

GREEN CONCRETE: EFFICIENT & ECO-FRIENDLY CONSTRUCTION MATERIALS

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ABSTRACT

The concrete is made with concrete wastes which are eco-friendly so called as Green concrete. Green concrete is a revolutionary topic in the history of concrete industry. Concrete is an environmental friendly material and the overall impact on the environment per ton of concrete is limited. The paper covers the aspect on how to choose a material for green concrete. It presents the feasibility of the usage of by product materials like fly ash, query dust, marble powder/ granules, plastic waste and recycled concrete and masonry as aggregates in concrete. The use of fly ash in concrete contributes the reduction of greenhouse emissions with negative impacts on the economy. It has been observed that 0.9 tons of CO₂ is produced per ton of cement production. Also, the composition of cement is 10% by weight in a cubic yard of concrete. Thus, by the use of green concrete it is possible to reduce the CO₂ emission in atmosphere towards eco-friendly construction technique. To avoid the pollution and reuse the material, the present study is carried out. Thus, green concrete is an excellent substituent of cement as it is cheaper, because it uses waste products, saving energy consumption in the production. Over and above all green concrete has greater strength and durability than the normal concrete.

KEYWORDS: Concrete, Eco-Friendly Concrete, Eco-Friendly Construction Material, Efficient Concrete, Green Concrete