Title of Article: Local Contents Initiative In Sandcrete Block Production: Effects of Partial Replacement Of Sand With Lateritic Soil.

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Abstract: Of recent, the attention of most researchers is shifting towards the optimization of building materials by using local contents; the use of indigenous materials; and local industrial by-products unique and abundant in certain localities. This study therefore devised a way in which lateritic soil could be utilised in hollow sandcrete block production using lateritic soil within selected location in Ota, Ogun State, Nigeria. Sandcrete blocks were made with each lateritic soil taken from different sources replacing the conventional fine aggregate (sand) in steps of 10% up to 60% and their compressive strengths determined to check for conformity with standard sandcrete block as specified in the Nigerian National Building Code (2006) with a view to determine the acceptable percentage replacement. Soil tests were performed on the lateritic soil samples to characterise the soils. Classifying the lateritic soil samples within Ota in Ogun State of Nigeria, it was discovered that the lateritic soils are mostly sandy clay of high plasticity and may replace sand by up to 20%, though an approximate linear decrease in strength with increasing sand replacement with lateritic soil was observed. This percentage replacement can be recommended to the block moulding industries within Ota with a view to encouraging local contents utilization, though it is encouraged to confirm the percentage before embarking on mass block production.