

Utilization of Ash of Burning Garbage as Substitution of Fine Aggregate on Concrete Solid Brick

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ABSTRACT

Increased housing or building construction makes the need for building materials such as concrete solid brick is increasing. The workmanship that is easy and fast makes it the main choice in making walls. One of the innovations being developed at this time is to make the ash of burning garbage as a substitute for sand in making concrete solid brick to overcome the problem of the amount of garbage available in the community. In the research of concrete solid brick with the addition of ash of burning garbage, used mixed variations 0%, 15%, 30%, 45% and 60% with treatment period of 7 days, 14 days and 28 days. At day 28, the largest compressive strength value is at 0% mixed variation that was 87.95 Kg / cm² with water absorption was 7.83%, so it was included in the quality level II. And the lowest compressive strength value is found in 60% mixed variation that was 15.72 Kg / cm² with water absorption was 18.55% so it is not included in the quality level. The use of ash of burning garbage can reduce the weight of the volume of the concrete solid brick itself. It is also certainly pretty useful in reducing the load of walls generated in a building.

Keywords : ash of burning garbage, compressive strength, concrete solid brick