Experimental Investigation on Various Efficient Parameters of AAC Blocks with Conventional Bricks

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ABSTRACT

The transformation from natural soil to innovative material in the field of masonry construction has shown day-to-day progress in engineering technology. The innovative material is developed to overcome the sarcastic outcome – Aerated Autoclaved Concrete (AAC) blocks. AAC blocks are the new creation that plays a vital role in making globalized earth. This innovation focuses on Eco-friendliness and directs a path to sustainable development. It also satisfies the rules of 3R's reduce, recycle and reuse. This study focuses on various parameters of AAC blocks and compares them with traditional clay bricks and fly ash bricks. The investigation process is done in 2 stages, modeling and estimating the quantity of materials required for a model 10x10 feet wall and determining the characteristics such as durability, space occupancy, ultimate strength test and electrical conductivity. All the above results are compared with traditional bricks and fly ash bricks and thus the efficiency of AAC block is obtained. Quality optimizes time and cost. When quality is required in stipulated time then the role of initial cost remains high but reduces the future cost. Thus, AAC blocks are one such optimizer.

Keywords: *Aerated Autoclaved Concrete, Masonry Blocks, Light weight Block*