

Experimental study on the effect of polymer on concrete properties

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Abstract

Polymer concrete mixes of various weights % (0-10) of polyester polyol have been prepared. Their properties were meticulously examined. These properties include initial and final setting times, mechanical strengths, water permeability and chemical resistance.

The results indicate that those properties of polymer-concrete mixes are functions of polymer loading. Optimum formulations for polymer concrete were determined. It was realized that the polymer can serve as a binder, water reducing admixture and internal protective coating for concrete.

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