

Special Patch

Polymer-Modified Concrete Repair Mortar

Description

A polymer-modified cementitious two-component concrete repair mortar for use in thin and thick-section concrete patching and overlays. Special Patch provides excellent freeze-thaw resistance, superior adhesion and resistance against the penetration of deicing salts and other contaminants. Ideal for repairing interior warehouse slabs or exterior concrete pavements.

shall be mixed and installed in strict accordance with the manufacturer's written recommendations and directions. Technical service shall be made available by the manufacturer upon request. Approved product: Conspec Special Patch or approved equivalent.

Manufacturer

Conspec
636 S. 66th Terrace
Kansas City, Kansas 66111
Customer Service (800) 348-7351
Technical Service (877) CONSPEC

Architectural Specifications

Patching Material: All concrete and masonry repairs shall be performed with Special Patch as manufactured by Conspec, Kansas City, Kansas. Patching material

Application

Surface Preparation: Remove all deteriorated concrete, dirt, oil, curing compounds, or other bond-inhibiting materials. Area to be repaired should be no less than 1/8" (.3cm) in depth for maximum durability. A vertically cut

Use

For all concrete structural and general repairs (interior and exterior, above and below grade). Use where Added durability against freeze-thaw, abrasion, deicing salts and impact is required. Ideal for parking deck repairs, ramps and roadways, as well as interior warehouse floors subjected to heavy loads and abrasion.

Benefits

- Excellent abrasion resistance to heavy loads and traffic
- High early strength for fast repair and turnaround
- Non-shrink for maximum durability and Adhesion
- Good resistance to freeze-thaw and impact
- High compressive, bond and flexural strengths
- Thermal expansion similar to concrete for long-term durability
- Versatile, Easy to trowel consistency for horizontal applications
- Does not form a vapor barrier for durable exterior repairs
- Rapid-hardening mortar (ASTM C-928) which accepts foot traffic in 1 to 2 hours, pneumatic tires in 4 to 6 hours.

Applicable Standards

ASTM C-928 (Rapid-hardening mortar)

TEST DATA		
	Special Patch Results	ASTM C-928 Requirements
Final Setting Time (ASTM C-266)	15-25 min.	
Yield	.41 cu. ft.	
Flow (ASTM C-109)	125%	100%
Expansion % in water (ASTM C-157)	.06%	+ .15%
Expansion % in air (ASTM C-157)	.02%	- .15%
Compressive Strength (ASTM C-109) (50 lbs. Special Patch and 7 pints of Special Bond)		
3 hours after set	1200 psi (8.3 MPa)	1000 psi (6.9 MPa)
3 days	3500 psi (24.1 MPa)	2000 psi (13.9MPa)
7 days	5200 psi (35.8 MPa)	4000 psi
(27.6MPa)		
28 days	7000 psi (48.6 MPa)	4000 psi (27.6MPa)
Bond Strength (ASTM C-1042)		
1 day	1000 psi (6.9 MPa)	
7 days	1800 psi (12.4 MPa)	
14 days	2000 psi (13.8 MPa)	
Freeze-Thaw Resistance		
ASTM C-666, Procedure A	99%	
Scaling (ASTM C-672)	25 cycles: none	
	Visual rating: 0	
Flexural Strength (ASTM C-78) - 28 days -	1700 psi (11.7 MPa)	
Yield per unit	.41 cu. ft.	

recessed edge outlining the area to be repaired is recommended on any area to carry vehicular or forklift traffic. All bonding surfaces should have an aggregate-fractured profile of $\pm 1/16$ " for optimum Adhesion. Saturate prepared surface with clean water, remove excess so that a saturated-surface dry condition exists at the time of mortar application.

Mixing: Add approximately 7 pints (3.29L) of Special Bond into mixing container. Slowly Add Special Patch powder while mixing with a low-speed drill and paddle or suitable mortar mixer. Mix for 2 to 3 minutes to a smooth consistency. Do not mix more than 3 minutes. Add Special Bond if a more flowable, self-leveling consistency is desired.

Application: Scrub or brush the mixed Special Patch into the predampened substrate filling any voids.

Fill the area to be repaired, screed level, and allow to stiffen. Finish to the desired texture to match the surrounding concrete. The use of Conspec Aquafilm (evaporation retardant and finishing aid) will facilitate finishing and reduce the tackiness of mortar with the finishing tools.

After material has set and been finished to desired texture, apply any remaining Special Bond to seal and aid curing. Material should be placed within a 20 minute period.

Special Patch is packaged with a finely graded aggregate which allows the mortar to be featheredged in non-structural, low stress repairs.

Although Special Patch is self-curing under most conditions, Special Patch should be protected against severe high wind, temperature and low humidity by moist curing or an approved Conspec ASTM C-309-91 curing compound.

Deep Applications: Special Patch can be extended up to 60% by weight (30 lbs./ 13.5 KG) with a clean 3/8"(1cm) pea gravel or aggregate in applications greater than 1"(2.54cm). Aggregate must be well graded, saturated, surface-dry and added at initial mix. Approximate yield with 30 lbs. (13.5 Kg) of aggregate is .59 cubic ft. Do not use limestone aggregate.

Packaging

60 lb. (27KG) unit (5 gal. pail):
50 lbs. (22.7 KG) of Special Patch
1 gal. (3.8L) of Special Bond polymer modifier*

60 lb. (27 KG) unit (bag):
50 lbs. (22.7 KG) of Special Patch
1 gal. (3.8L) of Special Bond polymer modifier*

*Note: Strong Bond can be used as a substitute for Special Bond. All other procedures apply. Special Bond can be applied as a ready-to-use acrylic polymer for any mortar mix.

Limitations/Precautions

DO NOT place at temperatures below 40°F (5°C) or if the temperature is expected to fall below 40°F (5°C) in the next 24 hour period. In hot weather follow ACI 305 recommended procedures.

Do not apply over hard troweled or tightly finished floors without first scarifying the floor.

Do not apply as a skim coat over large areas. Contact the manufacturer if you have any questions.

Caution. Contains Portland Cement and sand. Cement will cause irritation. Avoid contact. Use of 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 Material Safety Data Sheet (MSDS), product labels and technical literature. Please read this information prior to using the product.

Warranty

Conspec warrants, for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Conspec, the product is free of manufacturing defects and conforms to Conspec's published specifications in force on the date of acceptance by Conspec of the order. Conspec shall only be liable under this warranty if the material has been applied, used, and stored in accordance with Conspec's instructions in this technical data sheet. The purchaser must examine the product when received and promptly notify Conspec in writing of any non-conformity before the product is used, or no later than 30 days after such non-conformity is first discovered. If Conspec, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Conspec officer is authorized to modify this warranty. The sales information on the Conspec website and received by the customer during the sales process does not supersede this warranty and the specifications of the product in force on the date of sale. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

Limitation of Liability

Conspec shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, this Agreement, even if Conspec could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this agreement, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.

Receiving

All bagged products should be checked for dryness prior to signing shipping papers.

Storage

Special Patch should be stored in a cool, dry interior area. At no time should material be exposed to high humidity, rain or snow conditions.

Technical Services

Complete technical and specification services are available from the manufacturer and their authorized representatives and distributors.

Filing System

Additional literature and the Material Safety Data Sheet can be obtained from Conspec upon request.