

## Use of Industrial Wastes for Production of Low-Cost Building Material

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**Abstract :** Demand for building materials in the last decade due to growing population, has caused scarcity of low-cost housing in South Africa. The investigation thoroughly examined dolomitic waste (DW), silica fume (SF) and River sand (RS) effects on the geotechnical behaviour of fly ash bricks. Bricks samples were prepared at different ratios as follows: I. FA1 contained FA70% + RS30%, II. FA2 contained FA60% + DW10%+RS30%, III. FA3 has a mix proportion of FA50% + DW20%+RS30%, IV. FA4 has a mix ratio FA40% + DW30%+RS30%, V. FA5 contained FA20% + DW40% + SF10%+RS30% by mass percentage of the FA material. However, utilization of this wastes in production of bricks, does not only produce a valuable commercial product that is cost effective, but also reduces a major waste disposal problem from the surrounding environment.

**Keywords :** bricks, dolomite, fly ash, industrial wastes

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