

The Effect of Mineral Addition (Natural Pozzolana) on the Capillary Absorption and Compressive Strength of Environmental Mortar

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Abstract : The cement manufacturing is the one of the factors that pollutes the atmosphere in the industrial sector. The common way to reduce this pollution is using mineral additions as partial replacement of Portland cement. Particularly, natural pozzolana (NP) is component in which they can be used to decrease the rate of pollution. The main objective of this experimental work is the study of the effect of mineral addition (natural pozzolana) on the capillary water absorption and compressive-flexural strength of cement mortar. The results obtained in the present research showed that the higher dosages of natural pozzolana added could be the principal parameter of such decrease in strength at early and medium term. Further, this increase of incorporated addition has been believed to reduce the capillary water absorption.

Keywords : Natural pozzolana, mortar, strength, capillary absorption

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