



Transpatch

High Strength Patching Compound



Description

Transpatch is a rapid setting, rapid hardening concrete patching material that exhibits excellent flexural properties, shear bond strength and compressive strength. This product is a blend of portland cement, selected aggregates and proprietary admixtures.

Transpatch has been specifically formulated to meet and exceed the requirements of ASTM C-928 R1 and R2. **Transpatch** offers superior resistance to de-icing salts, petroleum products and other chemicals prevalent on concrete roadways. In addition, **Transpatch** will not rust or corrode reinforcing steel under moist, humid conditions.

Uses

Transpatch is suited for a wide variety of concrete repairs:

- Bridge decks
- Pavements
- Airport runways
- Warehouse floors
- Industrial plants

Benefits

- Resilient: withstands freeze/thaw cycles and withstands corrosive elements
- Rapid set: high early strength, open to traffic in 1 hour
- Performance: excellent compressive strengths
- Consistent: strict Quality Control Testing and standards

Surface Preparation

All surfaces in contact with **Transpatch** shall be free of dirt, oil, grease, laitance and other contaminants. All unsound concrete should be removed to ensure a good bond. Best results will be obtained by sawcutting the area to be patched, providing uniform depth and firm bonding areas. ACI recommends that the area to be patched should be saturated for 24 hours before placement. Remove any standing water. Surface should be saturated, surface dry (SSD). For best results, scrub some of the mixed components into the prepared surface. Do not allow scrub coat to fully dry before placement. Always apply a test patch. Maintain contact areas between 40°F (4°C) and 90°F (32°C) prior to repair and during initial curing period.

Physical Properties

Compressive Strength (ASTM C-109*)

SET	3 HOURS	1 DAY	7 DAYS	28 DAYS
A Normal	3,000 psi 20.67 MPa	5,700 psi 39.27 MPa	6,000 psi 41.34 MPa	7,100 psi 48.92 MPa

*Notes: 73°F (22.8°C) 55% Humidity A = 4.5 qts

Rate of Set (ASTM C-266*)

SET	INITIAL	FINAL
A Normal	:15	:30

Length Change - 28 Days (ASTM C-157*)

STORAGE	% LENGTH CHANGE AVERAGE
AIR STORAGE	-0.090
WATER STORAGE	+0.030

Bond Strength (ASTM C-882*)

AGE	BOND STRENGTH
7 DAYS	1,000 PSI (6.89 MPa)
28 DAYS	2,400 PSI (16.54 MPa)

*Note: 100% of rupture occurred in dummy section

Scaling Resistance of Concrete Surface Exposed to Deicing Chemicals (ASTM C-672) *Pass 25 cycles / 50 cycles

Mixing

For best results, use a mechanical mixer with rotating blades. Pre-wet mixer and empty excess water. Place 4 1/2 quarts of cool, clean potable water per 50 lb. bag in mixer, then add dry material. Mix on low RPM for a total of 3 to 5 minutes to achieve desired consistency. Mix only enough material that can be placed within working time. For placements greater than 3" in depth, **Transpatch** must be extended by up to 30%, by weight, with clean, washed and dry 3/8" (1cm) pea gravel. Do not blend excess water as this will cause bleeding and segregation. Do not use any other admixtures or additives.

Packaging: 50 lb. bag (22.7 kg)
64 bags per pallet

Yield: 50 lb. (22.7 kg) will fill approximately .43 ft³
(0.012 m³) when 4 1/2 qts mixing water is used.

03930

CONCRETE REHABILITATION

Placing

Transpatch should be placed immediately following completion of mixing. Place material consistently, avoiding any air entrapment. Pour material into prepared sawcut area, ensuring that all pores and voids are filled. Force material against edge of repair, working toward center. Screed or float to the level of the surrounding concrete, then trowel, brush or broom to the desired finish.

Finishing & Curing

Follow standard ACI curing procedures. Exposed surfaces should be cured with a membrane forming curing compound such as **US SPEC** Maxcure Resin Clear, Maxcure Wax Clear, Hydrasheen 15% or Hydrasheen 30%.

Storage

Normal cement storage and handling practices should be observed. Store material in an interior, cool, dry place. Shelf life is one year in original, unopened bags.

Limitations

In addition to limitations already mentioned, please note the following. Do not apply when temperature is below 40°F (4°C) or when the temperature is expected to fall below 40°F within 48 hours. Do not apply over surfaces that are frozen or contain frost. Do not apply over any active faults or cracks in the substrate without addressing any movement that may occur. Allow concrete to fully cure for 28 days before the use of this product. Normal conditions working time is 10 minutes. Setting time will speed up in warm weather and slow in cold weather. For hot and cold weather applications, contact your US SPEC manufacturer's representative.

Regulatory

Read and follow application information, precautions and Material Safety Data Information.

Right-to-know

This product contains Crystalline Silica (CAS# 14808-60-7) and Portland Cement (CAS# 65997-15-1).

HMIS

Health 1, Fire 0, Reactivity 0

Prop 65

Warning! This product contains Crystalline Silica, a chemical known to the State of California to cause cancer or reproductive toxicity.

VOC Content

0 g/l

Caution

EYE AND SKIN IRRITANT

Contains Portland Cement (CAS# 65997-15-1) Contains Aggregates (CAS# 14808-60-7) Do not allow contact with eyes or skin. Avoid breathing dust - Silica may cause serious lung problems. There is limited evidence Silica is a carcinogen. The use of gloves, goggles, and where appropriate, dust masks and other protective clothing is recommended. If cement or sand particles get into eyes, rinse immediately with clean water and seek prompt medical attention.

Technical Service

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Web Site www.usspec.com

NOTICE OF LIMITED WARRANTY US MIX Products Co. (manufacturer) warrants to buyer that this product at the time and place of shipment is of good quality and conforms to the manufacturer's specifications in force on the date of manufacture when used in accordance with the instructions hereon. Manufacturer cannot warrant or guarantee any particular method of use, application or performance of the product under any particular condition. This limited warranty cannot be extended or amended by manufacturer's sales, people, distributors or representatives or by any sales information, specifications of anyone other than the manufacturer. Liability under this warranty is expressly limited to refund of the purchase price.
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