

عنوان مقاله:

Impact the types of macro fibres in concrete

محل انتشار:

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خلاصه مقاله:

Use of macro plastic fibres to reinforce concrete has attracted widespread attention from both scientists and construction industry due to the multiple sustainability benefits they offer, compared to steel fibres and steel reinforcing mesh. This paper critically reviews the current state of knowledge and technology of using macro plastic fibres to reinforce concrete. Detailed review on the various preparation techniques and the resulting properties of macro plastic fibres are presented and the effects of macro plastic fibres on the fresh and hardened concrete properties are discussed in this paper. The effect of macro plastic fibres on workability, plastic shrinkage, compressive strength, splitting tensile strength, flexural strength, post-crack performance and dry shrinkage is discussed in this paper. Pull-out behaviour and degradation behaviour of the fibre in the concrete are also reviewed. Finally, cost and environmental analysis and some applications of the plastic fibre reinforced concrete are discussed.

کلمات کلیدی:

Macro plastic fibre, Reinforcement, Concrete, Fibre production , Application

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