valspar FLOORING

EPO-ROK® QUARTZ
FLOORING

Technical Data Sheet

DESCRIPTION:
A 100% solids, multi-component, decorative epoxy floor resurfacing system. This versatile system can be applied as a broadcast system at a 1/16'' for lighter duty applications. A heavy duty application will require the system to be installed at 3/16''. This will entail a 1/8'' trowel layer of EPO-ROK FLOORING followed by a broadcast of the colored quartz. Each system will require a topcoat.

USES:
Designed for use in light to heavy duty areas where slip-resistance, ease of cleaning and cosmetics are a major consideration. EPO-ROK® QUARTZ FLOORING is ideally suited for many applications found in hospitals & health care facilities, research facilities, educational facilities and correctional institutions in such areas as shower rooms, rest rooms, laboratories, cafeterias, coolers etc. When used in conjunction with the EPO-ROK® FLOORING SYSTEM (as a 1/8" base), heavier duty areas requiring thicker applications such as bakeries, food processing, food prep areas, kitchens and manufacturing areas may effectively be resurfaced.

ADVANTAGES:
- Slip-resistant even when wet
- Decorative and easy to maintain
- No joints or seams-sanitary
- Excellent UV light resistance
- 100% solids system - low odor
- Excellent chemical and wear resistance

PACKAGING:
EPO-ROK® QUARTZ FLOORING is a multi-product system that is packaged in units as pre-proportioned batches for error-free job site mixing and application. The system consists of EC-7 Epoxy Shop Floor Resurfacer, or (EC-15 UVR), Quartz Aggregate and EC-3 Heavy Coat Epoxy Resurfacer. The EC-7 Epoxy Shop Floor Resurfacer and EC-3 Heavy Coat Epoxy Resurfacer are available in 6 gallon and 15 gallon kits.

Each 6 gallon kit consists of (2) 3 gallon batches. This is made up from (2) 5 gallon pails of Part "R" Resin "short filled" and (2) one gallon cans of Part "H" Hardener. The Part "H" Hardener is shipped in a corrugated carton.

GENERAL PRODUCT DATA:

Available Colors:	Please consult Valspar for standard colors. Tweeds available upon request.
Coverage:	See Mixing and Application section
Pot Life:	30 minutes @ 75℉.
Application Method:	Squeegee and 3/8" nap Dynel roller. Quartz aggregate applied with Federal Quartz Applicator.
Cure Rate:	6-8 hrs. - Foot Traffic 18-24 hrs. - Medium Loads 48+ hrs. - Heavy Loads or Chemical Resistance.
Shelf Life:	Two years in unopened containers

TYPICAL PHYSICAL PROPERTIES:

TYPE TEST	TEST METHOD	TYPICAL VALUE
Compressive Strength	ASTM C-597	9,000 psi
Tensil Strength	ASTM C-307	2,050 psi
Flexural Strength	ASTM C-580	4,200 psi
Flexural Modulus of Elasticity	ASTM D-790	2.1 x 106 psi
Hardness Shore D Durometer	ASTM D-2240	86-89
Thermal Coefficient of Linear Expansion	ASTM D-696	3.75 x 10-5 in/in/ ℉
Bond Strength	ACI COM #403	350-400 psi (pp. 1139-1141)
Indentation	MIL-D-3134F	None
Abrasion Resistance (CS-17 Wheel, gm load, 1000 cycles)	ASTM D-1044	.08 gm max
Flammability	ASTM D-635	Self Extinguishing

Above typical values based on 7 days cure @ 75 ℉

Each 15 gallon kit consists of (2) full 5 gallon pails of Part "R" Resin and (1) full 5 gallon pail of Part "H" Hardener.

VALSPAR FLOORING
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COVERAGE:
PRIMER: (OPTIONAL)
EPO-ROK PRIMER – 175-225 sq. ft. / gallon
PR-7 FLEX PRIME – 200-250 sq. ft. / gallon
BASE LAYER: 1/8'' EPO-ROK FLOORING (option)
33.34 sq. ft. / bag
BASECOAT:
EC-7 Epoxy Shop Resurfacer – 80-100 sq. ft. / gallon
EC-15 UVR – 80-100 sq. ft. / gallon (option)
Colored Quartz 25-50 lbs. / 100 sq. ft.
NOTE: It is recommended that the basecoat step be repeated to eliminate the possibility of color shading
GROUT/FINISH
EC-3 Heavy Coat Resurfacer – 90-120 sq. ft. / gallon
EC-15 UVR – 90-120 sq. ft. / gallon (option)
FINISH: (OPTIONAL)
EPO-ROK TOP DRESSING – 250 sq. ft. / gallon

Consult above data sheets for specific information.

ASSOCIATED PRODUCTS:
PC-40 DYNOMITE
PC-41 SOLV-KWIK
EPO-ROK PRIMER
PR-7 FLEX PRIME

LIMITATIONS:
This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the resurfacer.

Technical Data Sheets are updated periodically. To ensure the most current version is being used, visit Technical Resources on *www.valsparflooring.com*.

Proper material application is the responsibility of the user. Site visits made by Valspar personnel are for making technical recommendations only and not for supervising or providing quality control.

Do not apply to concrete floors less than 60 days old.

Do not apply to floors previously treated with curing and parting compounds or other coatings unless they have been completely removed by chemical or mechanical means.

Do not use on vinyl, asphalt, rubber, glazed tile, paving brick, quarry tile, Mexican tile, or similar materials.

Do not apply if the floor or air temperature is below 60℉ or over 90℉ or if the relative humidity is above 85%. Do not apply over honeycombed or structurally unsound surfaces.

Before applying for protection against specific chemical environments, consult Chemical Resistance Guide or ValsparTechnical Service.

Sealed surfaces may discolor under tires due to tire plasticizer migration.

If the product is to be applied in or near areas containing food stuffs, they should be removed before the application and until the coating has fully cured and all vapors have dissipated.

Do not thin this product. Addition of thinners will slow the cure and reduce the ultimate properties of this product. Critical recoat times will also be affected.

PRELIMINARY FLOOR INSPECTIONS:
In general, the area to be surfaced must be clean, sound, dry and above 60℉ to assure a successful installation. Concrete must be at least 60 days old.

1. If there is uncertainty as to whether or not a curing compound or any coating is present on the floor, the following two tests may be performed in order to find out:
2. Pour a cup of water on three or four areas of the floor. If the water puddles out, then there probably is no curing compound or any coating on the floor, and the preparation process may begin. However, it the water beads up like on a waxed car, this may indicate the presence of a curing compound or any coating which must be removed by chemical or mechanical means.

Place a drop of PC-42 ACID CONDITIONER on the floor. If the acid bubbles, a curing compound or any coating is not present.
Always be alert to any possible airborne or surface contaminants which may contribute to problems such as fisheyes, crawling, cratering, etc.
The concrete floor should be examined for the presence of moisture. This can be accomplished by the following means:

1. Calcium Chloride Test
2. Delmhorst Moisture Meter
3. Polyethylene Sheet Method

Calcium Chloride Test: This test method works by a change in weight of moisture absorbing anhydrous calcium chloride and indicates the amount of moisture transmitting out of a large concrete surface area. Pounds is the equivalent weight of the water that is emitted from a 1,000 square foot concrete slab surface area in a 24 hour period of time (standard test duration is 60 hours). Concrete must not show moisture content greater than three pounds per 1,000 square feet in 24 hour time frame. Follow instructions as outlined by the supplier of the test kits. Make sure the concrete surface to be tested is completely clean of any residue and any debris. All seals, including curing compounds must be removed prior to performing tests. Sources: Roofing Equipment Inc., Denver, CO 303-371-7667; Sealflex Industries Inc., Costa Mesa, CA 714-708-0850; Vinyl Plastics Inc., Sheboygan, WI 920-458-4664; and Floor Seal Technology, San Jose, CA 408-436-8181

SURFACE PREPARATION:

This product can be used in conjunction with a new or existing Epo-Rok® Flooring installation. Quartz Flooring can also be used as a stand alone system over suitable concrete surfaces.

STANDARD TESTS:

Refer to the standard test methods below for further information.

ASTM D 4258-83	Standard Practice for Surface Cleaning Concrete for Coating
ASTM D 4259-83	Standard Practice for Abrading Concrete
ASTM D 4260-83	Standard Practice for Acid Etching Concrete
ASTM D 4262-83	Standard Test Method for pH of Chemically Cleaned or Etched Concrete Surfaces

Over Concrete

In general, the surface to be resurfaced must be clean, sound, dry and above 60° F to assure a successful installation. Either chemical or mechanical methods or a combination of both should be employed to prepare the surface. Any grease, oil, dirt etc., should be removed by mechanically scrubbing the surface. Loose or soft concrete must be removed by scarifying, shot blasting or high pressure cleaning. The prepared concrete floor must be allowed to dry thoroughly before beginning the mixing and application of the EC-7 Epoxy Shop Floor Resurfacer. (OPTION EC-15 UVR)

Priming:

If the concrete is porous it may be necessary to first prime the surface with EPO-ROK PRIMER, (option PR-7 FLEX PRIME) and allowed to dry before proceeding with the application of the EC-7 Epoxy Shop Floor Resurfacer, or EC-15 UVR. Refer to EPO-ROK PRIMER Data Sheet for application instructions.

Over Epo-Rok Flooring

When applied over a newly installed Epo-Rok Flooring only a slight sanding of the surface followed by vacuuming is necessary. When applied over a previously installed Epo-Rok® Flooring, it will be necessary to first prepare the surface by removing any dirt, grease, etc., by mechanical scrubbing and then rinsing the surface clean. Mechanical preparation procedures should then be followed.

MIXING AND APPLICATION OF 1/8'' BASE LAYER FOR 3/16'' EPO-ROK QUARTZ FLOORING

Refer to mixing and application instructions for EPO-ROK FLOORING. EPO-ROK should be applied at an 1/8''. Approximate yields are as follows;
12 – Single batches will yield 400 sq. ft. (33.34 sq. ft. per single bag mix)
4- Triple batches will yield 400 sq. ft. (100 sq. ft. per 3 bag mix)

MIXING AND APPLICATION - EC-7 EPOXY SHOP FLOOR RESURFACER. (OPTION; EC-15 UVR).

Before proceeding with the mixing and application of the EC-7 Epoxy Shop Floor Resurfacer and the broadcast aggregate, make sure the surface is properly prepared and the temperature of the area, floor and material are above 60℉. In addition, a mixing area should be set up nearby with the necessary equipment and materials ready.

The translucent EC-7 Epoxy Shop Floor Resurfacer is designed as the base coat. The colored quartz will be broadcasted into the EC-7 base coat and this will provide the color of the finished Quartz Flooring system. The color of the finished floor will ultimately be the color of the Quartz aggregate chosen.

1. The two liquid components of the EC-7 Epoxy Shop Floor Resurfacer system are carefully mixed together for 2 to 3 minutes with a jiffy mixer.
2. Next, the mixed material is applied to the floor in the form of a bead 5" wide. It is then uniformly spread, working from left to right then right to left, with a 12-14 inch wide, flat blade squeegee at the rate of 120-150 sq. ft. per gallon.
3. This is followed by a "dry-rolling" with a high quality 9", medium (3/8") nap solvent resistent paint roller to remove any puddles or lap marks. Important to remember that any ridges, puddles or lap marks left in the EC-7 Epoxy Shop Floor Resurfacer will show through the final Topcoat and affect the appearance of the finished surface.
4. Using a broadcaster, the colored aggregate is applied as evenly as possible over the freshly coated surface at the rate of 100 sq. ft. per 25 lb. bag. Broadcasting by hand is acceptable, although the quartz should be broadcasted in a “rain fall” pattern.
5. After the EC-7 Epoxy Shop Floor Resurfacer reaches its final set, which will be about 6-8 hours @ 75℉, a good quality, medium bristle industrial push broom should be used to carefully sweep the excess aggregate from the applied area. At this point, the resultant surface will have the texture of

rough sandpaper and be dull in appearance. It is recommended to vacuum the floor after sweeping
6. Repeat steps 1-5. This will insure full coverage and a uniform color.

MIXING AND APPLICATION - EC-3 HEAVY COAT EPOXY RESURFACER

1. After mixing the EC-3 Heavy Coat Epoxy Resurfacer "H" and "R" components for 2 to 3 minutes with a jiffy mixer, the mixture is poured onto the floor in the form of a bead 5" wide. Then, using a 12 -14 inch rubber squeegee, the material is pulled slowly across the floor surface to fill the surface voids and to encase the aggregate.
2. After filling (saturating) the area, use medium pressure on the squeegee while pulling the liquid from left to right, then from right to left (ALWAYS TOWARD YOU). The EC-3 Heavy Coat Epoxy Resurfacer is normally applied at the rate of 100-120sq. ft. per gallon.
3. Use a good quality 9", 3/8" nap solvent resistant roller to "dry-roll" the surface to even out and remove any puddles of EC-3.

FINISH: OPTIONAL

Refer to EPO-ROK TOP DRESSING data sheet for mixing and application instructions. Other recommended topcoats are as follows.
EPO-ROK TOPDRESSING SATIN
CRU-400 and CRU- 600 Urethanes
EC-10 HCR

POT LIFE: Approximately 30 minutes at 75℉.

CURE TIME:

At a cure temperature of 75℉, allow 6 hours for foot traffic and 18-24 hours for light to medium loads. For heavy fork lift traffic and chemical spillages allow 48 to 72 hours.

CLEAN UP:

Tools should be cleaned right away with soap and water. Solvents such Xylene or UR-9 MCU THINNER can also be used. Any cured or hard material can be removed with the use of PC-46 DRY EZE.

REFER TO MATERIAL SAFETY DATA SHEET FOR FURTHER SAFETY AND HANDLING INFORMATION.

See individual labels for more caution statements.
KEEP OUT OF THE REACH OF CHILDREN.

DISPOSAL:

Dispose in accordance with federal, state, and local regulations. Use licensed hazardous waste company.

Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned.

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