Rigid-Rock RR 1022

Applied Polymer Solutions, LLC

PRODUCT PROFILE

GENERIC DESCRIPTION **RR 1022 - SELF-LEVELING EPOXY RESURFACER**
- two component plus aggregate colored 100% solids epoxy recoatable, high gloss, abrasion resistant flooring system that can withstand impact and thermal shock.

RECOMMENDED USAGE Recommended for warehouses, kitchens, restrooms, and other areas where either a high build resurfacing for traffic areas where a seamless floor is desired.

COLORS All colors on APS Color Card

CHARACTERISTS/FINISHES

SURFACE Smooth. Non-skid media may be used to provide additional texture.

PRIMERS Recommend: any RR 3000 series coating or epoxy mortar power trowel overlay system as a starting base.

TOPCOATS/FINISHES None required; however, many epoxies and urethanes are compatible. Contact your sales representative for proper topcoat system selections. Multiple coats are required when topcoating over mortar.

TECHNICAL SPECIFICATIONS

SOLIDS BY WEIGHT 97% (liquids only-mixed)

THICKNESS 1/16”-1/8”

VOLITALE ORGANICS Less than .5 pounds per gallon

MIX RATIO Part A: 1 gallon (9.1 lbs) / Part B: .5 gallon (4.25 lbs.) /Part C: 20 lbs aggregate. (volumes & weights approximate)

APPLICATION TEMP 55°F - 90°F (12°C - 32C°)

CURE SCHEDULE

Cure State	70°F (21°C)
Pot Life	25-35 minutes
Light Traffic/Recoat	8-12 hours
Full Cure/Heavy Traffic	14-24 hours

STORAGE TEMP 65°F - 85F° (18°C - 30°C) in a dry area. Avoid excessive heat and freezing.

SHELF LIFE 1 years in an unopened container

PACKAGING All kits are premeasured, ready for blending and application

Size	Part A	Part B	Coverage (1,604/DFT) x gallons
1 1/2 gallon kit	1 gallon	.5 gallon	65-85 sq. ft.
Larger Sizes Available			

Published technical data and instructions may be modified at any time without prior notice. Please contact your Applied Polymer Solutions representative with any questions.

TECHNICAL SPECIFICATIONS (CONTINUED)

COMPRESSIVE STRENGTH	10,600 psi @ ASTM D695
FLEXURAL STRENGTH	12,400 psi @ ASTM D790
TENSILE STRENGTH	8,100 psi @ ASTM D638
BOND STRENGTH	425 psi (concrete failure)
GARDNER VARIABLE IMPATOR	50 in/lbs direct - Passed
ABRASION RESISTANCE	CS-17 wheel with 1000 gm/500 cycles = 23 mg loss (neat)
ULTIMATE ELONGATION	3.1%
HARDNESS	Shore D = 81
VISCOSITY	350-800 cps (mixed)
WEATHERING	Excellent

CHEMICAL RESISTANCE

Ammonia	C	**Sodium Hydroxide 50%**	E
Citric Acid	C	**Sulfuric Acid 10%**	D
Corn Oil	C	**HCl (aq) 36%**	C
Lactic Acid	C	**Nitric Acid 30%**	B
Salt Brine	D	**Phosphoric Acid 40%**	C
Gasoline	C	**Sodium Hypochlorite 3-5%**	A
Motor Oil	D	**MEK**	A
Skydrol	C	**Mineral Spirits**	C

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

SURFACE PREPARATION

SURFACE All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free bond to the substrate.

MOISTURE Allow concrete to cure for 28 to 45 days. Verify dryness by testing for moisture with a “plastic film” test; this can be done at room temperature by placing a 4’ x 4’ plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. Should moisture be present, perform Moisture Vapor Emission Rate testing using Anhydrous Calcium Chloride (ASTM F1869). Moisture content should not be in excess of 3 lbs. per 1,000 sq. ft. for coatings (5 lbs. for resurfacers) in a 24 hour period.

MOST SURFACES Aggressively shot-blast or mechanically prepare the substrate to properly profile the substrate and remove hardeners, curing compounds, sealers, laitance and other contaminants. All edges and around columns or beams should be mechanically scarified. All termination points should not be feather edged, but should be saw cut with the termination ending at the sawcut.

FILLING & PATCHING Voids, cavities, nail and bug holes should be filled with a recommended epoxy filler. All large cracks should be V cut and filled with an appropriate semi-rigid epoxy crack filler.

JOINTS All expansion joints should be filled with an appropriate joint filler. When overlaying an expansion joint, a single saw cut through the epoxy overlay will prevent random fracturing.

APPLICATION

MIXING This product has a mix ratio of 9.1# part A to 4.25# part B and 20# mixed aggregate. Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We highly recommend that the kits not be broken down unless suitable weighing equipment is available. After the two liquid parts are combined, add in the provided aggregate and mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. After mixing, transfer the mixed material to another pail (the transfer pail) and again remix. The material in the transfer pail is now ready to be applied on the primed substrate. Remix occasionally to prevent settling of aggregate. Improper mixing may result in product failure.

THICKNESS 1/16”-1/8” mils. The mixed material can be applied by a serrated squeegee at the recommended thickness, then back roll (very lightly) with a conventional roller tool. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process.

APPLICATION (CONTINUED)

RECOAT/TOPCOAT No recoating or topcoating is necessary, however, when you recoat or topcoat this product, you must first be sure that the coating has tacked off and then the surface should be deglossed to insure a trouble free bond prior to application of recoats or topcoats. Always remember that colder temperatures will require more cure time for the product before recoating or topcoating can commence. Before recoating or topcoating, check the coating to insure no epoxy blushes were developed (a whitish, greasy film, or deglossing). If a blush is present, it can be removed with a standard type detergent cleaner prior to topcoating or recoating. Many epoxy and urethane coatings are suitable for use as topcoats. Although this product can be used without a topcoat, when color or texture uniformity is important, a topcoat should be used.

CLEAN UP Citrus based cleaners or solvents such as Xylene.

**Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle.*

LIMITATIONS

FLOOR CLEANING Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

*Color stability may be affected by environmental conditions such as high humidity or chemical exposure.
* Product is not UV color stable and may discolor if exposed to lighting such as sodium vapor lights.
* Colors may vary from batch to batch due to variations in the silica filler.
* Mortar colors are not from our standard color chart.
* Substrate temperature must be 5 degrees F above dew point.
* For chemical exposure areas, we recommend a suitable topcoat to reduce porosity and chemical migration.
* Test data based on neat resin.
*This product is not intended for use as a decorative coating or where color stability or visual appearance is of any significant importance. Its sole purpose is as a protective coating.
*If a topcoat of a different color is to be used, multiple coats will be necessary to prevent bleed-through (discoloration)

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