PROPERTIES OF INSULATION BOARD MADE FROM

RICE HUSK AND WASTE PAPER

BY

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ABSTRACT

PROPERTIES OF HYBRID BOARD MADE FROM RICE HUSK AND WASTE PAPER

The properties of insulation board made from rice husk and waste paper was observed and studied. The dependent variable used in this study was the rice husk to paper ratio. The ratio used was 80:20, 60:40 and 40:60. The objectives of this study were to investigate the bending and thermal insulation properties of insulation board made from different ratio of rice husk and waste paper and the optimum ratio for insulation material. In this study, no adhesive was used and the rice husk used was unscreened and untreated instead the rice husk was bonded by paper fibers. In addition, the tests used were only bending test (MOR and MOE) and thermal conductivity test. The result obtained shows that higher ratio of paper gives higher bending strength. The ratio also affected thermal conductivity as the board with 80:20 ratios has the lowest thermal conductivity value which shows the best thermal resistance compare to the board with 60:40 and 40:60 ratios.

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