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STRENGTH CHARACTERISTICS OF FLY ASH/ SLAG BLENDED ALUMINA SILICATE CONCRETE UNDER AMBIENT CURING

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ABSTRACT: Construction has been the most important human activity since ancient time. Concrete is widely used and reliable material for construction. Some of challenges in industry are global warming and insufficiency of construction material. One of the novel material which replaces to conventional concrete is the Alumina Silicate Concrete. This research article outcomes the results of an experimental investigation on strength characteristics alumina silica concrete produced with Fly ash (Class - F Grade) and GGBS (Ground Granulated Blast Furnace Slag) and alkaline activators under ambient temperature. Fly ash was partially replaced by GGBS at different replacement levels from 0 to 50% with a standard concentration of 8M and the samples are cured at ambient temperature. The main parameters of the study are strength properties such as Compressive strength, Split tensile Strength and Flexural Strength. In addition to that Water Absorption test also conducted.

Keywords: Fly Ash, GGBS, Geopolymer concrete, Strength parameters

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