

## SPECCRETE® SPECCOPATCH-RS CONCRETE PATCHING MORTAR

**PRODUCT DESCRIPTION:** Speccrete® Speccopatch RS is a specially formulated, rapid setting, cement based concrete and masonry patching material that requires only the addition of potable water for mixing. Speccrete® Speccopatch RS may be used interior or exterior, above or below grade on vertical, horizontal and overhead surfaces without forms. After initial set, Speccrete® Speccopatch RS may be shaved to the contours of the surrounding area. Speccrete® Speccopatch RS is used to repair concrete pipe, manholes, sidewalks, driveways, expressways, ceilings, walls, curbs and panels. Speccrete® Speccopatch RS may be used for applications under constant moisture contact as it is formulated with a non-Portland cement base.

**BENEFITS:** FAST SETTING... SHAPEABLE...SHAVEABLE...TENACIOUS BOND...RESISTANT TO FREEZE THAW...THICK OR THIN LAYERS ... LIGHT COLOR...NON-SHRINK

**COMPOSITION:** Cement, plasticizers, rheology modifiers and selected aggregates. This product contains no calcium chloride or intentionally added chlorides that contribute to reinforcement steel corrosion, and contains no gypsum-based components.

**TECHNICAL DATA:** Complies with ASTM C-387 and ASTM C-928 R2 Specifications for Packaged, Dry, Rapid Hardening Cementitious Materials for concrete repairs.

<b>WORKING &amp; PERFORMANCE PROPERTIES @ 70° F (21° C) (APPROXIMATE):</b>	
Yield per 45 lb. Bag:	0.44 cubic feet
Coverage per 45 lb. Bag:	22 square feet at ¼ inch thickness
Initial Set per ASTM C-191:	33 minutes
Final Set per ASTM C-191:	49 minutes

<b>COMPRESSIVE STRENGTH PER ASTM C-109:</b>	
3 hours:	2630 p.s.i. (32.30 Mpa)
1 day:	3710 p.s.i. (45.50 Mpa)
7 days:	5680 p.s.i. (69.70 Mpa)
28 days:	7010 p.s.i. (86.10 Mpa)

<b>FLOW OF MORTAR @ 15 MINUTES - ASTM C-109:</b>	88 %
<b>SLUMP- ASTM C-143:</b>	3.0

<b>SLANT SHEAR BOND STRENGTH PER ASTM C-882:</b>	
1 day:	1290 p.s.i. (15.79 Mpa)
7 days:	1760 p.s.i. (21.55 Mpa)
28 days:	5670 p.s.i. (69.60 Mpa)

<b>SCALING RESISTANCE PER ASTM C-672:</b>	Visual rating = 1 (25 cycles)
<b>FREEZE THAW DURABILITY PER ASTM C-666:</b>	97.92 (300 cycles)

<b>AIR CURED LENGTH CHANGE % PER ASTM C-157:</b>	
28 days:	-0.050
<b>WATER CURED LENGTH CHANGE %- ASTM C-157:</b>	
28 days:	+0.031

<b>CHLORIDE ION CONTENT PER AASHTO T-260 PROCEDURE C:</b>	180 ppm (Max allowed 300 ppm)
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\*All tests above run at 16.22 % water to powder ratio = 7.30 lbs. water / 45.00 lbs. Speccopatch RS

**DIRECTIONS FOR USE:** All areas to be patched shall be clean and free of oil, grease, dirt, deteriorated concrete and all contaminants. Undercut the edges of the area to be patched to accommodate the repair. Speccrete® Speccopatch RS used to repair vehicular traffic bearing areas should be placed a minimum of 1.5" in depth. Clean and prime any exposed steel and reinforcing. Abrade or acid-etch slick surfaces to ensure proper bond. When the temperatures are above 40° F, pre-wet the prepared area with potable water before applying Speccrete® Speccopatch RS. Any excess water should be blown or swept away to prevent dilution of the material.

Speccrete® Speccopatch RS will require 3.25 to 3.50 quarts of potable water per 45# bag to achieve the proper mix consistency. Add the measured amount of Speccrete® Speccopatch RS to the proper amount of clean water and mix to a stiff plastic like consistency for no more than 4-5 minutes. Mix small quantities of Speccrete® Speccopatch RS in a clean container with a hand trowel or in a wheelbarrow with a mud hoe. Use a rotary mixer with rubber tip blades for mixing larger quantities up to 90 lbs. In deep areas over 1" Speccrete® Speccopatch RS may be extended with clean, washed 3/8" pea gravel in the range of 13 to 22.5 pounds (1.0-1.9 gallons) per 45 lb. bag. If adding dry pea gravel, additional water should be added at a rate of 0.4 gallon per gallon of aggregate. If adding "pre-wet" or damp gravel, then no additional water should be added. Do not mix more material than can be placed in 10 minutes. Do not re-temper with additional water.

Place Speccrete® Speccopatch RS immediately after mixing. Force Speccrete® Speccopatch RS firmly into the area to be patched by hand or with a trowel and mold to the desired shape. Compact thoroughly to ensure bond. After initial set, finish Speccrete® Speccopatch RS with a steel trowel until smooth and level with the surrounding surface. Do not overwork the material. Cure Speccrete® Speccopatch RS with damp cure method if any surface treatment will be used, or with a quality cure and seal compound such as Specco Envirocure 1315. Curing is mandatory especially in hot weather, direct sunlight and for thin patches.

**CAUTIONS:** Mix Speccrete® Speccopatch RS no more than 3-4 minutes. Do not mix more material than can be placed in 10-15 minutes. Use only potable water for mixing. Clean mixing equipment between batches. When mixing Speccrete® Speccopatch RS, the water-to-powder ratio is very critical, do not vary the specified water amount or over water. Do not re-temper. Do not feather edge. Do not apply less than 1/4 inch or over 1 1/2 inch in thickness per lift Use of any extension aggregates will alter physical properties as listed. Clean mixing equipment between batches. Protect from excessive sun, low humidity, rain and wind exposure, as well as temperature extremes that could prevent inadequate curing. Do not apply to frozen, frost filled or hot surfaces. Do not apply during freezing weather. Colder temperatures will extend open time and reduce rate of strength gain. Do not add calcium chloride or other accelerator type admixtures to Speccrete® Speccopatch RS.

**WARNINGS:** Contains cement and silica, avoid inhalation of dust. Wear gloves, safety goggles, and OSHA approved dust respirator during mixing and placement. Refer to product M.S.D.S. (Material Safety Data Sheet) for additional safety information. Do not take internally. Avoid prolonged contact with skin. **FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. NPCS HMIS SAFETY RATINGS:** HEALTH = 2, FLAMMABILITY = 0, REACTIVITY = 0, P. PROTECTION = E

**PACKAGING:** 45 lb. (20.45 kg) bags and pails

**STORAGE:** 40° to 90° F in a dry environment / **SHELF LIFE:** 1 year properly stored

**FREIGHT CLASS:** Item #42130, Sub 0, LTL 50- Cement based patching material in bags or pails

**LIMITED WARRANTY:** This product is warranted to be of merchantable quality when used according to the instruction herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased, if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability resulting from the use of this product. Revised -11-06-09