

## Specifications: Rockite Cement

General: The compound shall be a hydraulic type cement which, when mixed with water, will

harden rapidly to produce a permanent bolt-setting anchor. The compound shall conform to the following specifications, all of which are based on the performance of

the test specimens at room temperature and in laboratory air.

Application: It shall be applied by pouring into place in a semi-fluid state, and shall be ready to use

subject only to the addition of clear water.

**Consistency:** It shall require no more than 3 pints of water to ten(10) pounds of compound to achieve a pourable consistency that will flow freely form an inverted container.

Setting Time: It shall have an initial set of no more than thirty (30) minutes at 700 F and shall have a final set of no more than sixty (60) minutes as determined by Gilmore Setting Needles.

**Linear Movement**: It shall not shrink on setting, but shall exhibit a slight expansion of not more than 0.002 inches per lineal inch.

Wight Per Cubic Foot: It shall require no more than 92 lbs of dry compound missed with 3-1/2 gallons of water to fill one cubic foot of volume. Weight after setting up shall not exceed 120 pounds per cubic foot.

**Compression Strength**: Two-inch cubes made in accordance with ASTM standards tested on a Baldwin-Southwark Machine of 60,000 pounds capacity shall have the following average compression strengths:

## Age:

1 Hour - 4,500 psi 24 Hours - 5,000 psi 7 Days - 8,000 psi

**Contents:** The compound shall contain neither Portland cement, ferrous metals, nor rust-promoting agents.

**Strain-Bearing Ability:** the compound shall produce a setting with an average strain-bearing ability for each respective bolt and opening size, as shown in the following chart:

Diameter of Bolt to be	Diameter of Opening	Depth of Opening**	Average Strain-
fastened *			Bearing Ablitiy (lbs.)***
3/8"	1-1/4"	3 "	8,600
1 /2 "	1-3/4"	4 "	15,500
3 /4"	2-1/2"	6 "	32,700
1 "	3-1/2"	8 "	59,000
1-1/4"	4-1/4"	12"	94,200

<sup>\*</sup> All bolts shall be equipped with a washer large enough to fit the diameter of the opening with only enough tolerance so that the washer will be free to reach and rest snugly against the head of the bolt at the bottom of the opening.

<sup>\*\*</sup> Depths shown are based on opening drilled in sound concrete having compression strength of 3,600 lbs. per square inch. In the case of weaker concrete, the depth shall be increased to provide a greater purchase to the concrete, the depth shall be increased to provide a greater purchase to the concrete slab, This minimizes the danger of failure due to fracture of the concrete when subjected to extreme strains,

<sup>\*\*\*</sup> Data determined by test in which the strains recorded were limited to stresses sufficient to rupture mild steel bolts of each respective diameter, In no case was the setting injured.