MECHANICAL & PHYSICAL PROPERTIES OF WOOD CEMENT BOARD FROM KELEMPAYAN (*ANTHOCEPALUS CHINENSIS*) & ACACIA (*ACACIA MANGIUM*) USING DIFFERENT PARTICLE SIZES

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ABSTRACT

PROPERTIES OF CEMENTBOARD FROM KELEMPAYAN (*Anthocepalus chinensis)* AND AKASIA (*acacia mangium)* WITH DENSITY OF 1300 kg/m^3

The properties of wood cement board from kelempayan (*Anthocepalus chinensis*) species. The effect of different particle size (1.0 mm, and 2.0 mm) and types of species were determined. Target density of cement board is 1300 kg/m^3. The cement board is tested for physical and mechanical properties using European standard. Mechanical strength including MOE, MOR, IB and physical properties (thickness swelling and water absorption) were carried out. In general, result show that Kelempayan has significant and non significant on the mechanical properties and physical properties of boards. By using the British standard (BS EN), the board were met the requirement only for mechanical properties, while for physical properties, it doesn't met the standard.