

Thesis Title	Effect of Height / Diameter Ratio on Strength of Cement Stabilized Soft Bangkok Clay
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Abstract

The purpose of this thesis is to study the strength characteristic of Soft Bangkok Clay stabilized with Portland Cement type 1 at contents of 200 and 300 kilogram per cubic meter of wet soil or 22.7 and 34.1 percent of dry soil and the water to cement ratio of 1:1 by weight and the specified curing period of 7, 14, 28 and 90 days in which studies the effects of specimen dimensions and the ratios of height to diameter of the specimens. From the result of the Atterberg's Limits properties of soil-cement, it is found that Liquid Limits decreases and Plastic Limits increases when curing period and cement content increase. Plasticity Index decreases with dependence decrease of the liquid limit and increase of the plastic limit. And Specific Gravity increases when increase in curing period and cement content.

The unconfined compression strength of specimens with height to diameter ratios of 1.00, 1.50 and 1.80 were higher the unconfined compression strength than with a height to diameter ratio of 2.00 equal to 6, 3 and 1 percent, respectively. The unconfined compression strength of the specimens of mold 27.75, 55.50, and 83.30 millimeter in diameter were higher the unconfined compression strength than the specimens of mold 107.30 millimeter in diameter equal to 64, 30 and 14 percent, respectively when comparing with a height to diameter ratio of 2.00. And comparison the specimens from coring field test with height to diameter ratio of low were higher the unconfined compression strength than with a height to diameter ratio of height and closely to the specimens from laboratory test in which the results of the field test were less than.

Keywords : Soil Cement / Unconfined Compression Strength / Height to Diameter Ratio