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Behaviour of Concrete by the Partial Replacement of Fine Aggregate with Sawdust and Cement with Alccofine 1203

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Abstract: This research looks at using saw dust as a waste material to replace sand and Alcofine (1203) as a partial replacement for cement in concrete to change its qualities. Sand was substituted by weight in the concrete mixes, and the effects of the change on the concrete were examined. The use of saw dust in concrete allows waste (saw dust) to be disposed of while also making concrete lighter in weight. Alcofine (1203) is added as admixture to partial replacement of cement with different percentages of 0%,4%,8%,12%,16% &20% and sawdust is added as admixture to partial replacement of fine aggregate with different percentages of 3%,6%,9%& 12%. The test results were obtained with reference to compressive and split tensile strength at 7 &28 days.

Keywords: Alccofine (1203), Sawdust, compressive strength, split tensile

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