

AAC Blocks an Innovation as Eco-friendly Material in Construction

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ABSTRACT

In the current scenario with the increasing population growth, there is a need for innovation in managing resources. Sustainable urbanization became a key interest for societies in terms of environmental efficiency and intelligent employment of resources. To accommodate this aim one of the best way is to utilize the industrial waste in a productive way. This paper aims to promote the use of (Autoclaved aerated concrete) AAC blocks. By utilising fly ash in the manufacturing of AAC blocks, we can get one of the best “green products”. The (Autoclaved aerated concrete) AAC is about 3 to 4 times lighter than conventional bricks, therefore, easy handling and cheaper to transport. The use of AAC blocks reduces overall dead load of a building, thereby allowing construction of taller buildings. It is an accepted eco-friendly building material. Its weight is only about 50 per cent of a standard concrete block. Using AAC blocks construction cost can be reduced by about 2.5 per cent for buildings. It helps to bring down at least 30% of environmental waste as opposed to going with traditional concrete. There is a reduction of 50% of greenhouse gas emissions. It also reduces the construction time by 20%. AAC has very excellent properties and can be used in many construction works, because of its excellent properties.

Keywords: *Autoclaved aerated concrete, pulverized fly ash, ecofriendly material, Cost effective*