

Active Soils of Trinidad: Their Identification and Classification

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Abstract

Soils which exhibit volume changes with variations in their moisture content are termed active soils. The differential movement resulting from drying and wetting around and under buildings and pavements is detrimental to the stability of these structures. Such soils occupy a significant area of the central and southern regions of Trinidad. Engineers and contractors, who have worked in these areas have faced problems with building and pavements cracking badly due to continual heaving and shrinking of these soils. There is, therefore, a need to identify and classify these soils and provide appropriate data for design and construction practices.

Behaviour of these active soils is a complex one since they are sensitive to local environment. Soil-water interaction in the prevailing environment is very important but is a difficult task to evaluate it. However, as a first step in this direction, correlations of activity of these soils with simple and common soil test results are presented to facilitate identification and preliminary classification of these active soils of Trinidad.