

# WATER IMPACT ON CHANGE OF PHYSICAL CHARACTERISTICS OF SINGLE-LAYER WATER-RESISTANT PARTICLEBOARDS

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## ABSTRACT

*The paper elaborates water impact on change of physical properties of single-layer water-resistant particleboards. The water impact is analyzed in controlled laboratory conditions through the change of density, volume, thickness swelling and water absorption in the period of 1248 hours (52 days). Experimental panels are made of beech particles. The particles are glued with phenol-formaldehyde resin.*

*The results from the research showed that the panels are characterized by uniform density, stability in volume, without any deformation of the shape and dimensions of the test specimens. The changes of the properties in the analyzed period are proportional to the change of the treating period of the test specimens. The panels have dimensional stability and meet the requirements of the standards for non-structural use in construction.*

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