

## **POLY-CRETE MDB**

### **DESCRIPTION**

POLY-CRETE MDB is a 100% solids aromatic cementitious urethane system with a broadcast aggregate. This system is typically installed at a nominal ¼ inch thickness. POLY-CRETE MDB uses a natural quartz aggregate. A topcoat of DUR-A-FLEX epoxy, urethane or methyl methacrylate is applied depending on performance requirements.

### **BENEFITS**

- VOC Compliant
- CA 01350 Air Quality Compliant
- ADA Compliant
- Leed Credit Points Available
- Meets USDA, FDA and CFIA Standards
- National Floor Safety Institute (NFSI) Certified
- Hygienic - Does Not Harbor Bacteria
- High Chemical Resistance
- High Abrasion Resistance
- No priming required
- Wide Service Temperature Range, -100 to 220 F
- Can Be Applied To 7-14 Day Old Concrete

### **LIMITATIONS**

This product is best suited for application in temperatures between 60 °F and 85 °F. Substrate must be clean, sound and dry.

### **TYPICAL USES**

POLY-CRETE MDB is designed to protect concrete, polymer reinforced screeds, mild steel and water resistant plywood from chemical attack, corrosion, impact and thermal shock. It is also unaffected by freeze/thaw cycles.

- Aesthetic Considerations
- Wet Areas
- Commercial Kitchens and Restaurants
- Meat/Poultry and Dairy Processing
- Pharmaceutical Plants
- Processing Areas
- Exterior Applications

### **COLORS**

Refer to the Color Selection Chart's wide range of standard colors; special color matches may be available.

### **PACKAGING & STORAGE CONDITIONS**

POLY-CRETE MD is available in pre-measured kits that cover 32 sq.ft. at 3/16 inch for ¼ inch finished thickness after broadcast. POLY-CRETE MDB must be stored dry. Do not use partial bags of aggregate. Do not allow resins to freeze. Every POLY-CRETE product will be shipped with a lot number on the label. The first two digits indicate the year; the second two show the month, the third two will be the day. The shelf life is 6 months from the date on the label in the original unopened container.

### **SURFACE PREPARATION**

This product requires preparation in order to perform as expected. Surface must be profiled, clean, dry, oil free and sound. It is recommended that the perimeter edges of the floor area and doorways be keyed to produce a cross section ¼ inch deep by 3/16 inch wide running at 6 inches away from and parallel to doorways, drains and walls. Please refer to the master Surface Preparation Guide on our website for more information.

### **APPLICATION METHOD**

POLY-CRETE MDB should be applied to a properly prepared area at the required thickness using a steel bladed trowel, pin-rake, "V"-notched trowel or cam rake. The freshly placed material is then spike rolled into which the proper size quartz aggregate is broadcast to excess to achieve the desired. Allow a minimum of 8 hours for the Base Coat to cure before sweeping, sanding or vacuuming. Apply the desired pigmented coat(s) to achieve the required finish. Use T.C. aggregates for better flow and leveling performance. POLY-CRETE COLOR-FAST or POLY-CRETE TF PLUS may also be used to topcoat POLY-CRETE MDB systems. DUR-A-GLAZE NOVOLAC is also appropriate to use as a topcoat for POLY-CRETE MDB systems. **Refer to Poly-Crete MDB Application Instructions.**

### **GUIDE SPECIFICATIONS**

This product is part of the DUR-A-FLEX family of polymer systems. Please contact DUR-A-FLEX for complete three part guide specs.

### **DRAWINGS AND DETAILS**

Standard CAD drawings and details are available for coves, drains, breaches, transitions, etc. Please refer to the master Drawings and Details guide for actual drawings.

# **POLY-CRETE MDB (with TOPCOAT)**

## **TECHNICAL INFORMATION**

		<b>Poly-Crete COLOR-FAST</b>
Cure Time @ 70°F Full Service	12 hrs traffic, 16 hrs full service	
Mix Ratio (by volume)	3 Component Kit	
Working time @70°F	20 minutes	
Adhesion to Concrete	> 400 psi, concrete fails before loss of bond	
Service Temperature	-100 to 220 F (live steam)	
Available Colors	Blue*, Green*, Charcoal, Grey, Dark Grey, Red, Chestnut *These colors in Color-Fast may require a primer of TF Plus to ensure adequate background hiding	
<b>Physical Property</b>	<b>Test Method</b>	<b>Poly-Crete COLOR-FAST</b>
Hardness (Shore D)	ASTM D 2240	65 D
Compressive Strength	ASTM C 579	7,800 psi
Tensile Strength	ASTM D 638	4,200 psi
Impact Resistance	ASTM D1709	>160 in.-lb.
Flexural Strength	ASTM D 790	5,076 psi
Abrasion Resistance CS17 Wheel 1000 GM Load 1,000 Cycles	ASTM D 4060	30 mg loss
Coefficient of Friction Standard Slip-Resistant	ASTM D 2047	(Passes ADA recommendations) >0.6
Flammability	ASTM D 635 ASTM E 648	Self Extinguishing Class I
VOC Content		0 g/l
Indoor Air Quality		CA 01350 Compliant
Water Absorption	ATSM D 570	0.04%

### **JOINT GUIDELINES**

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

### **MOISTURE CONCERNS**

Normal limits for moisture vapor transmission for Poly-Crete floor systems are 20 lbs./1,000 sq. ft./24 hour using the calcium chloride test per ASTM F-1869 or 99% relative humidity using in-situ Relative Humidity Testing per ASTM F-2170. Please refer to the Floor Evaluation Guidelines at [www.dur-a-flex.com](http://www.dur-a-flex.com) for complete details.

### **CHEMICAL RESISTANCE**

Excellent resistance to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents.

### **CLEANING**

Regular scrubbing will maintain these systems in serviceable condition. However, certain textures and service environments require specific procedures. Please refer to the master Cleaning Guide on our website for more information.

### **CAUTION**

Adequate cross ventilation should be provided. Read, understand and follow Material Safety Data Sheets and Application Instructions of this flooring system prior to use. Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed.

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