IDENTIFICATION OF THICKNESS OF A COMPOSITE MATERIAL AS PART OF THE “QM GLUED” CONNECTION OF WOODEN ELEMENTS

The principal objective of the research project is to identify the thickness of an advanced composite adhesive material used as part of a glued connection of wooden surfaces. The active ingredients of the proposed adhesive material include an epoxy matrix and a glass fiber fabric. The author has analyzed the bearing capacity and deformability of the proposed connection in relation to the thickness of the composite material. The author used the methodology of assessment of the bearing capacity of wooden structures developed by professor Yu.M. Ivanov. For the purposes of development of optimal parameters of the “QM Glued” connection, the author identified the optimal ratio of b, or width of the surface of connected elements, and the thickness of the composite material: \( t = \frac{1}{40} b \).

**Key words:** timber connection, composite material, bearing capacity, deformability, adhesion, diffusion, safety factor, estimated bearing capacity.

**References**


**About the author:** Lin’kov Nikolay Vladimirovich — Candidate of Technical Sciences, Department of Timber and Plastic Structures, *Moscow State University of Civil Engineering (MGSU)*, 26 Yaroslavskoe shosse, Moscow, 129337, Russian Federation; nicklinkov@gmail.com; +7 (495) 287-49-14, ext. 31-11.