

## PHYSICAL PROPERTIES

Application time (ASTM C-308)	
Working time	30 minutes
Initial set	4 - 7 hours
Abrasion resistance, (ASTM C-517) 1000 cycles, 1000g.	18.1 mg
Bond to concrete	370 psi
Elongation @ yield	100%
Shore D Hardness	30 - 40
Tack free at 70 <sup>o</sup> F	11 hours
Tensile strength @ yield	1,950 psi
Thickness	20 - 60 mils wft
VOCs (Volitole Organic Compounds)	0.09 gm/L 7.5 x 10 <sup>-4</sup> lbs/gal (0.00075 lbs/gallon)
Volume Solids	100%

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.

ConoFlex Membrane No. 520 is a flexible elastomeric polyurethane combining toughness, flexibility and elongation.

Typical uses would be as a flexible membrane under a chemical-resistant coating or lining for existing or anticipated substrate cracking or primary/secondary containment structures subject to movement .

The ConoFlex system utilizes ConoWeld 501 or PenePrime 500 as a primer for concrete and other porous substrates.

## CHARACTERISTICS

- o Bridges cracks suppressing reflection cracking of flooring and overlays.
- o Permanent retention of flexibility and resistance.
- o VOC and HAP compliant.
- o Improves thermal shock resistance of installed systems.
- o Flexibility at low temperatures.

## AREA PREPARATION

**Temperature of Working Area**  
Maintain a temperature of 65<sup>o</sup>-90<sup>o</sup>F on air, substrate, Liquid and Hardener components during mixing, application, and cure.

The monolithic components should be maintained at 65<sup>o</sup>F to 90<sup>o</sup>F for 48 hours prior to beginning work. At temperatures below 65<sup>o</sup>F, the application becomes more difficult and curing is retarded. Above 90<sup>o</sup>F, the material working time decreases.

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. Concrete surfaces that have been in direct sunlight must be shaded for 24 hours prior to application and remain shaded until the initial set has taken place. 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.

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

*New Concrete* - All structures must be properly designed and capable of withstanding imposed loads.

Abrasive blast, high-pressure water blast, or acid etch concrete to remove laitance and obtain uniform surface texture.

*Old Concrete* - Concrete must be firm and structurally sound as specified by the architect/engineer. Abrasive blast, high-pressure water blast, or acid etch concrete to remove laitance and obtain uniform sound substrate.

Substrate surfaces requiring repairs of voids under 1/8 inch deep should be repaired with Filler Compound No. 209. If in excess of 1/8 inch depth should be resurfaced with Sauereisen Underlayment No. F-120 to ensure proper rehabilitation of the substrate.

## 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 501 or PenePrime 500 are the epoxy primers recommended for concrete and other porous substrates. Apply at 6-8 mils to allow to cure to slightly tacky condition before applying ConoFlex.

## Mixing

*Primer* - ConoWeld and PenePrime are supplied in premeasured containers. Remix individual containers before using.

Packaging of Primers No. 501 and 500 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.

*ConoFlex Membrane* - packaging consists of premeasured containers of Hardener Part A and Liquid Part B which must be mixed together before use. Remix Parts A and B separately before combining.

Completely empty contents of Part A into Part B container while slowly stirring. Scrape down sides of Part A container to ensure correct mix ratios. Use a slow speed 1/2 inch drill motor with a "Jiffy" blade, or equivalent, mix at least 3 minutes or until thoroughly blended.

ConoFlex is ready for use immediately after mixing. No induction period is required.

## Installation

*Primers* - Apply primer to concrete or steel using either a short nap adhesive roller with a nondegradable core, or a nylon bristle brush. For horizontal applications, pour primer onto the surface and spread with a squeegee before backrolling or brushing. Typical application thickness is 6-8 mils. Consult Sauereisen for specific details.

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

*ConoFlex Membrane* - Apply 20-60 mils wet film thickness over ConoWeld 501 or PenePrime 500 primer. ConoFlex may be rolled, brushed or applied by epoxy screed rake.

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Conoflex Membrane thickness is determined by the anticipated movement, severity of cracking, and thickness of the topcoat applied. Consult Sauereisen for a recommendation.

*Roller application* - Material should be delivered to finishers immediately after mixing. Do not let material remain in the mixing vessel. If application is for floor areas, spread the material with a squeegee to the recommended thickness.

To improve the surface texture of floor applications, lightly backroll the material with a short nap adhesive roller with a nondegradable core. For vertical application, material shall be applied at a maximum of 10 mils per coat to desired thickness. All finishing and backrolling must be completed within 30 minutes from mixing. A holiday detector should be utilized to ensure a continuous pinhole-free lining once cured.

Allow ConoFlex to cure a minimum of 12 hours at 70°F or a maximum 24 hours at 70°F before topcoating.

## COVERAGE

ConoWeld	200 ft <sup>2</sup> per gal. at 8 mils
PenePrime	200 ft <sup>2</sup> per gal. at 8 mils
ConoFlex	80 ft <sup>2</sup> per gal. at 20 mils
	26 ft <sup>2</sup> per gal. at 60 mils

Coverage is theoretical and will vary depending upon surface conditions, porosity, application techniques and specific project conditions. Consult Sauereisen for proper thickness recommendation.

## SETTING/CURING

Protect from weather and chemical exposure 24 hours at 70°F.

## PACKAGING

No. 520 is supplied as a 1 gallon unit of material when mixed. Consists of two components added at a one to one mix ratio.

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

## CLEAN-UP

All equipment should be cleaned with Xylol before material cures. If removal is required after cure, consult Sauereisen.

## SHELF LIFE

ConoFlex Membrane Part A has a shelf life of six (6) months and Part B has a shelf life of one year when stored in unopened, tightly sealed containers in a dry location at 70°F.

## 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 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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