

HYBRI-FLEX® ESD

The following information is to be used as a guideline for the installation of the Hybri-Flex ESD 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
0 g/L	Primer	Poly-Crete® TF	A, B & C unit	90 sq. ft./unit	0.80 gals./unit
0 g/L 0	Base Coat	Poly-Crete SL F-60 Quartz	A, B & C unit To Excess	55 sq. ft./unit 500 lbs./1000 sq. ft.	3.125 gals./unit 50 lbs.
0 g/L 0	S/L Topping	Resulfor™ Glaze F-60 Quartz 290 mesh Silica Flour	1 gal.: .5 gals. .75 gals. .75 gals.	70 sq. ft./batch	3, 15 or 150 gals. 50 lbs. 50 lbs.
<100 g/L	Topcoat	Resulfor SCT	Premeasured unit	300 sq. ft./unit	3.05 gals./unit
<100 g/L	Topcoat	Resutile™ SDS (satin) HPF Universal Colorant	Premeasured kit 1/2 pint colorant	600 sq. ft./kit	1.09 gals./unit 1 pint colorant 2 lbs.

For additional topcoat options, contact your Sherwin-Williams Representative.

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.

SYSTEM OVERVIEW

Hybri-Flex ESD is a high solids, low odor, smooth, solid color system composed of an 8 mil Poly-Crete TF primer, 1/8" Poly-Crete SL body coat with F-60 quartz broadcast, 60 mil Resulfor Glaze S/L topcoat, Resulfor SCT topcoat and Resutile SDS topcoat, yielding a total nominal system thickness of 190 mils.

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 Hybri-Flex ESD, always terminate in a keyway groove at doorways, drains and exposed edges. No epoxy coatings should be applied unless surface temperature is a minimum of 5°F above dew point. See Dew Point Calculation Chart on our website for detailed instructions.

MOISTURE CONCERNS

Please refer to the Floor Evaluation Guidelines in the Contractor's Center of our website for a step-by-step process to determine the condition of the concrete.

MIXING AREA

Select a convenient mix area and protect the surface from spillage by covering with a sheet of plastic and a layer of cardboard. Be generous with the amount of space allocated for this function. The more comfortably your mixer works, the less likely you are to have a "mix error". Please refer to the Mix Station video on our website.

STORAGE CONDITIONS

Hybri-Flex ESD components must be stored dry. Do not allow resins to freeze. Do not store near open flame or food. Every Poly-Crete product will be shipped with a lot number on the label. The first two digits indicate the year; the second two show the month, the third two will indicate the day. The shelf life is 6 months from the date on the label in the original unopened container.

JOINT GUIDELINES

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

APPLICATION METHOD

Proper planning is essential for satisfactory appearance of the finished floor. Lay out installation in sections to allow full width to be finished in 30 minutes (@70°F) or less to assure absence of placement lines.

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).

PRIMER

- 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 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 ½" 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.

BASE COAT

- A. POLY-CRETE SL is supplied in pre-measured units consisting of one pail of resin, one container of hardener and one bag of aggregate (powder). Pour the Poly-Crete SL resin into a metal 5-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. Pour all of the Poly-Crete SL hardener into the center of the mix bucket. (If using Poly-Crete Natural SL with pigment, add the pigment to the resin and hardener.) Next, using a 1/2" 850 RPM drill with a 4" dispersion blade, mix the resin and hardener for 30 seconds. Slowly add the Poly-Crete SL aggregate to the resin and hardener and mix at 850 RPM for 1 minute. **PRODUCT MUST BE MIXED WITH A 4" DISPERSION BLADE AND A 1/2" VARIABLE SPEED 850 RPM DRILL. *DO NOT ADD HARDENER TO RESIN UNTIL BATCH IS READY FOR MIXING*. *FAILURE TO ADD ALL POLY-CRETE SL AGGREGATE WILL RESULT IN IMPROPER CURE OF MATERIAL***
- B. Pour the entire batch onto the floor and spread with a 1/2" V-notched squeegee. Each kit of Poly-Crete SL will yield 55 square feet/kit. Check squeegee every 1,000 square feet for wear. Have a new squeegee ready to avoid interruption in the process.
- C. Use a flat trowel to cut in edges, drains and around equipment. With an even pressure at 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. To remove squeegee lines and help the material level, immediately loop roll the material after it has been placed. The material should be rolled straight forward and back while picking up the roller with each pass; this will avoid leaving divots in the floor. After the squeegee lines have been removed, the floor should be cross rolled side to side along the entire wet edge. The final cross roll should be completed within 12 minutes of mixing the product at 70°F.
- E. Wear spiked shoes while broadcasting F-60 quartz aggregate up into the air and let it fall onto the floor. Make sure the broadcast is dispersed evenly over the entire floor area at a rate of 0.5 lbs. per square foot. Make sure to wait a full 15-20 minutes before broadcasting. Broadcasting needs to be completed within 30 minutes of mixing. Do not roll or walk back into areas that have been broadcast. Allow Poly-Crete SL to cure for a minimum of 6 hours @ 70°F.
- F. Use a stiff bristle broom to sweep off excess aggregate. Use a vacuum around the edges and corners that are not accessible with a broom.

RESULTFOR GLAZE S/L TOPPING

- A. Measure out 0.5 gallons of Resultfor Glaze Regular hardener and 1 gallon of Resultfor Glaze Resin. The first step is to add the hardener to a separate mixing pail, then add the resin second. Scrape bottom and sides with a mix stick to assure that all material is transferred to the mix bucket. Use the measuring pail to scrape the mix stick; never scrape mix stick on the side of the mix pail. **BE SURE TO PRE-MIX RESULTFOR GLAZE RESIN AND HARDENER.**
- B. Using a slow-speed drill with a Jiffiler blade, mix the resin and hardener for 2-3 minutes. ***DO NOT ADD RESIN TO HARDENER UNTIL BATCH IS READY FOR MIXING***
- C. While continuing to mix, measure 3 quarts of F-60 quartz aggregate and 3 quarts of 290 Silica Flour and pour into the resin-hardener mix. Mix for another minute until uniform mixture is achieved.
- D. Pour a 4" to 6" ribbon along the starting area. Use a 3" chip brush to cut in along edges, doorways and drains.
- E. Using a 3/8" notch squeegee, pull the material from side to side while overlapping passes every 6". Be careful not to leave any puddles. Resultfor Glaze S/L is applied at 70 square feet/batch.
- F. While wearing spiked shoes, back roll the material against the squeegee lines with a loop roller.
- G. Cross roll the material from side to side while overlapping the previous pass with half the roller width. Allow to cure for 12 hours @ 70°F.
- H. Use a vacuum to remove any dust from sanding the floor.

ELECTRICAL GROUNDING

If Resufloor SCT is the primary ground, then a grounding system that meets the customer's specifications needs to be connected to the common ground of the facility. If copper tape is used, install the copper tape on the insulator coat underneath the Resufloor SCT.

RESUFLOOR SCT

- A. Premix part A using a Jiffy® mixer blade with slow-speed drill. Mix only enough material which can be used within 25 minutes.
- B. Premix the part B by shaking the can 10 times before adding it to the part A. While continuing to mix the part A, add part B. Mix for 1 minute using a Jiffy mixer blade and slow-speed drill.
- C. Pour mixed part A/B into part C while mixing. Mix for 3 minutes using a Jiffy mixer blade and slow-speed drill. Move the blade up and down the sides of the pail and across the bottom to ensure contents are thoroughly mixed so no dry filler remains. If the filler is not properly dispersed, the electrostatic discharge properties of the coating may be diminished.
- D. Use colorants at a rate of 1/2 pint (8 fluid ounces) per 3.05 gallons of Resufloor SCT. Premix colorant before adding to the combined parts A/B/C to ensure uniform color. Add colorant to combined parts A/B/C and mix using a Jiffy mixer blade and slow-speed drill. Mix until well-blended.
- E. Immediately pour all the mixed material onto the floor in a single bead. Wet out the mohair roller (that will later be used for backrolling) in the bead of material.
- F. Spread the material by pushing a 1/8" notch squeegee at an even speed with down pressure; apply 15-20 mils. One 3.05-gallon kit of Resufloor SCT will cover 325 square feet at 15 mils wet/dry film.
- G. Back-roll the material perpendicular to the way it was squeegeed with a mohair roller.

RESUTILE SDS TOPCOAT

- A. Premix part A using a Jiffy mixer blade with slow-speed drill. Mix only enough material which can be used within 30 minutes. **NOTE:** Once opened, this material cannot be resealed for later use.
- B. Continue to mix and add part B. Mix for 1 minute using a Jiffy mixer blade and slow-speed drill.
- C. Pour mixed parts A/B into part C while mixing. Mix for 3 minutes using a Jiffy mixer blade and slow-speed drill. Move the blade up and down the sides of the pail and across the bottom to ensure contents are thoroughly mixed, so no dry filler remains. **NOTE:** The part C is not blended — DO NOT SPLIT MIX OR PRODUCT MAY NOT MEET PERFORMANCE SPECIFICATIONS.
- D. Use colorants at a rate of one-half unit per 1 gallon (3.78 liters) of Resutile SDS. Premix Sherwin-Williams colorant before adding to the combined parts A/B/C to ensure uniform color. Add colorant to combined parts A/B/C and mix using a Jiffy mixer blade and slow-speed drill. Mix until well blended. Pour into application tray.
- E. Apply Resutile SDS at the rate of 600 square feet per gallon (55.7 m²/3.78 L) with a Purdy® Marathon® 3/8" (10 mm) nap roller. For proper appearance and development of physical properties, it is crucial that material is not applied above or below this rate. Material applied thicker will tend to foam at higher humidities and temperatures. Dip the roller in the coating and lightly roll out excess in the application tray. Apply material in an area no wider than 10 feet (3.0 meters). One dip should cover about 45 square feet (4.2 m²). Spread the material evenly with V-shaped cross passes. Make sure the floor has just enough coating to cover evenly. Excess material could cause the floor to blister, especially in high humidity, and will show more roller marks. Insufficient material will cause the floor to look non-uniform. If you cannot see the grit texture, the material is too thick.
- F. Level the area with straight passes that cross the initial material paths. These final strokes will reduce roller marks. If the appearance is not satisfactory, reroll the area. Remix the material in the tray occasionally (with the roller) to prevent settling of the part C (filler).

NOTE: This product cannot be finish rolled by a separate individual. Late finish rolling may introduce foam in the coating especially at higher humidities and temperatures. Allow the coating to dry for 24 hours at 75°F (24°C), 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. Full coating properties take 14 days to develop.

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.

United States & Canada

sherwin-williams.com/resin-flooring
swflooring@sherwin.com