

Clayey Behavior Of Calcareous Soils

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Summary

The clayey behavior of a soil depends upon the amount of clay present in it. The exact amount of clay required for such a behavior is difficult to ascertain as it depends on a variety of factors such as the type of clay minerals, shape and size distribution of granular particles, relative density of granular portion of the soil, specific gravities of clay and non-clay fractions, and water content. However, from basic phase relationships, a limiting clay content can be obtained. This paper presents parametric studies of phase relationships using a numerical computer program. Results obtained from the computer program are compared with index properties of mixtures of a highly expansive calcareous clay and clean beach sand to evaluate the validity of this limit.

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