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EXPERIMENTAL STUDY ON REPLACEMENT OF FINE AGGREGATE WITH FLY ASH AND STONE DUST IN CONCRETE

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ABSTRACT

The cement is the main ingredient used for concrete. The production of cement gives rise to CO₂ emissions generated by the calcinations of CaCo₃ & by the fossils, being responsible for about 5% of the Co₂ emissions in the world.

This can be substantially reduced if cement is used with admixture such as a fly ash are used within the frame work of a comprehensive research concerning this residual of coal industries, studied some durability characteristics of concrete made with Fly ash.

In this project report, the results of the tests were carried out on design strength on concrete. Also, aiming the use of fly ash as admixture with cement and sand replacement with stone dust. The present experimental investigation was carried on fly ash & has been chemically and physically characterized, and using fly ash as admixture and stone dust as replacement of sand by weight of cement in concrete. The result indicates that fly ash & stone dust improves concrete durability.

