





## Lateral Resistance of Cross-Laminated Timber Panel-to-Panel Connections

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Author: Richardson, Benjamin  
Hindman, Daniel

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### Summary:

Cross laminated timber (CLT) connections in shearwalls require an understanding of the shear strength and stiffness of panel-to-panel connections within the wall. This research measures the strength and stiffness of three different panel-to-panel CLT connections considering both monotonic and cyclic loading. Connections included a laminated veneer lumber (LVL) spline, a half-lap connection and a butt joint with overlapping steel plate. All connections were ductile in nature. The butt joint with steel plate demonstrated the highest connection strength of the connections tested. The cyclic stiffness of the laminated veneer lumber spline was less than the monotonic stiffness, while the halflap joint experienced a sharp drop in load after ultimate load was achieved. Full details of the monotonic and cyclic behaviour will be discussed, including load, stiffness and ductility terms.

Online Access: Free

### Resource Link

<http://hdl.handle.net/20.500.12708/172>