

The screenshot shows a library interface with a blue header containing 'LIBRARY' and navigation links for 'HOME', 'RESEARCH', 'AUTHOR SERVICES', and 'USER SERVICES'. Below the header, there's a search bar and a list of papers. The selected paper is 'Capacity-Based Design for Cross-Laminated Timber Buildings' by F. Kasper, M. S. Klein, and M. Papadimitriou. The abstract is partially visible, starting with 'An all cross laminated timber (CLT) or cross-laminated timber (CLT) is considered as a structural system for multi-story buildings. Within the scope of the study, the behavior of the CLT structure for Engineering Design in Cladding (EDC) is investigated. The CLT structure is modeled as a plane stress and plane strain problem. It is shown that the CLT structure is able to resist in-plane loads. The research presented in this paper investigated the in-plane behavior of CLT structures with different connections for glulam structures. Finite element analyses were conducted where the CLT panels were modeled as an orthotropic elastic material, and the shear walls were used as a boundary. The behavior of the connections under cyclic loading was modeled using a bilinear hysteretic model. The full analysis of the connections allowed some important results on CLT structures. A parametric study was conducted to investigate the influence of various parameters on the behavior of the CLT structure.

Capacity-Based Design for Cross-Laminated Timber Buildings