

The numbers in the same column followed by the same lowercase different not significant at 5% level according to the Multiple Duncan's new Ranger Test

Strength values parallel to the surface pressure of particle board obtained ranged between 68,84kg/cm² until 146,65kg/cm² with a 18.45% coefficient of variability Indonesian standards do not require the value of persistence press parallel surfaces. The higher use of wood particles bayur then press the firmness values parallel the surface tends to rise. Firmness press is a force parallel to the surface of the particle board to deny a burden.

CONCLUSIONS

Based on the research that has been done can be concluded as follows: Utilization of wood particles bayur as the outer layer of the three layer particle board at different percentages of different-significant effect on water content, water absorption, expansion of thick, density, strength fractures, internal bonding, surface strength parallel pressure.

Particle board with a percentage of refine coconut fiber : bayur wood particles (40: 60) is the best particle board where the water content of 6.11% water absorption 20, 56%. Expansion of thick 10.93%. Density of 0.84%; 303.76 kg/cm² broken strength, strength internal bonding 56.90 kg/cm² kg/cm² parallel to the surface of 146.65 kg/cm².

Triple particle board with wood particles bayur the outer layer with a smooth coconut fiber on the inner lining has met the standard of SNI 03-2105-2006.

The numbers of observations of physical and mechanical properties of particle board seen that the water content, and strength broken, parallel pressure, and internal bonding strength of SNI 03-2105-2006 standards for particle board, while for water absorption and thickness expansion board particles are not required.

V. SUGESTION

Based on the research that has been conducted hasi it can be some suggestions as follows: Strength broken boards to get smaller particles it is advisable to reduce the concentration of wear particles of wood adhesives and more subtle.

Using Bayur wood particle board with a good percentage of the coconut husk is (40% to 60%) because it is optimal. To continue this research by adding an optimal adhesive for outer layer and for the addition of a helper like paraffin.

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