



Perforated Plate Testing Edmonton, AB

As part of Fast + Epp's ongoing work to push the boundaries of Tall Wood construction in seismic zones, this testing program aims to develop a new dissipative system for use in timber braced frames or other timber lateral systems where the connections provide energy dissipation. The connections are designed to dissipate energy through ductile steel plates to provide robust and well understood dissipative systems.

In collaboration with the Advanced Research in Timber Systems' team at the University of Alberta, Fast + Epp is working on a four-phase testing program for cyclic and monotonic testing of various configurations of perforated plate connections. Small scale tests have been completed on perforated plates, and entire connections will be examined in advance of a full-scale timber brace frame test to evaluate the overall behaviour.

One phase of physical testing was completed in January 2020, with the next 3 phases intended to be completed in 2021. Initial data analysis of the first phase testing has resulted in tuning of the system in advance of later phase testing. Results on the first two or three phases of testing are anticipated to be completed in 2020 with initial publication of the results in early 2021.

Fast + Epp

Project Partner

(H.Daneshvar, J. Niederwestberg and Y.H.Chui)
from the Advance Research in Timber Systems (ARTS) Program, University of Alberta

Project Type

Testing Program

Funding

Green Construction through Wood (GCWood)
Tall Wood & Low-rise Commercial/ Industrial/
Office/ Institutional

Associated Project

None

Publications and Links

[Perforated Plate Testing Video](#)

