



SPECCRETE® SPECCOPATCH RS

CONCRETE PATCHING MORTAR

DESCRIPTION: *Speccrete® Speccopatch RS* is a general purpose cement based patching mortar for concrete and masonry that requires only the addition of potable water for mixing. *Speccrete® Speccopatch RS* can be shaved to level the repair back to uniform condition and exhibits high compressive and bond strengths, along with good weathering properties. Typical uses are interior or exterior, above or below grade, on vertical, horizontal and overhead surfaces without forms. Common applications include repairs on concrete pipe, manholes, curbs, sidewalks, driveways, steps, walls, panels, ceilings, balconies, highway applications and related flatwork.

BENEFITS:

- Meets ASTM C928 Type R2 Mortar specifications
- Ideal for vertical and overhead repairs
- Excellent trowelability and finishing
- 28 day compressive strengths > 7000 p.s.i.
- Light gray color for uniform match to substrate.

COMPOSITION: Proprietary blend of cement, water reducers, rheology modifying additives and selected aggregates for improved finishing and trowelability. This product contains no calcium chloride or intentionally added chlorides that contribute to reinforcement steel corrosion.

LEED CREDIT CONSIDERATIONS: Materials and Resources: **MR Credits 5.2:** Regional materials- Greater than 20% extracted, processed & manufactured regionally at production location: Lemont, IL 60439. 90% Content- Harvested within 500 miles.

TECHNICAL DATA:

WORKING AND PERFORMANCE PROPERTIES @ 70° F (21° C) APPROXIMATE VALUES *		
Initial set per ASTM C-191 (Finishing time):		30-35 minutes
Final set per ASTM C191:		40-45 minutes
Coverage per 45 lb. bag:		21 square feet at 1/4 inch thickness
Yield per 45 lb. bag:		0.40 cubic feet
Compressive Strength per ASTM C-109:	3 hour:	2630 ps.i.
Compressive Strength per ASTM C-109:	24 hour:	3710 ps.i.
Compressive Strength per ASTM C-109:	28 day:	7010 p.s.i.
Flow of Mortar @15 Minutes per ASTM C-109		88%
Slant Shear Bond Strength per ASTM C- 882:	7 day:	1290 p.s.i.
Slant Shear Bond Strength per ASTM C- 882:	28 day:	1760 p.s.i.
Freeze Thaw Durability per ASTM C-666:	300 cycles:	97.92 %
Air-Cured Length Change per ASTM C-157:	28 day:	-0.050%
Water Cured Length Change per ASTM C-157:	28 day:	+0.031%
Scaling Resistance per ASTM C-672:	25 cycles:	0% Loss (Visual rating = 1)
Chloride content per ASTM C1218:		9 p.p.m. = 0.02 lbs/yd ³ chloride ion

*Above results obtained using a water / powder ratio of 15.04% = 0.81 gallon water (3.25quarts) per 45 lb. (20.45 kg) unit

SURFACE PREPARATION: CONCRETE: Existing concrete should be prepared by removing unsound concrete with the use of high pressure water blasting, grinding, sandblasting or by use of chemical cleaning and etching. Remove all dirt, grease, oil and other contaminants that may come in contact with the patching material. For horizontal patching, a 3/4 inch minimum saw cut is recommended to insure adhesion. Always pre-wet the substrate to a saturated surface dry (SSD) condition with no standing water on the surface.

MIXING: Mix only as much material as can be placed in 8-10 minutes. Always add the powder to the water. Mix **Speccrete® Speccopatch RS** to a uniform, lump free consistency for a minimum of 60 seconds. A thick, creamy putty-like texture (zero slump) is considered ideal working consistency. It can be mixed with a margin trowel for small repairs.



MIXING (CONTINUED): For bag mixing, place approx. 0.81 gallons (3.25 quarts) of water in the mixing container and slowly add the 45 lb of **Speccrete® Speccopatch RS** while continuously mixing with a mechanical low speed drill and paddle mixer. Higher quantities of bags may be mixed in a mortar mixer to speed the mixing process for larger jobs. If necessary, adjust water to the desired consistency of the mortar, but do not exceed 0.93 gallon (3.75 quarts) per 45 lb. bag. Do not add previously mixed material to new batches, and do not re-temper or add additional water to previously mixed material to gain plasticity. In deep areas over 2" **Speccrete® Speccopatch RS** should 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. Aggregate addition should be in the following sequence with continuous mixing: Add water first, next add pea gravel, then add **Speccrete® Speccopatch RS**.

APPLICATION-PROCEDURES: Apply **Speccrete® Speccopatch RS** between 1/4 inch minimum to 2 inch maximum thickness with no aggregate and 2 inches plus with aggregate. Always overfill the area to be patched. Force **Speccrete® Speccopatch RS** into the area to be patched by trowel and trowel to the intended shape. Once initial set has occurred, shave the patch to the desired finish. Always shave towards the bond lines. Finish with a steel trowel. If applying in successive lifts, allow preceding lift to stiffen to harden before applying fresh material. Clean tools with water immediately after use. Please contact Specco technical service for conditions not specified or application procedures not noted, at 800-441-6646. **CURING:** Cure **Speccrete® Speccopatch RS** with damp cure method if any surface treatment is to be used, or with a quality cure and seal compound such as **Specco Envirocure 1315**. Curing should be considered mandatory, especially in hot, windy weather, direct sunlight and for thin patches.

APPLICATION-CAUTIONS: Set times will vary depending on temperature, humidity, and thickness. Minimum application thickness recommendation is 1/4 inch (6 mm). Do not feather edge. For feathered edge or very fine repairs, the use of **Speccrete® Thin Repair** is recommended. Maximum recommended application thickness in one lift is 2 inches (50 mm). Do not re-temper the mixed material. Do not overwork the completed surface. **When mixing the Speccrete® Speccopatch RS, the water to powder ratio is very critical, do not vary the specified water amount or over water.** Protect from excessive sun, low humidity, rain, or wind exposure, as well as temperature extremes that could prevent inadequate curing. Do not apply **Speccrete® Speccopatch RS** if the temperature is expected to fall below 40° F (4° C) or rise above 90° F (32.2° C) within 24 hours of application. Do not apply to frozen or frost filled surfaces. Heating the patch area until warm, using warm water for mixing and insulating the patch after application will assist in reaching higher strength development. Do not use direct heat on the patch after its installation. 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**. The use of **Specco Speccrete® G-30 or Speccrete® Phast Patch** products are recommended for cold weather patching options.

GHS HAZARD RATINGS: DANGER:



Irritant: Respiratory Tract Irritation.



Health Hazard: Known carcinogen



Health Hazard: Corrosive Material

WARNINGS: HEALTH HAZARD & IRRITANT: This product contains both Portland cement & crystalline silica (a known carcinogen). It is established that prolonged breathing of crystalline silica dust over time will increase the risk of serious lung disease (Silicosis). **Refer to product S.D.S. (SAFETY DATA SHEET) for FIRST AID INFORMATION, or any related health and safety information before using this product. For medical emergencies only, call INFOTRAC @ 800-535-5053.**

FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. Avoid Inhalation of these dusts and any prolonged, direct contact with skin. Wear chemical resistant gloves, safety goggles, and O.S.H.A. /N.I.O.S.H. approved respirator during mixing and placement. Keep away from food and drink. Wash hands thoroughly after use and before eating. Do not take internally.

NPCS HMIS SAFETY RATINGS: HEALTH = 2, FLAMMABILITY = 0, REACTIVITY = 0, PROTECTION = E

PACKAGING: 45 lb. bag (20.45kg) , 50 bags / pallet, or 45 lb. pail (20.45 kg), 36 pails / pallet



SHELF LIFE: 1 year

WARRANTY: *Specco Industries, Inc. (Specco) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. No other representations or statements made by Specco representatives, in writing or orally, shall alter this warranty. Specco MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. **Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages.***

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