



EFFECT ON PARTIAL REPLACEMENT OF FINE AGGREGATE AND CEMENT BY WASTE MARBLE POWDER/ GRANULES

RISHI¹ & VANITA AGGARWAL²

¹Research Scholar, Department of Civil Engineering, Maharishi Markandeshwar University,
Mullana, Ambala, Haryana, India

²Professor, Department of Civil Engineering, Maharishi Markandeshwar University,
Mullana, Ambala, Haryana, India

ABSTRACT

Due to the increase in demand of marble in structures, their adverse affect to the environment have also increased. From the research on Marble powder, it was found that it can be used as a filler in concrete and helps to reduce the total void content in concrete. This study shows the experimental investigations on the replacement of cement sand and both partially with the waste marble powder/waste marble granules. The study shows that the partial replacement of cement and sand by waste marble powder, the compressive strength get increased up to a certain percentage but get decreased with the combined replacement of combination of cement and sand.

KEYWORDS: Compressive Strength, Fine Aggregate, OPC 43 Grade, Waste Marble Powder, WMP