

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, 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

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 ¼ 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. 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 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.

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 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.

	Poly-Crete COLOR-FAST	DUR-A-GLAZE NOVOLAC	SHOP FLOOR w/ ARMOR TOP	POLY-CRETE TF PLUS
Cure Time @ 70°F Full Service	3 Days	24 hours	See application instructions	3-5 Days
Mix Ratio (by volume)	3 Component Kit	1 part hardener, 2 parts resin	See application instructions	3 Component kit
Working time @ 70°F	20 minutes	30 minutes	See application instructions	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	>400 psi, concrete fails before loss of bond
Heat Resistance Limit	220°F	250°F	200°F	220°F
Available Colors	Blue, Green, Charcoal, Grey, Dark Grey, Red, Chestnut	Medium Grey, Tile Red, Charcoal Grey, Slate Grey, Concrete Grey, Clear	See standard color chart	See Poly-Crete standard color chart

Physical Property	Test Method	Poly-Crete COLOR-FAST	DUR-A-GLAZE NOVOLAC	SHOP FLOOR w/ ARMOR TOP	POLY-CRETE TF PLUS
Hardness (Shore D)	ASTM D-2240	65 D	86-90 D	75-80 D	85 D
Compressive Strength	ASTM C-579	7,800 psi	14,000 psi	12,500 psi	7,250 psi
Tensile Strength	ASTM D-638	4,200 psi	2,500 psi	4,000 psi	750 psi
Impact Resistance	ASTM D-3134	Pass	Pass	Pass	Pass
Flexural Strength	ASTM D-790	5,076 psi	5,500 psi	6,250 psi	4,400 psi
Abrasion Resistance CS-17 Wheel 1000 GM Load 1,000 Cycles		ASTM D-4060 30 mg loss	ASTM D-1044 75 mg loss	ASTM D-4060 4 mg loss (gloss finish, with grit)	ASTM D-4060 50 mg loss
Static Coefficient of Friction*	ANSI B101.1	>0.6	>0.6	>0.6	>0.6
Dynamic Coefficient of Friction - Wet*	ANSI A326.3	>0.42	>0.42	>0.42	>0.42
VOC Content		0 g/L	0 g/L	0 g/L	0 g/L
Indoor Air Quality		CA 01350 Compliant	CA 01350 Compliant	CA 01350 Compliant	CA 01350 Compliant
Water Absorption	ASTM D-570	0.04%	0.05%	0.04%	0.04%

*Dur-A-Flex flooring systems can be built to meet or exceed the requirements of Static or Dynamic Coefficient of Friction testing per installation. Contact your Dur-A-Flex territory sales manager or tech representative for more information on alternative textures, grit/grip additives, or smooth coatings for your specific environment. A sample should always be obtained and tested prior to purchase for any non-slip flooring system.

IMPORTANT!

Before using DUR-A-FLEX products, read and understand its accompanying Safety Data Sheet & Application Instructions for important safety information.

STANDARD TERMS AND CONDITIONS OF SALE, INCLUDING STANDARD WARRANTY APPLY - VISIT **DUR-A-FLEX.COM** FOR THE LATEST VERSION