

## **HYBRI-FLEX® EC**

### **DESCRIPTION**

HYBRI-FLEX EC is a decorative chip system composed of an 1/8" POLY-CRETE MD SL body coat with a decorative chip broadcast. It uses a DUR-A-GLAZE #4 broadcast coat, a DUR-A-GLAZE #4 grout coat, and an ARMOR TOP topcoat yielding a total nominal system thickness of 3/16".

### **BENEFITS**

- VOC Compliant
- ADA Compliant
- Contributes to LEED Credits
- Meets USDA, FDA and CFIA Standards
- Hygienic - Does Not Harbor Bacteria
- High Chemical Resistance
- High Abrasion Resistance
- Self-Priming for Most Applications
- Wide Service Temperature Range
- Can Be Applied To 5-7 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**

HYBRI-FLEX EC 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.

- Pharmaceutical Plants
- Manufacturing Areas
- Laboratories
- Retail
- Restrooms
- Locker rooms

### **COLORS**

HYBRI-FLEX EC is available in standard and custom (Macro only) blended colors and in two sizes (Macro and Micro). Refer to Chip Blends Selector Chart for available quartz blends.

### **PACKAGING & STORAGE CONDITIONS**

POLY-CRETE MD SL is available in pre-measured kits that consist of resin, hardener and aggregate. DUR-A-GLAZE #4 is available in 1 and 5-gallon cans and 50-gallon drums. ARMOR TOP is available in pre-measured kits. HYBRI-FLEX EC components must be stored dry. Do not allow resins to freeze. Do not store near open flame or food. The shelf life of this product is 6 months from ship date 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. Please refer to the Surface Preparation Guide on our website for more information.

### **APPLICATION METHOD**

POLY-CRETE MD SL is applied to a properly prepared area at the required thickness using a "V" notched squeegee. The freshly placed material is then loop rolled and the proper sized colored chip blend is broadcast to excess to achieve the desired look. Allow a minimum of 6 hours for the Base Coat to cure before sweeping, sanding or vacuuming. A second chip broadcast is delivered into DUR-A-GLAZE #4. Apply DUR-A-GLAZE #4 to achieve the required texture. Finish with a top coat of ARMOR TOP. See Application Instructions on our website for detailed installation procedures.

### **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.

# **HYBRI-FLEX EC**

## **TECHNICAL INFORMATION**

Physical Property	Test Method	Result
Hardness, Shore D	ASTM D-2240	75 – 80
Water Absorption	ASTM D-570	0.04%
Flammability	ASTM D-635	Self extinguishing
Flame Spread / NFPA-101	ASTM E-84	Class A
Tensile Strength	ASTM D-638	3,700 psi
Flexural Strength	ASTM D-790	4,700 psi
	BS EN 13892-2	18 N/mm <sup>2</sup>
Compressive Strength	ASTM D-695	16,000 psi
	BS EN 13892-2	44 N/mm <sup>2</sup>
Indentation	MIL D-3134	.050 inches
Impact Resistance	ASTM D-2794	>160
Bond Strength to Concrete	ASTM D- 4541	400 psi substrate fails
Elevated Temperature	MIL D-3134	No slip or flow
Thermal Shock, 50 cycles of immersion in chilled & boiling water	MIL F-52505	No cracking or loss of adhesion
Noise Reduction Coefficient	ASTM C-423	0.05
UV Resistance	MIL F-52505	No chalking or loss of adhesion
Taber Abrasion Resistance A&B	ASTM D 4060, 1000g load, 1000 cycles, CS-17 wheel after full cure	<u>Gloss finish</u> w/ grit - 4 mg. loss <u>Satin finish</u> w/grit – 8 mg. loss no grit - 10 mg. loss no grit – 12 mg. loss
Abrasion Resistance	BS EN 13892-4	AR 0.5
Coefficient of Friction	ASTM D-2047	>0.6
60° Gloss	ASTM D 523	Gloss: 75 +/-10 Satin: 50 +/-10
VOC Content		Base coat, Body coat 0 gm/l VOC Armor Top 0 gm/L VOC

### **MOISTURE CONCERNS**

Normal limits for moisture vapor transmission for Hybri-Flex 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**

HYBRI-FLEX EC has excellent resistance to organic and inorganic acids, alkalis, fuel and hydraulic oils, as well as aromatic and aliphatic hydrocarbons. Contact the Dur-A-Flex Technical Department for specific questions about chemicals.

### **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.

### **CAUTION**

Read, understand and follow Material Safety Data Sheets and Application Instructions for 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.***