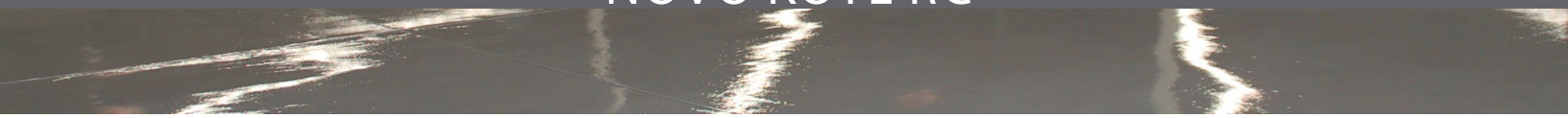
PRODUCT SPECIFICATIONS

NOVO KOTE RC



General Product Description

Novo Kote RC (Rapid Cure) is an advanced high performance novolac, two-component overlayment and coating system. It has the highest chemical resistance in the industry today. It is generally applied between 1/16" and 1/4" with silica. Novo Kote RC is the product of choice for jobs with the harshest chemical conditions. Advantages:

- Fast Cure
- Self-priming
- Resin Rich - Nonporous
- 100% Solids, V.O.C. Compliant
- Seamless flooring system
- Essentially odorless
- Four times harder than standard concrete
- Withstands heavy forklift traffic
- Chemical and solvent resistant
- Able to be applied over damp concrete
- Can be applied over ten day old concrete

Nonporous Resin Rich Technology

Conventional trowel down epoxy-clad systems are porous. Once the seal coat is breached, the porous epoxy mortar, being sponge-like, draws surface liquids and chemicals into it. This eventually causes an epoxy overlayment failure. Novo-Kote RC is nonporous, using twice the resin in the base overlayment than its clad counterpart.

Industrial Applications

- Chemical Flooring
- Aerospace
- Chemical Storage
- Power Plants
- Trench and sumps
- Hazardous Waste Storage
- Waste Water Treatment
- Plating
- Secondary Containment
- Battery Charging Areast

Product Data

Volumetric Ratio:	4 to 1
Solids:	100%
Application Temperature:	50-80°F and 5° above the dew point.
Thinning:	Not required
Pot Life:	8-10 minutes
Working time on floor:	10-15 minutes
Cure Time:	2-3 hours (walking)
	18 hours (traffic)
Critical recoat time:	24 hours
Shelf life:	12 months
USDA Food and Beverage:	Meets requirements

Physical Properties

PROPERTY	VALUE	REFERENCE
Compressive Strength	28,200 psi	ASTM C 579
Flexural Strength	13,300 psi	ASTM D 790
Tensile Strength	8,370 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
	113 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	.00	NACE Stand

CHEMICAL RESISTANCE

Acetic Acid	SS
Acetone	SS
Alcohol, Ethyl	R
Chlorine, Wet	R
Chromic Acid	R
Copper Chloride	R
Hydrochloric Acid 37%	R
Hydrogen Peroxide	SS
Methyl Ethyl Ketone	SS
Nitric Acid 45%	SS
Phosphoric Acid	R
Potassium Cyanide	R
Sodium Hydroxide 50%	R
Sodium Chloride	R
Toulene	R
Sulfuric Acid 50%	R
1-1-1 Trichloroethane	R

NOVO KOTE RC

Coverage

Standard nominal floor thicknesses are: 45-50 mil, 1/8", 3/16" and 1/4". Use chart below for determining required gallons.

Thickness:	Gallons in 1 S/F	Gallon in 100 S/F
45-50 Mils	.01	1
1/8"	.0286	2.86
3/16"	.0429	4.29
1/4"	.0572	5.72

Note: The above guidelines are for an unglazed (full broadcast) anti-slip surface. A standard glaze coat over an unglazed (30-40 mesh silica) surface requires 100 S/F to the gallon (or .01 gallon per S/F).

Color Selection

Novo Kote RC is available in the following colors: Black, white, light gray, medium gray, dark gray, light beige, dark beige, sand beige, safety red, tile red and safety yellow. Other colors are available at an additional charge.

Packaging

Novo Kote RC is available in two different kit sizes:

	Part A	Part B
5 Gallon Kit	4 gal.	1 gal.
25 Gallon Kit	20 gal.	5 gal.

Concrete Preparation

Before the coating is applied, the concrete must be:
Clean – Contaminants removed
Profiled – Surfaced 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 Novo Kote RC is 4 to 1. That is, four parts of A (resin), to one part B (hardener). Mix the following with a drill and jiffly mixer.

1. Premix the part A for 30-45 seconds. Pour three quarts of part A into a five gallon bucket .
2. Add one quart of part B and mix for another 30-45 second.

Verical Mix

Novo Kote RC can be made into a vertical mix by the following: Mix four quarts of Novo Kote RC Part A and one quart Part B per above instructions. Slowly add 1.25 Gallons of fumed silica (Aerosil 200, Cabosil M5) into mix. Next, add in 1.75 gallons of 30-40 mesh silica. Adjust per temperature conditions. Prime with Novo-Kote RC first.

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 Novo-Kote RC (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 Novo Kote RC onto concrete.
2. Trowel or screed rake the material until the resin mix is uniformly applied. If a screed rake is used, trowel away pin marks left by the rake.
3. Use a 3/8" nap paint roller with a phenolic core on an extended poll. Then lightly backroll resin, removing any unevenness left by the 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 the wet resin until the resin is thoroughly covered. This method requires that silica be thrown upward and gently fall into 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 finial finish.
6. Excess silica can be swept up after 4 hours.

Optional Glaze Coat:

1. Novo Kote RC,Novo Kote HB or Novo Kote TC may be used as glaze coat.
2. Mix five quarts of Novo Kote RC resin without silica at a time using above mixing instructions.
3. Immediately pour out onto the unglazed surface in a ribbon, walking and pouring at the same time until the bucket is empty.

Cleanup

Novo Kote RC while in a liquid state may be cleaned up with water and degreaser. Otherwise a strong solvent may be required while Novo Kote RC is setting up.

Warranty

Petra Industrial 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 Novo Kote RC material safety data sheet. Avoid Novo Kote RC contact with skin. Some individuals may be allergic to epoxy.

PETRA

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