PHYSICAL CHARACTERISTICS OF MULTILAYERED PLYWOOD MADE FROM BEECH VENEERS

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ABSTRACT

The researches conducted were directed to production of stable multipurpose plywood from deciduous raw materials that are resistant to prolonged water impact, as well as to mutual impact of water and heat. For that purpose experimental seven-layer and nine-layer plywood panels were made from peeled beech veneers bonded with water-soluble phenol formaldehyde resin.

Water impact was analyzed in conditions of water regimes in order to define the change in thickness swelling and water absorption after immersion of test specimens in water for a period of 96 hours, and the change in density, volume, thickness swelling and water absorption after immersion of the test specimens in boiling water for 6 hours. Water impact on the degree of adhesion after 2 hours of immersion in water was also analyzed.

The research showed that panels are characterized by high stability during this kind of treatment. The panels showed consistency in form and dimensions, as well as consistency of adhesion in glue lines.

REFERENCES


Macedonian standards – MKS D.A1.072; MKS D.A8.063; MKS D.C5.032; MKS D.C5.040; MKS D.C5.041.


