

An Approach to Make Low-Cost Self-Compacting Geo-Polymer Concrete

Authors : Ankit Chakraborty, Raj Shah, Prayas Variya

Abstract : Self-compacting geo-polymer concrete is a blended version of self-compacting concrete developed in Japan by Okamura. H. in 1986 and geo-polymer concrete proposed by Davidovits in 1999. This method is eco-friendly as there is low CO₂ emission and reduces labor cost due to its self-compacting property and zero percent cement content. We are making an approach to reduce concreting cost and make concreting eco-friendly by replacing cement fully and sand by a certain amount of industrial waste. It will reduce overall concreting cost due to its self-compatibility and replacement of materials, forms eco-friendly concreting technique and gives better fresh property and hardened property results compared to self-compacting concrete and geo-polymer concrete.

Keywords : geopolymer concrete, low cost concreting, low carbon emission, self compactability

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