

INNOVATIVE IDEA FOR REPLACEMENT OF THE PLAIN CEMENT CONCRETE BY FIBRE FLY ASH BRICK MIX ACT AS BASE CONCRETE

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ABSTRACT

Fly ash, a by-product from coal based thermal power plant. Fly ash are large area of land required for disposal and toxicity associated with heavy metal leached to groundwater, so utilization of the fly ash is required. In this experimental research work “Class F” Fly ash used as a primary material. The class ‘F’ fly ash used 55%, Lime 15%, Sand 15%, Kheda dust 15%, and also add Glass fibre in different proportion like 0.2%, 0.4%, 0.6%, 0.8%, 1.0% by the total weight of the brick mix. In the testing side of the fibre fly ash brick, there are main two testing is done Compressive strength test and Water absorption test. The main aim of this study is to check the compressive strength and water absorption and also check this Brick mix is replacement of Plain Cement Concrete (PCC, mix proportion 1:3:6) and decrease the cost of work by utilize this Glass fibre fly ash brick mix.

KEYWORDS: “Class F” Fly Ash, Glass Fibre Fly Ash Brick, Compression, Water Absorption, Plain Cement Concrete