SAUEREISEN

SELF-LEVELING EPOXY NOS. 201/228 SL

PHYSICAL PROPERTIES	General Purpose No. 201SL	Epoxy Novolak No. 228SL
Application time		
Working time at 70°F	45 min	45 min
Initial set at 70°F	12 hours	12 hours
Bond strength to concrete (ASTM D 7234)	concrete failure	concrete failure
Compressive strength	7,000 psi	6,000 psi
Density (ASTM C-905)	11.93 lbs/gl	11.81 lbs/gl
Flexural strength (ASTM C-580)	4,000 psi	2,700 psi
Maximum service temperature (Dry)	150°F (65°C)	180°F (82°C)
Modulus of elasticity (ASTM C-580)	2 x 10^6 psi	5 x 10^6 psi
Absorption (ASTM C-413)	<0.2%	<0.2%
Shrinkage (ASTM C-531)	<0.1%	<0.1%
Tensile strength (ASTM C-307)	2,000 psi	2,000 psi
Thickness	10 - 30 mils	10 - 30 mils

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 Self-Leveling Epoxy Nos. 201/228 SL are self-leveling coating systems for flooring applications. These products offer excellent application properties and are ideal chemical-resistant flooring materials for areas where traffic is not extreme. Where skid resistance is required, various sized aggregates may be incorporated as a broadcast system.

Self-Leveling Epoxy No. 201SL - General Purpose Grade is recommended for moderate chemical exposure in a wide variety of industrial facilities. Where temperatures or chemical concentrations necessitate, the Epoxy NovolaK Grade No. 228SL offers additional protection. Consult Sauereisen chemical resistance charts.

These epoxy flooring systems should be used with an appropriate Sauereisen primer to enhance bonding. Consult Sauereisen for a primer recommendation depending on the type of substrate and surface conditions.

CHARACTERISTICS

- ☐ Resistant to a wide range of acids, alkalies and some solvents.
- ☐ Recommended for the food & beverage, chemical processing, pharmaceutical, steel, and power industries.
- ☐ 100% solids material, no noxious or toxic odors during application.
- ☐ Available colors: 53 gray, 63 tile red

AREA PREPARATION

Temperature of Working Area

The monolithic components and substrate should be maintained at 65°F to 85°F for 48 hours prior to beginning work. Maintain a temperature of 60°-85°F on air, concrete substrate and material components during mixing, application, and cure.

At temperatures below 65°F, the application becomes more difficult and curing 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.

Application in direct sunlight and rising surface temperatures may result in blistering of materials due to expansion of entrapped air or moisture in the substrate. Concrete that has been in direct sunlight must be shaded 24 hours prior to application and remain shaded until after the initial set. When the surface temperatures are rising, it may be necessary to postpone the application or apply during cooler hours.

Surface Preparation

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

Concrete must be dry, firm and structurally sound as specified by the architect/engineer. Concrete shall have a pull off strength of 200 psi or greater as tested by ACI 515.1 Appendix A. Surfaces should be made free of oil grease, and other contaminants that may inhibit bond. This can be achieved by chemical cleaning. Abrasive blast, high-pressure water blast, or acid etch concrete to remove laitance and obtain uniform surface texture resembling coarse sandpaper.

New Concrete - Concrete should be floated free of ridges or depressions and all voids filled with Sauereisen Underlayment No. F-120 or Filler Compound No. 209, depending on the severity of the voids. Too much slope will result in puddling of the coatings in low spots and insufficient coverage on the higher areas.

If acid etching is utilized as the method of surface preparation, refer to ASTM D-4260 "Standard Practice for Acid Etching Concrete" for appropriate procedure. All acid and residue must be removed prior to applying epoxy.

Old Concrete - All structural cracks must be repaired and slopes reestablished with Sauereisen Underlayment No. F-120. Concrete should be sloped a maximum 1/8 inch per foot. If existing slope is greater it will be necessary to re-slope using Underlayment No. F-120 or other appropriate underlayments. Consult Sauereisen for recommendations.

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. Repeat the procedure if necessary. If surface does not have desired texture, repeat surface preparation procedure.

EXPANSION/CONTROL JOINTS

Joints are to be provided on 14 foot centerlines and over existing expansion/control joints. Joints should also be placed around all fixed objects, peripheries of rooms and all points of movement in the base slab. Consult Sauereisen for recommendations.

APPLICATION

An appropriate Sauereisen primer should be applied prior to the epoxy coating. This will enhance bond strength. ConoWeld No. 501 is the standard Sauereisen epoxy primer for concrete. Where porosity of concrete is a concern, Sauereisen PenePrime No. 500, a deep-penetrating waterborne epoxy primer, is recommended.

Mixing

Primer - Primers are supplied in premeasured containers. Remix individual containers before using.

Packaging of Primers No. 500 and 501 consists of Hardener Part A and Resin Part B which must be mixed together. Completely empty contents of Hardener Part A into Resin Part B container. Using a slow speed 1/2 inch drill motor with a "Jiffy" type blade, mix thoroughly until blended for three minutes. Primer is ready for use immediately after mixing.

Self-Leveling Epoxy Nos. 201/228 SL- Empty contents of Hardener into Liquid and mix thoroughly until blended for at least three minutes with a "Jiffy" mixing blade and drill motor.

Mix only complete units. Material which has begun to set must be discarded. Do not try to retemper the material. Do not add solvent, additive or adulterant to any component or mixed material.

Material should be delivered to finishers immediately after mixing. Do not let material remain in the mixing vessel.

Installation

Primers - Apply primer to concrete using a squeegee. Lightly backroll the primer using a short nap adhesive roller with a nondegradable core. At 70ºF, the epoxy primers must be allowed to cure at least eight hours, but no longer than 24 hours, prior to application of Self-Leveling Epoxy. Recoat time should not exceed 24 hours.

Prior to application of the floor coating, inspect primed surface for voids, bubbles, or defects that may result in blistering or pinholes in the topcoat. Repair with Sauereisen Filler Compound No. 209 Fast Set to ensure a sealed surface.

Self-Leveling Epoxy Nos. 201/228 SL

Workers are advised to wear spiked shoes to allow freshly applied material to self-level. Pour the material in a narrow band starting at any convenient wall or joint. Apply to the desired thickness using a squeegee. Nos. 201/228 SL may be applied from 10-15 mils per coat. If necessary, 2-3 coats may be specified for a maximum 30 mil thickness. To improve the surface texture and appearance, lightly backroll using a short-nap mohair roller or spiked roller.

Optional Broadcast Systems - Pure white silica sand may be incorporated by one of two methods to provide a more skid-resistant profile. Where a very thin system is specified, sand may be broadcast into wet primer prior to the application of Self-Leveling Epoxy. Use only ConoWeld Primer No. 501 when utilizing this application method. Remove excess sand from the surface of the primer before topcoating.

An alternate method of providing skid resistance is to broadcast directly into the Nos. 201/228 SL immediately after application. After adequate cure time, excess sand must be vacuumed. A final topcoat of Self-Leveling Epoxy is recommended to seal the broadcast.

Clean white silica sand for broadcasting may be purchased from Sauereisen or sourced locally. A particle size of 30 mesh is recommended.

COVERAGE

Primers

ConoWeld 501:	200 ft^2/gal. @ 8 mils
PenePrime 500:	200 ft^2/gal. @ 8 mils

Self - Leveling Epoxies 201/228 SL:

160 ft^2/gal @10 mils

*Quantities do not include losses during application. Coverage

PACKAGING

Self - Leveling Epoxy No. 201SL

Unit Size	Part A	Part B
1 gallon	1 gal. can	2 gal. pail
3 gallon	1 gal. can	3.5 gal. pail
5 gallon	3 gal. pail	6 gal. pail

Self - Leveling Epoxy No. 228SL

Unit Size	Part A	Part B
1 gallon	1 qt. can	1 gal. can
3 gallon	1 gal. can	3.5 gal. pail
5 gallon	1 gal. can	6 gal. pail

*Containers are filled by weight, not volume. Container size does not indicate volume of contents.

CLEAN-UP

All equipment should be cleaned with MEK or N-methyl pyrol before material cures. If removal is required after cure, consult Sauereisen.

SHELF LIFE

Sauereisen Self-Leveling Epoxy Nos. 201/228 SL Liquids and Hardeners have a shelf life of one year. Store in unopened, tightly sealed containers in a dry location at 70ºF. Avoid freezing. If there is a doubt as to the quality of the materials, consult
Sauereisen.

CAUTION

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

LEGAL NOTICE

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

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...since 1899

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