

PRODUCT INFORMATION

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# **HiCap**

### **Description**

HiCap is a line of quick setting, cementitious patching and finishing compounds that are designed to be highly carvable. All HiCap series products can be featheredged or shaved to the desired shape, after achieving an initial set. In addition, all HiCap series products are composed of special portland cements, graded and washed silica aggregates, unique accelerating additives, workability agents and water reducing agents.

HiCap products are available in three different set times of approximately 5, 15, and 30 minutes. As a result of having these three set times, it allows the end user to combat the winter and summer temperature extremes, so that the product sets up in the desired set time.

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.

### **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, especially in overhead and vertical applications. 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.

# **Variations**

HiCap 5 Light

HiCap 5 Medium

HiCap 5 Dark

HiCap 15 Light

HiCap 15 Medium

HiCap 15 Dark

HiCap 30 Light

HiCap 30 Medium

HiCap 30 Dark

### 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 ~20-30 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 28 days 930 psi

(ASTM C-348)

Slant Shear Bond Strength 1 day 1,030 psi (ASTM C-1042) 7 days 1,570 psi

Percent Length Change 7 days -0.047% In Air (ASTM C-928) 28 days -0.104%

### **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 ¼". 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. 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. Do not ever add plasticizers, accelerators, retarders, or any other ingredients besides potable water unless advised by Kaufman Products in writing.

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 the concrete with SureBond, SureWeld, or the proper SurePoxy Bonding Agent. Apply HiCap by trowel and slightly overfill the patch. Allow HiCap to set for a short time, and then shave to the desired shape. Always shave toward the common bonding edge between HiCap and the surrounding area. After finishing, HiCap can be rubbed with a wet sponge and textured if desired. Adequate curing is essential. Consider using Krystal 25 Emulsion.

### **Cold Weather Placement**

HiCap will set faster than the mixing water will freeze. When the temperature is below 35° F, do not pre-wet 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. Read Safety Data Sheet before using.

#### **Technical Information**

Test 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.