



Quick Set Patch Mix

Data Sheet



Part # QSPM-45

DESCRIPTION: Concrete Solutions® Quick Set Patch Mix is a just-add-water, polymer modified cement-based compound. It contains ingredients to assure instant strength, sulfate resistance, superior bondability and increased flexural and tensile strengths. It is a nonshrink, non-metallic, freeze-thaw stable, instant strength patching compound that can be used in high wind, cold and wet conditions. In most circumstances, areas can be opened to traffic within one hour of application. Do not use Quick Set Patch Mix for structural crack or joint repair. For video instructions, scan the QR code on the data sheet or visit www.concretesolutions.com/quicksetpatch.

TYPICAL USES: Quick Set Patch Mix is used on driveways, garage floors, parking garages, warehouse floors, airport runways and taxiways, bridge decks, highways or wherever a quick set repair is needed.

FEATURES & BENEFITS:

- All weather stability
- Can resurface with polymer concrete within 1 hour
- Quick return to traffic at 70°F (21°C), 1 hr
- Polymer reinforced for greater bond strength
- Rapid set
- High early strength

CHEMICAL PROPERTIES:

	Result
Pot Life	10 – 15 min
Return to Service Time (vehicle traffic)	1 hr

TYPICAL PHYSICAL PROPERTIES:

	Result
Flexural Modulus	1120 (24 hrs)
	1260 (7 days)
	1880 (28 days)
Compressive Strength (psi)	2500 (1 hr)
	5100 (24 hrs)
	8100 (28 days)

SURFACE PREPARATION: Surface Preparation is often the most important part of a successful coating or resurfacing application. Surface must be clean, sound, and free from oil, dirt, waxes, or any other contaminant that may interfere with bonding. Popular methods of surface preparation include grinding, shotblasting, and/or scrubbing with detergent, acid etching, neutralizing, and pressure washing. The type of surface preparation needed will depend on the condition of the substrate to be repaired, resurfaced, textured, stamped, colorcoated and/or sealed. **For commercial and industrial indoor jobs**, grinding is required to prepare the surface. **For residential indoor jobs**, scrubbing with detergent, acid washing, neutralizing, rinsing and wet/dry vacuuming is recommended. **For most outdoor jobs**, the surface can be cleaned by detergent scrubbing, acid washing and pressure washing. The following is a step-by-step procedure.

1. Protect the walls with tape and plastic before scrubbing or rinsing.

2. Scrub and rinse the floors. First dampen the surface with water in 100 to 200 sq. ft. sections at a time using a water hose. Using the floor polisher machine, scrub the dampened surface with a strong detergent (such as Simple Green) diluted 2 to 1 or 5 to 1 with water. For oil spots use straight detergent with no dilution. While scrubbing, use a water hose and trigger gun nozzle to clean the surface behind the floor polisher. For large open areas such as a warehouse floors, etc., a 3000 psi (or higher) pressure washer with a 15 degree or spinner tip on the end of the gun can be used to clean behind the floor polisher. Rinse immediately behind the floor polisher, so the residue does not dry on the surface. Use a rubber squeegee and/or broom to keep the dirty water from running back into the rinsed clean areas. **Use a wet/dry vacuum** (one or more depending on the size of the job) to remove the dirty water and detergent from the surface. The persons scrubbing, rinsing, squeegeeing and vacuuming should all work closely together doing a section at a time. After rinsing the surface clean, check the oil spots by rubbing them with a white rag. If the rag gets dirty, it will need to be scrubbed with a heavy duty detergent using a floor polisher machine and then rinsed clean prior to using a grinder.

3. If the surface is coated with a paint or sealer, it will be necessary to remove the coating using a paint stripper, sandblaster, shotblaster or surface grinder. If a shotblaster is used, a dustless grinder can be used to clean the edges where the shotblaster cannot reach.

4. Open the concrete pores. Acid washing is recommended to etch a concrete surface when grinding, shot-blasting or sandblasting is not possible or unavailable. Opening the concrete pores allows the coating material to get good adhesion or bite into the substrate. Always wear the appropriate safety protection. The proper procedure to acid wash a concrete surface is as follows:

CONCRETE SOLUTIONS® QUICK SET PATCH MIX *(continued)*:

- a. Mix a solution in a 5 gallon pail consisting of 4 parts water and 1 part muriatic, hydrochloric or phosphoric acid. ALWAYS ADD THE ACID TO THE WATER FOR SAFETY AND TO AVOID SPLATTERING.
- b. Dampen the surface with water (no puddles) before applying the acid solution.
- c. Pour or spray the acid solution onto the dampened concrete surface. When spraying, use an acid-resistant pump-up sprayer.
- d. Scrub the acid solution evenly over the surface using an acid-resistant broom. Allow the acid solution to sit on the surface and work for 3 – 5 minutes etching the concrete. Do not allow any areas on the concrete to dry during the etching process. If this occurs, spray more water or acid solution to keep the surface wet.
- e. Once the acid solution stops fizzing, spray a solution of 10 parts water and 1 part household ammonia onto the acid solution to increase the pH and neutralize it prior to rinsing.
- f. Thoroughly rinse any acid residue off the concrete surface using a pressure washer. Pre-wet any surfaces the acid solution will be rinsed over. If indoors, rinse with water a section at a time and remove the water and acid solution with a wet/dry vacuum.

CRACK & JOINT REPAIR: Structural moving cracks should be repaired/treated with Concrete Solutions Crack Repair System prior to applying Quick Set Patch Mix or any other Concrete Solutions polymer concrete products. Please refer to Concrete Solutions Crack Repair Instructions for the complete and detailed procedure.

MIXING INSTRUCTIONS: Using a drill mixer, or stir stick for smaller batches, mix by volume 1 part water to 4 parts Quick Set Patch Mix. Add more Patch Mix or water as needed to adjust consistency. Mix thoroughly for 3 minutes, then apply immediately over slightly dampened concrete before the material begins to set up which is usually within 10 – 15 minutes after mixing. Note: For large or deep repairs over 1/2" (12.7 mm) thick, add between 1 – 1.5 gallons (4.4 – 6.6 liters) of 3/8" (9.5 mm) pea gravel/rock per a 50 lb. (22.7 kg) bag of Quick Set Patch Mix to provide extra strength, decrease shrinkage cracks and increase coverage. In colder temperatures, mix warm water with the Quick Set Patch Mix to accelerate dry time, and if needed heat concrete surface prior to the Patch Mix application.

APPLICATION INSTRUCTIONS: Immediately after mixing, lightly dampen the area to be repaired with water and work the Quick Set Patch Mix into the hole or patch area using a paintbrush or stiff bristle broom. Press the Patch Mix into the surface to achieve the best bond possible and level off using a trowel, putty knife, or screed rod. Trowel smooth and feather the edges of the Patch Mix to zero. Scrape off and remove excess material around the patch. A light amount of water can be sprayed over Quick Set Patch Mix and then troweled to help achieve a smoother finish. Polymer concrete resurfacing systems can usually be applied over the Quick Set Patch Mix within 1 hour of application.

Application Instructions for Airport Taxiways, Bridges and Highway Repairs: For high traffic areas, apply Epoxy 200 Quick Set as a primer before applying the Quick Set Patch Mix to achieve a superior bond with the existing concrete surface. Mix and apply Epoxy 200 Quick Set by brushing or rolling it, using a 3/4" nap roller, into the hole or over the repair area. Apply the Epoxy 200 Quick Set as thin as possible. Immediately (or within 5 minutes) while the Epoxy 200 Quick Set is still wet, apply Quick Set Patch Mix over it and trowel or screed as usual to achieve the desired finish. (See the Epoxy 200 Quick Set technical data sheet for more information).

NOT RECOMMENDED FOR: Do not use Quick Set Patch Mix for structural crack or joint repair.

HOW SUPPLIED: Quick Set Patch Mix is packaged in 50 lb (22.7 kg) bag.

SAFETY PRECAUTIONS: Health Considerations: Consult the Rhino Linings® Safety Data Sheets (SDS)

Chemical systems require the use of proper safety equipment and procedures. Please follow the Rhino Linings® product SDS and Safety Manual for detailed information and handling guidelines.

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Quick Set Patch Mix
How-to Video
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