

“EXPERIMENTAL STUDY ON EFFECT OF SUGAR POWDER ON STRENGTH OF CEMENT”

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ABSTRACT

The present work deals with the results of experimental investigations on effect of sugar powder on setting time and compressive strength of cement and concrete. Effect of sugar on compressive strength of cement and concrete by using different brands of cement are studied. Sugar powder content is 0, 0.05, 0.075, 0.1, 0.15, and 0.2 % by weight of cement.

Cube of size 70 mm X 70 mm X 70 mm for compressive strength test of cement. And cube of size 150 mm X 150 mm X 150 mm for compressive strength test of concrete were cast. All the specimens were water cured and testing is done for 3 days, 7 days and 28 days. Results were observe and comparison of results of compressive strength of cement and concrete with sugar powder with that of normal cement and concrete showed the significant improvements in the results of compressive strength.

KEYWORDS: Sugar Powder (Retarding Agent), Compressive Strength, Different Types of Cement, Concrete