

Sauereisen H2OPruf No. F-190 is a two component, crystalline water proofing coating for use on concrete or masonry structures to prevent water seepage through the substrate.

Application of the waterproofing kit is by masonry brush or mechanical spray equipment. No. F-190 withstands both positive and negative side pressure.

This material is specially recommended to withstand hydrostatic pressure on the negative side of below grade structures. Two coats withstand water pressure up to 69 feet of head. Three coats will seal a substrate exposed to 100 feet of water head.

Sauereisen H<sub>2</sub>OPruf No. F-190 is used to seal sumps, trenches, tanks, manholes and below grade walls in wastewater treatment, power, pulp & paper, and steel industries.

## CHARACTERISTICS

- Promotes crystalline reaction within the concrete matrix to prevent water seepage through the concrete
- Creates a highly durable barrier to water flow and seepage through concrete and masonry surfaces.
- Inorganic cementitious coating.
- Cleans up with water.
- Application by brush or spray.
- Safe to use - no VOCs.

## AREA PREPARATION

### Temperature of Working Area

Maintain a temperature of 40°-85°F on air, substrate, Powder, Liquid, and water components during mixing, application, and cure. The monolithic components and substrate should be maintained at 40°F to 85°F for 48 hours prior to beginning work.

## PHYSICAL PROPERTIES

|                                      |                                       |
|--------------------------------------|---------------------------------------|
| Application time at 70°F             |                                       |
| Working time                         | 30 minutes                            |
| Initial set                          | 8 hours                               |
| Final set                            | 24 hours                              |
| Components                           | 2 parts, in addition to water         |
| Thickness                            | 1/16 inch (63 mils) per coat          |
| Bond strength to concrete            | Concrete failure                      |
| Color                                | Gray                                  |
| Compressive strength (ASTM C-109)    | 5,300 psi (372.6 kg/cm <sup>2</sup> ) |
| Density (ASTM C-905)                 | 131 pcf (2.1 gm/cm <sup>3</sup> )     |
| Hydrostatic pressure (ASTM C 497-70) | 69.2 ft water head (30 psi)           |

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.

At temperatures below 60°F setting is retarded.

Above 85°F, the material working time decreases. It is recommended that the material components be stored in a cooler area prior to mixing.

### Surface Preparation

Concrete or masonry must be firm and structurally sound as specified by the architect/engineer. Surfaces should be made free of oil, grease, water, and other contaminants that may inhibit bond. This can be achieved by chemical cleaning. All structural cracks must be repaired. Abrasive blast or high-pressure water blast concrete to remove laitance and obtain uniform surface texture. Substrate should be saturated and remain damp prior to application.

If chemical cleaning is utilized to remove contaminants, substrate must be neutralized. If abrasive or high-pressure water blasting is used as the method of surface preparation, all sand and/or debris must be removed by thoroughly vacuuming the area with an industrial vacuum cleaner. If surface does not have desired conditions, repeat surface preparation procedure.

### Stopping Active Leaks

After surface cleaning, all visible pressure leaks must be sealed using Sauereisen InstaPlug™ No. F-180, or No. F-370 Hydroactive Polyurethane Grout.

### Patching

In areas where voids exist, patching should be completed using Sauereisen Underlayment No. F-120. In the areas to be patched, all cracked or disintegrated material shall be removed to expose a sound substrate. Repair materials shall be applied in accordance with manufacturer's instructions.

## APPLICATION

### Mixing

Mixing should be done mechanically with a slow-speed, paddle-type mortar mixer or a drill motor with a "Jiffy" type blade. Place five quarts of potable water in a clean mixing container. Vigorously shake the 16 ounce container of inorganic copolymer admixture Liquid and add to the mixing water. Mix this solution well.

Slowly add the Powder and mix for three minutes to achieve a uniform slurry. When spraying or applying in the presence of higher temperatures, add up to an additional quart of cold water.

### Installation

**Brush application** - Using a masonry brush, liberally apply and work the first coat into the surface to a thickness of 1/16 inch (63 mils). After the first coat has taken an initial set, (min. 1.5 hours depending on temperature) the second coat can then be applied at the same thickness.

**Spray application** - apply a uniform coat to a minimum thickness of 1/8 inch (125 mils). The total thickness is not to be greater than 1/4 inch. Immediately use a masons brush to produce a more uniform finish.

The following equipment is typically used for spray application:

Pump - Quikspray Carousel Pump Model #1020CEM-3 with 1 h.p. variable speed electric motor OR RFI parastaltic pump Model #RS - 45.

Material hose - one inch or 3/4 inch I.D. rated at 6,000 psi minimum.

Gun - follow pump manufacturer's recommendation with a minimum 1/8 inch orifice.

Attachments - affix the material supply hose directly to the pump outlet. No screens, filters or surge tanks shall be used between the pump and nozzle. Moisture traps are recommended.

## SETTING/CURING

Proper curing of the materials is critical to the serviceability of the completed structure. Sauereisen H<sub>2</sub>OPruf No. F-190 has an initial set at 70°F in 8 hours. Final set at 70°F is in 24 hours.

## COVERAGE

**Concrete** - first coat is 80 to 100 ft<sup>2</sup> at 1/16 inch thickness. Second coat is 100 to 120 ft<sup>2</sup>.

**Concrete block** - first coat is 70 to 80 ft<sup>2</sup> at 1/16 inch thickness. Second coat is 85 to 100 ft<sup>2</sup>.

**Brick** - first coat is 70 to 90 ft<sup>2</sup> at 1/16 inch thickness. Second coat is 90 to 110 ft<sup>2</sup>.

**Spray application** is 25 to 50 ft<sup>2</sup> in one coat.

Quantities do not include losses incurred during application or normal density variations.

## SHELF LIFE

Sauereisen H<sub>2</sub>OPruf No. F-190 has a shelf life of one (1) year, when stored in unopened, tightly sealed containers in a dry location at 70°F. Avoid freezing. 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.

## PACKAGING

One kit of H<sub>2</sub>OPruf No. F-190 weighs approximately 52 pounds and consists of:

Powder - 50 pound bag.

Liquid - One 16-ounce bottle.

## CLEAN-UP

All equipment should be cleaned by scrubbing with a stiff brush and water at the end of each working period or when buildup becomes pronounced.

## 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 non-conforming goods at our factory or, at our sole option, to repayment of the purchase price of non-conforming goods.

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