

## Characterization of Performance of Blocks Produced from Dredged Sample

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**Abstract :** The performance and characteristics of blocks produced from dredged sample was investigated. Blocks were produced using appropriate mixes of dredged sample and sharp sand. Some geotechnical properties (moisture content, grain size distribution) of the dredged sample (Igbokoda dredged sample) were determined using the British Standard. The physico-mechanical properties (water absorption, density and compressive strength) of blocks produced were evaluated. The dredged sample is classified as a silty material. Seven replacement levels of sharp sand were considered in the study (SS- Sharp Sand and DS - Dredged Sample) was done with constant amount of cement. 1- 85 % DS and 15 % SS, 2- 70 % DS and 30 % SS, 3- 55 % DS and 45 % SS, 4- 50 % DS and 50 % SS, 5- 45 % DS and 55 % SS, 6- 30 % DS and 70 % SS, 7- 15 % DS and 85 % SS and 8 - IS 100 % with cement; 9 - SS 100 % with cement) of different ages (7 days, 14 days, 21 days and 28 days) for the production of blocks. The compressive strength of the blocks produced ranges between 0.52 MPa to 3.0 MPa and considering the mixes, the highest compressive strength was found in mix of 15 % DS and 85 % SS.

**Keywords :** dredge sample, silt, sharp sand, block, cement

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