

Abstract

This is the study of the using foam in mortar their mechanical properties. The objective of the study is investigations of the efficacy of mortar to reduce the weight and good strength. By considering the proportion of mixing sand was replaced by foam, the water/cement ratio was fixed at 0.6. The samples were tested by following ASTM standards compression testing, flexural testing, flow able, water abortion and density. The results shows that the Expanded Polystyrene (EPS) beads foam decrease the compressive strength depending on the percentage foam addition. The density of mortar was decreased by the foam volume addition. In this study, results shows interesting mechanical properties of foam mortar in range of 50-60 percentage foam additions. It can increase the flexural strength and improve the water absorption of the samples testing.

Keywords: Effective, Mechanical Properties, Mortar, Foamed