

Stabilization of Clay Soil Using Coire Fibre, Cement and Flyash Mixture

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ABSTRACT

Expansive soils are found in many parts of the world such kind of soil generally consists of active clay minerals. Geotechnical engineers face various problems while designing foundation because of poor bearing capacity of clay soil and excessive settlement. To overcome these problems researches are concentrated on soil improvement techniques by adding fibres, cement and fly ash to improve the properties of clay soil. The fibres are added at percentages (0.5% and 1%) and cement are added at percentages (2% and 4%) to enhance the ground improvement by giving them in four proportions. It can be used as a replacement for deep foundation or raft foundation and aids in embankment and slope stability.

Keywords: Stabilization: Clay soil; Cement; Flyash; Coir fibre.