HYBRI-FLEX® AQ ONE

The following information is to be used as a guideline for the installation of the Hybri-Flex AQ One 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 gal/unit
0 g/L 0	Basecoat	Poly-Crete SL 5900 Colored Quartz	A, B & C unit To Excess	40-55 sq ft/unit 0.8 lbs/sq ft	3.125 gal/unit 50 lbs
0 g/L 0	Second Broadcast	Resuflor Glaze 5900 Colored Quartz	2:1 To Excess	90 sq ft/gal 0.5 lbs/sq ft	3, 15 or 150 gals 50 lbs
<50 g/L	Grout	Accelera One	Varies by Temperature	100 sq ft/gal	1, 5 or 50 gals
<50 g/L	Topcoat	Accelera One	Varies by Temperature	200 sq ft/gal	1, 5 or 50 gals

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 AQ One is a 100% solids low odor color quartz system composed of a 1/8" Poly-Crete SL body coat with a decorative quartz broadcast. It uses a Resuflor Glaze broadcast coat and two Accelera* One topcoats, yielding a total system thickness of 1/4".

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" for more information. Never feather edge Hybri-Flex AQ One, always terminate in 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 our Mix Station video on our website for more information.

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. The shelf life is 6 months from the ship date in the original unopened container. Products must be stored in temperatures no less than 60°F and no greater than 85°F.

JOINT TREATMENT/REPAIRS

Control joints and expansion joints can be treated several ways depending on traffic loads, temperature, movement in substrate and ability to repair a crack should one occur in a finished floor. Joints that have already cracked and have no potential for movement can be pre-filled with Poly-Crete SL neat. It should be noted that if a joint moves, there is the potential for a crack to transfer through the finished floor. It is up to the facility owner to decide if this is acceptable. The safest way to install the joint is to saw cut through the finished floor, install a backer rod and fill the joint with a flexible joint filler. Holes and cracks that are less than ¼" can be patched with Poly-Crete SL. Holes deeper than ¾" should be wet primed with Poly-Crete TF and patched with Poly-Crete WR. Do not allow primer to puddle during repairs. Allow patches to cure for 3-5 hours before proceeding with the installation of Poly-Crete SL.

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 20 minutes (@ 70°F) or less to assure absence of placement lines.

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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

In most applications, Hybri-Flex AQ One does not require a primer. However, very porous substrates should be primed first with Poly-Crete* TF.

- A. Poly-Crete TF is supplied in pre-measured units consisting of one pail of resin, one container of hardener and one bag of aggregate (powder).
- B. Pour resin into the 2 gallon mix container.
- C. Scrape the sides of the resin container with a paint stick making sure no amount of residue remains.
- D. Wipe excess material from paint stick on rim of resin bucket DO NOT wipe excess material from stick on the rim of the mixing bucket.
- E. Add hardener, same as steps C and D, scrape the sides of the bucket.
- F. Use a high speed drill with a 5-inch Jiffler blade.
- G. Thoroughly mix resin and hardener for 30 seconds.
- H. To avoid any possible clumping, add Poly-Crete TF Plus Aggregate while mixing the resin and hardener.
- Thoroughly mix resin, hardener and aggregate for 60 seconds.
- J. Make sure there are no clumps in the mixed materials.
- K. Pour the entire mixed material onto the floor in 4" ribbons.
- L. Scrape out all mixed material with paint stick and do not leave any residue in mix bucket.
- M. Spread with a 1/8" notched squeegee east to west and apply the material uniformly at 90 square feet @ 8 mils thickness. When moving east to west, move squeegee in a continuous semi-circular motion.
- N. Wet out rollers in a puddle prior to using. Back roll north to south to level the material.
- O. Cross roll east to west to eliminate any roller lines, overlapping 4" in between each cross roll.

BASECOAT

- 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, and 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 ½" 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 ½" VARIABLE SPEED 850 RPM DRILL. DO NOT ADD HARDENER TO RESIN UNTIL BATCH IS READY FOR MIXING. FAILURE TO ADD ALL POLY-CRETE SL WILL RESULT IN IMPROPER CURE OF MATERIAL.
- B. Pour the entire batch onto the floor and spread with a ½" V-notched squeegee. Each kit of Poly-Crete SL will yield 40-55 square feet per 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. For continuity of finish and to ensure that new batches of material are blended together without transition lines, use even pressure and trowel at a low angle using a sweeping motion.
- 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, 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. While wearing spiked shoes, broadcast 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 0.8 lbs per square foot. 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. At 70°F, broadcasting should not begin until 15 minutes after the time the Poly-Crete SL was mixed. This time varies depending on temperature. Broadcasting needs to be completed within 30 minutes of mixing.
- F. Use a stiff bristle broom to sweep off excess aggregate. Use a vacuum to remove sand around the edges and corners that are not accessible with a broom.

SECOND BROADCAST

- A. Measure out 1 part Resuflor Glaze Regular or FAST hardener, and 2 parts Resuflor Glaze Resin. First add the hardener into a separate mixing pail and then add the resin. Scrape the bottom and sides with a mix stick to ensure that all material is transferred to the mix bucket. Use the measuring pail to scrape the mix stick, and never scrape the mix stick on the side of the mix pail.
- B. Using a ½" 450 RPM drill with a Jiffler blade, mix the resin and hardener for 2 minutes.*DO NOT ADD RESIN TO HARDENER UNTIL BATCH IS READY FOR MIXING*
- C. Pour a 4" to 6" ribbon along the starting area. Use a 3" chip brush to cut in along edges, doorways and drains.
- D. Using a 12" flat soft rubber window squeegee, pull the material from side to side, overlapping passes every 6". Be careful not to leave any puddles. Resuflor Glaze is applied at 90 square feet per gallon over broadcasted Poly-Crete SL.
- E. While wearing spiked shoes, back roll the material against the squeegee lines with a high quality 3/8" nap roller.
- F. Cross roll the material side to side, overlapping the previous pass with half the roller width.

- G. Broadcast 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. Do not roll or walk back into areas that have been broadcast. Allow Resuflor Glaze to cure for 4 hours @ 70°F.
- H. Use a stiff bristle broom to sweep off excess aggregate. Use a vacuum to remove sand around the edges and corners that are not accessible with a broom.

GROUT COAT

Grout Coat Spread Rate: Accelera® One is applied at 100 square feet/gallon @ 16 mils over 5900 Colored Quartz.

MIX AND APPLY ONE BATCH AT A TIME – DO NOT MIX HARDENER AND RESIN TOGETHER UNTIL BATCH IS READY FOR IMMEDIATE APPLICATION. ACCLIMATE MATERIAL TO JOBSITE CONDITIONS BEFORE STARTING.

- A. Measure the amount of hardener according to the mix ratio chart provided above. Pour the hardener into the resin container; scrape bottom and sides with a mix stick to assure that all material is transferred to the resin bucket. Use the hardener pail to scrape the mix stick and never scrape mix stick on the side of the mix pail. Using a 750 RPM drill with a 3" Jiffler blade, mix the resin and hardener for 30 seconds. Material should be clear and no streaks should be present. Use a 5" Jiffler blade for larger mixes.
- B. Pour the entire batch onto the floor in a 4" to 6" ribbon. Use a flat squeegee over broadcast surfaces to spread the material evenly. Spread rate will vary depending on substrate, broadcast media and finish texture desired.
- C. Cross roll the material, pushing a 3/8" nap roller in the same direction immediately after the squeegee to ensure there are no puddles. All rolling should be completed within 15 minutes. Allow to cure for 2 hours (@ 70°F/50% RH).

TOPCOAT

Topcoat Spread Rate: Accelera One is applied at 200 square feet/gallon over grout coat.

MIX AND APPLY ONE BATCH AT A TIME - DO NOT MIX HARDENER AND RESIN TOGETHER UNTIL BATCH IS READY FOR IMMEDIATE APPLICATION. ACCLIMATE MATERIAL TO JOBSITE CONDITIONS BEFORE STARTING.

- A. Measure the amount of hardener according to the mix ratio chart provided above. Pour the hardener into the resin container; scrape bottom and sides with a mix stick to assure that all material is transferred to the resin bucket. Use the hardener pail to scrape the mix stick and never scrape mix stick on the side of the mix pail. Using a 750 RPM drill with a 3" Jiffler blade, mix the resin and hardener for 30 seconds. Material should be clear and no streaks should be present. Use a 5" Jiffler blade for larger mixes.
- B. Pour the entire batch onto the floor in a 4" to 6" ribbon. Use a flat squeegee over broadcast surfaces to spread the material evenly. Spread rate will vary depending on substrate, broadcast media and finish texture desired.
- C. Cross roll the material, pushing a 3/8" nap roller in the same direction immediately after the squeegee to ensure there are no puddles. All rolling should be completed within 15 minutes. Allow to cure for 2 hours (@ 70°F/50% RH).

NOTE: This product is best suited for application in temperatures between 60°F and 85°F. Full chemical and abrasion resistance occurs in 7 days at 70°F. At lower temperatures, these properties will be attained more slowly. Protect floor from chemical exposure and abrasive wear during this time.

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.