

## **HYBRI-FLEX MQ**

**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.

### **SYSTEM OVERVIEW**

HYBRI-FLEX MQ is a 100% solids, color quartz system composed of a 1/8" POLY-CRETE SL body coat with a decorative quartz broadcast. It uses a 16 mil CRYL-A-GLAZE G201 broadcast coat, and two 16 mil CRYL-A-TOP T301 topcoats yielding a total nominal 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 MQ, always terminate in a keyway groove at doorways, drains and exposed edges.

### **MOISTURE CONCERNS**

Please refer to the Floor Evaluation Flow Chart 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 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 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 20 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**

In most applications HYBRI-FLEX MQ 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). Pour the POLY-CRETE TF 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 1oz of POLY-CRETE HF ACCELERATOR and add it to the mix bucket. Pour the entire POLY-CRETE TF hardener into the center of the mix bucket. 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 TF 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 TF POWDER WILL RESULT IN IMPROPER CURE OF MATERIAL\***
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- B. Pour the entire batch onto the floor in a 4 to 6" ribbon. Using an 18 inch 3/8" nap roller, roll the material at 60 Sq. Ft. per kit. Cross roll the material to ensure there are no puddles. Allow to cure for 4 hours @ 70°F.

### **BASECOAT**

- C. 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\***

- D. Pour the entire batch onto the floor and spread with a ½ V notched squeegee. Each kit of POLY-CRETE SL will yield 55 SF/kit. Check squeegee every 1000 sq feet for wear. Have new squeegee ready to avoid interruption in the process.
- E. 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.
- F. 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 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 with in 12 minutes of mixing the product at 70°F.
- G. 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 0.8lbs per square foot. Broadcasting needs to be completed within 20 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.
- H. Use a stiff bristle broom to sweep off excess aggregate. Use a vacuum to remove chips around the edges and corners that are not accessible with a broom.

**VENTILATION**

Prior to any application, proper “negative pressure” ventilation must be established. Please refer to the CRYL-A-FLEX Ventilation Guidelines on our website.

**SECOND BROADCAST**

- A. Due to the short working time of Cryl-A-Flex products mix only what can be placed in 10 minutes. Typical batch size is 1 gallon. The amount of CRYL-A-CURE activator powder used is based upon substrate temperature. Be sure to use an infrared thermometer to measure substrate temperature. Refer to the CRYL-A-CURE MIX CHART for appropriate amount based on ounces per gallon.
- B. Measure out 1 gallon of CRYL-A-GLAZE G201 resin. Then measure out appropriate amount of CRYL-A-CURE based on substrate temperature. First pour the CRYL-A-GLAZE G201 into a 2 gallon mix pail and then add the appropriate amount of CRYL-A-CURE.

- C. Using a ½” 850 RPM drill with a Jiffler blade, mix the CRYL-A-GLAZE G-201 and CRYL-A-CURE for 30 seconds. **\*DO NOT ADD CRYL-A-CURE TO CRYL-A-GLAZE UNTIL BATCH IS READY FOR MIXING\***
- D. Pour entire batch in a 4 to 6” ribbon along the starting area. Use a 3” chip brush to cut in along edges, doorways, and drains.
- E. Using an 18” 3/8” nap roller, pull the material from side to side overlapping passes every 6”. Be careful not to leave any puddles. CRYL-A-GLAZE G201 is applied at 90 Sq. Ft. per gallon over Q-28, and 50 Sq. Ft. per gallon over Q-11.
- F. Using a 18” 3/8” nap roller, 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 0.5lbs per square foot. DO NOT OVER BROADCAST. THIS WILL INHIBIT THE CURE OF CRYL-A-GLAZE G201. Do not roll or walk back into areas that have been broadcast. CRYL-A-GLAZE will cure completely in 40 to 60 min.
- 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.

**TOP COAT INSTRUCTIONS**

- A. Due to the short working time of Cryl-A-Flex products mix only what can be placed in 10 minutes. Typical batch size is 1 gallon. The amount of CRYL-A-CURE activator powder used is based on substrate temperature. Be sure to use an infrared thermometer to measure substrate temperature. Refer to the CRYL-A-CURE MIX CHART for appropriate amount based upon ounces per gallon.
- B. Measure out 1 gallon of CRYL-A-TOP T301 resin. Then measure out appropriate amount of CRYL-A-CURE based on substrate temperature. First pour the CRYL-A-TOP T301 into a 2 gallon mix pail and then add the appropriate amount of CRYL-A-CURE.
- C. Using a ½” 850 RPM drill with a Jiffler blade, mix the CRYL-A-TOP T301 and CRYL-A-CURE for 30 seconds. **\*DO NOT ADD CRYL-A-CURE TO CRYL-A-TOP UNTIL BATCH IS READY FOR MIXING\***
- D. Pour entire batch in a 4 to 6” ribbon along the starting area. Use a 3” chip brush to cut in along edges, doorways, and drains.
- E. Using an 18” 3/8” nap roller, pull the material from side to side overlapping passes every 6”. Be careful not to leave any puddles. CRYL-A-TOP T301 is applied at 90 Sq. Ft. per gallon over Q-28, and 50 Sq. Ft. per gallon over Q-11.
- F. Using a 18” 3/8” nap roller, cross roll the material side to side overlapping the previous pass with half the roller width.

- G. CRYL-A-TOP T301 will cure completely in 40 to 60 minutes. For second topcoat repeat instructions A-F. The coverage rate will increase to 100-110 Sq. Ft. per gallon on the second top coat.

**NOTE:** This product is best suited for application in temperatures between 60°F and 85°F. CRYL-A-QUARTZ resins are flammable liquids in their uncured state. Smoking, open flames or sparks should not be permitted during the handling of the product.

**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.**

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