## Effect of Curing Temperature on Unconfined Compression Strength of Bagasse Ash-Calcium Carbide Residue Treated Organic Clay

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**Abstract :** A series of experimental program was undertaken to study the effect of curing temperature on the unconfined compression strength of bagasse ash (BA) - calcium carbide residue (CCR) stabilized organic clay (OC). A preliminary experiment was performed to get the physical properties of OC, and to get the optimum water content (OMC), the standard compaction test was done. The stabilizing agents used in this research was (40% BA + 60% CCR) . Then to obtain the best binder proportion, unconfined compression test was undertaken for OC + 3, 6, 9, 12 and 15% of binder with 7, 14, 21, 28 and 56 days curing period. The best quantity of the binder was found on 9%. Finally, to study the effect of curing temperature, the unconfined compression test was performed on OC + 9% binder with 7, 14, 21, 28 and 56 days curing time with 200, 250, 300, 400, and 500 C curing temperature. The result indicates that unconfined compression strength (UCS) of treated OC improve according to the increase of curing temperature at the same curing time. The improvement of UCS is probably due to the degree of cementation and pozzolanic reactions.

Keywords : curing temperature, organic clay, bagasse ash, calcium carbide residue, unconfined compression strength

**Conference Title :** ICSCCSE 2020 : International Conference on Sustainability in Civil, Construction and Structural Engineering

Conference Location : Bali, Indonesia Conference Dates : October 22-23, 2020

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