



## HOT-APPLIED MEMBRANE SYSTEM: PRIMER NO. 47 AND ASPHALTIC MEMBRANE NO. 85

The Sauereisen Hot-Applied Membrane System includes Primer No. 47 and Asphaltic Membrane No. 85. These products are installed as a system to form a flexible acid-alkali-, and water-resistant barrier between acid brick or monolithic sheathing and concrete substrates.

Benefits of the Asphaltic Membrane are two-fold. It not only protects concrete against chemical attack, but isolates masonry linings and monolithics from structural movement of the underlying substrate. The No. 47/85 system offers proven, long-term service in concrete tank and floor construction in the steel, chemical, food & beverage, refining, and pulp & paper industries.

For those applications where strong oxidizing acids are present, Sauereisen Sheet Membrane System No. 90/91 is preferred.

All Sauereisen membranes are designed to be used in a corrosion resistant system incorporating expansion joints and either monolithic or brick and mortar linings.

### CHARACTERISTICS

- A dependable and economical hot-applied protective membrane system.
- Excellent acid and alkali (pH 0-12) as well as water resistance.
- Proven long life under acid-brick and monolithics in concrete tank and floor applications.
- Quickly and easily applied.

### AREA PREPARATION

#### Temperature of Working Area

Maintain a minimum temperature of 60°F on No. 47 material, air, and concrete substrate during mixing, application and cure. Dew point of air must also be monitored and substrate temperature must be maintained at least 5°F above dew point.

### PHYSICAL PROPERTIES

(Asphaltic Membrane No. 85)

Ash	0.2%
Color	Black
Ductility	0.91 in (2.3 cm)
Flash point	500°F (260°C)
Melting point ( ball & ring)	210° to 230°F (99°-110°C)
Penetration	
at 32°F (0°C), 200g-60 sec	0.28-0.60 in. (7-15 mm)
at 77°F (25°C), 100g-5 sec	0.60-1.00 in. (15-25 mm)
at 115°F (46°C), 50g-5 sec	2.95 in. max. (75 mm max.)
Specific gravity at 77°F (25°C)	0.95-1.10

Physical properties were determined on specimens prepared under laboratory conditions using applicable ASTM procedures. Actual field conditions may vary and yield different results; therefore, data are subject to reasonable deviation. Data should not be used for specification purposes.

#### Surface Preparation

**Concrete:** Refer to SSPC-SP13/NACE 6 "Surface Preparation of Concrete" for detailed guidelines.

Concrete should be free of laitance, oil, grease and other contaminants that may inhibit the bond of the No. 47/85 system. Chemical cleaning is recommended.

**New Concrete** - The concrete must be dry, firm and structurally sound as specified by the architect/engineer. All voids should be filled with Sauereisen substrate repair materials such as Underlayment No. F-120 or Filler Compound No. 209.

**Old Concrete** - Abrasive blast or hydroblast surfaces to remove attacked concrete and obtain a firm surface. All structural cracks should be repaired, slopes reestablished and voids filled with Sauereisen Underlayment No. F-120 material. Concrete must be dry, firm and structurally sound as specified by the architect/engineer prior to Primer No. 47 application.

### APPLICATION

#### Installation

##### Primer No. 47

No. 47 should be thoroughly re-mixed and applied in a single liberal coat by brush, roller or spray with conventional or airless equipment.

##### Membrane No. 85

Melt No. 85 in a clean roofer's kettle at 275°-300°F. Melting can be aided by breaking the solid material with a hand ax or hatchet.

Once Primer No. 47 is completely dry to the touch and after No. 85 is completely melted, apply No. 85 while hot in thin coats to the desired thickness using masonite plyboard or a squeegee. The first coat will often develop bubbles as the hot material expands air in the porous concrete substrate; subsequent applications will redissolve the bubble domes and fill in any void areas. Successive layers of No. 85 should be applied to build to desired thickness as follows:

- (a) 1/8 inch thickness under Sauereisen monolithics
- (b) 1/4 inch thickness under acid-brick in floor applications
- (c) 3/8 inch thickness in all immersion areas

The Asphaltic Membrane No. 85 will ignite when overheated. If this occurs, simply cover, remove heat and allow to cool. Do not use water to extinguish flames. No. 85 should always be reinforced with Asphalt-Impregnated Glass Cloth No. 45 for immersion conditions, high-temperature environments and elevated floors. Reinforcing on grade floor elevations is optional, but is recommended at stress points (i.e., junction of floors and walls, high points of floor, concrete construction joints). Glass cloth reinforcement should be applied while No. 85 is in liquid state.

## COVERAGE

*Primer No. 47*

200 ft<sup>2</sup> per gallon

*Glass Cloth No. 45*

Approximately 450 ft<sup>2</sup> per roll

*Membrane No. 85*

100 ft<sup>2</sup> per 150 lbs. at 1/4 inch thickness

## CLEAN-UP

All equipment should be cleaned with kerosene or mineral spirits within one (1) hour after use and after each days use. If removal is required after cure, consult Sauereisen for recommendations.

## SETTING/CURING

*Primer No. 47*

At 70°F, tack-free drying of No. 47 occurs in 30 to 60 minutes. Membrane No. 85 may be applied over No. 47 once primer is completely dry to the touch.

*Membrane No. 85*

No. 85 is completely cured upon cooling to ambient temperature.

## PACKAGING

*Primer No. 47:*

5-gallon pail

*Glass Cloth No. 45*

3 ft. x 150 ft. roll

*Membrane No. 85*

100-lb. roll

## SHELF LIFE

Sauereisen Primer No. 47 and Hot-Applied Membrane No. 85 have a shelf life of one (1) year when stored in unopened, tightly sealed containers in a dry location at 70°F. If there is a doubt as to the quality of the materials, consult a Sauereisen representative.

## CAUTION

Consult Material Safety Data Sheets and container label Caution Statements for hazards in handling these materials.

## WARRANTY

We warrant that our goods will conform to the description contained in the order, and that we have good title to all goods sold. WE GIVE NO WARRANTY, WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE OR OTHERWISE, EXPRESS OR IMPLIED, OTHER THAN AS EXPRESSLY SET FORTH HEREIN. We are glad to offer suggestions or to refer you to customers using Sauereisen cements and compounds for a similar application. Users shall determine the suitability of the product for intended application before using, and users assume all risk and liability whatsoever in connection therewith regardless of any suggestions as to application or construction. In no event shall we be liable hereunder or otherwise for incidental or consequential damages. Our liability and your exclusive remedy hereunder or otherwise, in law or in equity, shall be expressly limited to our replacement of nonconforming goods at our factory or, at our sole option, to repayment of the purchase price of nonconforming goods.

☐ **Distributors and agents in major cities throughout the world. Consult manufacturer for locations.**

☐ **Sauereisen also produces inorganic compounds for assembling, sealing, electrically insulating and grouting.**

**SAUEREISEN** ...since 1899  
160 Gamma Drive  
Pittsburgh, PA 15238-2989 USA  
Phone 412/963-0303 Fax 412/963-7620  
www.sauereisen.com