

STRENGTH AND PERMEABILITY OF HIGH PERFORMANCE CONCRETE CONTAINING METAKAOLIN

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ABSTRACT

High performance concrete is a concrete mixture, which possess high durability and high strength when compared to conventional concrete. Use of pozzolanic materials is necessary for producing high performance concrete. These materials when used as mineral admixtures in high performance concrete can improve both strength and durability properties of concrete. This paper focus on the comparison of metakaolin and palm oil fuel ash for selecting a suitable admixture for developing high performance concrete (M60 grade). Two types of concrete mixes were prepared and compared to obtain the optimum design mix. The mechanical and permeability properties of the optimum mix were also studied.

KEYWORDS: High Performance Concrete, Metakaolin, Palm Oil Fuel Ash, Permeability