# POLY-CRETE® SL

The following information is to be used as a guideline for the installation of the Poly-Crete SL flooring system. Contact the Sherwin-Williams Technical Service Department for assistance prior to application.

## APPLICATION INFORMATION — SURFACE PREP PROFILE CSP 3-4

| VOC MIXED | APPLICATION STEP | MATERIAL | MIX RATIO | THEORETICAL COVERAGE PER COAT | PACKAGING |
|---|---|---|---|---|---|
| **POLY-CRETE SL** | | | | | |
| 0 g/L | Primer (optional) | Poly-Crete TF | A, B & C unit | 90 sq. ft./unit | 0.80 gal./unit |
| 0 g/L | Base coat | Poly-Crete SL | A, B & C unit | 40-42 sq. ft./unit | 3.125 gal./unit |

## IMPORTANT!

Read these instructions carefully several days prior to starting your work. Seek answers to any questions you may have before you begin. Sherwin-Williams HPF maintains a technical staff that will be glad to answer your questions and give you advice pertaining to your particular installation. Large areas will require two or more mixers.

Poly-Crete SL is a 100% solids aromatic cementitious urethane system. This system is installed at 1/8" thick. Poly-Crete SL uses a natural quartz aggregate. **NOTE:** Do not apply at a temperature below 60°F (15°C) or above 85°F (29°C).

## STORAGE CONDITIONS

Poly-Crete SL must be stored dry. Exposure of the aggregate to moisture for an extended period will cause lumps. Do not allow resins to freeze. Frozen (crystallized) hardener must be heated above 100°F to melt crystals. Both the Poly-Crete SL Aggregate and Hardener have a 6-month shelf life. Poly-Crete SL Resin has a 12-month shelf life.

## SURFACE PREPARATION

Surface should be profiled, clean, dry, oil free and sound; Shot Blasting is the preferred preparation method. Please refer to the master Surface Preparation Guide on our website for more information. Never feather edge Poly-Crete SL, always terminate in keyway groove at doorways and exposed edges. Refer to architectural drawings for details. Do not apply at temperatures below 60°F or above 85°F.

**NOTE:** For each application of material and before mixing, mark your batches to ensure you achieve your spread rate targets. This is best accomplished by dividing your target spread rate by the width of the area being coated (or your planned wet edge). Example: If your spread rate is 100 square feet and your area is 20 feet wide, you would make a mark every 5 feet (100 divided by 20 = 5).

## MIXING AREA

Select a convenient mix area as close as possible to the application area and protect the surface from spillage by covering with a layer of cardboard and/or a sheet of plastic. Be generous with the amount of space allocated for this function. Do not mix this product in direct sunlight or when temperatures exceed 80°F. Exposure to high temperatures will greatly reduce the working time of this product. **DO NOT MIX UNTIL READY FOR IMMEDIATE USE.**

## JOINT GUIDELINES

Refer to the Joint Guidelines for complete details on our website.

## PRIMER

Priming or sealing of the substrate is typically not required; however, substrate must be primed with Poly-Crete TF Plus when broadcasting F60 aggregate or if the substrate is very porous (allow to cure a minimum of 6 hours @ 70°F) to prevent resins from being absorbed prematurely by substrate.

## APPLICATION METHOD

A. Poly-Crete TF Plus is supplied in pre-measured units consisting of one pail of resin, one pail of hardener and one bag of aggregate (powder). Pour the Poly-Crete TF Plus resin into a 2-gallon pail; scrape bottom and sides with a mix stick to assure that all material is transferred to the mix bucket. Use the Poly-Crete pail to scrape the mix stick, never scrape the mix stick on the side of the mix pail. Measure 1/4 oz. of Poly-Crete HF Accelerator and add it to the mix bucket. Pour the entire Poly-Crete TF Plus hardener into the center of the mix bucket. Using a 1/2" 750 RPM drill with a 4" dispersion blade, mix the resin and hardener for 30 seconds. Slowly add the Poly-Crete TF Plus aggregate to the resin and hardener and mix at 750 RPM for 1 minute. **PRODUCT MUST BE MIXED WITH A 4" DISPERSION BLADE AND A 1/2" VARIABLE SPEED 750 RPM DRILL. *DO NOT ADD HARDENER TO RESIN UNTIL BATCH IS READY FOR MIXING*. *FAILURE TO ADD ALL POLY-CRETE TF PLUS POWDER WILL RESULT IN IMPROPER CURE OF MATERIAL***

B. Pour the entire batch in two 4"-6" ribbons along the starting point.

C. Using a 3" chip brush, cut in along edges, drains and doorways.

D. Roll the material with an 18" 3/8" nap roller at 90 square feet/kit depending on substrate texture and porosity.

E. Cross roll the material to remove any puddles and achieve a uniform thickness. Allow to cure for 4 hours @ 70°F before proceeding to the next application.

**NOTE:** Resuflor Aqua 3477 can be used as a primer in place of Poly-Crete TF. Please contact Technical Service for application instructions.

## BASE COAT

Poly-Crete SL is applied by 1/2" V-notched squeegee method, and is typically applied at a thickness of 1/8". Lay out installation in sections to allow full width to be finished in 15 minutes (@ 70°F) or less to assure absence of placement lines.

A. Poly-Crete SL is supplied in pre-measured units consisting of one pail of resin, one pail of hardener and one bag of aggregate (powder). Pour resin into a 5-gallon pail; scrape bottom and sides to assure that all pigment is transferred. (If using Poly-Crete Natural SL with pigment, add the pigment to the resin and hardener.) The resin and hardener should be pre-blended for approximately 30 seconds. A 4" dispersion blade is recommended for this product together with a high-speed drill 750 RPM minimum to shear the cement-based aggregate into the system and avoid lumps. Gradually add aggregate until a homogeneous mix is attained (Approximately 1 minute). THOROUGH BLENDING IS MANDATORY. A properly mixed batch applies easier and has a uniform surface appearance. Incomplete mixing will cause an inconsistent finish or possible blistering. Have three mixing buckets that are rotated to assure minimum time between mixes. To avoid irregular curing or blisters, regularly clean the mixing blade and pail to avoid combining fresh material with older batches. Material should be applied directly onto the wet edge immediately after mixing. When applying on level surfaces or surfaces sloped up to 1/4"/foot, the product is used as supplied. For more steeply sloped surfaces such as ramps that are up to 3/4"/foot, adding 3 quarts of Q11 (QRok #3) to each mix will prevent sagging while still providing a uniform surface after loop rolling.

B. Pour the entire batch onto the floor and spread with an 18" x 1/2" V-notched squeegee. To avoid transition lines between mixes, it is very important that the material is poured directly onto the wet edge.

C. Trowel edges, drains and around equipment supports with an even pressure and a low-angle trowel in a sweeping motion to complete troweling. This ensures that new batches of material are blended together with no transition lines for continuity of finish.

D. Immediately roll and then cross roll with an 18" loop roller to eliminate lines and help release air.

E. Loop Rolling must be completed immediately after leveling of material to eliminate any residual roller marks in the finished surface (Within 12 minutes of mixing at 70°F).

## PREPARATION OF PLYWOOD FOR APPLICATION OF POLY-CRETE SL

A. Plywood should be new and free of contamination (clean and dry). Marine grade plywood is recommended.

B. Installations over existing concrete or substrates with a possible chance of moisture contamination transfer should be isolated using a polyethylene vapor barrier; all joints should be taped according to manufacturer's instructions. Raised platforms should have consideration for airbricks in outside walls to reduce the risk of excessive dampness.

C. It is recommended that 2 layers of plywood be installed offset at joints to reduce flexing between joists. Plywood should be at least 3/4" thick.

D. Plywood should be positively fastened with high-quality construction adhesive and recessed screws at 6" on center screw pattern.

E. Bandage joints using a mixture of Resuflor EOC 100% solids epoxy and No Sag #1, embedding a minimum of 8" of close weave fiberglass matting into the wet resin.

F. All key ways should be installed by using a Skil® type saw with a 1/4" wide blade set to 1/4" deep (Concrete diamond cutting blades will burn and not cut wood).

G. Any drain detail must be keyed a minimum 2" away from the drain edge with the outside exposed edge removed to a slope using a wood chisel. Doorway thresholds should be treated in a similar way to allow a smooth transition for the termination of the material.

H. Detail such as cold joints should also be cut using a Skil saw detail as per concrete CAD drawing detail.

I. Plywood should be thoroughly vacuumed prior to installation.

## CURE

Allow a minimum of 8 hours cure before light foot traffic at 70°F, and a minimum of 24 hours is required at 50°F. Additional time must be allowed for heavier loads or lower temperatures. Contact the Sherwin-Williams High Performance Flooring Technical Department for more information.

**IMPORTANT!**

Before using Sherwin-Williams High Performance Flooring products, read and understand their accompanying Safety Data Sheet.

STANDARD TERMS AND CONDITIONS OF SALE, INCLUDING STANDARD WARRANTY APPLY - VISIT **industrial.sherwin-williams.com/na/us/en/resin-flooring** FOR THE LATEST VERSION.

**CAUTION!** As with all chemical products, individuals may have different reactions to exposure to specific products. This is dependent upon many factors, including the individual's personal characteristics, the size of the installation, the ventilation available, the intensity of the exposure or the length of the exposure. Individuals may experience discomfort during the installation process of one product, but not another.

In some cases this is experienced as a skin irritation and in others it is experienced as an inhalant irritation. Typically, it disappears once the exposure is eliminated. In some cases people can become "sensitized" to a product and experience the discomfort every time there is exposure without Personal Protective Equipment ("PPE").

To protect yourself from various exposures or discomfort during the mixing and application of our products, we recommend covering exposed skin including using gloves, long sleeves, safety glasses and a respirator such as the 3M 8577 P95 Universal Disposable Carbon Respirator or a cartridge respirator.

Use only as directed. KEEP OUT OF REACH OF CHILDREN.

Do not reseal moisture-contaminated hardener. This will result in carbon dioxide generation or possible violent rupture of container.

## THE SHERWIN-WILLIAMS DIFFERENCE

Sherwin-Williams High Performance Flooring delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe.

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