

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 – 37 – 104°C
- Can be installed with moisture levels up to 12 lb sf/1000 sf/24 hours
- Can be applied to 7-14 day old concrete\

COLOURS

Refer to the colour selection charts wide range of standard colours, special colour 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 6mm deep by 4.7mm wide running at 152mm from and parallel to doorways, drains and walls. Please refer to the master "Surface Preparation Guide" 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 can 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 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 10°C and 30°C. 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 MDB is available in pre-measured kits that cover 3 m² at 4.7mm for 6mm finished thickness after broadcast. Topcoat resins are packaged in 1-gallon, 5-gallon and 50-gallon quantities.

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 @ 21°C				
Full	48 hours	24 hours	3-5 days	
Mix Ratio	3pt Resin:1pt Hardener	3 Component Kit	3 Component Kit	
Pot Life – 1 gallon	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	37-104°C (live steam)	37-104°C (live steam)	37-104°C (live steam)	
Available Colour	Beige, Black, Charcoal, Concrete, Medium Grey, Slate Grey, Tile Red	Blue, Burnt Orange, Green, Charcoal, Concrete, Grey, Dark Grey, Red, Sandstone, Cream	Blue, Burnt Orange, Green, Charcoal, Concrete, Grey, Dark Grey, Red, Sandstone, Cream	
Physical Property	Test Method	Poly-Crete KT	Poly-Crete CF	Poly-Crete TF
Hardness (Shore D)	ASTM D 2240	75-80 D	65 D	85D
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 D790	5,075 psi	1,000 psi	4,400 psi
Abrasion Resistance CS17 Wheel 1000 GM Load 1,000 Cycles	ASTM D 2060	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 Centre 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” 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 labelling guide for proper person protective equipment to use when handling this product. Use only as directed.