

Composite CLT-Glulam Double-T Panels Prince George, BC

To support the associated Sir Matthew Begbie Elementary School and Bayview Elementary School projects in pushing the boundaries forward for long-span floor and roof construction, this testing project aims to compare different connection approaches for composite connections between glulam and cross-laminated timber (CLT) – for vibration, stiffness, and strength.

Working with the University of Northern British Columbia (UNBC), Fast + Epp aimed to complete a series of vibration and monotonic load tests on 30' long full-scale double-T ribbed panels. The tests consisted of screws in withdrawal, screws in shear, and nominal screws clamping with glue. Both the strength and stiffness are of interest, including slip stiffness of each connection type.

This physical testing was completed in January and February 2020, where the full composite strength of each system was reached. Initial data analysis has provided information for comparison with existing models for shear connection stiffness. Publications will follow in 2021.

Fast + Epp

<u>Project Partner</u> Thomas Tannert, University of Northern British Columbia

<u>Project Type</u> Testing Program

<u>Funding</u> Green Construction through Wood (GCWood) Low-rise Commercial/ Industrial/ Office/ Institutional

<u>Associated Project</u> Sir Matthew Begbie Elementary School, Bayview Elementary School

Publications and Links None



