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(57) Abstract :

ABSTRACT: Title: Method for Compressive Strength Determination of Crushed Rock Concrete The present disclosure proposes a method of developing an empirical equation for 28 days strength determination of crushed rock concrete that reduces the use of concrete material for strength evaluation and reduces waiting time. The method aids to develop an empirical equation or mathematical equation that is independent of strength, grade of concrete and water to binder ratio to compute the compressive strength of CRD concrete. Further, cement is replaced by CRD as filler in concrete to increase the economic benefit of the concrete, reduce environmental pollution and produce less carbon footprint. The compressive strength results obtained using the empirical equation are validated using X-ray diffraction analysis (XRD) and scanning electron microscope (SEM) analysis.

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