



International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.10 No.8, pp 42-47, **2017**

Experimental Investigation on High Strength Pervious Concrete with Partial Replacement of Coarse Aggregate by Marble Aggregate

R. M. Karthikeyan^{1*}, Praveen Kumar², R.Srinath Sharvin³, G.Vignesh⁴

Department of Civil Engineering, SNS of Technology, Coimbatore, Tamilnadu, India.

Abstract: The concrete technology has made tremendous strides in past decades. Pervious concrete plays a different role which is an exceptional case¹. Normal concrete does not allow water to pass through it whereas pervious concrete allows water to pass through it. The principal reason to develop these type of concrete is to use this concrete in pavement, open floors, since rain water may pass through it and thus helps to increase the ground water level. Water logging and depleting ground water table are the two-major problem faced by the people all over the world. So, this research projects objective is to maintain the permeability as well as strength of the concrete. In this investigation, the pervious concrete is obtained by removing the fine aggregate wholly (0%) and replacing with 6.3mm waste marble aggregate and partially as, 10% replacing the coarse aggregate and partially as 10% and 20% of waste marble aggregate of 10-12mm. With water cement ratio of 0.4. Suitability of pervious concrete as a pavement material is discussed.

Keywords: Pervious concrete, Permeability, Strength, Marble aggregate.

R. M. Karthikeyan et al /International Journal of ChemTech Research, 2017,10(8): 42-47.
