A STUDY ON THE STRENGTH OF CONCRETE MIXES USING DIFFERENT BRANDS OF CEMENT

A RESEARCH PAPER

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ABSTRACT

A study was conducted to compare the compressive strength of concrete from five different brands of cement, namely Premium, Mindanao, Horse, Eagle and Apo. A completely randomized design was used with three replications. Results show that the slump of concrete from five different brands of cement are within the specification standards required for construction of different structures which ranges from 1 to 6 inches. The slump obtained from the different brands ranged from 71 – 76 mm which is roughly three (3) inches.

The compressive strength test of the concrete from five different brands identified concrete from Apo brand to be the strongest which can withstand stress of 2,656 psi compared with the stress that concrete from Horse brand which can withstand only 2,542 psi. Although statistical test showed no significant differences among mean compressive strength of concrete from five different brands of cement, comparison among means disclosed concrete from Apo cement to have significantly higher compressive strength compared with concrete from Horse cement.

The researcher recommends further validation of the results since it was only limited to 6 days curing . Curing for 3, 7, 14 and 28 days is recommended for further study.

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