

Experimental Research on the Properties Reactive Powder Concrete (RPC)

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Abstract : This study investigates the influence of water-binder ratio, mineral admixtures (silica fume and ground granulated blast furnace slag), and copper coated steel fiber on fluidity diameter, compressive and flexural strengths of reactive powder concrete (RPC). The test results show that the binary combination of silica fume and blast-furnace slag provided a positive influence on the mechanical properties of RPC. Although the addition of fibers reduced the workability, results indicated a higher mechanical strength in the inclusion of fibers.

Keywords : RPC, steel fiber, fluidity, mechanical properties

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