



SEWERGARD® 210 XHB

PHYSICAL PROPERTIES

Abrasion Resistance @ 28 days (ASTM D4060, Taber Abraser, 1,000 gram load, 500 cycles)	19.3 mg average loss
Bond strength to concrete (ASTM D7234)	Concrete failure
Compressive strength (ASTM D695)	16,000 psi
Components	2 parts
Tensile Elongation (ASTM D638)	5%
Flexural Strength (ASTM D790) @ 28 days	8,000 psi (562.4 kg/cm ²)
Max.service temperature (Dry)	150°F (65°C)
Mix Ratio (By Volume)	1 Part A-(Hardener) : 3 Parts B-(Resin)
Modulus of elasticity (ASTM D790)	7 x 10 ⁶ psi
Permeability (ASTM E96)	8.06 x 10 ⁻⁹ (g/m·s·Pa)
Shore D Hardness (ASTM D2240)	89
Tensile Strength (ASTM D638)	4,500 psi

* All values determined @ 7 days unless otherwise noted

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.

Sauereisen SewerGard® 210XHB is a protective lining specifically formulated for municipal wastewater environments. SewerGard® 210XHB provides a chemical-resistant barrier for concrete, masonry, brick, and steel substrates.

As a 100% solids epoxy polymer 210XHB is specified to protect infrastructure throughout the wastewater industry. SewerGard® 210XHB is a fast setting, high strength lining that enables high build capabilities. Applications range from manholes and lift stations within the collection systems to tankage, structural steel, digesters, clarifiers, and secondary containment at treatment plants.

Installation of SewerGard® 210XHB is completed using plural component spray equipment.

CHARACTERISTICS

- ☐ Can be applied to surface saturated dry concrete (SSD).
- ☐ Color: SewerGard Beige for greater light reflection.
- ☐ Cured lining will prevent inflow & infiltration
- ☐ High Strength 16,000 psi.
- ☐ Resistant to hydrogen sulfide, sulfuric acid, MIC and treatment chemicals.
- ☐ Smooth finish - aids wash down and prevents debris accumulation.
- ☐ Installed thickness up to 300 mils in a single coat
- ☐ User friendly by plural component spray equipment.
- ☐ Zero VOC's, 100% solids

AREA PREPARATION

Temperature of Working Area

The substrate temperature must be at least 5°F above the dew point.

At temperatures below 60°F, curing is prolonged.

Application in direct sunlight and rising surface temperature may result in blistering of the materials due to expansion of entrapped air or moisture in the substrate. If temperatures are rising, it may be necessary to postpone the application and apply during cooler hours. It may be necessary to utilize a primer to mitigate offgassing.

Surface Preparation

Metal - Abrasive blast to a minimum 2.5 mil profile employing SSPC-SP5/NACE 1 White Metal Blast for immersion and SSPC-SP10/NACE 2, Near White Metal Blast for other service conditions.

All welds must be continuous, free of flux and have a smooth rounded radius without any sharp edges or ground flat in accordance with SSPC/NACE Standard Practices.

Concrete - Refer to SSPC-SP13/NACE 6 "Surface Preparation of Concrete" guidelines. Surface should be profiled to an ICRI CSP 4-6 per ICRI 310.2.

For All Concrete Surfaces

Surfaces should be made free of oil, grease, and other contaminants that may inhibit bond. This can be achieved by chemical cleaning. Abrasive blast or high-pressure water blast concrete to remove laitance and obtain uniform surface texture exposing fine aggregate. Restore the substrate as needed to provide an appropriate specified surface profile.

New & Old Concrete - Surface should be floated free of ridges or depressions and all voids shall be filled with an appropriate Sauereisen RestoKrete® underlayment product. Mechanical methods should be utilized to remove old paints, protective coatings, and deteriorated concrete.

The choice of underlayment will depend on the conditions of the concrete. Stop active water leaks with Sauereisen Insta-Plug™ F-180 or Hydroactive Urethane Grout F-370 prior to the coating installation. To assure material compatibility, all voids should be filled with Sauereisen RestoKrete® Substrate-Resurfacer F-121, Sauereisen RestoKrete® Epoxy Modified Cement Mortar 208 or RestoKrete® Filler Compound 209.

Consult Sauereisen for proper substrate restoration materials recommendation.

Do not add any solvent, additive, or adulterant to any component or mixed material.

INSTALLATION

Application Only by Plural Component:

Premix Hardener Part A and Resin Part B separately for 2 minutes, before using.

Plural Component Spray

Applications:

Mix Ratio (By Volume)

1 Part A-(Hardener) : 3 Parts B-(Resin).

Recommended equipment for plural component spray of Sauereisen SewerGard® 210XHB include variable ratio pumps or fixed ratio pumps 3 : 1, with recirculation and heating capabilities. It may be necessary to utilize heated hose lines and hoppers.

Heating the resin and hardener to the following temperature is required.

Part A (Hardener) -	120-130°F
Part B (Resin) -	120-130°F

Please consult Sauereisen for information and equipment required for spraying via plural component.

PLURAL COMPONENT SPRAY EQUIPMENT

* Remove all filters including the filter from the surge tank

Water Trap: - must be placed on the air line at least 50' from the air compressor.

Gun - Graco XTR-7 or equivalent.

Gun tip - Gun tip - Use Tip Housing Part No. XHD[1]001 with Graco Reversa Tips MDL No. XHD with orifices of 0.019 to 0.025 inch tip works best. Larger alternative tip sizes may be suitable as well.

Static mixers - two static mixers should be used, one 12" static mixer (24 turn) directly attached to the mixing block and a second 6" static mixer between the material hose and the whip.

Material hose - 6' whip end, 1/4" i.d.; working pressure 5,000 psi, 16,000 psi burst.

Material hose (Between the pump and remote mix manifold) - 0-50' overall, 3/8" i.d. for the Resin and 1/4" i.d. for the hardener, working pressure 4,000 psi, 16,000 psi burst.

Air compressor - 180 ft³ per minute at 100 psi, minimum.

FILM THICKNESS

SauereisenSewerGard® 210XHB is a 100% solids epoxy with zero shrinkage. The dry film thickness (DFT) is expected to be the same as the wet film thickness (WFT). The recommended thickness is up to 300 mils in a single coat. Greater thickness can be achieved by additional coats within 24 hours.

Note: The application thickness and the number of coats required to achieve the specified thickness may vary with surface conditions, application method, application equipment and exposure. *Consult Sauereisen for details*

COVERAGE

Depending on type of application equipment, SewerGard® 210XHB can be applied up to 300 mils per coat.

- 12.8ft² per gallon at 125 mils
- 6.4 ft² per gallon at 250 mils

Coverage is theoretical and will vary depending upon surface conditions, porosity, application techniques and specific project conditions.

SETTING/CURING

Working Time: In the event of a work stoppage, equipment (including hoses, mixing block, spraygun and other components) containing mixed material should be thoroughly flushed with solvent within 10 minutes. "

Re-Coat Time:

Up to 24 hours @ 70°F

Chemical Exposure / Immersion:

12 hours @ 70°F
24 hours @ 35°F

After 210XHB has sufficiently cured, a holiday detector should be utilized to ensure a continuous pinhole-free lining. Consult a Sauereisen representative for details.

SHELF LIFE

Sauereisen SewerGard® 210XHB has a shelf life of one year. Store in unopened, tightly sealed containers in a dry location at 70°F. Avoid freezing. If there is doubt as to the condition of the materials, consult a Sauereisen representative.

PACKAGING

Sauereisen SewerGard® 210XHB is packaged in 15-Gallon (Large) units and 200 Gallon (Bulk) Units.

Unit Size

Large Unit (L): = 15 gallons

Part A - Hardener- 30.4 pounds is packaged in a 5-gallon metal pail

Part B - Resin -3 / 40.1 pound each packaged in 5-gallon plastic pails.

****Total weight for materials only in a Large(L) unit is 150.70 lbs.**

Bulk Unit = 200 Gallons

Part A - Hardener: 405 lbs. is packaged in a 55-gallon metal drum

Part B - Resin: 3 /55 gallon metal drums at 535 lbs each .

****Total weight for materials only in a BULK Unit unit is 2,010 pounds.**

Weight does not include shipping materials such as metal or plastic pails & drums, pallets and wrapping materials.

*** Materials are packaged by weight**

CLEAN-UP

All equipment should be cleaned with MEK or equivalent before material cures.

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.**

☐ **Information concerning government safety regulations available upon request.**

LEGAL NOTICE

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