

## **POLY-CRETE MDQ**

### **DESCRIPTION**

POLY-CRETE MDQ is a 100% solids aromatic cementitious urethane system with decorative quartz broadcast. The system is typically installed at a nominal ¼ inch thickness. This should be determined by service, cleaning temperatures, severity of traffic, point impact and loadings. POLY-CRETE MDQ uses colored or blended decorative 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
- 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 50°F and 85°F. A second broadcast is recommended if aesthetics are a concern. Substrate must be clean, sound and dry.

### **TYPICAL USES**

POLY-CRETE MDQ 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.

- Wet Areas
- Pharmaceutical Plants
- Bottling Plants
- Commercial Kitchens
- Exterior Applications

### **COLORS**

POLY-CRETE MDQ is available in 15 blended and 18 solid colors and in two sizes (Q11 and Q28). Refer to Quartz Blend Selector Chart for example of typical quartz color blends

### **PACKAGING & STORAGE CONDITIONS**

POLY-CRETE MDQ is available in pre-measured kits that cover 32 sq.ft. at 3/16 inch for ¼ inch finished thickness after broadcast and topcoat. Topcoat resins are packaged in 1 gallon, 5 gallon and 50 gallon quantities. POLY-CRETE MDQ 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 substrate preparation in order to perform as expected. Surface must be profiled, clean, dry, oil free and sound. It is recommended that edges of the floor area and doorways be keyed to produce a cross section ¼" deep by 3/16" wide running at 6" 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 /SPREAD RATES**

POLY-CRETE MDQ should be applied to a properly prepared area at the required thickness using a steel bladed trowel or pin-rake. The freshly placed material is then spike rolled in to which the proper size colored quartz aggregate is broadcast to excess. Allow a minimum of 8 hours for the base coat to cure before sweeping, sanding or vacuuming. Apply the desired clear topcoat(s) to achieve the desired finish. Use T.C. aggregates for better flow and leveling performance.

### **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.

**POLY-CRETE MDQ (NOVOLAC TOPCOAT)**

**TECHNICAL INFORMATION**

Cure Time @ 70°F		
Light Traffic	8-10 hours	
Light wheel traffic	16 hours	
Full Service	3 - 5 days	
Heavy Duty Traffic	48 hours	
Color	Refer to DUR-A-QUARTZ Color Blends	
Pot Life - 1 gallon @ 70°F	15 minutes	
Adhesion to Concrete	> 400 psi, concrete fails before loss of bond	
Service Temperature	-100 to 220°F	
<b>Physical Property</b>	<b>Test Method</b>	<b>Result</b>
Hardness (Shore D)	ASTM D 2240	75-80
Compressive Strength	ASTM C 579	8,990 psi
Tensile Strength	ASTM D 638	2,175 psi
Impact Resistance @ 125 mils	MIL D-3134	
Flexural Strength	ASTM D 790	5,075 psi
Abrasion Resistance CS17 Wheel 1000 GM Load 1000 Cycles	ASTM D 4060	65 mg loss
Coefficient of Friction Standard Slip-Resistant	ASTM D 2047	(Passes ADA recommendations) >0.6
VOC Content		0 g/L

**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.

**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**

POLY-CRETE MDQ has 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 as long as contamination is not allowed to build. 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.***