

K A U F M A N

PRODUCT
INFORMATION

KAUFMAN
PRODUCTS
INC.

3811 CURTIS
AVENUE

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Patchwell

Description

Patchwell contains a combination of special cements, corrosion inhibitors, dry powdered polymer latex, dispersing and plasticizing agents. It is a powder material, ready to use with the addition of only water. Patchwell enables patching and/or resurfacing of concrete areas, inside or outside, above or below grade, from 1/2" down to a true feather-edge. Patchwell is specifically engineered for increased resistance to calcium chloride & deicing chemicals, as well as for increased resistance to freeze-thaw cycling.

Uses

Patchwell is ideal for the reinstatement of large, structural sections of steel-reinforced concrete as well as for many smaller locations where difficult access makes hand or trowel-applied mortars impractical. It is suitable for use where chloride and carbon dioxide resistance is required. Patchwell is alkaline in nature and will protect properly prepared embedded steel reinforcement.

Physical Properties - @ 75°F

Compressive Strength, psi. (ASTM C-109)	1 Day	2,400
	7 Days	5,000
	28 Days	6,800
Flexural Strength, psi. (ASTM C-348)	7 Days	1,500
Slant Shear Bond Strength psi. (ASTM C-882)	1 Day	1,500
	7 Days	2,100
	28 Days	2,200
Length Change-Wet (ASTM C-157)	+0.032 @ 14 Days	
	+0.041 @ 28 Days	
Length Change-Dry (ASTM C-157)	-0.080 @ 14 Days	
	-0.12 @ 28 Days	
Splitting Tensile Strength, psi. (ASTM C-496)	28 Days	650
	28 Days	890
Direct Bond Strength (ASTM C-1583)	3.1 x 10 ⁶	psi.
Freeze-Thaw Cycling (ASTM C-666, Procedure A)	98% @ 300 Cycles	
Weight Loss in Calcium Chloride Freeze-Thaw Testing-VDOT Vicat Set Time (ASTM C-191)	25 cycles	4.7%
	Initial	120 minutes
Final	150 minutes	

Do not ever add plasticizers, accelerators, retarders, or any other ingredients besides potable water unless advised by Kaufman Products in writing.

Packaging/Yield

@ 1/8" thick, yield is 44 ft²

@ 1/4" thick, yield is 22 ft²

@ 1/2" thick, yield is 11 ft²

One bag is equivalent to .45 ft³

Directions

Surface Preparation

The concrete surface must be clean, free of all contaminants and all deleterious materials. The surface must be prepared to a minimum of 1/16" or to a Concrete Surface Profile (CSP) of five, as per Guideline Number 03732, *Selecting & Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays* from the International Concrete Repair Institute (ICRI). Additionally, once prepared properly, the concrete surface must be saturated surface dry (SSD), unless using an epoxy bonding agent. If steel reinforcement is exposed, it should be prepared by mechanical means to remove all rust. If corrosion has occurred the steel should be prepared with high-pressure water after the mechanical preparation. For proper priming of the steel, use SurePoxy HMEPL or SurePoxy HM 24. Dampen substrate thoroughly for 1/2 hours prior to placement of the Patchwell. This will control the temperature and the suction rate of the substrate. Never apply over puddles of free standing water.

Mixing

.9-1.0 gallons of water per 50 lb. bag.

Always add the powder to the water. Mix until all pockets of dry material are thoroughly blended into the liquid. A 1/2" heavy-duty type drill with paddle blade and 500 rpm maximum speed should be used for mixing the material more easily.

Bonding Slurry

After mixing, add an additional quart of water (per 50# bag) and mix to a creamy consistency. Brush onto the already prepared substrate. Be sure to work the slurry into the pores with a stiff bristle brush for maximum bonding efficiency. Maintain 1/16"-1/8" thickness over the entire area to be topped. Apply topping or patch before slurry starts to dry.

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Application

Horizontal patching and toppings. Prepare bonding slurry as described above and scrub intimately into surface. If surface is very rough, this step can be eliminated. While still wet, apply Patchwell without any extra water and bring to proper elevation. Steel floating/troweling should be limited to several passes about 10 minutes after placement. Excessive troweling can cause separation and cracking within the patch. This material is self-curing. Do not apply thicker than 1/2" at any one time.

For thicker applications, either extend with up to 25 lbs. of 3/8" pea gravel, or use Patchwell Deep from 2" down to about 1/4" and then bring to a feather-edge with Patchwell.

Curing

As per ACI recommendations for Portland cement based materials, curing is beneficial. Moist cure Patchwell with wet burlap, polyethylene, a fine mist of potable water, or a solvent-based curing & sealing compound, such as Krystal ReFresh, Krystal ReFresh OTC, Krystal 25, Krystal 30, Krystal 25 OTC, or Krystal 30 OTC, Never apply a curing/curing & sealing compound if subsequent lifts are to be applied on top of Patchwell.

Precautions

Avoid air entrapment caused by excessive mixing. Do not add excessive amounts of water, as this will weaken the mortar. Over troweling results in discoloration and a weak cracked surface. Do not apply when substrate or ambient temperatures are below 40°F. If applications over 1/2" are required, contact KPI. Existing expansion joints should be maintained. When application occurs over joints, the original joint must be reproduced in Patchwell. Use of a joint-forming tool or saw cutting can be used. Steel strips can also be inserted in the old joint and brought to elevation just below the top surface of Patchwell. Cracks in the substrate must be repaired properly before resurfacing with Patchwell, otherwise they will reappear in the new Patchwell. Consult your KPI representative. Read the complete Product Data Sheet, Safety Data Sheet, and Concrete Substrate Preparation Guidelines before using.

Technical Information

The following results were achieved under laboratory conditions. Statistical variations will occur based upon mixing methods, temperature & humidity, test methodology, site conditions, curing conditions, application methods, and equipment.

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LIMITED WARRANTY We warrant our products to be of good quality and will replace material proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement, Kaufman Products, Inc makes no warranty or guarantee, expressed or implied, including warranties of fitness or merchantability, respecting its products, and Kaufman Products, Inc shall have no other liability with respect hereto. User shall determine the suitability of the product or the intended use and assume all risks and liability in connection thereto. Our salespeople, distributors and their salespeople have no authority to change the printed recommendations concerning the use of our products.