(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :31/07/2023

(21) Application No.202341051375 A

(43) Publication Date : 01/09/2023

(71)Name of Applicant:

(54) Title of the invention: Influence of Fly Ash on Slump Loss & Strength of Concrete when Fully Incorporated With Recycled Aggregates

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(57) Abstract:

The infrastructure of a country or state depends on the development of innovative ventures constructed in that state/ country. Due to increase in construction the natural aggregates are depleting day by day. So the recycling technique is adopted in construction field. Recycled coarse aggregate (RCA) is one of the approaches for this need. The strength of concrete decrease with increase in the percentage of recycled coarse aggregate but there are methods to increase the strength of RCA such as surface treatments, two stage mixing and pozzolanic material. In this project the method of using pozzolanic material and two stage mixing method is studied, here fly ash is used as pozzolanic material. The paper investigates about the effect of replacement of fly ash on fresh and hardened properties of recycled aggregate concrete. Most of the research work done on replacement of coarse aggregate with recycled aggregates about 25%, 50%, 75% & 100% and class F. fly ash is used to replace ordinary Portland cement by 10% & 20% to improve the workability and strength of recycled aggregate concrete. The compressive strength and split tensile strength of recycled aggregate concrete is compared with the conventional concrete.

No. of Pages: 15 No. of Claims: 6