



EPOXY NOVOLAK MATTE REINFORCED SYSTEM NO. 270

PHYSICAL PROPERTIES

	ConoWeld Primer No. 501	NovoMatte No. 270	Saturant No. 271
Application time			
Working time at 70°F	30 minutes	40 minutes	40 minutes
Initial set at 70°F	2 hours	18 hours	18 hours
Components	2 part	3 part	2 part
Thickness	5-10 mils	1/16" (63 mils) per coat	15 mils
Bond strength to concrete (ASTM C-478)	Concrete failure	Concrete failure	Concrete failure
Maximum service temperature		180°F (82°C)	180°F (82°C)

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.

The Sauereisen Epoxy NovolaK Matte Reinforced System No. 270 is a multiple layer, 1/8 inch thick, fiberglass reinforced lining for chemical-resistant construction of sumps, dikes, containment areas, trenches, walls, and floors. The Epoxy NovolaK Matte Reinforced System offers superior resistance to most caustics, strong oxidizing solutions, and acids, including high concentrations of sulfuric acid. The system consists of three Sauereisen materials including ConoWeld Primer No. 501, NovoMatte No. 270 and Saturant No. 271 combined with specified fiberglass mat which is purchased locally. For applications requiring the optimum standards of aesthetics and ease of cleaning, the system may be sealed with Sauereisen ConoGlaze - Epoxy NovolaK No. 228.

AREA PREPARATION

Temperature of Working Area

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

At temperatures below 60°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.

Shading the substrate and using ice water to cool mixing equipment is not uncommon. In extreme temperatures it may be necessary to postpone the application or apply during cooler hours.

CHARACTERISTICS

- Excellent resistance to splash and spillage of concentrated mineral acids, alkalis and some solvents.
- Maximum service temperature of 180°F (82°C).
- Superior tensile/flexural strengths.
- 100% solids material, no noxious or toxic odors during application.
- Low porosity.

Surface Preparation

Surfaces should be made free of oil, grease, water and other contaminants that may inhibit bond. This can be achieved by chemical cleaning.

Metal - Abrasive blast to a nominal 2.5 mil profile employing SSPC-SP10 Near White Metal Blast for immersion and SSPC-SP6 Commercial Blast for other service conditions. All welds must be continuous, free of flux and have a smooth rounded radius without any sharp edges.

Concrete - Concrete must be dry, firm, have attained 3000 psi compressive strength or be structurally sound as specified by the architect/engineer. Concrete should be floated free of ridges or depressions; all structural cracks must be repaired; voids filled, and slopes reestablished.

Abrasive blast or high-pressure water blast to remove laitance and obtain uniform sound substrate.

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 profile, repeat surface preparation procedure.

APPLICATION

Mixing

With each component of the matte reinforced system, remix contents of Hardener Part A and Resin Part B components for a minimum of 2 minutes with a slow speed paddle or "Jiffy" mixer. Add Hardener to Resin and mix for a minimum of 2 minutes until thoroughly blended. For Sauereisen NovoMatte No. 270, mix Hardener/Resin combination for 2 minutes and then gradually add Powder while mixing continuously for an additional 3 minutes.

Mix only complete batches. Material which has begun to set must be discarded. Do not try to retemper the material.

Installation

The Epoxy NovolaK Matte Reinforced System is installed in 5 steps including the following...ConoWeld Primer, a basecoat of NovoMatte, fiberglass reinforcement, Saturant, and a topcoat of NovoMatte. As an option for applications requiring a high gloss surface, a final layer of ConoGlaze No. 228 may be used. Installation steps are as follows:

Step one

Apply ConoWeld Primer No. 501 by roller to a thickness of 5-10 mils using a short nap roller with a non-degradable core. For horizontal applications, installation of the basecoat of NovoMatte may proceed immediately after placement of the Primer. For vertical applications, the Primer should be firm but tacky when the basecoat is applied.

Step two

After mixing, trowel NovoMatte No. 270 to 1/16" (approx. 110 ft² per unit) over the Primer. This layer of the system will serve as a basecoat for the fiberglass reinforcement.

Step three

Immediately press woven fiberglass matte reinforcement into NovoMatte No. 270. Apply fiberglass cloth in a uniform manner. Be careful not to wrinkle or intertwine material. Use 2" overlaps on the adjacent strips of cloth. Smooth matte reinforcement with a short nap mohair roller to eliminate air entrapment or pinholes.

Step four

After mixing, apply Epoxy NovolaK Saturant No. 271 by brush, roller or spray until fiberglass becomes translucent (approx. 100 ft² per unit). Allow installation to cure a minimum of 8 hours at 70°F before proceeding.

Step five

After Saturant No. 271 has cured, trowel a 1/16" thickness of NovoMatte No. 270 onto the surface of the applied system. Finish with a short nap roller to eliminate voids and remove trowel marks. Allow to cure at least 48 hours at 70°F prior to chemical exposure.

Step six (optional)

For applications where aesthetics or ease of cleaning is required, a sealing layer of ConoGlaze - Epoxy NovolaK No. 228 can be applied. See the ConoGlaze data sheet for further details on application and packaging. Contact Sauereisen for recommendations.

COVERAGE

ConoWeld Primer
No. 501 200 ft² per gallon at 8 mils.

NovoMatte
No. 270 A unit will cover 40 ft² at a thickness of 1/16 inch.

Saturant
No. 271 100 ft² per unit.

ConoGlaze (if specified)
No. 228 160 ft² per gallon at 10 mils

*Coverages are theoretical and will vary depending upon surface conditions, porosity, application techniques and project specific conditions.

SETTING/CURING

The Epoxy NovolaK Matte Reinforced System will take an initial set in 18 hours at 70°F. Do not allow water or chemicals on the material surface for a minimum of 48 hours. For temperatures below 70°F, cure a minimum of 72 hours prior to water or chemical exposure.

PACKAGING

ConoWeld Primer No. 501 is available in one (1) gallon and three (3) gallon kits.

NovoMatte No. 270 is packaged in a 51.6 pound unit that includes:

Liquid	(2) 1-gallon cans
Hardener	(2) 1-quart cans
Powder	(2) 3-gallon pails lined with a plastic bag

Saturant No. 271 is packaged in a 9.4 pound unit that includes:

Liquid	(1) 1-gallon can
Hardener	(1) 1-quart can

* Unitized packages are filled by weight, not volume. Container size does not indicate volume of contents. Fiberglass matte is to be purchased locally.

CLEAN-UP

All equipment should be cleaned by scrubbing with a stiff brush and xylene or MEK at the end of each working period or when build-up becomes pronounced.

SHELF LIFE

Sauereisen Epoxy NovolaK Matte Reinforced System components have 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.

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