UNIVERSITI TEKNOLOGI MARA

BENDING STRENGTH OF FINGER JOINT FROM NEOMALARKIA CADAMBA AND SAPPIUM BACCATUM

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ABSTRACT

BENDING STRENGTH PROPERTIES OF FINGER JOINT FROM NEOMALARKIA CADAMBA AND SAPPIUM BACCATUM.

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Finger jointing is a method to create long lengths of lumber from short pieces. Jointing system is the overcome steps that get into action by the manufacturing industry especially the furniture manufacturer and building construction. The aim of this study is to present results showing the comparative performance of the two different finger orientations and two different species. The main objectives of the study is to determine strength properties of different finger orientation and different species using kelempayan (*Neomalarkia cadamba*) and ludai (*Sappium baccatum*) strips either this finger specimen and species are suitable for jointing application. The average moisture content of wood materials used for the preparation of test samples was determined as 12%. Samples with dimensions of 320 x 20 x 20 mm were cut according to the procedure of BS EN 204 (1991). The load was applied at the centre of the span at the constant of 0.26 in/min (BS 373:1957). For bending strength test, the result MOE for mix species has a highest result while the highest for result MOR was kelempayan. The result bending strength at difference orientations show that the highest MOE was horizontal meanwhile the highest result for MOR was vertical.