

THE HIVE

Vancouver, BC | Construction Phase

Role of the firm: Structural Engineer of Record

Area: 163,000 sq.ft. (15,143 sq. m.)

Budget: CAD \$37 million

Architect: DIALOG

Client: Undisclosed

Envisioned as the office headquarters for the future lead-tenant, The Hive's (2150 Keith Drive) first design mandate was the use of mass timber. The design team was looking for ways to incorporate the patterns of nature into a delicately detailed exposed mass timber superstructure with a powerful architectural façade for the prominent Vancouver site.

Through much collaboration with the DIALOG architectural team, Fast + Epp developed a perimeter timber braced frame system that creates a striking façade expression and eliminates the need for conventional cast-in place concrete cores. The perimeter timber braced frames are paired with four discrete internal cross laminated timber shearwalls. Once complete, this should be the tallest timber braced frame in North America.

The timber braced frame and cross laminated timber shearwall systems are undergoing testing at the University of Alberta and the University of Queens, which will provide invaluable engineering data back to the design community for future tall wood projects.

The 'all-timber' system has been designed as a kit-of-parts prefabricated structure to facilitate rapid construction erection. Fast + Epp considers this a pioneering project that will continue to inform the design and construction movement towards mass timber.

