

MOISTURE CONTENT GRADIENT FOR A 50,0 MM THICK FIR ELEMENTS IN THE CONDITIONS OF VACUUM DRYING

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ABSTRACT

The aim of this research is the defining of moisture content gradient in fir elements after vacuum drying. The elements are 50,0 mm thick, 20,0 cm in width and 4,0 m in length. According to the drying schedule, the temperature of the wood and of the heating units in the kiln chamber during drying varies from 29 to 72 ° C and from 25 to 45 ° C respectively. The elements are kiln dried from initial average moisture content (MCi) of 32,0 % to a final average moisture content (MCf) of 7,0% for 240 h. Moisture content gradient in the cross section of fir elements is – 1,35 %. The elements are used for manufacturing solid wood products.

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