عنوان مقاله:

Effect on Autogenous Healing in Concrete by Fly Ash and Rice Husk Ash

محل انتشار:

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خلاصه مقاله:

In this research paper, the effect on autogenous healing in concrete by cementitious material such as fly ash (FA) and rice husk ash (RHA) are reported. The utilization of waste byproduct are the interest in research for healing of concrete. The non-destructive testing and microstructure analysis were conducted to quantify autogenous healing in concrete. The concrete specimens prepared with different proportion of FA and RHA. The satisfactory results of non-destructive test were obtained with respect to the durability of concrete. In the chemical and microstructure analysis the calcium carbonate crystals formed on healed cracks surface and dense particle packing in the matrix of concrete were observed. This type of ternary blend is useful for making durable and sustainable concrete structure. The utilization of industrial and agricultural byproduct reduces the effect of environmental pollution and also reduces the consumption of cement with the same reduction in CO2 emition from cement industry.

کلمات کلیدی:

Autogenous Healing, Concrete, Fly ash, Rice Husk Ash