

INSTRUCTIONS FOR USING **SIM STAIN** FROM L & M Industries, LLC

DESCRIPTION: Sim Stain is a safe alternative to common acid stains. It contains no hazardous components, yet produces the mottled, variegated look associated with chemical (acid) stains used in decorative concrete. **NO** safety equipment is required and no special spiked shoes. Rubber gloves may be worn to prevent the color from staining cuticles, and it is always recommended to wear goggles when using a sprayer.

The greatest advantage Sim-Stain has over the competition is that the color is “built-up” with no need to wait for a chemical reaction to take place. No “surprises” await when returning to the jobsite to check on the color development. The technician never leaves the jobsite, unless it is for a couple of hours while the Sim-Stain completely dries before the application of clear sealer. There is **NO** neutralizing of the surface to have to do; **NO** ammonia water, **NO** double or triple rinsing, **NO** additional drying time. A Sim-Stain job can be completed in a matter of hours, not days.

Sim-Stain has proven long lasting without the application of a clear sealer, but a clear sealer will enhance the beauty and durability of the finished surface. Water-based or solvent-based sealers may be used. Just allow for drying of the Sim-Stain before application of sealer. The degree of moisture remaining before application of the sealer varies from brand and type, so a test area may be necessary. When in doubt, give more drying time.

PREPARATION: If the concrete surface does not repel water and is not a really hard trowelled surface then little or no prep work is required. Any previously applied sealer, paint or other oil-based product must be removed.

If the surface is such a hard trowelled surface or very smooth finish that Sim-Stain can not penetrate, then light sanding or light acid etching should be performed to “open up” the surface. Hydrochloric or phosphoric acid is preferred; muriatic acid tends to leave a yellowing of the surface. Acid containing masonry cleaners may also be used. To test, just apply a small amount of Sim-Stain to the surface and leave for a couple of minutes. If the Sim-Stain doesn’t soak into the surface and wipes up leaving little or no color, then the surface needs to be prepped by sanding or acid etching.

SANDING FLOOR: Make sure that after sanding floor that clean floor with a mild cleaner and brush to get all sand particles up from pores of concrete. Then rinse well and wet vac floor while it is wet. Then test an area where it was sanded with Sim Stain to make sure there is porosity in slab and all dust is removed.

MAKE SURE YOU TEST AN AREA ON SITE BEFORE APPLYING.

CURING

Concrete should be allowed to cure a minimum of 14 days. In cooler climates curing time could require 21 days or more.

APPLICATION: Sim-Stain can be sprayed, squirted, mopped, painted or rolled. Though, care must be taken to avoid or cover up straight lines associated with rolling (unless straight lines are desired). Sim Stain may be applied full strength or can be diluted with water to get lighter hue of color.

Sim-Stain color is built-up and may require repeat applications, depending upon the porosity of the concrete. It is not recommended for use on extremely porous substrates (concrete block or “just floated and broomed” surfaces). For extremely porous surfaces or on sanded surface ½ pt to 1 pt of Min-Wax water based polycrylic can be added per gallon of Sim Stain to decrease the absorption and gives you the color without using as much product. The use of polycrylic not only speeds up the job, but is more cost effective then using an extreme amount of Sim-Stain.

When using a single color of Sim-Stain, the first step is to apply completely over the entire surface. A single color of Sim-Stain, in single application, achieves mottling by the varying degrees of porosity within the surface of the concrete. Additional “acid” effects are achieved through further applications, either in complete coverage or random, haphazard applications. Further applications depend upon desired look and porosity of the concrete.

TECHNIQUES: The results that can be obtained by using Sim-Stain have been limited, up to this point, only by imagination. Some guidelines or “pointers”-

- ◆ When using multiple colors, apply the lighter colors first.
- ◆ However, yellow can be applied over red to “orange” it up a bit.
- ◆ White can be applied first, either in complete coverage or randomly, which results in more extreme mottling and a broader range of colors. The white base coat allows for brighter, more vibrant, colors.
- ◆ The White Sim-Stains are of heavier pigment loading and care is recommended when applying white over other colors, as the white may be too overbearing. The white also shows settling, so keep product shaken or stirred.
- ◆ Each coat contributes a little “primer effect” to the successive coat. Meaning that each additional coat may take longer to dry, and the latter application may be more pronounced. This depends upon the color and “density” of application. (Black overrides red, red overrides yellow)
- ◆ The colors can be mixed in any fashion. They can be mixed together before application, and will actually “separate” a little to produce mottling by slightly different colors. More control and distinct colors is achieved by building one color on top of the other.
- ◆ Spraying to some saturation (even puddling), followed by blotting or swirling with a mop has produced some attractive results.
- ◆ The edges of puddles will leave very distinctive veining, upon drying.
- ◆ If white is mixed with other colors, it penetrates faster, so “mopping” a puddle may actually turn out lighter then surrounding areas.
- ◆ If some areas of the substrate are to be discovered to be much more porous then others, spend some time and product on these areas, before finishing the entire job. A light application of Eagle Primer may be needed at such specific locations.

It has yet to be found that there is any application practice that should not be performed. L & M Industries LLC suggests wearing “Tyvek” booties or sock feet when traversing over previously covered surfaces. At this time other suggestions and “discoveries” are welcomed.

CLEAR SEALING: Follow the manufacturers’ guidelines. Remember, a water-based product has just been applied and different sealers have varying tolerance to additional moisture. The drying of Sim-Stain can be promoted by any means, not to exceed 200° F. Sim-Stain leaves an inert pigment upon drying. Slight residual material at the surface is acceptable; it will be incorporated into the sealer and bonded to the surface. However, White Sim-Stain should be completely dry and checked for residue if the sealer is being applied by any other means than spraying. The White can be picked-up and transferred by some sealers, especially if rolled to “tackiness”. If this transference of color is taking place, STOP! Additional drying time is probably needed. Switching to a sprayer for the first coat of sealer is another option. A lower solids level for the first coat of clear sealer is a third remedy.

Allow 24 hours before permitting foot traffic on sealed area. Allow 72 hours before heavy traffic or vehicle traffic.

COVERAGE: 1 GALLON covers 200-300 sq. ft. per coat depending on porosity of concrete. Mixing Ratio: Ready to use can be diluted further with water to get lighter hues of color. **CONCENTRATE:** ONE GALLON is mixed with 4 gallon of regular water making 5 gallon of Sim Stain.

TEMPERTURE REQUIREMENTS: Apply when surface temperatures are above 40 degrees and not above 90 degrees. Cement substitutes will not affect application or color.

VERTICAL APPLICATIONS: Sim Stain can be applied to on vertical applications for exterior and interior and give a faux look in one step. Please contact us for further application direction on applying to a vertical surface.

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