



## POLY-CRETE HF

### DESCRIPTION

POLY-CRETE HF is a 100% solids, aromatic, cementitious urethane system. It is a pigmented, trowel applied floor system. It is typically applied 1/4 -3/8 inch thick depending on design requirements. POLY-CRETE HF is designed to withstand aggressive chemical and thermal attack while providing abrasion resistance. An optional, integral cove base is available.

### 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
- Thermal Shock Resistant
- Wide Service Temperature, -100 to 220°F
- No Topcoat Required
- Self Priming in most Installations
- Can be installed with moisture levels up to 20 lbs/1,000 sf/24 hrs
- Accelerator can be added to aid in cure at low temperatures.
- 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 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:

- Chemical Processing
- Food Processing Areas
- Cook / Chill Areas
- Spalled Joint Repair
- Bottling Areas
- Sanitize / Wash Areas
- Plant Vehicle Aisles

### COLORS

POLY-CRETE HF is available in 8 standard colors. Refer to Poly-Crete Color Chart.

### PACKAGING/STORAGE

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

Substrate must be profiled, free of standing water, clean, oil free, and sound. Shot Blasting/Scarifying 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 running at 6" from and parallel to the wall. Typical Moisture levels should be no greater than 99% RH (Relative Humidity). Please refer to the master Surface Preparation Guide on our website 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 or #36aluminum oxide or Q-Rock #3 into the wet resin. As an option, a coat of POLY-CRETE Color-Fast can be applied to prevent ambering.

### 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 specifications.

### 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.

# **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	Refer to Poyl-Crete HF Color Selector Chart
Mix Ratio (by volume)	3 Component Kit
Pot Life - 1 gallon @ 70°F	15 minutes
Adhesion to Concrete	> 400 psi, concrete fails before loss of bond
Service Temperature	-100 to 220°F (live steam)
<b>Physical Property</b>	<b>Test Method</b> <b>Result</b>
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 1,000 Cycles	ASTM D 4060      5 mg loss
Coefficient of Friction Standard Slip-Resistant	ASTM D 2047      (Passes ADA recommendations) 0.9
VOC Content	0 g/L
Indoor Air Quality	Compliant to CA 01350

### **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](http://www.dur-a-flex.com) for complete details.

### **CHEMICAL RESISTANCE**

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

### **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.

### **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.*