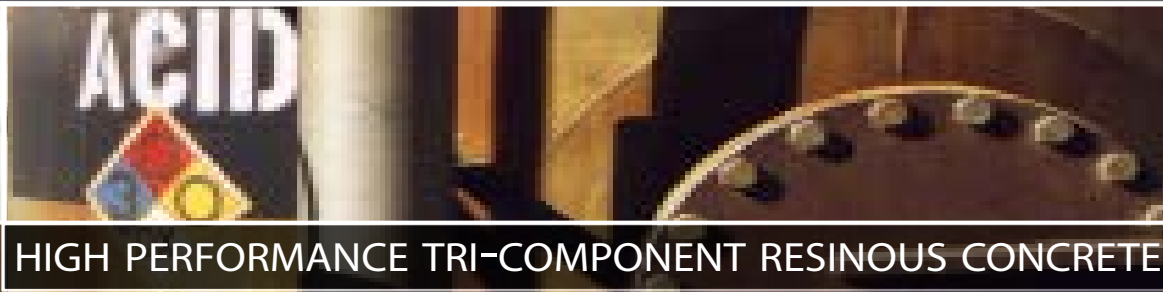




NovoKOTE POLYMER
CONCRETE
 advanced coating systems



HIGH PERFORMANCE TRI-COMPONENT RESINOUS CONCRETE

GENERAL PRODUCT DESCRIPTION

NovoKote Polymer Concrete (NPC) is an advanced high performance, three component epoxy resinous concrete. NPC is engineered to withstand the highest chemical demands of a novolac epoxy including 98% sulfuric acid (see chart below). NPC is generally applied between 1.5" to 2" nominal thickness. Its design features provide for the highest industrial demands. NovoKote Polymer Concrete has one of the highest ratios of resin to aggregate and is considered the premium system. NPC may be used in conjunction with Petra's metal anchoring reinforcement system (MARS) for added system strength and longevity. Advantages:

- Self-priming
- 100% Solids, V.O.C. Compliant
- Seamless flooring system
- Essentially odorless
- Four times harder than standard concrete
- Withstands heavy forklift traffic
- Chemical resistant
- Able to be applied over damp concrete
- Does not amine blush
- Can be applied over ten day old concrete

INDUSTRIAL APPLICATIONS

- Manufacturing Floors
- Sumps
- Aerospace
- Production Areas
- Trench and sumps
- Containment Curb
- Berms and Curbs
- Chemical Flooring
- Waste Water Treatment
- Chemical Flooring
- Secondary Containment
- Equipment Pads

PRODUCT DATA

Volumetric Ratio: 4 to 1
 Solids: 100% (+ or - 1%)
 Application Temperature: 65-90°F
 Thinning: Not required
 Pot Life: 10-15 minutes
 Working time on floor: 15-20 minutes
 Cure Time: 4 hours (walking)
 18 hours (traffic)
 Critical recoat time: 24 hours
 Shelf life: 12 months

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	13,750 psi	ASTM C 579
Flexural Strength	5,475 psi	ASTM D 790
Tensile Strength	2,400 psi	ASTM D 307
Bond to Concrete	350 psi	ASTM D 4541
	concrete fails at this point	ASTM D 4060 CS 17 Wheels
Taber Abrasion	Loss/1000 Cycles	ASTM D 4060
	26 mg	CS 17 Wheels
Water Absorption	.10% maximum	ASTM D 413
Linear Shrinkage	.01% maximum	ASTM C 531
Flammability	Self-extinguishing	ASTM D 635
Impact Resistance	16 ft. lb. - no failure	Mil-D-3134H
Coefficient of Friction	.6 minimum	ASTM D 2047
Hardness, Shore D	85	ASTM D 2240
Porosity on un-glazed finish	.00	NACE Stand TM-01-74

CHEMICAL RESISTANCE

Acetic Acid	NR	Hydrochloric Acid 37%	R
Alcohol, Ethyl	NR	Nitric Acid 30%	SS
Alcohol, Isopropyl	SS	Phosphoric Acid	SS
Aluminum Hydroxide	R	Skydrol R	R
Citric Acid	R	Sodium Bisulfate	R
Copper Chloride	R	Sodium Chloride	R
Diesel	R	Sodium Hydroxide 50%	R
Ferric Acid	R	Sulfuric Acid 98%	R

Note: The above guide is based on seven days exposure of the listed chemical at 72 degrees F (22 degrees C)
 Key: R = Recommended, SS = Splash and Spill, NR = Not Recommended.
 Above chart serves as a guideline only. Samples will be furnished upon request for testing.

NovoKOTE POLYMER CONCRETE

CONCRETE PREPARATION

Before the coating is applied, the concrete must be:

- Clean – Contaminants removed
- Profiled – Surface etched
- Sound – Cracks repaired

Mechanical methods are preferred for preparing concrete prior to coating application. Shot-blasting, diamond grinding, scarifying, and scabbling are all acceptable methods. The concrete profile should approximate 60-80 grit sandpaper after preparation.

MIXING

Ratio of NovoKote Polymer Concrete is 4 to 1. That is, four parts of A - resin, to one part of B - hardener. To mix 1/2 cubic foot, do the following with a drill and jiffler mixer.

1. Pour 64 oz. of part A in a five gallon bucket and premix for 30-45 seconds.
2. Add 16 oz. of part B and mix for another 30-45 second.
3. Mix in approximately 55 lbs. of Part C aggregate and mix for 1-2 minutes until blended.

APPLICATION PROCESS

The best method for controlling thickness during application is to map out the area first. After determining the layout and square footage of the area, calculate the required gallons of NovoKote HB (refer to above coverage chart). Next, mark off on the floor how many gallons of resin are to be used by the time predetermined points have been reached.

1. Pour mixed NovoKote Polymer Concrete onto concrete.
2. Trowel or screed rake the material until a resin mix is uniformly applied. If a screed rake is used, trowel away pin marks left by rake.
3. Use a 3/8" nap paint roller with phenolic core on an extended poll. Then lightly backroll resin, removing any unevenness left by trowel or screed rake. This generally requires the use of spike shoes, allowing one to walk in wet resin mix.
4. Wait 4-8 minutes while resin mix self-levels and a even resin surface appears.
5. Again, wearing spiked shoes, broadcast silica onto resin until resin is thoroughly covered. This method requires that silica be thrown upward over the resin. Throwing silica directly at the resin mix will result in an uneven finish. Remember to keep a 1-2 foot wet edge by not broadcasting silica into the edge where the next batch is to be applied. Otherwise, a ridge will appear in the final finish.
6. Excess silica can be swept up after about 6 hours.

COLOR SELECTION

NovoKote Polymer Concrete is available in the following colors: Black, dark gray, and tile red. Other colors are available at an additional charge.

PACKAGING

NovoKote Polymer Concrete is available in two different kit sizes:

	<u>Part A</u>	<u>Part B</u>	<u>Part C</u>
1 Cubic Feet Kit	1 gal.	1 qt.	90 lbs.
3 Cubic Feet Kit	3 gal.	3 qt.	270 lbs.

CLEANUP

NovoKote Polymer Concrete while in a liquid state may be cleaned up with water and degreaser. Otherwise a strong solvent may be required while NovoKote Polymer Concrete is setting up.

WARRANTY

Petra Polymers products are warranted for one year after date of application. Please refer to the Petra Industrial Polymer's Limited Material Warranty for additional clarification.

SAFETY

Consult NovoKote Polymer Concrete material safety data sheet. Avoid NovoKote Polymer Concrete contact with skin. Some individuals may be allergic to epoxy.



Information expressed in this data sheet is correct to the best of our knowledge. The technical data sheet does not constitute a warranty, expressed or implied as to the performance of this product. The use and application of this product is beyond our control. Warranty and liability therefore is limited to the replacement only for defective materials. Technical information is subjected to change without cause.