



An Innovative Method Based on Grain Angle Measurement to Sort Veneer and Predict Mechanical Properties of Beech Laminated Veneer Lumber

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Summary:

Cross-Laminated Timber (CLT) structures exhibit satisfactory performance under seismic conditions. This is possible because of the high strength-to-weight ratio and in-plane stiffness of the CLT panels, and the capacity of connections to resist the loads with ductile deformations and limited impairment of strength. This study summarises a part of the activities conducted by the Working Group 2 of COST Action FP1402, by presenting an in-depth review of the research works that have analysed the seismic behaviour of CLT structural systems. The first part of the paper discusses the outcomes of the testing programmes carried out in the last fifteen years and describes the modelling strategies recommended in the literature. The second part of the paper introduces the q -behaviour factor of CLT structures and provides capacity-based principles for their seismic design.

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Resource Link

https://sam.ensam.eu/bitstream/handle/10985/13494/LABOMAP_CON%20BUILD%20MAT_2018_VIGUIER.pdf?sequence=1