

Fast-Setting
Underlayment and Repair Mortar
Polymer-Modified with C-21 All Acrylic
Portland Cement-Based
Resurfacing / Patching / Leveling

Featheredge to 1" Inside Featheredge to 1/4" Outside

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Silpro Fasco, mixed with Silpro C-21 All Acrylic admix, is a fast-setting, polymer-modified, Portland cement-based mortar. Fasco has been developed for the successful flooring contractor who is interested in ways to meet demanding schedules without compromising on quality. As a superior patching, resurfacing, and leveling material for use over concrete and approved wooden substrates, Fasco facilitates same-day installation of floor coverings because of its ease of installation and short cure time.

Additionally, **Fasco** provides a durable wear surface that can be used both indoors and outdoors, above or below grade, on horizontal and vertical surfaces, and can be applied down to a featheredge.

**Fasco** is available in a gray color that resembles poured concrete.

#### USE FASCO FOR

- Creating a strong, smooth, and uniform underlayment for carpeting, vinyl, rubber, wood, tile, sheet goods, athletic surfaces, etc.
- Bedding and resetting tile, slate, brick, metal stair treads, flagstone, and marble.
- Resurfacing warehouse floors and parking garages.
- Patching concrete floors, shipping docks, ramps, steps, sidewalks, driveways, and aprons.
- Restoring pitch, drainage, and nonskid surfaces.

#### **A** D V A N T A G E S

- **Short Cure Time:** Floor coverings can be installed in as little as 1 hour. (See page 3 for details.) **Fasco** is ready for light foot traffic in 1 to 3 hours.
- Excellent adhesion: Fasco bonds readily to new and old concrete, wood, plywood, cement plaster, stone, and clean steel.
- Moisture resistant/Exterior use: Fasco may be used in exterior applications as well as in areas subject to high moisture and freezing conditions.
- Use Over Adhesives: Fasco can be installed over residual water-insoluble adhesive and cut-back adhesive.
- **Superior strength:** Permits featheredging or thin patches on clean surfaces without the need for special preparation like roughening or cutting edges square.
- From featheredge to 1" inside: Fasco eliminates the need for multiple thin lifts, thereby reducing both labor and material costs.
- Improved dimensional stability: Fasco is shrinkage compensated, which improves the bond to the substrate and minimizes the potential for cracking.
- Nailability: Fasco can be nailed into without shattering or splitting.

#### TEST DATA

Working Time: 15-25 minutes

Setting Time/Vicat – Final ASTM C-191 30 – 50 minutes

Compressive Strength: ASTM C-109 5 hours 1000 PSI
24 hours 1500 PSI
7 Days 2500 PSI
28 days 4100 PSI

Loss by Abrasion: 2.4% Taber Abrader/400 cycles/1000 gm

## SURFACE PREPARATION

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

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

**Presence of Adhesives on Floors:** If you find there is something on the surface of the floor and you can definitively determine what it is, you may be able to apply **Silpro Fasco** over specific, securely-adhered surfaces.

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 Fasco over soft, cutback adhesive. It may be applied over cutback residue. 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" application of **Fasco** can be used to cover the adhesive.

**Note:** For both cutback and carpet adhesive, scrape off all build up. A floor stained by residue of cutback is satisfactory to receive 1/8" of **Fasco** applied as an underlayment. For applications of **Fasco** over 1/8" thick, even the residue must be removed (usually by shotblasting method).

Remove mold, mildew and moss using commercial cleaners made for this purpose following manufacturer's instructions and rinsing thoroughly. Any removal agent must be rinsed 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 for adhesion to insure bonding.

Apply a 1/8-inch thick sample of at least 1 sq. ft. 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 the **Fasco** adhering, please call Silpro before proceeding with the application.

## SURFACE PREPARATION CONTINUED

**Note:** Even if the sample patch bonds adequately to the smooth or sealed surface, do not apply **Fasco** over 1/4" thick if any dimension is longer than 15' 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' or less.

In lieu of testing, polished or sealed floors should be shotblasted or scarified 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 a slurry of **Fasco** and **C-21 All Acrylic**.

**Note:** Areas that show efflorescence or to which snow removal salts have been applied should be shotblasted (preferable), power-washed with detergent, or cleaned with muriatic acid following the manufacturer's instructions, neutralized and rinsed thoroughly prior to being coated with **Fasco**.

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

Saturated vertical surfaces must be allowed to drain and horizontal surfaces should be vacuumed, blown, swept or squeegeed to remove standing water.

#### CRACKS IN THE SUBSTRATE

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

**Static:** If the crack or break is not active, cut out to 3/4" depth or greater and fill with **Silpro Fastcrete** mixed with water, **Silpro Mascrete** mixed with undiluted **Silpro 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 appearance and function will be as the owner, architect, and contractor expect, install a  $10^{\circ} \times 10^{\circ}$  test patch at the maximum designed thickness anticipated on the project and subject it to anticipated service conditions before beginning the entire job.

## PRIMING

Surfaces are to be primed with **Silpro C-21 All Acrylic** prior to the application of **Fasco**.

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 All Acrylic: 1 part clean, potable water should be applied directly to wooden surfaces and allowed to dry. Re-prime with undiluted C-21 All Acrylic just prior to coating with Fasco.

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

Prime the surface just prior to applying **Fasco**. **Fasco** may be applied while the surface is wet, however if slippage occurs let the surface tack up or dry.

#### MIXING

#### Mixing Proportions:

Use 3 1/2 quarts of C-21 All Acrylic admix per 40# bag of Fasco.

## Mixing Procedures:

For featheredge to 1/4" (1" indoors): In a clean container, mortar box, or paddle mixer, add C-21 All Acrylic admix to the Fasco powder. Do not add water. Mix thoroughly to obtain 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 C-21 All Acrylic if necessary.

**Note:** For thicknesses greater than 1/4" outside or 1" inside, use **Silpro Fastcrete** fast-setting or **Silpro Mascrete** normalsetting repair mortar. Please refer to the Product Data Sheets of these products for additional information.

## APPLYING

Place and trowel **Fasco** to the desired thickness. Lubricate the trowel with **C-21 All Acrylic** to prevent dragging. Do not use a power trowel. Do not over trowel. **Fasco** may be steel troweled, floated or broom finished for a non-skid surface.

Indoors Fasco may be applied up to 1" thick in a single application.

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

Note: If drying conditions include hot, dry, or rapid air movement: correct the conditions if possible, protect the surface from rapid drying, dampen the substrate before application, and do not apply Fasco thicker than 1/4".

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

**Recoating**: **Fasco** 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

**Fasco** is self-curing under normal conditions. **DO NOT WET CURE.** Latex needs to air cure to properly coalesce.

**Fasco** should be allowed to cure before painting. Consult paint manufacturer's label for recommendations.

**Fasco** 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 for curing depending on application thickness, temperature, and other conditions.

# EXTREME TEMPERATURES AND CONDITIONS

Polymer emulsions, also called "latexes", must coalesce (have water evaporate allowing the polymer to come together within and under the coating) to form a film. This film is necessary to produce a good bond and a durable coating.

**Cold: C-21 All Acrylic** must coalesce at or above 50°F. (10°C.) to perform properly. Therefore, keep newly applied **Fasco** above

## EXTREME TEMPERATURES AND CONDITIONS CONTINUED

50°F. (10°C.) for 24 hours under good drying conditions, and 48 hours for thick applications and/or slow drying conditions.

**Hot:** Polymers within the material form a film on the surface and retard the passage of water out of the coating.

If it is hot, dry and windy, however, this film may not be sufficient to prevent the water from being drawn out of the coating before the Portland cement has a chance to hydrate. Excessive heat and drying conditions, especially outside, could cause shrinkage and adhesive failure.

Ultimate strength and bonding will be improved by:

• Applying the coating to a Saturated Surface Dry substrate.

For optimum bond and durability of the topping, the substrate should be conditioned to a Saturated Surface Dry (SSD) state. By saturating the surface the tendency of the substrate to absorb the water necessary for complete hydration is minimized.

Soak the substrate until water stands on the surface. Allow the surface to dry until it no longer glistens and your hand will come up dry when you touch it. If puddles are visible remove them before applying a topping. Any excess water on the surface will weaken the bond between the surface and the topping.

• Covering the coating.

To prevent rapid drying, cover the coating after it has dried for an hour or two, and is hard to the touch, with paper or sheet plastic. Remove covering when conditions cool down to allow coating to air cure.

#### HUMIDITY

Water must evaporate for polymer emulsions to coalesce and that process is slowed by excess humidity. 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 **Fasco** depending on the thickness of the application, environmental conditions, and floor covering manufacturers' recommendations. Floor coverings that are moisture sensitive may typically be installed after 16 hours.

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

## LIMITATIONS

- Apply **Fasco** only if temperature of air, surface, and material is above 50°F. (10°C.) and will not fall below that for 24 48 hours after application. Then keep patched area above 32°F. (0°C.) for a total of 7 days.
- Do not add set-accelerating admixtures.
- **Fasco** may be applied over new concrete the next day (as soon as it is hard enough to walk on).
- As **Fasco** begins to set, a greenish latex film may form. This is normal and will disappear.

## LIMITATIONS CONTINUED

- Do not apply **Fasco** over plywood outside, or over plywood in damp areas inside, as the plywood will delaminate.
- Protect from strong winds and/or direct sun during placement and finishing.
- For temperatures higher than 90°F. consult with Silpro's Technical Service Department.
- In storage, keep the Fasco bag dry and protect C-21 All Acrylic from freezing.

#### PACKAGE SIZE

## Fasco powder:

40# Plastic lined bag (18.14 kg.)

#### C-21 All Acrylic:

1 Gallon Plastic jug (3.79 liters)

5 Gallon Plastic pail (18.93 liters)

55 Gallon Drum (208.23 liters)

## APPROXIMATE COVERAGE

Per 40# bag mixed with 3 1/2 quarts of C-21 All Acrylic admix: 80 sq. ft. (7.5 sq. m.) at 1/16" thickness

40 sq. ft. (3.7 sq.m.) at 1/8" thickness

20 sq. ft. (1.9 sq. m.) at 1/4" 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.

#### **G**UARANTEE

Please call Silpro Corporation for copy of guarantee.



