

THE APPLICATION AND PERFORMANCE OF RICE HUSK ASH  
BLENDED CEMENT TO CONCRETE

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## Abstract

Rice is the biggest agricultural product of the Philippines. Considered as organic waste material, its husk is casted off but adds to the waste disposal problem. In order to utilize this waste, the researchers have sought to reuse these into useful construction purposes. As emphasized in the objective of the study, the researchers determined the possibilities of mixing this treated ash to the usual concrete mix that produced tolerable strength for structural members or road pavements. The authors used three cement – RHA proportion, different sizes of coarse aggregate, and their different curing days. The specimens have been potted through a test to determine the compressive strength of each. Based on the results of tests conducted to the specimens, it proved a decreasing behaviour from Class AA to Class C mixture also from CRHA ratio of 90:10, 85:15 and 80:20. According to aggregate size, the results recorded a decreasing ultimate strength from 0.25, 0.50 and 1.0 inch. It is concluded that vast majority of the concrete with RHA passed the required compressive strength for certain structural concrete members. The data showed that the compressive strengths of concrete with RHA are tolerable.

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