Abstract

In recent years, medium-density fiberboard is used heavily by the large volume of imports supplied. However, due to the consumption of these products, investors went into production in the country and are now being produced in a factory. Boards made by different manufacturers (raw materials and production conditions different) functions differently from the drilling and installation of connections in these Fravrdhbh products such as cabinets, furniture, etc. show. IB board edges due to poor performance, low resistance, low modulus of rupture and elasticity, which causes weakness in the core layer and the product is consumer dissatisfaction. The main cause of these defects, poor performance material used in the production of such properties, the resin content, density board and was produced. Research on the control medium density fiberboard production conditions to improve edge strength is necessary. The most important factor in this regard, the final density of the board, the percentage of resin used and the length of fiber is used. This study was conducted in two stages. The effect of density boards, boards of resin and fiber length on physical and mechanical properties were investigated in the second phase of the effect of these variables on fiberboard edge strength is evaluated. The results showed that the highest flexural modulus, modulus of elasticity and internal cohesion of the boards with the highest density, the percentage of resin and fiber length has been used. Resistance to water absorption and thickness swelling under the influence of changes in density, the percentage of resin and fiber length is the minimum water absorption of the boards with the lowest and highest density of resin and fiber length was dedicated. The minimum thickness swelling of the lowest and highest density of the resin and fiber length. Increased density, reduce consumption of resin and fiber length is increased water absorption and thickness swelling. The screws holding the resistance values at the edges of the boards with the highest density, the percentage of resin and fiber length is obtained. The resistance of medium density fiberboard edge on the boards with the highest density and best resin and fiber length is obtained.

Keyword: Edge strength, Medium density fiberboard, Fiber length, Resin content.

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