



Influence of Micro Structured Surface on the Bond Quality of Hardwood

<https://research.thinkwood.com/en/permalink/catalogue454>

Author: Lehmann, Martin
Volkmer, Thomas

Year of Publication: 2014

Country of Publication: Canada

Format: Conference Paper

Material: Glulam (Glue-Laminated Timber)

Topic: Connections
Cost

Keywords: Beech
Delamination
Hardwood
Melamine Urea Formaldehyde
Production Costs
Micro-structure

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 10-14, 2014, Quebec City, Canada

Summary:

The state of the art requires a closed waiting time of about one hour for the beech glulam production. This has a negative influence on the production costs. Micro structured surfaces showed good performance in combination with coatings. The authors have performed tension-shear and delaminating test in order to investigate the influence of micro structured surfaces on the bond quality of hardwoods. The results are very promising and show clearly improved delaminating resistance for all tested adhesive. No closed waiting time was needed to achieve satisfying results using MUF in combination with beech.

Online Access: Free

Resource Link

http://schr.ws/hosted_files/wcte2014/91/ABS617_Lehmann_web.pdf