

## MICA-FLEX E DECORATIVE EPOXY FLOORING

**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.

### MICA-FLEX E is applied by broadcast method.

When recommended spread rates are followed, a single broadcast of either micro or macro MICA-FLAKE decorative chips will produce a nominal 1/16" (1.6 mm) floor system. Surface finish can be smooth or slip resistant.

### 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. Upper level rooms, like mechanical rooms, bathrooms, or wet process areas that have space below should receive ELAST-O-COAT seamless fluid applied membrane. 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 without delay. 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.

### PRE-PATCH

Pre-patch badly eroded, spalled or cracked areas with the proper material: Use ELAST-O-COAT thickened with NO SAG 1 for moving joints and DUR-A-GLAZE #4 mixed with NO-SAG 2 or Flintshot for non-moving joints. **BE SURE TO LEAVE AS LITTLE EXCESS AS POSSIBLE AS IT WILL BE HIGHLIGHTED IN SUCCESSIVE STEPS.** Sanding or grinding pre-patch areas will help in hiding deviations.

### APPLICATION METHOD

#### **1. PRIMING**

- A. Prepare the surface as outlined in the DUR-A-FLEX Surface Preparation Guide. All surfaces must be primed with DUR-A-SHIELD II or DUR-A-GLAZE #4 WB as soon as the surface has been prepared.

#### **2. BROADCAST COAT**

- A. Pre-blend the Dur-A-Gard OPF hardener and resin with a clean mixing blade. Measure out 1/2 gallon of DUR-A-GARD OPF hardener and 1 gallon of DUR-A-GARD resin. When combining, be sure to add the hardener first and scrape out the container. Add the resin and scrape out the container. Be careful to pour both hardener and resin into the center of the mixing pail. Mix the blended epoxy with a slow speed power drill with a Jiffler type mixing blade for 2 minutes. **Always scrape the sides and bottom of the measuring bucket to assure thorough blending.**
- B. Apply the mixed DUR-A-GARD using a non-shed 18" 3/8 inch nap roller at 300 – 400 Sq Ft per gallon by the dip and roll method. Back roll with a quality, non-shed roller 18" 3/8 inch nap roller.
- C. Broadcast micro or macro MICA-FLAKE decorative chips. While wearing spiked shoes, walk on the wet epoxy holding a 2-gallon container and broadcast the decorative chip until the floor appears dry (0.04 lbs./sq. ft. for macro and 0.03 lbs./sq. ft. for micro chips). The best procedure to minimize dust contamination while broadcasting is to grab the flakes with the fingertips and broadcast from waist height. Throw the flakes straight out and allow them to "rain" down on the floor. Do not throw the flakes higher than chest height. Do not rush as the flakes fall very slowly. **IMPORTANT:** Do not broadcast the edge that will be joining the next section. Be sure to leave a "WET EDGE" (a 24" strip to permit overlapping when proceeding onto next section). Do not walk on the decorative chip with spiked shoes. Be sure to keep any impurities out of the chips such as broom bristles, debris, etc. Allow to cure.

Thoroughly vacuum the chips. To avoid dust contamination do not smooth with a nylon bristle brush.

#### **3. GROUT COAT**

- A. Measure out 1 part DUR-A-GLAZE #4 WATER CLEAR hardener and 2 parts DUR-A-GLAZE #4 resin and mix the blended epoxy for 2 minutes. Be sure to

follow the procedures outlined in step (B). Mix only what you can apply in 5 – 10 minutes.

- B. Apply the mixed DUR-A-GLAZE #4 WATER CLEAR at 150 sq. ft. per gallon with a flat squeegee and back roll with a quality 18” 3/8” nap non-shed roller. Allow to cure.
- C. Using a floor buffing machine with 100 grit sandpaper, sand the floor in both directions.
- D. Thoroughly vacuum the floor to remove the dust and tack rag the floor to remove the fine dust.

#### 4. FIRST TOPCOAT

- A. Measure out 1 part DUR-A-GLAZE #4 WATER CLEAR hardener and 2 parts DUR-A-GLAZE #4 resin and mix the blended epoxy for 2 minutes. Be sure to follow the procedures outlined in step (B). Mix only what you can apply in 5 – 10 minutes.
- B. Apply the mixed DUR-A-GLAZE #4 WATER CLEAR at 150 – 200 sq. ft. per gallon with a flat squeegee and back roll with a quality 18” 3/8” nap non-shed roller. Allow to cure.
- C. Using a floor buffing machine with 100 grit sandpaper, sand the floor in both directions.
- D. Thoroughly vacuum the floor to remove the dust and Tack rag the floor to remove the fine dust.

#### 5. SECOND TOPCOAT

- A. Measure out 1 part DUR-A-GLAZE #4 WATER CLEAR hardener and 2 parts DUR-A-GLAZE #4 resin and mix the blended epoxy for 2 minutes. Be sure to follow the procedures outlined in step (B). Mix only what you can apply in 5 – 10 minutes.
- B. Apply the mixed DUR-A-GLAZE #4 WATER CLEAR at 150 – 200 sq. ft. per gallon with a flat squeegee and back roll with a quality 18” 3/8” nap non-shed roller.
- C. For anti-slip properties, back-roll aluminum oxide size #54 to #36 into the topcoat. Allow to cure.
- D. Using a floor buffing machine with 100 grit sandpaper, sand the floor in both directions.
- E. Thoroughly vacuum the floor to remove the dust and tack rag the floor to remove the fine dust.

#### 6. FINISH TOPCOAT

##### ARMOR TOP APPLICATION INSTRUCTIONS

ARMOR TOP performance topcoat is typically applied using the dip and roll method with a 18” long, 3/8” nap roller with a Wide Boy™ or Big Ben™ frame. Applicators should wear spiked shoes (cross roll). DUR-A-FLEX, Inc. recommends Big Ben™ roller frames when using white or light colors.

- A. Pour ARMOR TOP hardener into a 2 gallon bucket. If color is desired, add ARMOR TOP Colorant; mix for 30 seconds. Add ARMOR TOP resin and mix for 30 seconds. If specified, slowly add ARMOR TOP Grit and continue mixing for an additional minute. Pour a small amount into a dip and roll tray that is large enough to accommodate an 18 inch roller.

- B. Dip roller cover into paint tray and roll off excess. Apply two 8-10 foot long paths left to right then right to left. Re-wet roller and continue application. Even out roller lines by using W shaped crosses and/or up & down passes. If not even, re-roll up and down until uniform. A final cross-roll is necessary to even out roller lines.
- C. Occasionally remix ARMOR TOP in tray or bucket with a stick to prevent settling of the grit/powder.

##### ARMOR TOP KIT SPREAD RATES

Gloss Clear (w/grit)	= 650 SF/kit
Gloss Clear (no grit)	= 625 SF/kit
Satin Clear (w/grit)	= 775 SF/kit
Satin Clear (no grit)	= 750 SF/kit

**NOTE: Armor Top is sold in kits only. Spread rates vary due to differences in gloss and satin kit sizes.**

Remove all masking tape as you proceed, before it gets out of reach. Allow to cure.

**IMPORTANT:** Be sure to pour the hardener into the mixing bucket first, when working with the epoxy and vice versa when working with the urethane. 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.

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.**

##### JOINT GUIDELINES

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

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