

## **MICA-FLEX M**

### DECORATIVE FLOOR SYSTEM

#### **GENERAL**

MICA-FLEX M is 100% reactive, fast curing, high strength methyl methacrylate (MMA) based acrylic flooring system. It is designed to provide a terrazzo like appearance with the benefits of a seamless floor. It is a nominal 1/16" (1.6 mm) thick system composed of primer, a single broadcast of micro or macro MICA-FLAKE decorative chips and topcoats. Surface finish can be smooth or slip resistant. This system cannot be thinned with solvents.

#### **COLORS**

MICA-FLEX M is available in micro or macro MICA-FLAKE decorative chips. The chips are available in solid colors or multi-color pre-blends. Refer to the MICA-FLAKE color charts for current information.

#### **SURFACE PREPARATION**

The substrate must be dry and free of oil, grease, dirt, bituminous and other contaminants. Unsound concrete and laitance should be removed by appropriate mechanical means. Please refer to the DUR-A-FLEX Surface Preparation Guide on our website for detailed instructions.

#### **MOISTURE CONCERNS**

Please refer to the Floor Evaluation Guide in the Contractor's Center of our website for a step-by-step process to determine the condition of the concrete.

#### **BOND TEST**

Prior to full application of the primer, bond tests shall be conducted to determine adequacy of substrate preparation. The bond of the primer to the substrate should be greater than the tensile strength of the substrate. A successful test shows substrate material and sheared aggregate adhering fully to the sample. If laitance or a small amount of the substrate is attached, further preparation is required. Refer to the Bond Test Guide on our website for more information.

#### **VENTILATION**

Prior to any application, proper "negative pressure" ventilation must be established. Refer to the CRYL-A-FLEX Ventilation Guidelines on our website for details.

#### **APPLICATION METHOD**

All MMA resins require the addition of CRYL-A-CURE (BPO) to cure. To determine the correct amount of BPO necessary, refer to the CRYL-A-FLEX Mixing Chart. BPO usage is a function of the material and substrate temperature.

**Therefore, the temperature of the floor must be measured prior to any mixing or application of material.**

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).

Due to the fast cure of the material, only make enough material to be applied in 5 minutes. A typical batch size of primer or topcoat is usually 1 gallon (4 liters). Warmer conditions may dictate a smaller batch size. The primer is applied with a brush or roller at 80 - 100 Sq Ft per gallon (7.4 - 9.3 m<sup>2</sup> per liter) to achieve an even, puddle free surface. Substrates that are very porous may require an additional coat. Rough surfaces and holes must be patched with the appropriate CRYL-A-FLEX system before the body coat is applied. Based on the temperature, add the proper amount of BPO to the CRYL-A-PRIME P-101. Mix for 30 - 60 seconds or until the BPO is completely dissolved. Pour an even ribbon of material out onto the floor and roll to the proper thickness. The primer will cure tack free in 30 - 60 minutes.

The broadcast coat of CRYL-A-GLAZE G-201 is roller applied at 90 - 100 Sq Ft per gallon (8.4 - 9.3 m<sup>2</sup> per liter). MICA-FLAKE decorative chips are broadcast at a rate of 0.05 lbs/sq ft for macro chips and 0.03 lbs/sq ft for micro chips into the wet material. Keep Broadcast 6 feet (1.8 m) back from wet edge. After the material has cured, sweep/blow off the excess/loose chips.

Broadcast 6 feet (1.8m) back from the wet edge. 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. Let the system cure and vacuum off the excess/loose chips.

Optional: Apply a second coat of CRYL-A-GLAZE at 50-60 Sq Ft per gallon (4.6 - 5.6 m<sup>2</sup> per liter) and broadcast the mica flakes at the same rate. Let the system cure and vacuum off the excess/loose chips.

The first of two topcoats of CRYL-A-TOP T301 is applied at 50 - 60 Sq Ft per gallon (4.6 - 5.6 m<sup>2</sup> per liter). After the

material has cured, sand with a floor buffer and 100 grit sandpaper in both directions. Thoroughly vacuum the floor to remove the dust and tack rag the floor to remove fine dust. For additional slip resistance size 24 – 36 aluminum oxide can be broadcast into the first wet topcoat at a ratio of 1.5-2 lbs per 100 Sq Ft.

A second topcoat of CRYL-A-TOP T301 is applied at 90 - 100 Sq Ft per gallon (8.4 – 9.3 m<sup>2</sup> per liter).

### **CURE**

MICA-FLEX M components will cure typically in 45-60 minutes. The floor is fully functional one hour after completed application. **IMPORTANT, DO NOT APPLY THE TOPCOAT TOO THIN.** It may not cure properly, it will pick-up dirt and wear pre-maturely.

### **PACKAGING**

MICA-FLEX M resins are available in 5-gallon (19 liter) pails and 50-gallon (190 liter) drums. CRYL-A-CURE is available in 1-gallon (3.8 liter) cans, 5-gallon (19 liter) pails and 55 lb. (25 kg) boxes. MICA-FLAKE decorative chips are available in 10 and 25 lb boxes.

### **JOINT GUIDELINES**

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

### **TECHNICAL INFORMATION**

MICA-FLEX M is part of a family of special repair and wearing materials supplied by DUR-A-FLEX. If you require further information on this or any of our other products please contact our Technical Department.

### **CLEANING**

This product is considered to be part of a low maintenance flooring solution, however, certain textures and service environments require specific procedures. Always apply the material at the recommended spread rate. Please refer to the master Cleaning Guide on our website.

### **STORAGE CONDITIONS**

Store in a cool and dry place below 85 F (30 C), out of direct sunlight. Do not store near open flame or food. The shelf

life is 6 months from ship date in the original unopened containers.

### **CAUTION**

**MICA-FLEX M resins are flammable liquids in their uncured state. Smoking, open flames or sparks should not be permitted during the handling of the product.** Workers should wear protective clothing consisting of splash-proof goggles, impermeable gloves and, where exposure limits are exceeded, an organic vapor respirator should be used. Air powered or explosion proof mixing equipment is required. Adequate cross ventilation should be provided, and if necessary, explosion proof fans may be required. All foodstuffs must be removed during application of the system.

**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.**

**If substrate and/or material temperature is above 90 F (32 C), Do Not apply material.**

**Detailed application instructions should be obtained, read and understood prior to commencement of application.**

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