K A U F M A N

PRODUCT
INFORMATION

KAUFMAN PRODUCTS INC. 7050 HI TECH DR. SUITE 102 HANOVER, MARYLAND 21076
410-354-8600
800-637-6372
www.kaufmanproducts.net

Patchwell Deep Light

Description

Patchwell Deep Light is a high quality, polymer modified mortar specifically designed for horizontal repairs to concrete where the depth of repair is between ¼" and 2 inches without the need for the addition of pea gravel. Patchwell Deep Light consists of special light colored cements and non-shrink additives that allow it to be used at greater thicknesses than most patching materials without shrinkage. For greater thicknesses, the addition of pea gravel is recommended.

This product is self-curing, freeze-thaw resistant and provides better adhesion than standard mortars. The coefficient of thermal expansion is similar to that of normal concrete, ensuring thermal compatibility. Patchwell Deep Light contains a migrating corrosion inhibiting agent to protect embedded steel reinforcement from chloride and carbon dioxide penetration.

Uses

Recommended for structural repairs to both interior, exterior, above, below or on grade applications. Both small and large areas may be resurfaced. Excellent for repairing sloped surfaces in parking decks as it will not run or self-level.

Packaging/Yield

@ ½“ thick, yield is 11 ft^2
@ 1” thick, yield is 5 ½ ft^2

One bag is equivalent to .45 ft^3

Directions

Surface Preparation

Remove all foreign matter including any curing compounds and form release agents. Remove all unsound concrete. Acid etching with 1:1 muriatic acid, water or sand blasting is needed to bond to smooth troweled concrete. Rinse thoroughly with copious amounts of clean water under pressure to remove all acid and loose laitance.

If not using a latex or epoxy primer, dampen substrate thoroughly for ½ hour prior to placement of Patchwell Deep Light. This will control the temperature and the suction rate of the substrate. Never apply over puddles of freestanding water.

For best results, the use of Sure-Weld or SureBond later adhesives or even better, use SurePoxy HM. Consult with the factory for assistance in achieving the best bond. Embedded steel should be cleaned of corrosion and exposed to 100% of the circumference. Once cleaned, and prior to application, the exposed metal should be coated with SurePoxy HM or SurePoxy HM EPL. Use within 40 minutes.

Typical Properties

Compressive Strength, psi. (ASTM C-109)	3,300 psi. @ 1 day 5,600 psi. @ 7 days 7,200 psi. @ 28 days
Flexural Strength, psi. (ASTM C-348)	1,500 psi. @ 7 days
Slant Shear Bond Strength (ASTM C-882)	1,200 psi. @ 1 day 1,500 psi. @ 3 days 2,100 psi. @ 7 days
Splitting Tensile Strength, psi. (ASTM C-496)	750 psi. @ 28 days
Length Change-Wet (ASTM C-157)	+0.031% @ 14 days +0.038% @ 28 days
Length Change-Dry (ASTM C-157-Dry)	-0.080% @ 14 days -0.120% @ 28 days
Coefficient of Thermal Expansion, per 0°C	7.3×10^{-6}
Freeze-Thaw Resistance (ASTM C-666, Procedure A)	98% @ 300 cycles
Modulus of Elasticity (ASTM C-469)	3.1×10^6 @ 28 days

Mixing

Patchwell Deep Light only requires the addition of water for mixing. The correct mixing ratio is 3.1 qts. of water to each 50 pound bag of Patchwell Deep Light. Add the water to the mixing container first and then add the powder. Mix with a jiffy mixer attached to a ½” drill for a 5 gallon can size or use a mortar mixer for larger sizes. Continue mixing until the material is free of lumps (2-3 minutes)

Mix material as close as possible to the area to be repaired. Do not allow mixed material to build up on mixing materials. Do not re-temper or use admixtures.

Application

Apply mixed Patchwell Deep Light over the properly prepared surface, working the material firmly into the sides and bottom, eliminating any air pockets and assuring maximum bond. Where practical, work from one side to the other. Working time is 35-40 minutes.

When desired thickness is achieved, finish smooth with wood float, and then trowel. A broom finish can be achieved, if desired. For applications 2" to 4" deep, add up to 35% 3/8" to ½" pea gravel. Please read the technical document called "*Susceptibility of Kaufman Products to Alkali-Silica Reaction (ASR) Overview"* for additional information. Aggregate must be clean, non-reactive, well-graded, have low absorption and high density in compliance with ASTM C-33 and C-1260.

Curing

As per ACI recommendation for Portland cement based materials, curing is beneficial. Moist cure Patchwell Deep Light 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.

Precautions

Minimum application thickness is ¼." Minimum ambient and substrate temperature is 45^0F and rising at time of application. Control and expansion joints must be taken into consideration and followed to the new surface. Do not use water-based curing/curing & sealing compounds. Never use limestone aggregates with this product. We recommend pretesting with the pea gravel, if needed. 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.