas may require up to 24 hours to cure depending on application thickness, temperature, and other conditions.

Humidity: Water must evaporate to coalesce the polymer in **Patchco**. For best results, allow polymer-modified toppings to cure with adequate ventilation.

WAITING TIMES BEFORE COVERING

Floor coverings can be installed in as little as 1 hour after applying **Patchco** depending on the thickness of the application, environmental conditions, and floor covering manufacturer's recommendations. Floor coverings that are moisture sensitive may typically be installed after 16 hours.

In all cases, test the substrate prior to the flooring installation to insure that it complies with the flooring manufacturer's specifications.

PRECAUTIONS

Apply **Patchco** only if the temperature of the air, surface, and material is above 50°F (10°C) and will not fall below that for 12 hours after applications. For best results, apply below 90°F (32°C)

Engineered for interior use.

Do not add set-accelerating admixtures.

Patchco may be applied over new concrete the next day (as soon as it is hard enough to walk on).

Store **Patchco** in a cool, dry area.

PACKAGE SIZE

40# (18.2kg) plastic lined bag

Approximate Coverage:

90 sq. ft. at 1/16" (8.4 sq. m at 1.6mm)

45 sq. ft. at 1/8" (4.2 sq. m at 3.2mm)

23 sq ft. at 1/4" (2.1 sq. m at 6.4mm)

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.

For further product information on **Patchco** consult your local dealer or call Silpro LLC at:

1-978-772-4444, 1-800-343-1501, FAX 1-978-772-7456.

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