

Experimental Investigation of Concrete on Partial Replacement of Fine Aggregate with Crumb Rubber

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Abstract: Each year to the Indian roads about 11Millionsall types of new vehicles are added which increases about 3 Millions discarded tyres each year which poses a potential threat to the environment. The best way to use this scrap tyres in the form crumb rubber in partial replacement with fine aggregate. The proposed work presents an experimental study of effect of the used of solid waste material like crumb rubber in concrete by weight variation of crumb rubber. Crumb rubber Usually consist of particals ranging in size from 4.75mm to less than 0.075mm. Recycling tyres is an innovative idea in order to prevent the environmental problem from growing. Recycling tyre is the process of recycling vehicles tyres that are no longer suitable for use on vehicles due to wear or irreparable damage such as punctures. Cracker mill process tears apart or reduces the size of tyre rubber by passing the material between rotating corrugated steel drums, by this process an irregularly shaped torn particals having large surface area are produce and this particals are commonly known as Crumb Rubber.

Keywords: Crumb Rubber, Rubberised Concrete, Scrap tyre aggregate, Waste tyre aggregate

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