

UNIVERSITI TEKNOLOGI MARA

**SCREW WITHDRAWAL PROPERTIES ON
PARTICLEBOARD FROM OIL PALM FROND**

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ABSTRACT

In this study, particles of oil palm frond were used. Urea formaldehyde and wax addition were used as binder. Three percentage of resin urea formaldehyde (UF) that are 8%, 10% and 12% are used on homogeneous particleboard. Particle that used for face and core are 1.0 mm and 2.0 mm with density of 550 kg/m^3 . Screw withdrawal properties on the particleboard determined, in this test screws are drill into the two positions in test pieces vertically, pull out the screws vertically after fixing the test piece, measure the maximum loads required for pulling out, and consider the mean value of the two operations the wood screw holding power. Increasing in percentages of UF resin and wax will affected the screw withdrawal properties on the homogeneous particleboard.

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