

**HEF – OL (OVERLAY)**  
**1/4 INCH ECONOMICAL SLOPE-TO-DRAIN MORTAR SYSTEM**  
*Industrial Resin & Aggregate Flooring System*

**PRODUCT DESCRIPTION**

HEF - OL (Overlay) Economical Mortar System is 100% solids epoxy resin and naturally occurring aggregate flooring system. It is installed at a nominal thickness of 1/4 Inch or greater.

HEF – OL System is available in clear and 16 standard colors. It can be installed by either hand trowel or by power trowel. It is normally grouted, however for some installations it may be unnecessary. Optional clear or pigmented epoxy grout and topcoats will provide a smooth surface when desired.

HEF – OL System is a durable and moderately chemical resistant flooring system. This industrial flooring system is ideal for most light, medium and heavy duty industrial installations where a durable, seamless and moderate chemical resistant underlayment or sloping system is required.

**TYPICAL USES**

- Bottling Plants
- Manufacturing Plants
- Industrial Plants
- Steel Wheel Areas
- Ramps
- Loading Docks
- Halls
- Corridors
- Traffic Aisle Ways
- Garages

**ADVANTAGES**

- Meets or Exceeds USDA, FDA, OSHA and LEEDS Requirements
- Available in Clear and Standard Colors
- Durable and Long Lasting
- Texture is Smooth to Slightly Textured
- Moderate Chemical Resistance
- Resistant to Algae, Fungi, Mildew & Mold (*does not promote bacterial growth*)
- Resistant to Mechanical Wear
- Heat Resistant Exposure Continuous @ 120°F  
*Dependant on Product Choice*

**BENEFITS**

- Stain Resistant
- Easy to Clean
- Good Color Stability
- Durable
- Low Viscosity

**LEVELS**

- **Level I** “HEF Underlayment Clear”

General Purpose Clear. Not Intended for Topcoats.

Acetic Acid <50%  
Formaldehyde Solution <3%  
Phosphoric Acid 10%  
Tannic Acid 20%

- **Level II** “HEF Underlayment Pigmented”

General Purpose Pigmented. Not Intended for Topcoats.

Acetic Acid <50%  
Formaldehyde <3%  
Phosphoric Acid 10%  
Tannic Acid 20%

*Chemical Resistant Levels Note: See Hallemitte Chemical Resistance Guide for a complete list of products and their designated chemical exposure information.*

## TYPICAL PHYSICAL PROPERTIES

Physical Property	Test Method	Result
Tensile Strength	ASTM D 638	5,000 psi
Tensile Strength	ASTM C 307	2,650 psi
Compressive Strength	ASTM D 695	17,520 psi
Compressive Strength	ASTM D 579	12,900 psi
Bond Strength To Concrete	ASTM D 4541	>400 psi
Shear from Steel Plate	MIL D 3134	1,050 psi
Impact Strength	MIL D 3134 No Chipping, Cracking or Delaminating	Passing
Hardness	ASTM D 2240 Shore D	75 - 80
Elevated Temperature	MIL D 3134	No Slip or Flow
Electrical Conductivity		Non-Conductive
Flexural Strength	ASTM D 790	6,300 psi
Flexural Strength	ASTM C 580	4,550 psi
Linear Expansion	ASTM D 696	$2 \times 10^{-5}$
Indentation	MIL D 3134	.025 Max
Abrasion Resistance	ASTM D 4060 CS 17 Wheel 1000 Grain Load, 1000 Cycles	23 mg
Coefficient of Friction Smooth	ASTM D 2047	0.7
Water Absorption, max	ASTM D 570	0.04%
Flammability	ASTM D 635	Self Extinguishing
Flame Spread NFPA-101	ASTM E 84	Class A
Anti-Microbial Resistance	ASTM G 21	Passes
Toxicity		Non-Toxic USDA Approved
VOC Content		Zero

(Note: Pot Life is shorter at higher temperatures. Do not use below 55°F or above 95°F.)

## SLIP RESISTANCE & CLEANABILITY

Normally, the smoother the finished surface, the easier the coating or flooring system is to clean. The more aggressive or textured flooring system will offer a greater degree of skid inhibition, but is usually more difficult to clean.

## CLEANING AND DISINFECTING

Cleaning and disinfecting compounds and cleaning techniques may affect the color, the gloss, or texture of a polymer coating or flooring system. As a precautionary step, Hallemite recommends that the end user test the cleaning and disinfecting compounds on a sample or small finished area utilizing the intended cleaning technique prior to cleaning the entire surface area.

If no deleterious effects are observed, the procedure can be continued. However, if the cleaning and disinfecting compounds or cleaning technique damage the color, the gloss, or texture, modification of the materials and/or procedures are required. For more information contact the Hallemite's Technical Service Department or refer to Hallemite's Maintenance Guideline for Epoxy Flooring Systems.

### LIMITED WARRANTY (abridged)

Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of the system or product. No express warranty is made by the seller or manufacturer with respect to the results of any use of the product. NO IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO AN IMPLIED WARRANTY OF MERCHANTABILITY, OR AN IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE MADE WITH RESPECT TO THIS SYSTEM or PRODUCT. Neither seller nor manufacturer assumes any liability for personal injury, loss, or damage resulting from the use of this product. In the event that the product shall prove defective, buyer's exclusive remedy shall be as follows: Seller or manufacturer shall, upon written request of buyer, replace any quantity of the system or product which is proven to be defective, or shall, at its option, refund the purchase price for the system or product upon return of the system or product.

(See Hallemite Price Schedule for full limited warranty)

SPECIAL NOTE: The Company reserves the right to alter or discontinue the system/product described herein at any time without prior notice.

## SURFACE PREPARATION

This product requires preparation in order to perform as expected. Substrate must be profiled, clean, sound and dry. Please refer to the master "Guideline Instructions for Concrete Substrate Surface Preparation" for more information.

## APPLICATION METHOD/SPREAD RATE

Apply with a roller, squeegee or trowel. See installation instruction sheets for a complete guideline.

## CONCRETE MOISTURE CONCERNS

Moisture vapor transmission in the slab should be measured prior to application of polymer systems to ensure a long lasting, durable installation. Please refer to the master "Guideline Instructions for Concrete Substrate Surface Preparation – Appendix B" for more information.

## LIMITATIONS

This product is best suited for application in temperatures between 55°F and 95°F. Substrate must be clean, sound and dry.

## GUIDELINE SPECIFICATIONS

Refer to the master "Specifiers Guide" for a three part specifier's guideline.

## DRAWINGS AND DETAILS

Standard engineered drawings and details are available for drains, coves, transitions, etc. Please refer to the "Useful Information" section of the Hallemite product book for actual drawings.

## PACKAGING

- 1 Gallon Cans, 5 Gallon Pails and 55 Gallon Drums

## CAUTION

Follow the SDS for proper personal protective equipment to use when handling the product. Use only as directed. KEEP OUT OF REACH OF CHILDREN.

HEF – OL/04