

## POLY-CRETE<sup>®</sup> SLB

**IMPORTANT!** Read these instructions carefully several days prior to starting your work. Seek answers to any questions you may have before you begin. DUR-A-FLEX, Inc. 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 SLB** is a 100% solids aromatic cementitious urethane system with a broadcast aggregate. This system is installed at 3/16" thick. POLY-CRETE SLB uses a natural quartz aggregate. **NOTE:** Do not apply at a temperature below 60°F (10°C) or above 85°F (29°C).

### STORAGE CONDITIONS

POLY-CRETE SLB 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. The shelf life is 12 months from the ship date in the original unopened containers.

### 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 SLB, 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

POLY-CRETE SLB is applied by 1/2" V-notched squeegee method", and is typically applied at a thickness of 1/8". With broadcast and topcoat, POLY-CRETE SLB has a finished thickness of 3/16". 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 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 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 40 to 60 SF/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.

### BASECOAT

- F. POLY-CRETE SLB 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-inch dispersion blade is recommended for this product together with a high speed drill 750rpm minimum to shear the cement based aggregate into the system and avoid lumps. Gradually add aggregate until a homogenous 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.

- G. When applying on level or surfaces sloped up to ¼"/foot, the product is used as supplied. For more steeply sloped surfaces such as ramps that are up to ¾ inch/foot, adding 3 quarts of Q11 (Q-Rok #3) to each mix will prevent sagging while still providing a uniform surface after loop rolling.
- H. Pour the entire batch onto the floor and spread with a 18"x ½ v-notched squeegee. To avoid transition lines between mixes, it is very important that the material is poured directly onto the wet edge.
- I. 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.
- J. Immediately roll and then cross roll with an 18" loop roller to eliminate lines and help release air.
- K. 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).
- L. The aggregate must be broadcast UP into the air while dispersing evenly and vertically at an approximate rate of 0.8 pounds per sq. ft. into the wet surface (0.5 lbs. for F-60). **Wait approximately 15 minutes before broadcasting into Poly-Crete SL to ensure air has been released. Broadcasting too quickly will result in air entrapment.** Do not loop roller areas that have been broadcast.

The time window at which SLB is broadcast is extremely critical:

- at 80°-90° F you have 20 minutes in which to finish the broadcast
- at 70°- 80° F you have 25 minutes in which to finish the broadcast
- at 55° - 65° F you have 30 minutes in which to finish the broadcast
- Too early and the surface may become uneven
- Too late and the aggregate may not penetrate into the matrix surface.
- Allow to cure for a minimum of 10hrs (@70°F). Remove excess aggregate by brush. (Do Not Sand)

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

1. Plywood should be new and free of contamination (clean and dry). Marine grade plywood is recommended.
2. 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.
3. It is recommended that 2 layers of plywood be installed offset at joints to reduce flexing between joists. Plywood should be at least ¾" thick.
4. Plywood should be positively fastened with high quality construction adhesive and recessed screws at 6" on center screw pattern.
5. Bandage joints using a mixture of ELAST-O-COAT 100% solids epoxy and NO SAG #1, embedding a minimum of 8" of close weave fiberglass matting into the wet resin.

6. All key ways should be installed by using a Skill type saw with a ¼" wide blade set to ¼" deep. (Concrete diamond cutting blades will burn and not cut wood)
7. Any drain detail must be keyed a minimum 2 inches 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.
8. Detail such as cold joints should also be cut using a Skill saw detail as per concrete CAD drawing detail.
9. Plywood should be thoroughly vacuumed prior to installation.

#### TOPCOAT INSTRUCTIONS

POLY-CRETE COLOR-FAST, POLY-CRETE TF PLUS, DUR-A-GLAZE NOVOLAC, or DUR-A-GLAZE SHOP FLOOR WITH ARMOR TOP is used to top coat POLY-CRETE SLB systems. Refer to their respective Product Data Sheets and/or Application Instructions for application details.

#### 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 DUR-A-FLEX Technical Department for more information.

#### 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.

Note that POLY-CRETE SLB contains crystalline (quartz) silica and Portland cement.

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

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

#### MOISTURE CONCERNS

Please refer to the Floor Evaluation Guidelines in the Contractor's Center of our website. Typical Moisture levels should be no greater than 99% RH.

*Before using any DUR-A-FLEX, Inc. product, be sure the Safety Data Sheet is read and understood.*