

HYBRI-FLEX AQ

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 AQ is a 100% solids low odor color quartz system composed of a 1/8" POLY-CRETE MD SL body coat with a decorative quartz broadcast. It uses a 1/16" DUR-A-GLAZE #4 broadcast coat, and two DUR-A-GLAZE #5 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 POLY-CRETE SLQ, always terminate in keyway groove at doorways, drains and exposed edges.

MOISTURE TESTING

Typical substrate moisture levels should be no greater than 92%RH (Relative Humidity) and no greater than 12lbs/1000SF/24hrs per calcium chloride test. Please refer to our **Moisture Guidelines** for more information.

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 at http://www.dur-a-flex.com/contractors_center/training_videos.aspx for more information.

STORAGE CONDITIONS

POLY-CRETE MD 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 a mixture of DUR-A-GLAZE #4 and aggregate. Joints that might have the potential for movement can be filled with ELAST-O-COAT and NO-SAG #1. 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 POLY-FILL UJF. Holes and cracks that are less than 1/4" can be patched with POLY-CRETE MD. Holes deeper than 1/4" 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 MD 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.

PRIMER

In most applications HYBRI-FLEX AQ 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, and never scrape 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 MD SL WILL RESULT IN IMPROPER CURE OF MATERIAL.**

- 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 MD 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 MD 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 MD 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 MD 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 MD SL WILL RESULT IN IMPROPER CURE OF MATERIAL.**

- D. Pour the entire batch onto the floor and spread with a 1/2 V notched squeegee. Each kit of POLY-CRETE MD SL will yield 55 Sq. Ft. per 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 within 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 MD 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 sand around the edges and corners that are not accessible with a broom.

SECOND BROADCAST

- A. Measure out 1 part DUR-A-GLAZE #4 FAST hardener, and 2 parts DUR-A-GLAZE #4 Resin. First add the hardener to a separate mixing pail and then add the resin. 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, and never scrape mix stick on the side of the mix pail.
- B. Using a 1/2" 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. DUR-A-GLAZE #4 is applied at 90 Sq. Ft. per gallon over Q-28 and 50 Sq. Ft. per gallon over Q-11 aggregate.
- 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 0.5lbs per square foot. Do not roll or walk back into areas that have been broadcast. Allow to DUR-A-GLAZE #4 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.

TOP COAT INSTRUCTIONS

- A. Add DUR-A-GLAZE #5 hardener to the DUR-A-GLAZE #5 resin container. Mix thoroughly with a Jiffler mixer on a 450 rpm 1/2" drill for 1 minute. Always scrape the sides and bottom of resin container to assure thorough blending. Keep hardener and resin containers covered to prevent moisture from entering. THOROUGH BLENDING IS MANDATORY. Immediately use blended material. Pot life and working time is shorter at higher temperatures.
- B. Topcoat for cove and floor should be done at the same time to avoid roller or squeegee marks.
- C. Pour entire batch in a long "ribbon", 4 to 6 inches wide, along a wall or a joint at your starting point. Watch your spread rate! The blended hardener and resin is spread with a flat squeegee at 75 Sq. Ft per kit over Q-28 and 35 Sq. Ft. per kit over Q-11.
- D. Immediately back-roll against the squeegee lines with a 3/8" nap, Non-Shed roller.
- E. Cross roll the material side to side while overlapping the previous pass with half the roller width. Do not re-roll

material after 3 minutes. Complete all procedures within 10 minutes of mixing.

- F. Allow first coat to cure until dry for 5 hours @ 70°F. On grade or below grade concrete floors are usually considerably cooler than surrounding air, so cure time may be extended.

Apply second coat to obtain a more uniform appearance and more durability. Follow steps A-F at a spread rate of 150 Sq. Ft. per kit over Q-28 and 100 Sq. Ft. per kit over Q-11. The second topcoat must be applied within 24 hours of the first top coat. **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 77° F.** At lower temperatures these properties will be attained more slowly. Protect floor from chemical exposure and abrasive wear during this time.

CAUTION

Refer to Material Safety Data Sheet for proper personal protective equipment to use when handling this product. 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.

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