

## **HYBRI-FLEX ES**

### **DESCRIPTION**

HYBRI-FLEX ES is a 100% solids low odor, smooth, solid color system; composed of a 8 mil POLY-CRETE TF primer, 1/8" POLY-CRETE SL body coat with F-60 quartz broadcast, 60 mil DUR-A-GARD S/L topcoat, and a 3 mil ARMOR TOP topcoat yielding a total nominal system thickness of 190 mils.

### **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
- 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 ES 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.

### **AREAS OF USE:**

- Main Traffic Aisles
- Automotive Service Areas
- Loading Docks
- Aircraft Hangars
- Storage Areas
- Manufacturing Areas

### **COLORS**

HYBRI-FLEX ES is available in variety of colors. Refer to the Color Selection for the range of standard colors.

### **PACKAGING / STORAGE CONDITIONS**

POLY-CRETE SL is available in pre-measured kits that consist of resin, hardener and aggregate. DUR-A-GARD SL epoxy is available in 1 and 5-gallon pails and 50-gallon drums.

The fillers are available in 50 lb bags and the aggregate is available in 100 lb bags. ARMOR TOP is provided in pre-measured kits. HYBRI-FLEX ES components must be stored dry. Do not allow resins to freeze. Do not store near open flame or food. 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 indicate 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. Please refer to the Surface Preparation Guide on our website for more information.

### **APPLICATION METHOD**

POLY-CRETE SL is applied to a properly prepared area at 55 SF/kit using a 1/2" "V" notched squeegee. The freshly placed material is then loop rolled into which F-60 quartz aggregate is broadcast to excess. Allow a minimum of 6 hours for the Base Coat to cure before sweeping. Apply DUR-A-GARD S/L at 60 mils in the same color as the specified ARMOR-TOP. Finish with a top coat of pigmented ARMOR-TOP.

### **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.

### **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 on our website for complete details.

### **CHEMICAL RESISTANCE**

HYBRI-FLEX ES has excellent resistance to organic and inorganic acids, alkalis, fuel and hydraulic oils, as well as aromatic and aliphatic solvents. Refer to the Chemical Resistance Chart on our website or consult with our technical staff for non-listed materials.

## **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 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

## **HYBRI-FLEX ES**

### **TECHNICAL INFORMATION**

<b>Physical Property</b>	<b>Test Method</b>	<b>Result</b>
Hardness (Shore D)	ASTM D-2240	75-80
Compressive Strength	ASTM D-695 ASTM C-579	17,500 psi 12,500 psi
Tensile Strength	ASTM D-638 ASTM C-307	4,000 psi 2,600 psi
Tensile Elongation	ASTM D-638	7.50%
Flexural Strength	ASTM D-790 ASTM C-580	6,250 psi 4,500 psi
Flexural Modulus of Elasticity	ASTM D-790	6.2 x 10 <sup>5</sup>
Linear Expansion	ASTM D-696	2 x 10 <sup>-5</sup>
Bond Strength to Concrete	ASTM D-4541	400 psi substrate fails
Indentation	MIL D-3134	.025 MAX
Impact Resistance	ASTM D-2794	>160
Water Absorption	ASTM D-570	0.04%
Heat Resistance Limitation		140°F - 200°F
Flammability	ASTM D-635	Self Extinguishing
Critical Radiant Flux	ASTM E-648	Class I
Noise Reduction Coefficient	ASTM C-423	0.05
Taber Abrasion Resistance A&B	ASTM D-4060, 1000 g load, 1000 cycles, CS-17 wheel after full cure	<u>Gloss Finish</u> w/grit - 4 mg. loss no grit - 10 mg loss <u>Satin Finish</u> w/grit - 8 mg loss no grit - 12 mg loss
Static Coefficient of Friction*	ANSI B101.1	>0.6
Dynamic Coefficient of Friction - Wet*	ANSI A326.3	>0.42
VOC Content		5 g/L; pigmented Armor Top <100 g/L

\*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