



POLY-CRETE MDC

DESCRIPTION

POLY-CRETE MDC is a 100% solids aromatic cementitious urethane system with a vinyl chip broadcast. This system is installed at 3/16 – ¼ inch thickness. This should be determined by service, cleaning temperatures, severity of traffic, point impact and loadings. POLY-CRETE MDC uses Macro or Micro colored chips and is top coated with DUR-A-FLEX epoxy, urethane or methyl methacrylate 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, -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. Substrate must be clean, sound and dry.

TYPICAL USES

POLY-CRETE MDC is designed to protect concrete from chemical attack, corrosion, impact and thermal shock. It is also unaffected by freeze/thaw cycles. Typical areas of application:

- Pharmaceutical Plants
- Bottling plants
- Production & Manufacturing Areas
- Cage Wash Rooms

COLORS

The decorative colored chips that are used in the POLY-CRETE MDC system are available in a MACRO and MICRO size. Refer to the Color Selection Chart for the standard chip blends. Customs blends are available.

PACKAGING & STORAGE CONDITIONS

POLY-CRETE MDC is available in pre-measured kits that cover 32 square feet at 3/16 inch for ¼ inch finished thickness. POLY-CRETE MDC 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 perimeter 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

POLY-CRETE MDC is applied at the required thickness using a steel bladed trowel, pin rake, “V” notched trowel or cam rake. The freshly placed material is spiked rolled into which the colored chips are broadcast to excess. Allow a minimum of 8 hours for the base coat to cure before sweeping, brushing and vacuuming. Apply the desired topcoat(s) to achieve the required 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 refer to the master Specifier’s Guide 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 MDC (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 Macro and Micro Chip Color Chart	
Pot Life - 1 gallon @ 70°F	15 minutes	
Adhesion to Concrete	>400 psi. Concrete fails before loss of bond.	
Service Temperature	-100 to 200°F	
Physical Property	Test Method	Result
Hardness (Shore D)	ASTM D 2134	75-80
Compressive Strength	ASTM C 579	8,990 psi
Tensile Strength	ASTM D 638	2,175 psi
Impact Resistance @ 125 mils		Pass
Flexural Strength	ASTM D 790	5,075 psi
Abrasion Resistance CS17 Wheel 1000GM Load at 1,000 Cycles	ASTM D 4060	65 mg loss
Coefficient of Friction	ASTM D 2047	0.6
VOC Content		< 0 g/L

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

POLY-CRETE MDC has excellent resistance to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents.

CLEANING

This product is considered to be a low maintenance flooring solution, 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.