SAUEREISEN

CONOCRETE - EPOXY NOVOLAK NO. 118

ConoCrete - Epoxy NovolaK No. 118 is a chemically-resistant, 100% solids, aggregate-filled, novolak epoxy floor system. It is ideal for resurfacing old and protecting new concrete floors from chemical and physical abuse. The physical properties of these materials far exceed those of concrete, providing a surface that not only has greater durability, but a chemical resistant barrier to the substrate.

ConoCrete may be used in numerous manufacturing, processing, storage, and shipping areas. It is specifically formulated to resist strong oxidizing environments, especially high concentrations of sulfuric acid. This skid-resistant system has the versatility for use in both refrigeration rooms and higher temperature areas.

ConoCrete - Epoxy NovolaK No. 118 meets USDA requirements for use in federally inspected meat and poultry plants.

CHARACTERISTICS

- ☐ Excellent resistance to sulfuric acid.
- ☐ Conforms to USDA requirements for use in federally inspected meat and poultry plants.
- ☐ Easily cleaned, skid-resistant surface.
- ☐ Available in colors gray 53 & tile red 63.

AREA PREPARATION

Temperature of Working Area
For optimum conditions, maintain a temperature of 60°-85°F on air, substrate, Liquid, and Hardener components during mixing, application, and cure.

The monolithic components should be maintained at 65°F to 80°F for 48 hours prior to beginning work.

At temperatures below 65°F, the application becomes more difficult and curing is retarded. Above 80°F, the material working time decreases.

PHYSICAL PROPERTIES

Application time (ASTM C-308 modified)	
Working time at 70°F	30 minutes
Components	4 part
Thickness	1/4 inch (6.35 mm)
Bond strength to concrete (ASTM D 7234)	Concrete failure
Compressive strength (ASTM C-579)	13,200 psi
Density (ASTM C-905)	129.9 pcf
Flexural strength (ASTM C-580)	5,100 psi
Maximum service temperature (Dry)	180°F (82°C)
Modulus of elasticity (ASTM C-580)	1.67 x 10^6 psi
Tensile strength (ASTM C-307)	2,700 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.

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. In rising temperatures it may be necessary to postpone the application or apply during cooler hours.

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.

New Concrete - All structures must have the necessary strength to withstand imposed loads during normal use and operation. Surfaces are to be floated free of ridges or depressions and all voids filled with Sauereisen Underlayment No. F-120 or No. 209 Filler Compound. The choice of underlayment will depend on the severity of the voids to be filled. Surfaces should be sloped a maximum 1/4 inch per foot for drainage.

Abrasive blast, high-pressure water blast, or acid etch concrete to remove laitance and obtain uniform surface texture exposing fine aggregate resembling coarse sandpaper.

Old Concrete - Concrete must be dry, firm and must have the necessary strength to withstand imposed loads during normal use and operation. Mechanical methods should be utilized to remove old paints, protective coatings, and deteriorated concrete.

Abrasive blast, high-pressure water blast, or acid etch concrete to obtain uniform sound substrate.

All structural cracks should be repaired, and all slopes reestablished with Sauereisen Underlayment No. F-120.

All prepared surfaces must be allowed to dry prior to monolithic application. Regardless of preparation method used, all surfaces must be vacuumed to remove any loose deposits or contamination.

Transition Detail "Key"
All exposed perimeter edges, including doorways, drains, traffic aisle sides, etc., must be saw cut to a minimum depth of 3/8 inch then chipped out at a 45° angle on the inside of the area to be resurfaced with ConoCrete. All saw cutting and keying should be be done prior to final surface preparation. Contact Sauereisen if more detail is required.

EXPANSION/CONTROL JOINTS

Joints are to be provided on 20 foot centerlines and over existing expansion/control joints. Joints must also be placed around all fixed objects, peripheries of rooms and all points of movement in the base slab. Consult Sauereisen for recommendations.

APPLICATION

ConoWeld Primer No. 501 is the standard primer used under normal conditions. However, for the hard to penetrate surface, PenePrime No. 500, a water-based epoxy primer, is recommended.

Mixing

Primer - Primers are packaged in pre-measured containers consisting of Hardener Part A and Resin Part B which must be mixed together before use.

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 3 minutes. Primer is ready for use immediately after mixing.

ConoCrete - Packaging consists of pre-measured unitized containers of Hardener Part A, Resin Part B, Aggregate Part C, and Pigment Part D. Remix Part A and B before combining.

Regular unit - Regular units are packaged in two (2) 20ft^2 units.

Completely empty contents of Pigment Part D and Resin Part B into a clean mixing container. Using a slow speed 1/2 inch drill motor affixed with a "Jiffy" type blade, mix thoroughly until blended to uniform color.

Add Hardener Part A to Resin/Pigment blend and mix for 2 minutes. Slowly add 2/3 of Aggregate Part C and mix until all material is wetted out. Then add remainder of Aggregate and continue mixing until uniform in consistency.

Large unit - Completely empty contents of Pigment Part D into Resin Part B container. Using a slow speed 1/2 inch drill motor with a "Jiffy" type blade, mix thoroughly until blended to uniform color.

Completely add Hardener Part A to Resin/Pigment blend and mix for 2 minutes. After mixing, add total contents into a 4 - 7ft^3 mortar mixer and add the four bags of Aggregate Part C. Mix for 4 more minutes assuring that all material is wetted out and uniform in consistency.

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

Installation

Primer - Apply primer to the concrete using a squeegee, short nap adhesive roller with a nondetatchable core, or nylon bristle brush. Prior to the application of ConoCrete, inspect the primed surface for voids, bubbles, or defects that may result in blistering or pinholes in the topcoat. Repair with Sauereisen No. 209 Fast Set if necessary.

Primer cure times vary by product. ConoCrete can be placed immediately after application of ConoWeld No. 501, but must occur within 6 hours. while the primer is wet to tacky. If recoat time exceeds six hours, consult Sauereisen.

When PenePrime No. 500 is specified, the curing window prior to placement of ConoCrete is 3 to 24 hours.

ConoCrete - Material should be placed immediately after mixing. Do not let mixed material remain in mixing vessel. Spread ConoCrete with a spreader box, screed, or by hand to desired thickness (1/4" minimum). Use steel trowel to compact and finish surface. Finishing must be completed within 30 minutes from mixing. Consult Sauereisen for power trowel directions.

COVERAGE

Primers:

ConoWeld

1 gallon unit	200 ft^2/ gal. @ 8 mils
3 gallon unit	600 ft^2/ gal. @ 8 mils

Pene Prime 200 ft^2/ gal. @ 8 mils

ConoCrete:

Regular unit	40ft^2 per unit at 1/4 inch
Large unit	100ft^2 per unit at 1/4 inch

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

SETTING/CURING

Do not allow water or chemicals on the material surface for a minimum of 24 hours. For harsh chemical or physical environments cure a minimum of 72 hours prior to exposure.

TOPCOAT

ConoCrete systems do not require a topcoat. For specific service conditions, a topcoat may be desirable. Contact Sauereisen for a recommendation and appropriate ConoGlaze topcoat for your application.

PACKAGING

Regular Unit: 110 lbs. shipping wt.

Part A	-	(2)	1-quart cans
Part B	-	(2)	1-gallon cans
Part C	-	(2)	42-pound bags
Part D	-	(2)	1-pint cans

Regular units are packaged in two 20ft^2 batches to facilitate mixing in a pail mixer.

Large Unit: 260 lbs. shipping wt.

Part A	-	(1)	1 gallon can
Part B	-	(1)	5 gallon pail
Part C	-	(4)	52.5-pound bags
Part D	-	(1)	1 gallon can

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

CLEAN-UP

All equipment should be cleaned with MEK before material cures. If removal is required after cure, consult Sauereisen for specific recommendation.

SHELF LIFE

ConoCrete has a shelf life of one (1) year, when stored in unopened, tightly sealed containers in a dry location at 70^{o}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.

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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