BENDING PROPERTIES OF ORIENTED STRAND BOARD (OSB) FROM MIX ACACIA AND MAHANG AT 7 % RESIN CONTENT WITH DIFFERENT DENSITY

By

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ABSTRACT

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Oriented Strand Board (OSB) from mix Acacia and Mahang is one of the wood composite panels, which have most similar strength properties with plywood. The purpose of this study is to determine the strength properties of OSB made from mix Acacia and Mahang gajah. These properties are the factors why this study was made and to determine whether Acacia and Mahang are suitable are not in the production of OSB. The trial of using only 7 % resin content with different density of board with 600 kg/m^3 and 700 kg/m^3 is to determine and identify the strength to make comparable with European standard and to commercial it. Result of this study show that, MOE and MOR give the higher value for 600 kg/m^3 and 700 kg/m^3 density compared to European standard. But 700 kg/m^3 density of board is very good in strength properties so, this board is very suitable to make OSB. This new panel product is able to improve their properties and be as a substitute to other panel product such as MDF and Particleboard.