**Experimental investigation on strength and durability parameters of concrete replacing cement by glass powder in concrete with different dosages for M25 and M30 grade concrete**

**ABSTRACT**

In a growing country like India a huge amount of industrial waste are polluting the environmental. With a view to the above, this study aims at utilization of such industrial by product for value added application. In addition the waste can improve the properties of construction materials. The recycled glass has been used in the form of powder. The glass powder was tested with concrete and mortar. Cement was replaced by the glass powder in the proportion of 0%, 5%, 10%, 15%, 20%, 25%, 30%, 35%, 40%, 45%, 50%, 55% and 60% for M25 grade and M30 grade of concrete with 0.5 and 0.44 water-cement ratios respectively. The compressive strength, split tensile strength, consistency and flexural strength were conducted for the above replacements. The result showed glass powder improves the mechanical properties. The advantages of this project are that the replacement of glass powder is economically cheap as well as a superior concrete can be made.

**Keywords:** Experimental Study, Concrete, Using Cement, Glass Powder