

## POLY-CRETE HF

### **DESCRIPTION**

POLY-CRETE HF is a 100% solids, aromatic, cementitious urethane system. It is a pigmented, trowel applied floor system. POLY-CRETE HF is designed to withstand aggressive chemical and thermal attack while providing abrasion resistance. An optional, integral cove base is available. Please contact DUR-A-FLEX for POLY-CRETE WR and POLY-CRETE TF product data sheets.

### **BENEFITS**

- Low Odor
- Co-efficient of thermal expansion similar to concrete
- Superior Adhesion
- Superior Chemical Resistance
- Easy Maintenance
- Thermal Shock Resistant
- Tolerates Dampness
- No Topcoat Required
- Self Priming in most Installations
- Meets USDA, FDA, OSHA standards

### **COLORS**

POLY-CRETE HF is available in Grey and Red.

### **TYPICAL USES**

POLY-CRETE HF is designed to protect concrete from chemical attack, corrosion, impact and thermal shock. Repeated exposure to hot oil or steam does not cause pitting, cracking or crazing. Typical areas of application:

<ul style="list-style-type: none"> <li>• Chemical Processing</li> <li>• Food Processing Areas</li> <li>• Cook / Chill Areas</li> </ul>	<ul style="list-style-type: none"> <li>• Bottling Areas</li> <li>• Sanitize / Wash Areas</li> <li>• Plant Vehicle Aisles</li> </ul>
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### **SURFACE PREPARATION**

Substrate must be profiled, free of standing water, clean, oil free, and sound. Shot Blasting/Scarfing is recommended. To ensure that the finished system remains fully bonded to the substrate, it is recommended that edges of the floor area adjoining the walls be keyed to produce a cross section of 3/4" deep by a 1/2" wide, running at 6" from and parallel to the wall. Typical Moisture levels should be no greater than 85% RH (Relative Humidity). Please refer to the master "Surface Preparation Guide" for more information.

### **APPLICATION METHOD/SPREAD RATE**

POLY-CRETE HF is trowel applied at 1/4 to 3/8 inch thickness. The resin and hardener should be added to a forced circulation pail mixer and pre-blended for approximately 30 seconds. Gradually add aggregate until homogenous mix is attained. (Approximately 1 minute) Trowel, level and lightly roll with a 3/8-inch nap roller to eliminate trowel marks and to bring the resin to the surface. For maximum slip resistance in wet areas, broadcast #24 aluminum oxide or Q-Rock #3 into the wet resin.

### **LIMITATIONS**

This product is best suited for application in temperatures between 45° F and 85° F. Substrate must be clean, sound and dry.

### **STORAGE CONDITIONS**

POLY-CRETE HF must be stored dry. Exposure of the aggregate to moisture for extended periods will cause lumps. Exposure of the hardener to water will lead to pressure build up from carbon dioxide generation. Do not reseal containers contaminated with moisture. Do not store near open flame or food. The shelf life is 6 months from ship date in the original unopened container.

### **PACKAGING**

POLY-CRETE HF is available in pre-measured kits which cover 18 Sq Ft at a 1/4 inch thick or 12 Sq Ft at 3/8 inch thick.

### **CHEMICAL RESISTANCE**

This product is resistant to many common chemicals. Please refer to the master "Chemical Resistance Chart" for actual resistance to specific chemicals/reagents.

### **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.

## POLY-CRETE HF

### TECHNICAL INFORMATION

Cure Time @ 70° F		
Light Traffic	6-8 hours	
Light wheel traffic	12 - 16 hours	
Full Service	3 - 5 days	
Color	Red or Grey	
Mix Ratio (by volume)	3 Component Kit	
Pot Life - 1 gallon @ 77°F	15 minutes	
Adhesion to Concrete	> 400 psi, concrete fails before loss of bond	
Service Temperature	-100 F to 220 F (live steam)	
Toxicity	Sensitized individuals do not install or inhale vapor	
Physical Property	Test Method	Result
Hardness (Shore D)	ASTM D-2240	85
Compressive Strength	ASTM C-579	8,565 psi
Tensile Strength	ASTM D-638	950 psi
Impact Resistance @ 125 mils	ML D-3134	Pass
Flexural Strength	ASTM D-790	3,300 psi
Abrasion Resistance CS17 Wheel 1000 GM Load 1000 Cycles	ASTM D-4060	5 mg loss
Coefficient of Friction Standard Slip-Resistant	ASTM D-2047	0.9

\* Pot life is shorter at higher temperature. Do not use below 45°F or above 85°F

### MOISTURE CONCERNS

Moisture vapor transmission in the slab should be measured prior to application of polymeric systems to ensure a long lasting, durable installation. Typical Moisture levels should be no greater than 85% RH (Relative Humidity). Please refer to the master “**Moisture Assessment Guide**” for more information.

### 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.

### 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**”.

### CAUTION

Workers should wear protective clothing consisting of splash-proof goggles, impermeable gloves and, where exposure limits are exceeded, organic vapor respirators. Adequate cross ventilation should be provided. **Any worker with prior sensitization should not be exposed to this product. Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed. KEEP OUT OF REACH OF CHILDREN.**

*Before using any DUR-A-FLEX, Inc. product, be sure the Material Safety Data Sheet is read and understood.*