

Engineering Properties Of Concrete With Laterite Aggregate As Partial Coarse Aggregate Replacement

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ABSTRACT

The increasing utilization of natural aggregate for concrete production has created negative impact towards environment. Thus, investigation on searching for alternative material which has potential to replace the use of granite aggregate in concrete mix is very much in need. This paper presents the engineering properties of concrete containing laterite aggregate as partial coarse aggregate replacement. Granite aggregate has been replaced by 10, 20, 30, 40 and 50% with laterite aggregate. All the specimens were subjected to water curing until it is ready to be tested. Tests on compressive strength, flexural strength and modulus of elasticity have been carried out at the age of 7, 14, 28 and 60 days. The results revealed that replacement of laterite aggregate up to 30% able to produce laterite concrete exhibiting the targeted strength which is 30 MPa.