

# SPECCRETE® PHAST PATCH

## PHOSPHATE BASED, FAST SETTING PATCHING MORTAR

**PRODUCT DESCRIPTION:** Speccrete® Phast Patch is a one-component concrete repair and anchoring material that may be used in sub-freezing temperatures down to 0°F(-17.7°C). Speccrete® Phast Patch's quick setting characteristics make it an ideal product for bridge deck and highway overlays, precast spalling repairs, parking deck and ramp repairs, and a variety of heavy industrial repairs where fast setting, high early-strength properties are required. Speccrete® Phast Patch is available in optional formulas for both color and set time modification.

**BENEFITS:**

- **May be used in cold freezing weather**
- **Rapid setting**
- **Excellent bond strength to concrete**
- **Non-shrinking**
- **Requires only water for mixing**
- **No primer or wet curing required**
- **Available in white or modified custom colors**

**COMPOSITION:** Magnesium-ammonium phosphates with selected aggregates

<b>WORKING &amp; PERFORMANCE PROPERTIES @ 70° F (21° C) (APPROXIMATE):</b>	
<b>Yield per 50 lb. unit:</b>	0.46 cubic feet
<b>Coverage per 50 lb. unit:</b>	22 square feet at ¼ inch thickness
<b>Initial Set per ASTM C-403:</b>	3-5 Minutes
<b>Final Set per ASTM C-403:</b>	6-8 Minutes
<b>COMPRESSIVE STRENGTH PER ASTM C-109:</b>	
<b>1 hour:</b>	2880 p.s.i.
<b>3 hours:</b>	3250 p.s.i.
<b>1 day:</b>	4360 p.s.i.
<b>3 days:</b>	4890 p.s.i.
<b>28 days:</b>	6190 p.s.i.
<b>SLANT SHEAR BOND STRENGTH PER ASTM C-882:</b>	
<b>1 hour:</b>	1440 p.s.i.
<b>3 hours:</b>	1725 p.s.i.
<b>1 day:</b>	2500 p.s.i.
<b>3 days:</b>	2900 p.s.i.
<b>28 days:</b>	3715 p.s.i.
<b>FLEXURAL STRENGTH PER ASTM C-78:</b>	
<b>7 days:</b>	720 p.s.i.

\*All tests above were run at 10.0 % water to powder ratio (5.0 lbs. water / 50.0 lbs. powder)

**DIRECTIONS FOR USE:** All areas to be patched shall be clean and free of oil, grease, dirt, deteriorated concrete and all contaminants. Areas to be patched must be a minimum of 1/2" deep. Speccrete® Phast Patch will require 2.4 quarts of potable water per 50 lb. unit to achieve the proper mix consistency. Add the pre-measured amount of Speccrete® Phast Patch to the proper amount of clean water and mix for less than two minutes. Mix small quantities of Speccrete® Phast Patch in a clean container with a hand trowel. Use a slow-speed motor and paddle mixer or a rotary mixer with rubber tip blades for mixing larger quantities. Speccrete® Phast Patch may be extended with clean, washed 3/8" pea gravel in the range of 13 to 26 pounds (1-2 gallons) per 50 lb. unit. 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. Organization and timing are very important when mixing and placing Speccrete® Phast Patch.

Add the designated amount of water into the mixer, then add Speccrete® Phast Patch powder, quickly mix to a smooth consistency and then dump the material into place. Screed, trowel or broom finish quickly as Speccrete® Phast Patch achieves initial set in 3-5 minutes. It is strongly advised to clean equipment and tools with water between batches. Organization and timing are very important when mixing and placing Speccrete® Phast Patch. The mixing time is short, usually less than two minutes.

**CAUTIONS:** Do not mix more material than can be placed in 6-8 minutes. Use only potable water for mixing. When mixing Speccrete® Phast Patch, the water-to-powder ratio is very critical, do not vary the specified water amount. Do not over water. Do not re-temper. Do not feather edge. Do not use Speccrete® Phast Patch for precision grouting or place against copper, aluminum or galvanized metal.. Do not apply less than 1/2 inch or over 1 1/2 inch in thickness per lift. 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.

**COLD WEATHER RECOMMENDATIONS:** For temperatures below 32° F (0° C) use the minimum amount of water stated above (10% w/p or 2.4 quarts / 50 lb bag) for improved strength and set properties. In sub-freezing weather conditions, do not apply Speccrete® Phast Patch to frozen, frost, snow or ice filled surfaces. These should be thawed by use of ground heaters or propane torches if available. Speccrete® Phast Patch will generate its own heat in the early reaction process, so preheating the surface is not necessary if snow, ice or frost conditions are not visually present in the substrate. The use warm water and heated aggregates is also encouraged if possible for improved strength gain at early stages. Refer also to ACI 306.1 report "Standard Specification for Cold Weather Concreting" for recommended protection methods of concrete placement in sub-freezing temperatures. Colder temperatures will extend open time and reduce rate of strength gain. Do not add calcium chloride, bonding agents, or other admixtures to Speccrete® Phastpatch . Colder temperatures will extend open time and reduce rate of strength gain. Do not add calcium chloride, bonding agents, or other admixtures to Speccrete® Phast Patch. Use of any extension aggregates will alter physical properties as listed.

**WARNINGS:** When using Phast Patch indoors, provide adequate ventilation. The mixed product produces small amounts of ammonia and this odor will prevail during mixing and finishing. DO NOT WET CURE. When the cured material is exposed to moisture, snow or rain, the ammonia odor may again be present for an extended period of time. 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. For medical emergencies only, call Infotrac 800-535-5053.

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

**PACKAGING:** 50# (22.70 kg) bags or pails **STORAGE:** Store in a dry protected area **SHELF LIFE:** Bags -1 year properly stored / Pails- 2 years

**FREIGHT CLASS DESCRIPTION:** Item 42130, Sub 0, LTL 50