

Strength & Density of an Autoclaved Aerated Concrete Using Various Air Entraining Agent

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Abstract : The purpose of the present paper is to study the changes in the strength characteristics of autoclaved aerated concrete (AAC) and also the density when different expansion agents are used. The expansion agent so used releases air in the concrete thereby making it lighter by reducing its density. It also increases the workability of the concrete. The various air entraining agents used for this study are hydrogen peroxide, oleic acid, and olive oil. The addition of these agents causes the concrete to rise like cake but it reduces the strength of concrete due to the formation of air voids. The amount of agents chosen for concrete production are 0.5%, 1%, 1.5% by weight of cement.

Keywords : AAC, olive oil, hydrogen peroxide, oleic acid, steam curing

Conference Title : ICECE 2014 : International Conference on Environmental and Civil Engineering

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : August 25-26, 2014