**Analysis of experimental researches of parameters of regression dependences by the method of facing for the protection of wooden beams**Available to Purchase

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This article was based on a visual and graphical analysis of the effectiveness of fire-retardant cladding based on fire-retardant plywood for wooden beams. According to the obtained temperature distributions, by simulating the charring zone using Bezier curves, it was possible to depict in detail the process of charring samples-fragments of a wooden beam with fire-retardant cladding. The dependences of lateral and end thickness, charring velocities of the investigated wooden beams depending on the exposure time according to the standard temperature of the fire and having the following regression coefficients were also established: d (t) = b1 + b2t + b3t2 + b4t3. In addition, the contours of the charred zone for different wooden beams with fire-retardant cladding of different thickness were considered, analyzed and applied by the developed mathematical apparatus. According to the defined parameters of the regression dependences of the distribution of the parameter temperature of wooden beams, for which the contours of the charred zone for the exposure time were constructed. These calculations were performed to determine the accuracy of the results obtained using the proposed method of constructing the contour lines of the charred zone of the beams using Bezier lines.