# Wood Innovation <br> Iain Weir-Jones, Weir-Jones Group, Vancouver <br> Shoreline by MGA, Vancouver 


> "A creative, solutions-based design with wood used in a variety of ways throughout the building.

Photos - all Courtesy:

Definitely an innovative use of mass timber wood in structural applications for a renovation...a beautiful result that would be easily duplicated."

- jury comments

For this project, the original building did not include additional footings, which constrained carrying a second floor structure. However, a wood design solution offered a lighter structure and allowed minimizing the installation of additional footings under the existing slab.

The builder desired a structural floor panel made that could serve as the finished floor as well as the finished ceiling surface for the area below the mezzanine, which meant significant cost savings compared to conventional systems.

A new and innovative fire resistance solution was used to meet the required two-hour fire resistance rating (FRR) for non-combustible construction. The fire consultant showed that while combustible, the mass timber LVL (laminated veneer lumber) construction provided an equivalent, if not superior, level of safety to non-combustible construction in various ways. Connections were designed to have two-hour FRR and joints between panels would require no fire stopping owing to glue and screws used, and the design and development of fire-stopping of seismic joints.

Mass timber is environmentally friendly, sustainable, sequesters carbon and reduces energy use in buildings. Prefabricated wood elements resulted in rapid installation times (days vs. weeks) and reduced overall project costs compared to other building materials.

Wood created a contemporary design with unique warmth and character to stimulate and promote a healthy office and shop environment.

