Rigid-Rock RR 2018

Applied Polymer Solutions, LLC

PRODUCT PROFILE

GENERIC DESCRIPTION RR 2018 is a two component 100% solids epoxy crack filler designed for shallow repair on either vertical or horizontal surfaces. This product is easy to mix and use and has a non-critical mix ratio. Additionally, the product, because it is a 100% solids formulation, can be applied thicker on horizontal surfaces when required.

RECOMMENDED USAGE Recommended for repairing cracks and defects in concrete or masonry.
NOT RECOMMENDED for immersion service for all acids and chemicals.

COLORS STANDARDS: Medium Gray (mixed)

CHARACTERISTS/FINISHES

SURFACE Smooth.

PRIMERS None required.

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 100% (mixed)

THICKNESS 1/2" to 1 1/2"

VOLITALE ORGANICS Zero pounds per gallon

MIX RATIO COLORS: 1:1 by Volume. Part A=11.1 lbs / Part B=11.2 lbs gallons.(volumes & weights approximate)

APPLICATION TEMP 60°F - 90°F (12°C - 32C°)

CURE SCHEDULE

Cure State	70°F (21°C)
Pot Life	1 - 3 hours
Light Traffic/Recoat	5 - 10 hours
Full Cure/Heavy Traffic	24 hours
Full Chemical Resistance	2-7 days

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 (1/8" x 1/8") / kit
2 gallon kit	1 gallon	1 gallon	1228 lin. ft.
10 gallon kit	5 gallon	5 gallon	12000 - 13000 lin. ft.
Drum Kits	N/A	N/A	N/A

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

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TECHNICAL SPECIFICATIONS (continued)

COMPRESSIVE STRENGTH	8,710 psi @ ASTM D695
FLEXURAL STRENGTH	7,500 psi @ ASTM D790
TENSILE STRENGTH	6,256 psi @ ASTM D638
BOND STRENGTH	350 psi (concrete failure)
IMPACT RESISTANCE	Excellent
ABRASION RESISTANCE	CS-17 wheel with 1000 gm/ 1000 cycles = 36 mg loss
ULTIMATE ELONGATION	2.4% at 70F (ASTM D-412)
HARDNESS	Shore D = 65
VISCOSITY	3,100,000 cps (typical)
WEATHERING	Good Stability

CHEMICAL RESISTANCE

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

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 We recommend that all loose concrete, previous joint compound or other foreign material to be removed to leave a clean sound joint at least 2” deep.

FILLING & PATCHING Joints that have spalled and rounded, know as bull-nosed, should be cut and rebuild with epoxy mortar/ patch. Epoxy mortar once cured should be saw cut to re-establish the joint.

JOINTS For best results, edges should be sawcut and a one inch backer rod should be placed into the joint leaving approximately 1 to 1 1/2 inches from the top of the backer rod to the top of the joint.

APPLICATION

MIXING It is important that the material be mixed well. Therefore take a few extra minutes to make sure adequate time has been taken to mix the two components together thoroughly. Improper mixing will cause an incomplete cure and soft spots in the joint. Mix four parts (by volume) part A to one part (by volume) part B in an oversized mixing container. Mix well with slow speed mixing equipment until totally streak free being sure to scrape the sides and bottom of the mixing container thoroughly. Avoid high speed mixing as this could force air into the product.

APPLICATION The mixed material can be applied by marginal trowel, putty knife or any other suitable equipment. Remove any excess material with a putty knife or similar tool prior to curing. Alternatively, it may also be suitable to let the product become tack free in the joint and then using a razor scraper to cut off or shave the excess above the floor plane. Maintain temperatures within the recommended ranges during the application and curing process. When temperatures are lower, allow more time for this material to cure.

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APPLICATION (CONTINUED)

RECOAT/TOPCOAT No recoating or topcoating is necessary. However, if you opt to topcoat the applied joint compound, allow it to cure before topcoating. It is not necessary to prime over the joint compound prior to topcoating the joint compound. Many epoxies and urethanes can be used. In some instances, especially when excessive expansion joint movement is involved, topcoats may chip. However, most epoxy or topcoat products will adhere to the joint compound very well.

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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