

PROPERTIES OF COMPOSITE PANEL MANUFACTURED FROM
COMBINATION OF FIBERGLASS WITH OIL PALM FRUIT FIBERS

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ABSTRACT

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Composite panel was produced from the combination fiberglass with oil palm fruit fibers. Such panel was investigated for the effect of fibers types such selected fibers and unselected fibers on the mechanical properties (tensile MOE and bending flexural) and physical properties (water absorption and thickness swelling). The finding indicated that the composite panel from selected fibers is better than those from unselected fibers in terms of the mechanical properties whereby show the bending flexural and tensile modulus of elasticity are higher for panel from selected fibers compared to that of unselected fibers. However, water absorption and thickness swelling of composite panel from unselected fibers is higher than that of selected fibers but the lower percentage is better because the rate of water absorption is smaller. In conclusion, the oil palm fruit fibers can be regarded on raw material to be used in combination with fiberglass for the manufacture of composite panel.