

The Study of Early Days of Strength of Light Weight Concrete using Waste Foundry Sand and Manufactured Sand by Fine Aggregate

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Abstract: *Light weight Concrete or formed concrete is a versatile material which consist primarily of a cement based mortar mix with 20 % of volume air. Lightweight concrete can be defined as a type of concrete which includes an expanding agent in that it increases the volume of the mixture while giving additional qualities such as nailbility and lessened the dead weight. It is lighter than the conventional concrete. An Investigation on strength parameters on light weight concrete using foundry and manufactured sand replacing fine aggregate. Manufactured sand differs from natural sea and river dredged sand in its physical and mineralogical properties. These can be both beneficial and detrimental to the fresh and hardened properties of concrete. This paper presents the results of a laboratory study in which manufactured sand produced in an industry sized crushing plant was characterized with respect to its physical and mineralogical properties. The influence of these characteristics on concrete work ability and strength, when manufactured sand completely replaced natural sand in concrete.*

Keywords: Light weight Concrete, Manufactured sand, Waste Foundry Sand, conventional concrete & Compressive & Flexural Strength.

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