

KAUFMAN

PRODUCT
INFORMATION

KAUFMAN
PRODUCTS
INC.

3811 CURTIS
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Patchwell V/O

Description

Patchwell V/O is a single component polymer-modified, cement based fast setting non-sag mortar. It consists of portland cements, lightweight hollow silica spheres, corrosion inhibitors and proprietary modifiers. When mixed with water it forms an extremely workable quick setting, polymer modified mortar that possesses high strength with excellent adhesion and low permeability against carbon dioxide and chloride intrusion. The coefficient of thermal expansion is similar to concrete.

Uses

Patchwell V/O is recommended for vertical and overhead concrete repairs, however Patchwell VO may also be used in horizontal applications if desired. Under normal conditions, it is self-curing and allows for quick, easy repairs of both interior and exterior surfaces. Use for patching scaled and spalled concrete as well as resurfacing damaged and honeycombed surfaces. It is ideal for use on parking structures, bridges, retaining walls, ceilings, sloped surfaces, or anywhere concrete surfaces need repair. Use from 1/4" up to 2" thick overhead and 3" thick on vertical surfaces.

Physical Properties - @ 75°F

Vicat Set Times (ASTM C-191)

Initial, 25 mm	20-30 minutes
Final	50-60 minutes

Compressive Strength	1 Day	3,000
(ASTM C-109)	7 Days	6,500

	28 Days	7,500
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Slant Shear Bond	1 Day	2,900
Strength, (ASTM C-882)	3 Days	4,500

	28 Days	5,800
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Length Change-Wet	14 Days	+0.035
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(ASTM C-157)	28 Days	+0.044
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Length Change-Dry	14 Days	-0.035
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(ASTM C-157)	28 Days	-0.104
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Splitting Tensile Strength	28 Days	890
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(ASTM C-496)		
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Direct Bond Strength	28 Days	1,000
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(ASTM C-1583)		
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Flexural Strength	7 Days	910
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(ASTM C-348)		
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Modulus of Elasticity	3.2 x 10 ⁶ psi.	
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(ASTM C-469)		
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Freeze-Thaw Cycling	98% @ 300 Cycles	
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(ASTM C-666, Procedure A)		
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Weight Loss in	25 cycles	3.1%
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Calcium Chloride Freeze-Thaw Testing-VDOT		
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Packaging /Yield

50 lb. bag of powder, yielding .45 ft³ (3.36 gal.)

Surface Preparation

The concrete substrate must be structurally sound. 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 a 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 SurePoxym HMEPL, SurePoxym HM Gel, or SurePoxym HM 24.

Mixing

Pour approximately 1 gallon of clean water into a mixing container and then slowly add the dry powder. Mix mechanically with a 1/2" drill and mixing paddle. Continue to mix until uniform. Do not ever add plasticizers, accelerators, retarders, or any other ingredients besides potable water unless advised by Kaufman Products in writing.

Application

Patchwell V/O must be scrubbed into the substrate, filling all pores and voids. Force material against edge of repair, working toward center. After filling repair, consolidate, then screed. Material may be applied in multiple lifts or at least 1/4" to 3". When using multiple lifts, be sure to score top surface of each lift to produce a roughened surface for the next lift, make certain that the prior lift is saturated with potable water prior to applying the next lift, and use either a bonding agent or a slurry coat to enhance the bond of subsequent lifts. Allow preceding lift to reach final set before placing fresh material. For structural bond strength, use SurePoxym HM, SurePoxym HM EPL or SurePoxym HM Gel. Do not add additional water for finishing but use VaporAid or VaporAid RTU.

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Curing

As per ACI recommendations for portland cement concrete, curing is beneficial. Moist cure with wet burlap or polyethylene, a fine mist of potable water or a solvent-based curing & sealing compound, such as Krystal ReFresh OTC, Krystal 25, Krystal 30, Krystal 25 OTC, or Krystal 30 OTC. Do not apply subsequent lifts to a surface that has had curing compound applied.

Precautions

Not recommended for use less than 1/4" thick. Temperatures during application should be at least 45°F and rising. Do not allow material to freeze. Do not apply outdoors when rain or moving water is expected within 5 hours. Substrate strength should be evaluated in accordance with ACI 503 Appendix A prior to application. Shelf life is approximately one year. Read complete Safety Data Sheet 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.