

Effect of Sugarcane Bagasse Ash, Lime Powder & Quarry Dust in Performance of Unburnt Bricks

Sridhar M^{1, a)}, Saravanan J^{2, b)}, Nivedha DGS^{3, c)}, Yamini V^{4, d)}

¹Research Scholar, ^{2,3,4}Assistant Professor, Department of Civil Engineering
Vel Tech Rangarajan Dr.Sagunthala R & D Institute of Science and Technology, Chennai, India.
msridhar@veltech.edu.in

ABSTRACT

Environmental impact of construction industries is obvious as they depletes the natural resources by overconsumption and polluting the environment by emitting greenhouse gases. Emerging thoughts of sustainable construction, leads to experiments the ways to solve the issues related to these. Reuse of wastes as construction and building materials will, certainly help in achieving the sustainability goals. In this study an approach of utilizing the Sugarcane Bagasse Ash (SBA), a non-biodegradable waste generated by burning Sugarcane Bagasse for the energy production in sugar industries, for manufacturing of unburnt brick in place of clay, along with Lime powder and Quarry dust. Compressive strength and other physical properties have been correlated and discussed the benefits of usage of SBA in brick manufacturing.

Keywords: *Sugarcane Bagasse Ash (SBA); Unburnt brick; Waste Management; Sustainable building materials*