



DEPARTMENT OF BUILDING SURVEYING
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CEMENT BRICK FILLED WITH PALM OIL SCUM

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"I declare that this Dissertation is the result of my own research and that
all sources are acknowledged in the references"

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ABSTRACT

The main aim of this study was to determine the properties of cement brick with palm oil scum. One of objectives was to determine the physical properties of cement brick with palm oil scum with the size, weight and density. The study also focused on the determination the water absorption characteristic on the cement brick with the palm oil scum. the compressive strength of cement brick with the palm oil scum was also determine the effects of incorporation of different content of palm oil scum to the properties of cement brick was also studied.

The specimens were pressed at the factory of Majpadu Bricks Sdn. Bhd., Shah Alam and tested at the material testing Laboratory Universiti Teknologi MARA. The specimens of 140 bricks were tested according to MS 27: 1996 and seven types of specimens were tested with various percentages of palm oil scum content.

The findings of the research, firstly, the density of the cement brick with palm oil scum increased with the increase of palm oil scum contents. Secondly, the compressive strength of cement brick with palm oil scum increased with the increase of palm oil scum contents. Thirdly, the water absorption characteristic of cement brick increased with the increase of palm oil scum contents. Finally, the incorporated of various palm oil scum contents in cement brick resulted in the increase of density, compressive strength and water absorption properties of cement brick.

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