

# K A U F M A N

PRODUCT  
INFORMATION

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## HiCap

### Description

HiCap is a line of quick setting, cementitious patching and finishing compounds. They are composed of special portland cements, graded and washed silica aggregates, unique accelerating additives, workability agents and water reducing agents.

HiCap, is available in three different set times of approximately 5, 15, and 30 minutes. They allow you to combat the winter and summer temperature extremes. All three products can be featheredged or shaved to desired shape, after achieving an initial set.

Due to the need for repair materials to blend in with the existing concrete structure, we offer all three set times of HiCap in light, medium, and dark gray color. In addition, we also offer a polymer modified version for maximum adhesion and a special version for underwater repairs.

### Uses

HiCap, combined with water or our SureBond latex modifier, is an excellent choice to repair or finish broken, chipped and spalled areas of concrete. HiCap is ideal for use in repairing precast or prestressed concrete. Whether it is a bridge beam, box culvert, concrete pipe, or lawn ornaments, HiCap's carvability will help you to produce a quality repair.

HiCap UW is special cement based patching compound formulated specifically for underwater use. It is available in the medium gray 5-minute initial set time. It is recommended for the repair restoration of dams, piers, reservoirs, pilings, sea walls, tunnels, sewer pipe and other underwater surfaces.

### Variations

HiCap 5	Light, Medium, Dark & PM*
HiCap 15	Light, Medium, Dark & PM*
HiCap 30	Light, Medium, and Dark Gray
HiCap 5 Deep	For deeper patches
HiCap 15 Deep	For deeper patches
HiCap 5 UW	For underwater applications
*PM	Polymer Modified

### Packaging/Yield

50 pound pail	.45 ft <sup>3</sup>
50 pound bag	.45 ft <sup>3</sup>
500 pound drum	4.5 ft <sup>3</sup>

### Physical Properties - 75°F

Initial Set	
HiCap 5	~5 minutes
HiCap 15	~12-15 minutes
HiCap 30	~20-25 minutes
Compressive Strength (ASTM C-109)	
	6 hrs      420 psi
	1 day     3,300 psi
	7 days    5,400 psi
	28 days   6,500 psi
Flexural Strength (ASTM C-348)	@ 28 days 930 psi
Slant Shear Bond Strength (ASTM C-1042)	@ 1 day   1,030 psi @ 7 days   1,570 psi
Percent Length Change In Air (ASTM C-928)	@ 7 days   -0.047% @ 28 days -0104%

### Directions

#### Surface Preparation

Surfaces must be structurally sound, clean, and free of loose or deteriorated concrete, rust, marine growth, oily materials and all contaminants. Undercut all edges of the area to a minimum depth of 3/4". Clean exposed steel and reinforcing. Roughen the surfaces to which HiCap is intended to bond for good mechanical adhesion. Pre wet the prepared area with potable water for approximately 15 minutes immediately before application of HiCap. All surfaces to be repaired should be in a saturated surface dry (SSD) condition without standing water on the surface.

#### Application

Mix 50 lbs. of HiCap with 4.5-5 qts. of potable water. HiCap UW requires more water. Thoroughly mix until uniformly blended but no more than 60 seconds. The use of a low RPM (1/2" drill) and a mud paddle is recommended. Do not retemper or add sand to this mix.

Scrub HiCap intimately into the pores of the roughened surfaces with a gloved hand, then pack the rest of the area with the mixed material immediately. For best adhesion, prime with SureBond, SureWeld, or the proper SurePoxy Bonding Agent. Apply by trowel and slightly overfill the patch and allow to set for a short time. Shave to the desired shape or finish before HiCap gets too

(continued over)

hard. Always shave toward the common bonding edge between the HiCap and surrounding area. After finishing, HiCap can be rubbed with a wet sponge and textured if desired. Adequate curing is essential. Consider using SureCure 25 or SureCure 25 Emulsion, or if non-yellowing is important use Krystal 25 Emulsion. Underwater applications may be smoothed or finished by hand.

For applications 2" deep or more, we recommend HiCap Deep. Alternatively, you could add 25 lbs. Of clean, dry 3/8" pea gravel to the 50 lb. bag.

### **Cold Weather Placement**

HiCap will set faster than the mixing water will freeze. When the temperature is below 35° F, do not prewet the area to be patched. Use heat to eliminate frost from the substrate but do not heat the surface to above 70° F. Use warm water for mixing to help shorten the setting time. The use of Excell NC would be beneficial in speeding the setting of HiCap. Do not apply heat to the patch after it has been installed.

### **Notes**

Never retemper. Application should always be finished by the time of initial set or stiffening. This product is not recommended for resurfacing or topping floor areas. Read Material Safety Data before using. Consider using PipeWipe whenever an extremely fine material is needed to paint or fill tiny imperfections.

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