

Evaluation of foamed concrete and its application

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Abstract

An application of aerated concrete (foamed concrete) is experimentally studied. In this study the compressive strength of the proposed concrete is measured. The effect of parameters such as aggregate size of broken stone (stone powder), quantity of cement, various densities, additive material, perlite usage and several curing condition (such as CO₂ curing) and application of burnt rice husk are experimentally studied and the best mixture in each mix design is selected.

These prepared mixtures are practically useful to optimize the consumption of cement and increase strength in every density in nonstructural application.

The compressive strength is even up to 380 kg/cm² for 1800 kg/m³ of dry densities with CO₂ curing. And there's lots of other results in this study the information given in this project can be taken into consideration while building nonstructural pieces such as wall blocks and roads and roofs in order to decrease the dead load of building.