Spruce Plywood Bonding

Milan Brožek
Czech University of Life Sciences Prague. 165 21 Praha 6 – Suchdol, Czech Republic, Phone: +420 22438 3265, E-mail: brozek@tf.czu.cz

The contribution contains results of bonded joints strength tests. The tests were carried out according to the modified standard CSN EN 1465 (66 8510). For bonding the spruce three-ply wood of 4 mm thickness was used (according to CSN EN 636). The test samples of 100 x 25 mm size were cut out from a semi-product of 2440 x 1220 mm size in the direction of its longer side (angle 0°), in the oblique direction (angle 45°) and in the direction of its shorter side (crosswise - angle 90°). The bonding was carried out using eight different domestic as well as foreign adhesives according to the technology prescribed by the producer. All used adhesives were designated for wood bonding. At the bonding the consumption of the adhesive was determined. After curing the bonded assemblies were loaded using a universal tensile-strength testing machine up to the rupture. The rupture force and the rupture type were registered. Finally the technical-economical evaluation of the experiments was carried out.

Keywords: bonding, adhesive, bonded joints testing, costs of bonding

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References


