



**ELEMENT5**  
MODERN TIMBER BUILDINGS

# GOLDEN AVENUE

## PROJECT TEAM

superkül  
Blackwell  
Element5  
MCH

## HIGHLIGHTS

3-storey office  
9,145 ft<sup>2</sup> hybrid design  
Prefabricated NLT panels  
Solid-wood staircases

# GOLDEN AVENUE



**Nail-laminated timber is an excellent option for anyone looking to leverage the economic and environmental benefits of mass timber construction. It is readily available, offers tremendous design flexibility, and is recognized by building codes as Heavy Timber construction so it can be used in most occupancies without the need for an alternative solution.**

## E5 SERVICES PROVIDED:

- Cost consulting
- Design consulting
- Coordination with steel
- 3D modelling
- Shop drawings
- Supply of mass timber elements
- Coordination of transportation
- Assembly

## MATERIALS:

- Prefabricated NLT (Nail Laminated Timber) floor and roof panels with ZIP System weather protection
- Custom-designed and prefabricated solid-wood staircases

## CONTACT US:

sales@elementfive.co  
1-888-670-7713  
www.elementfive.co

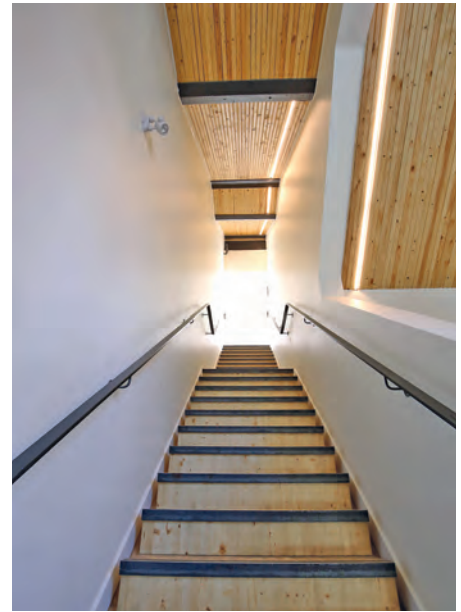
## PROJECT DETAILS:

Golden Avenue is a 3-storey, 9,145 ft<sup>2</sup> addition to an historic 2-storey post-and-beam factory that was adapted for commercial office use. The new construction is an efficient NLT and steel hybrid structure that incorporates prefabricated NLT panels from Element5 for the floor and roof assemblies and custom-designed solid-wood stairs installed as complete staircase cassettes.

The use of prefabricated NLT panels reduced the construction time on-site, lowered costs, and provided the old-world aesthetic sought by the clients who wanted the addition to fit with the existing factory conversion and provide an attractive, comfortable work environment for occupants.

Although recently popular, NLT isn't new. It has been used for more than a century, particularly in warehouses where solid, sturdy floors were required. NLT is recognized in building codes (NBCC and IBC) as heavy timber construction, providing the lumber is securely fastened and the depth of the assembly is at least 64mm for a roof and 89mm for a floor, so it does not require an 'alternative solution' to be used in most building types.

NLT is an excellent substitute for concrete slabs and steel decking in commercial and institutional buildings. Clients appreciate the aesthetics, economics and environmental performance of NLT. At Element5, we carefully grade the lumber, fabricate the panels, pre-install the plywood sheathing and weatherproofing membrane, and apply a sealer coat to deliver a complete floor or roof system that offers beautiful, natural wood surface that can be left exposed as the ceiling for the space below.



**NLT is an economical, durable, mass timber solution that has been used in large scale buildings since the 1800s. Originally known as 'warehouse decking' and nailed in place by crews one board at a time, modern NLT is a high-performance, factory-built component delivered to site with the sheathing and weatherproofing membrane already installed, and shipped in sequential order for rapid assembly.**

## CARBON CALCULATOR

### RESULTS:



Volume of wood products used:  
95 cubic meters (3,355 cubic feet)



U.S. and Canadian forests grow  
this much wood in: 16 seconds



Carbon stored in the wood:  
73 metric tons of carbon dioxide



Avoided greenhouse gas emissions:  
28 metric tons of carbon dioxide



Total potential carbon benefit:  
102 metric tons of carbon dioxide

### EQUIVALENT TO:



**21** cars off the road for a year

Energy to operate **11** homes for a year



COST CONSULTING



DESIGN CONSULTING



ENGINEERING



FABRICATION



ASSEMBLY

