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Experimental Study on Structural Light Weight Concrete for Partial Replacement to Coarse Aggregate by Sintered Fly Ash Aggregate

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Abstract: The use of Lightweight concretes has gained acceptance and popularity worldwide in the recent years in the construction and development of both the infrastructure and residential buildings. Light weight aggregate concrete has become more popular in recent advancements owing to the tremendous advantages it offers over the conventional concrete but at the same time light in weight and strong enough to be used for structural purposes. Replacement of natural aggregate with concrete such as light weight concrete by using sintered fly ash aggregate (natural aggregate), The main disadvantage of conventional concrete it is high self—weight. This heavy self-weight will make it to some extent an uneconomical structural material. Light weight concrete having low density facilitates reduction of dead load and to increase thermal insulation.

Keywords: Structural Light Weight Concrete

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