

## DUR-A-CRETE

**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 this 100% solids heavy-duty resurfacer. Material for cove or 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. Large areas will require two or more Power Mixers, or a large mortar mixer. **NOTE:** Cement mixers will not work.

### DUR-A-CRETE is applied by "trowel method".

DUR-A-CRETE is typically applied at thicknesses ranging from 3/16" to 1/4". DUR-A-CRETE can also be used to form containment berms or to slope floor to drain. At thicknesses greater than 1/2", clean, dry 3/8" peastone can be added to DUR-A-CRETE mortar mix to extend coverage rate.

### 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. 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.

### MIXING AREA

Select a convenient mix area and protect the surface from spillage by covering with a layer of cardboard and/or a 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 UNTIL READY FOR IMMEDIATE USE.** 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.

### PRIMING

Prime all surfaces with 100% solids DUR-A-GLAZE #4 as soon as the surface has been prepared. On oily concrete slabs HI-SPEED Detergent/Degreaser is recommended, be sure to apply primer **before** oil has a

chance to "wick" up to the top of the slab and migrate across the surface.

### TROWEL APPLICATION

- A. Prepare the surface as outlined in the Surface Preparation Guide.
- B. Prime the prepared area (or section) by applying a coat of DUR-A-GLAZE #4 at approximately 150-200 Sq Ft per gallon. Apply DUR-A-CRETE while Primer is still wet or tacky. If the primer cures "tack free" before the area is resurfaced, the area must be primed again.
- C. Mix DUR-A-CRETE epoxy mortar:
  1. Pour 24 **Fluid** oz. of DUR-A-GLAZE #4 (or one part) hardener into a bucket then add 48 **Fluid** oz. of SHOP FLOOR or DUR-A-GLAZE #4 (or two parts) resin. Mix with Jiffler type mixer 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 1 bag of DUR-A-CRETE Aggregate. Allow the mixer to run for another minute. 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 mortar on the floor. Spread at a desired thickness with a screed box or gage rake.
- E. Finish smooth with a small hand or power trowel. Apply sufficient pressure on the trowel to compact the DUR-A-CRETE as much as possible. If the mortar "pulls" creating a rough surface, the trowel has become sticky or it is positioned improperly. Spray Trowel-Eeze on trowel to help close DUR-A-CRETE mortar properly and reduce porosity. The

finished surface will follow the contour of the concrete substrate. Cracks and holes should be pre-filled with DUR-A-CRETE mortar before troweling overlayment. A bright light behind the applicator will reveal trowel marks readily.

- F. Trowel must be kept clean with a lubricant such as Trowel-Eeze. 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-CRETE. Check for 1/4" thickness frequently. Allow to fully cure. **NOTE:** It is essential to keep moisture from contacting DUR-A-CRETE during installation and curing time. All plumbing leaks must be stopped or diverted prior to commencement of work.

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

### **GRIND FLOOR**

The purpose of grinding is to remove trowel marks and to smooth the surface prior to applying grout coats, topcoats, etc. Grout coats can usually be omitted if the topping is to be finished with a SHOP FLOOR or DUR-A-QUARTZ system. The best method of grinding is to use an EDCO floor grinder with carborundum stones. It is important to grind floor moving east to west and north to south for best results. On small areas and in tight places, rub by hand with carborundum stones. Remove all sanding debris and dust with a vacuum cleaner, sweeping is not acceptable. A 3M dust mask should be worn while grinding the floor.

### **TOPCOAT APPLICATION**

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, NOVOLAC, CRETE-GARD, etc.

### **TYPICAL DUR-A-CRETE TOPCOAT**

1. Combine 1 part CRETE-GARD hardener with 2 parts DUR-A-GARD RESIN 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" Q-28 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 with you. Pull the blended epoxy over the same area twice to force epoxy into DUR-A-CRETE mortar. 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 an orange peel appearance.

### **ADDITIONAL TOPCOAT OR FLOOR SYSTEM**

Follow the Application Instructions for the product selected. See POLY-THANE, DUR-A-GARD, SHOP FLOOR or DUR-A-QUARTZ Application Instructions.

### **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.***