

عنوان مقاله:

Use of Waste Glasses in Concrete Mixes : A Review

محل انتشار:

نخستین کنفرانس بین المللی بتن (سال: 1388)

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خلاصه مقاله:

The use of waste glasses in concrete has attracted a lot of interest worldwide due to the increased disposal costs and environmental concerns. Waste glass can be used as concrete aggregate or cement replacement because of its pozzolanic reactivity when it is finely ground. On the other hand the main concern in the usage of glass in concrete is the alkali-silica reaction (ASR) between glass aggregate and cement paste. The build-up of the ASR gel causes volume expansion and may cause the concrete to crack as a long-term problem. This paper intends to express the production process of glass concrete completely and investigate its mechanical properties carefully. We are to study the conventional and new strategies in preventing or mitigating the negative affects caused by usage of glass in concrete and to present the applications of glass concrete in global concrete industry, as an innovative material

کلمات کلیدی:

Waste Glass; Aggregate; Pozzolanic Reactivity; Mechanical Properties

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