



HIGH PERFORMANCE TWO COMPONENT EPOXY

GENERAL PRODUCT DESCRIPTION

CoreKote HB (High Build) is an advanced high performance, two component epoxy flooring overlayment and coating system. It is generally applied between 1/16" and 1/4" silica. Its design features provide for the highest industrial demands. Advantages:

- Self-priming
- Resin Rich
- V.O.C. - 0 g/L
- 100% Solids
- Nonporous
- 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
- Berms and Curbs
- Chemical Flooring
- Aerospace
- Waste Water Treatment
- Production Areas
- Trench and sumps
- Secondary Containment
- Containment Curb
- Equipment Pads

PRODUCT DATA

Volumetric Ratio: 2 to 1
 Solids: 100%
 Application Temperature: 65-90°F
 Thinning: Not required
 Pot Life: 15-20 minutes
 Working time on floor: 20-30 minutes
 Cure Time: 10 hours (walking)
 24 hours (traffic)
 Critical recoat time: 24 hours
 Shelf life: 12 months
 USDA Food and Beverage: Meets requirements

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	13,000 psi	ASTM C 579
Flexural Strength	16,800 psi	ASTM D 790
Tensile Strength	9,500 psi	ASTM D 638
Bond to Concrete	350 psi	ASTM D 4541
Taber Abrasion	Loss/1000 Cycles = 65 mg	ASTM D 4060 CS 17 Wheels
Water Absorption	.10% maximum	ASTM D 413
Linear Sinkage	.01% maximum	ASTM C 531
Flammability	1.2 cm/min	ASTM D 635
Impact Resistance	16 ft. lb - no failure	Mil-D-3134H
Coefficient of Friction	6 minimum	ASTM D 2047
Hardness, Shore D	84	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 50%	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.

COREKOTE HB

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 evidentially accounts for an epoxy overlayment failure. CoreKote HB is non-porous, using twice the resin in the base overlayment as its clad counterpart.

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).

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

The mix ratio of CoreKote HB is 2 to 1. That is, two parts of A (resin), to one part B (hardener). Mix the following with a drill and jiffy mixer.

- Pour one gallon of part A into a five gallon bucket and premix for 30-45 seconds.
- Add two quarts of part B and mix for another 30-45 second.
- Mix in approximately 25 lbs. silica and mix for 1-2 minutes until blended. A 45-50 mil system does not require silica in the mix.

VERTICAL MIX

CoreKote HB can be made into a vertical mix by the following: Mix four quarts of CoreKote HB Part A and two quarts Part B per above instructions. Slowly add 1-1/2 gallons of Aerosil 200 (or, Cabosil M5) into mix. Next, add in 2 gallons of 30-40 mesh silica. Adjust per temperature and other conditions. Prime with Core Kote HB first.

COLOR SELECTION

CoreKote HB is available in the following colors: Black, white, light gray, medium gray, dark gray, light beige, dark beige, beige, safety red, tile red, pastel blue, light brown, and safety yellow. Other colors are available at an additional charge.

APPLICATION PROCESS

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

- Pour mixed CoreKote HB onto concrete.
- Trowel or screed rake material until a resin mix is uniformly applied. If a screed rake is used, trowel away pin marks left by rake.
- 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 rake. This generally requires the use of spike shoes, allowing one to walk in wet resin mix.
- Wait 10-15 minutes while resin mix self-levels and a even resin surface appears.
- 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.
- Excess silica can be swept up after about 6 hours.

OPTIONAL GLAZE COAT

- XtraKote TC or XtraKote LS may be used as a glaze coat for optimal color stability.
- Mix three gallons of resin at a time using above mixing instructions.
- Immediately pour out on an unglazed surface in a ribbon, walking and pouring at the same time until bucket is empty.
- Using a window squeegee on a pole, pull resin tightly and uniformly over surface.
- Using a 3/8" paint roller with phenolic core, roll glaze coat up and back.
- Lastly, backroll from left to right (perpendicular to first).

PACKAGING

CoreKote HB is available in three different kit sizes:

	Part A	Part B
3 Gallon Kit	2 gal.	1 gal.
15 Gallon Kit	10 gal.	5 gal.
150 Gallon Kit	100 gal.	50 gal.

CLEANUP

CoreKote HB while in a liquid state may be cleaned up with water and degreaser. Otherwise a strong solvent may be required while CoreKote HB 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 CoreKote HB material safety data sheet. Avoid contacting CoreKote HB 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.

