DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

PRODUCT DATA SHEET

95 Goodwin Street
East Hartford, CT 06108

Tel: 800-253-3539 • Fax: 860-528-2802 • www.dur-a-flex.com • contact_us@dur-a-flex.com

POLY-CRETE MD

DESCRIPTION

POLY-CRETE MD is a 100% solids, aromatic, cementitious urethane system blended with graded silica and fine fillers applied at 3/16 to 1/4 inch to produce a self-leveling matte finish of uniform color.

BENEFITS

- VOC Compliant
- CA 01350 Indoor Air Quality Compliant
- ADA Compliant
- Leed Credits Available
- Meets USDA, FDA , and CFIA Standards
- Superior Adhesion
- Superior Chemical Resistance
- Will not support bacteria growth
- Easy Maintenance
- Wide Service Temperature, -100 to 220oF
- No Topcoat Required
- Can Be applied To 7-14 Day Old Concrete
- Withstands moisture levels up to 20 lbs./1000 sq.ft./24 hours and up to 99% RH.

LIMITATIONS

Do not apply at a temperature below 60°F (10°c) or above 85°F (29°c). POLY-CRETE MD can be slippery when oily. Do not apply to un-reinforced sand cement screeds, asphalt or bitumen substrates, glazed tile or nonporous brick and tile, magnesite, copper, aluminum, polyesters or elastomeric membranes.

TYPICAL USES

POLY-CRETE MD is designed to protect concrete, polymer reinforced screeds, or water resistant plywood from chemical attack, corrosion impact and thermal shock. Repeated exposure to hot oil or steam does not cause pitting, cracking or crazing.

- Chemical Processing
- Food Processing Areas
- Cook / Chill Areas
- Bakeries
- Plant Vehicle Aisles
- Warehouses
- Bottling Areas
- Sanitize / Wash Areas
- Pharmaceutical
- Cage Wash Areas
- Mfg/Production Areas

COLORS

Refer to Poly-Crete MD Color Selector Guide. Special color matches may be available

PACKAGING/STORAGE

POLY-CRETE MD is available in pre-measured kits that cover 32 square feet at 3/16 inch. POLY-CRETE MD 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 /SPREAD RATES

POLY-CRETE MD should be applied to a preprimed area at the required thickness by using a steel bladed trowel, pin rake, “V” notched trowel or cam rake. The freshly placed material is then spiked rolled. As an option, a coat of POLY-CRETE COLOR-FAST can be applied to prevent ambering.

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

POLY-CRETE MD has excellent resistance to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents. Some acids may discolor or bleach the surface.

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.

POLY-CRETE MD **TECHNICAL INFORMATION**		
Cure Time @ 70°F Light Traffic		10 hours
Light Wheel Traffic		16 hours
Heavy Duty Traffic		48 Hours
Full Service		5 days
Color		Refer to Poly-Crete MD Color Selector Chart
Mix Ratio (by volume)		3 Component kit
Working time @ 70°F		15 minutes
Adhesion to Concrete		> 400 psi, concrete fails before loss of bond
Service Temperature		-100°F to 220°F (live stream)
Physical Property	**Test Method**	**Result**
Hardness (Shore D)	ASTM D-2240	85
Compressive Strength	ASTM C-579	8,990 psi
Tensile Strength	ASTM D-638 ASTM C-307	2,175 psi 1,000 psi
Impact Resistance @ 125 mils	MIL D-3134	>160 in-lb
Flexural Strength	ASTM D-790 ASTM C-580	5,075 psi 2,400 psi
Abrasion Resistance CS-17 Wheel 1000 GM Load 1,000 Cycles	ASTM D-4060	50 mg loss
Static Coefficient of Friction	ASTM D-2047	>0.6
VOC Content		0 g/L
Indoor Air Quality		Compliant to CA 01350 - CDPH v1.1-2010