



PETRAQUARTZ RC

advanced coating systems



RAPID CURE 100% SOLIDS CYCLOALIPHATIC EPOXY

GENERAL PRODUCT DESCRIPTION

Petra Quartz RC (rapid cure) is a two component, 100% solids cycloaliphatic epoxy. It serves as a decorative, high performance, seamless overlayment floor and cove base system. The beauty of Petra Quartz comes from the use of color quartz with its unique water-clear cycloaliphatic epoxy. PetraQuartz RC cures in four hours at 70° F (half the time of conventional epoxy systems). Its epoxy chemistry provides excellent bonding characteristics. It can be applied as a single broadcast (45-50 mil) coating system, a double broadcast (100-125 mil) or over a CoreKote HB (1/4") or other high build system. Its design features provide for the highest industrial demands. Advantages:

- Essentially odorless
- Self-priming
- VOC Compliant - 100% Solids
- One system does it all (base coat and seal coat are the same)
- High gloss
- Anti-slip and Texture control - Flexibility of being smooth under equipment and textured in walkways
- Withstands heavy traffic
- Chemical resistant
- Able to be applied over damp concrete
- No amine blush
- Can be applied over ten day old concrete

PRODUCT DATA

Volumetric Ratio:	2 to 1
Solids:	100%
Coverage:	Basecoat - 100 S/F per gal. (45-50 mils) Basecoat - 50 S/F per gal. (90-100 mils) Topcoat - 105-150 S/F per gal.
Application Temperature:	65-90°F and 5° above the dew point
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	18,800 psi	ASTM C 579
Flexural Strength	2,270 psi	ASTM D 790
Tensile Strength	1,560 psi	ASTM D 638
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Coefficient of Friction	0.6 minimum	ASTM D 2047
Taber Abrasion	59 mgs	ASTM D 4060 CS 17 Wheels
Flammability	Self-extinguishing	ASTM D 635
Hardness, Shore D	82	ASTM D 2240
Flash Point	>200°F	ASTM D 93

INDUSTRIAL APPLICATIONS

The uniqueness and universality of its chemistry allows Petra-Quartz RC to be used in the following applications:

- Pharmaceutical
- Laboratories
- Food Preparation
- Dairies
- Restrooms and Showers
- Kitchens
- Hospitals
- Correctional Facilities
- Clean rooms
- Animal Care Facilities
- Showrooms
- Schools

COLORS

PetraQuartz RC is available in clear only. When used with color quartz aggregate, there is no end to the matchless color combination that can be achieved.

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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.

PATCHING

Voids, cracks, and imperfections will be seen in finished coating if the concrete is not patched correctly. Patch concrete with Petra Patch. After the patching material has cured, diamond grind patch the concrete. If a non-Petra patching material is used, make sure that it is a two-part epoxy patch. Always test unproven products by applying patch material first, then Petra coating system next. Check to see if bonding is firm.

MIXING

The ratio of PetraQuartz RC is 2 to 1. That is, two parts of A (resin), to one part of B (hardener). Generally, three mixed gallons is ideal for application. Mix the following with a drill and jiffler mixer.

1. Part A does not require pre-mixing. If using the 15 gallon kit, pour out 2 gallons into an empty 5 gallon bucket which then becomes the mixing bucket. (The three gallon kit allows the Part A bucket to be used as the complete mixing bucket, since the Part A comes in a three and a half gallon bucket.)
2. Add one gallon of part B and mix for 60-90 seconds.
3. Immediately apply to the floor. PetraQuartz RC in mass has a short pot life of approximately 15-20 minutes. Once poured out on the floor, 20-30 minutes of working time can generally be expected.

APPLICATION PROCESS

Application of PetraQuartz RC for a nominal 45-50 mil (single broadcast) system is applied in as follows:

1. Always apply in descending temperatures. Concrete is porous and traps air. In ascending temperatures (generally mornings), the air expands and can cause out gassing in the coating. It is safer to apply coatings in the late afternoon, especially for exterior applications. Optimum ambient temperature should be between 65-90°F and five degrees above the dew point during application.
2. Mix three gallons of resin using above mixing instructions.
3. Apply approximately 100 S/F per gallon and spread by using a window squeegee on a pole pulling PetraQuartz RC over substrate. Lastly, using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards. Then roll from left to right. Allow to self level for approximately 10-15 minutes.

APPLICATION PROCESS (CONTINUED)

4. Broadcast the color quartz by gently throwing the color quartz up into the air allowing it to fall without lumping in one spot or moving the resin. Do this until the floor is totally saturated with the color quartz and the resin will not accept any more. This generally requires 1/2 to 3/4 lbs. per S/F. Allow to cure for at least 6-8 hours.
5. Sweep floor and stone any high spots. (The excess color quartz may be sifted and cleaned and used again).
6. Apply seal coat at approximately 125 S/F per gallon. Use the same procedure as in step 3 but without broadcasting.
7. For a 100-125 mil. double broadcast system, repeat above steps.
8. For a 1/4" system, apply 3/16" of CoreKote HB.

PACKAGING

PetraQuartz RC is available in two different kit sizes:

	<u>Part A</u>	<u>Part B</u>
3 Gallon Kit	2 gal.	1 gal.
15 Gallon Kit	10 gal.	5 gal.

CLEANUP

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

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