

DUR-A-QUARTZ “TM” EPOXY FLOORING (Trowel Method)

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. DUR-A-FLEX Power Mixers are highly recommended for mixing cove base and patching compound. Material for small areas can be mixed with a 1/2” - 3/4” heavy duty, slow speed, electric drill equipped with a DUR-A-FLEX bird-cage mixing attachment and a 5-gallon metal pail.

DUR-A-QUARTZ “TM” is applied by “trowel method”. When recommended spread rates are followed, a 1/8” to 3/16” thick finish will be produced. It can also be applied at 1/4” to fill and level damaged concrete floors.

SURFACE PREPARATION

Surface must be clean, sound, dry and free of all oil, grease, detergent film, sealers and/or curing compounds. A surface profile of 10 to 15 mils is appropriate for most applications. All paint should be removed unless it is a properly applied, totally de-glossed, high quality epoxy. Cracks and holes should be pre-filled with epoxy mortar before troweling overlayment. Upper level rooms, like mechanical rooms, bathrooms, or wet process areas that have space below should receive ELAST-O-COAT seamless fluid applied membrane. ELAST-O-COAT should be used on areas exposed to thermal shock and as a defusing layer to absorb vibration from transferring through to the finished floor. Please refer to the DUR-A-FLEX Surface Preparation Guide on our website for detailed instructions. No epoxy coatings should be applied unless surface temperature is a minimum of 5 degrees F above dew point. See Dew Point Calculation Chart on our website for detailed instructions.

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 and protect the surface from spillage by covering with a layer of cardboard and/or sheet of plastic. Be generous with the amount of space you allocate for this function. The more comfortably your mixer works, the less likely you are to have a “mix error”. Make ready all necessary tools, mix and measure containers, etc. **DO NOT MIX ANY EPOXY UNTIL**

READY FOR IMMEDIATE USE. Once hardener and resin are combined, it must be used immediately. Apply masking tape wherever coating is intended to stop. To obtain neat, straight, chip resistant edges at termination points and/or drains, a “keyed edge” must be installed.

JOINT GUIDELINES

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

1. TROWEL METHOD

- A. Prepare the surface as outlined in the DUR-A-FLEX Surface Preparation Guide.
- B. Prime the prepared area (or section of) by applying a coat of DUR-A-GLAZE #4 at approximately 150 – 200 Sq Ft per gallon.
- C. Mix DUR-A-QUARTZ “TM” matrix:
 1. Pour 24 **Fluid** oz. of DUR-A-GLAZE #4 “Water Clear” (or one part) hardener into a bucket, and then add 48 **Fluid** oz. of DUR-A-GLAZE #4 (or two parts) resin. Mix with Jiffler type mixer for 3 minutes. Then pour into a spinning Power Mixer pail and allow mixing for 2 minutes.
 2. Move the paddle back and forth scraping the bottom and sides of the pail while mixing. This is very important! **Thorough blending is mandatory.**
 3. Slowly add 40 lbs of blended DUR-A-QUARTZ Aggregate (1 part Q-28 and 2 parts Q-11). Allow the mixer to run for another 2 minutes. Warmer aggregate and epoxy blends set faster than cooler components. A properly mixed batch trowels easier and has a uniform surface appearance. Incomplete mixing will cause an inconsistent finish.
- D. Place the entire batch of matrix on the floor. Spread at a desired thickness with a screed box or gage rake. Apply DUR-A-QUARTZ “TM” while Primer is still wet or tacky. If a decorative pattern is being done, it may be easier to broadcast lightly and let it cure overnight. This will enable the contractor to walk across the floor without tracking primer onto the

troweled sections of DUR-A-QUARTZ. Coverage at 20 sq.ft. per batch at 1/4”.

- E. Finish smooth with a small hand or power trowel. Apply sufficient pressure on the trowel to compact the DUR-A-QUARTZ “TM” as much as possible. If the mortar “pulls” creating a rough surface, the trowel has become sticky or it is positioned improperly. Spray a trowel lubricant on the trowel to help “close” DUR-A-QUARTZ “TM” properly and reduce porosity. The finished surface will follow the contour of the concrete substrate. A bright light behind the applicator will reveal trowel marks readily.
- F. Trowel must be kept clean with a trowel lubricant. If solvent odor cannot be tolerated a soapy steel wool pad will help keep trowel clean. In either case, the trowel must be wiped before using on the DUR-A-QUARTZ “TM”. Check for desired thickness frequently. Allow to fully cure. **NOTE:** It is essential to keep moisture from contacting DUR-A-QUARTZ “TM” during installation and curing time. All plumbing leaks must be stopped or diverted prior to commencement of work.
- G. Allow to cure.

IMPORTANT! Mix only what can be placed in 10 - 15 minutes. Never attempt to re-temper the mortar after it begins to set.

APPLY FIRST DUR-A-QUARTZ TM GROUTCOAT

Appearance, texture and the type of traffic or chemical abuse the floor receives will determine what type of topcoat should be applied. Consult DUR-A-FLEX, Inc. for technical assistance to determine whether to use DUR-A-GLAZE #4 “Water Clear” or DUR-A-GLAZE #4 “Regular.”

1. Combine 1 part DUR-A-GLAZE “Water Clear” hardener with 2 parts DUR-A-GLAZE #4 COVEREZ by volume. Using a Jiffler type mixer, mix thoroughly for 3 minutes. Mix only what can be used within 5 - 10 minutes. Refer to the appropriate Product Data Sheet for Pot Life of individual hardener.
2. Apply combined epoxy with a 12” flat squeegee (window type). A 10” or 12” handle can be added to the squeegee to extend reach. The paint roller should have a long (5”) handle. Pour a 4”- 6” ribbon of blended epoxy on the floor. Bend forward and spread the epoxy by moving the squeegee in a continuous semi-circular movement from left to right to left, etc. Simultaneously moving backward slowly and pulling the epoxy glaze with you. Pull the blended epoxy over the same area twice to force epoxy into DUR-A-QUARTZ “TM” matrix. Move

squeegee slowly and apply sufficient pressure to obtain a uniform appearance. Avoid leaving puddles and squeegee marks. Then walk onto the surface with spiked golf shoes and back-roll the applied area with a 3/8” non-shed roller. Cross roll area perpendicular to backrolling direction to achieve uniform appearance.

APPLY SECOND GROUTCOAT

Use same procedure as first groutcoat.

FINAL TOP COAT

ARMOR TOP is typically used as a final topcoat. See ARMOR TOP Application Instructions.

IMPORTANT: Be sure to pour the hardener into the mixing bucket first, then the “resin”. Always scrape the sides and bottom of mixing container to assure thorough blending.

USE SIGNS AND BARRIERS to keep traffic out of the area. Do not allow any water on coated surface for 24-48 hours. Chemical spillage must be prevented for approximately 5 days. **NOTE:** Use DUR-A-SOLVE or a lacquer thinner for clean up.

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.

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