

The Effect of Curing Time on the Properties of Fly Ash-Based Geopolymer Bricks

Abstract

This paper reports the results of an experimental work conducted to investigate the effect of curing conditions on the properties of fly ash-based geopolymer bricks prepared by using fly ash as base material and combination of sodium hydroxide and sodium silicate as alkaline activator. The experiments were conducted by varying the curing time in the range of 1-24 hours respectively. The specimens cured for a period of 24 hours have presented the highest compressive strength for all ratio of fly ash to sand. For increasing curing time improve compressive strength and decreasing water absorption.

Keywords: Brick, Compressive Strength, Fly Ash (FA), Geopolymer, Geopolymerization