

## **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
- ADA Compliant
- Leed Credit Points Available
- Meets USDA, FDA and CFIA Standards
- 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

### **COLORS**

Refer to the Color Selection Charts wide range of standard colors, special color matches may be available.

### **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

### **JOINT GUIDELINES**

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

### **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 finish. 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 CF and POLY-CRETE TF 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.**

### **LIMITATIONS**

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

### **STORAGE CONDITIONS**

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.

### **PACKAGING**

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.

### **CHEMICAL RESISTANCE**

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

# POLY-CRETE MDB (TOPCOATS)

## TECHNICAL INFORMATION

	Poly-Crete KT	Poly-Crete CF	Poly-Crete TF	
Cure Time @ 70°F				
Full	48 hours	24 hrs	3-5days	
Mix Ratio (bvolume)	3 part resin: 1 part	3 Component Kit	3 Component Kit	
Working time @70°F	15 minutes	25 minutes	15 minutes	
Adhesion to Concrete	> 400 psi, concrete fails before loss of bond	> 400 psi, concrete fails before loss of bond	> 400 psi, concrete fails before loss of bond	
Service Temperature	-100 to 220 F (live steam)	-100 to 220 F (live steam)	-100 to 220 F (live steam)	
Available Color	Beige, Black, Charcoal, Concrete, Medium Grey, Slate Grey, Tile Red	Blue, Burnt Orange, Green, Charcoal, Grey, Dark Grey, Red, Sandstone	Blue, Burnt Orange, Green, Charcoal, Grey, Dark Grey, Red, Sandstone	
Physical Property	Test Method	Poly-Crete KT	Poly-Crete CF	Poly-Crete TF
Hardness (Shore D)	ASTM D 2240	75-80 D	65 D	85 D
Compressive Strength	ASTM C 579	8,990 psi	7,800 psi	7,250 psi
Tensile Strength	ASTM D 638	2,175 psi	4,200 psi	750 psi
Impact Resistance	ASTM D1709	>160 in.-lb.	>160 in.-lb.	>160 in.-lb.
Flexural Strength	ASTM D 790	5,075 psi	1,000 psi	4,400 psi
Abrasion Resistance CS17 Wheel 1000 GM Load 1,000 Cycles	ASTM D 4060	35 mg loss	10 mg loss	40 mg loss
Coefficient of Friction Standard Slip-Resistant	ASTM D 2047	(Passes ADA recommendations) 0.9	(Passes ADA recommendations) 0.9	(Passes ADA recommendations) 0.9
VOC Content		0 g/l	0 g/l	0 g/l

### MOISTURE CONCERNS

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

### 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.

### 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.

### 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.***