Research Article:

INFLUENCE OF THE NUMBER OF LAMELLAS UPON THE MECHANICAL PROPERTIES OF POPLAR BEAMS

Marius GIURGIU
Dipl.Eng, PhD Student - S.C. Becker-Romania S.R.L.
Adresa/Address: Str Clujului nr 7, 405300 Gherla, Romania
E-mail: productie@becker-romania.ro

Ivan CISMARU
Prof. dr. eng. - TRANSILVANIA University of Brașov, Faculty of Wood Engineering
Adresa/Address: B-dul Eroilor nr. 29, 500036 Brașov, România
E-mail: icismaru@unitbv.ro

Abstract:
This work presents the influence of the lamellas number on the bending strength and the deflection of poplar beams. The behaviour of beams while keeping the same section, but varying the number of lamellas between 2 and 5 was studied. For each structure, ten specimens were tested until rupture occurred, so as to create a real reference base. The results can be applied in the design of wood constructions

Key words: glued laminated beams; bending strength; MOE; wood constructions.

Received: June 2011
Accepted: November 2011
Published: December 2011