### TECHNICAL DATA

# SPECPATCH 30

General purpose polymer-modified concrete repair material



### DESCRIPTION

SpecPatch 30 is a general purpose polymer-modified concrete repair mortar for concrete floors, walls, precast, tilt-up and masonry surfaces. SpecPatch 30 can be used for horizontal and vertical applications to provide a durable repair that can be shaped by shaving or sanding.

### **FEATURES/BENEFITS**

- Can be featheredged and shaped
- Lifts up to 1" in thickness (up to 2" in small areas)
- Designed for interior & exterior repairs
- Excellent durability and adhesion
- Dries to color of concrete
- One-component Just add water

# **APPLICATION**

#### **Applications:**

- Interior & exterior
- Vertical, overhead & horizontal repairs
- Used at no slump consistency
- Outstanding repair material for concrete pipe, curbs, sidewalks, formed and precast concrete

Surface Preparation: The concrete must be sound and free of all foreign material, including oil, grease, dust, laitance or other surface contaminants. For maximum durability, saw cut the perimeter of the repair 1/8" deeper than the depth of the repair, creating a notched, reinforced edge. Mechanically abrade the surface by an engineered approved method in accordance with ICRI 310.2 Guideline to a minimum CSP 5. All concrete surfaces to be repaired must be in a saturated-surface-damp (SSD) condition with no standing water on the surface.

**Priming/Scrub Coat:** Thoroughly clean all exposed steel reinforcing of rust and coat with **SpecPrep SB**.

Prepared concrete must be SSD and primed with a spray or brush coat of SpecPrep SB and the repair mortar applied wet on wet or up to the recommended open time (see SpecPrep SB technical data sheet).

As an alternative, apply a scrub coat of the properly mixed repair mortar by scrubbing a thin layer into the predampened substrate with a stiff brush. Place the repair mortar immediately before the bond coat dries.

Mixing: Mix 6.75 – 7.25 pints (depending on desired consistency) of clean water per 50 pound bag of material. Mix with a low speed drill. Add recommended amount of clean water into the container, followed by the SpecPatch 30. Mix 2 to 3 minutes. Mix only what can be applied within the setting period. SpecPatch 30 may be used with SpecChem Strong Bond Acrylic Bonder neat or mixed 1 to 1 with water per 50 pounds of powder to increase durability, abrasion resistance and bond strength. The addition of Strong Bond is recommended when using SpecPatch 30 in thin, horizontal applications subjected to heavy traffic or wear.

### **APPLICATION** (con't)

<u>Deep/Large Applications</u>: Extending SpecPatch 30 with clean 3/8" SSD pea stone in large or deep applications over 3/4", will create a concrete repair very similar in thermal properties to the concrete itself.

Large repair applications over 1" should be extended with 3/8" aggregate up to 50% by weight (25 lbs) and mixed an additional 2 minutes.

**Placement:** Trowel SpecPatch 30 firmly into the prepared area, ensuring intimate contact with the bonding surface. Use slightly more material than is needed and roughly shape during placement. After the initial set, when SpecPatch 30 is surface hard, shave the material to the desired final shape using a steel trowel. Maximum depth of neat repair mortar is 1" for each lift. Additional lifts can be placed after the original lift has achieved set. The original lift should be left with a rough surface to improve bond between lifts.

### **TYPICAL TEST DATA**

Set Time at 70°F (ASTM C266)	
Final Set	60 min
Compressive Strength (ASTM C109)	
3 hour	1000 psi
1 day	3000 psi
7 days	5000 psi
28 days	6000 psi
Length Change (ASTM C157)	
28 days ( air cure)	08%
28 days (water cure)	+.03%
Freeze-Thaw (ASTM C672)	
Scaling Resistance	25 cycles=0% loss
Slant Shear Bond Strength (ASTM C882)	
7 day	1680 psi
Flexural Strength (ASTM C348)	
28 days	650 psi
Yield	
Yield Per Bag	.43 cu-ft



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### **APPLICATION** (con't)

**Finishing/Curing:** Finish the repair material to the desired texture to match the surrounding concrete. SpecPatch 30 is self-curing under most conditions. In severe drying conditions, use an ASTM C309 compliant, water-based SpecChem curing compound.

# SPECIFICATION/COMPLIANCE

ASTM C928 Rapid-hardening Cementitious Mortar ASTM C109 Compressive Strength ASTM C882 Slant Shear Bond Strength

#### **PACKAGING**

50 lb bag & 50 lb plastic pail

Coverage: approx 20 sq-ft @ 1/4"

### **CLEAN UP**

Tools and equipment may be cleaned with water before SpecPatch 30 hardens.

#### SHELF LIFE

Shelf life of unopened bags stored in a dry facility is 12 months. Excessive temperature differential and/or high humidity can shorten the shelf life expectancy. Store in a cool, dry area away from direct sunlight.

### LIMITATIONS/PRECAUTIONS

Minimum thickness for repair is 1/8" to achieve maximum durability in heavy wear applications. Do not retemper after initial mixing.

For large horizontal overlay or topping applications use SpecChem DuoPatch due to a more flowable consistency, greater durability and abrasion resistance.

Do not add other cements or additives to this product. SpecPatch 30 is a fast setting product, so mixing equipment should be cleaned with water as soon as possible.

Do not allow repairs to freeze until the material has reached a minimum of 1000 psi compressive strength. In adverse temperatures, follow ACI recommendations for hot/cold weather concreting practices.

Use only potable water for mixing.

Minimum surface and ambient temperature of 45°F and rising is required at the time of application.

For optimum results, condition material to between 65 °F and 85°F.

**Caution:** Contains Portland cement and sand. Cement will cause irritation. Avoid contact. A dust respirator, safety goggles, and rubber gloves are recommended. Avoid prolonged contact with clothing. In case of contact with eyes, immediately flush with water for at least 15 minutes. Get prompt medical attention. Do not wear contact lenses when working with this product. DO NOT take internally. Keep out of reach of children.

Avoid hazards by following all precautions found in the Safety Data Sheet (SDS), product labels, and technical literature. Please read this information prior to using the product.

#### WARRANTY

# NOTICE-READ CAREFULLY CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

#### WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

#### INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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