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Utilisation of Waste Plastics as a Replacement of Coarse Aggregate in Paver Blocks

A.Panimayam¹, P.Chinnadurai², R.Anuradha^{3*}, K.Pradeesh⁴,
A.Umar Jaffer⁴

^{1,2,4}Department of civil Engineering, Infant Jesus College of engineering, Tuticorin, India.

³Department of civil Engineering, SNS College of Technology, Coimbatore, India.

Abstract : The rapid industrialization and urbanization in the country leads lot of infrastructure development. This process leads to several problems like shortage of construction materials, increased productivity of wastes and other products. This paper deals with the reuse of waste plastics as partial replacement of coarse aggregate in M20 concrete. Usually M20 concrete is used for most constructional works. Waste Plastics were incrementally added in 0%, 2%, 4%, 6%, 8% and 10% to replace the same amount of Aggregate. Tests were conducted on coarse aggregates, fine aggregates, cement and waste plastics to determine their physical properties. Paver Blocks of I section of casted and tested for 7, 14 and 28 days strength. The result shows that the compressive strength of M20 concrete with waste plastics is 4% for Paver Blocks.

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