Strength Characteristics and Temperature Distribution of Concrete Containing Crumb Rubber as Partial Replacement of Fine Aggregate

ABSTRACT

This paper presents an experimental study on the strength characteristics and temperature distribution of concrete containing crumb rubber as partial replacement of fine aggregate. This study examines the effect of different percentages (3%, 5%, 10% and 15%) of crumb rubber on concrete with strength of 25 N/mm2 and 30 N/mm2. The results show that crumb rubber reduces slump, compressive strength, and flexural strength of concrete when exposed to fire.