

Using Waste Marbles in Self Compacting Lightweight Concrete

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Abstract : In this study, the effects of waste marbles as aggregate material on workability and hardened concrete characteristics of self compacting lightweight concrete are investigated. For this purpose, self compacting light weight concrete are produced by waste marble aggregates are replaced with fine aggregate at 5%, 7.5%, and 10% ratios. Fresh concrete properties, slump flow, T_{50} time, V funnel, compressive strength and ultrasonic pulse velocity of self compacting lightweight concrete are determined. It is concluded from the test results that using waste marbles as aggregate material by replacement with fine aggregate slightly affects fresh and hardened concrete characteristics of self compacting lightweight concretes.

Keywords : hardened concrete characteristics, self compacting lightweight concrete, waste marble, workability

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