

# ON5 Office Building, Vancouver

2021

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oN5 is the first TS3 building in North America. The oN5 office building pays tribute to the beauty, structural performance, and sustainability of solid wood.

## The Project

The oN5 project utilizes advanced building technologies designed to improve the structure's efficiency and long-term performance. TS3 is not the only innovation being implemented in this building. Layers are added to the CLT for the ceiling elements, which improve acoustics and vibration behavior. Additionally, an innovative and elastic connection system is used in the building, which absorbs seismic energy and realigns the structures after a potential earthquake. The CLT wall and ceiling elements are left exposed in the interior, highlighting the natural beauty of solid wood, which has a positive impact on the well-being of the occupants. The four-story mixed-use commercial building, with a floor area of 840 m<sup>2</sup>, will provide space for small manufacturing businesses and a range of retail stores.

## The Construction Method

The wall, ceiling, and roof elements serve as the building's primary structural system, which is supplemented by a concrete foundation. A total of 32 CLT elements were delivered by truck from Katterra's CLT factory in Spokane Valley, Washington. The use of advanced logistics software enables just-in-time delivery, allowing for precise installation on this tight urban lot. Thanks to the lightweight nature of the prefabricated solid wood components, the elements can be lifted into place quickly and efficiently.

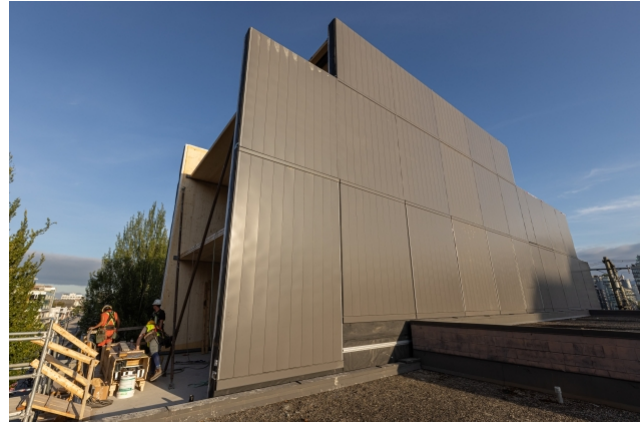
## The Challenges

oN5 is TS3's first project in North America. Naikon employees received on-site training as early as 2019. Before construction began, their knowledge was refreshed during an online training session.



### Construction data

- Number of floors: 2 + attic
- Gross floor area: 761 m<sup>2</sup>
- Cross-laminated timber: 44 m<sup>3</sup>
- TS3 technology: 280 m<sup>3</sup>



### Client

Equilibrium Consulting Inc, Vancouver BC

### GU/TU

Naikoon Contracting Ltd., Vancouver BC