

Canadian Wood Endless possibilities



A Case Study Designing with Solid Wood

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“Wood, for interior or exterior applications, plays a key role in mitigating climate change. With growing pressure to reduce the carbon footprint of the built environment, building designers are increasingly being called upon to balance functionality and cost objectives with reduced environmental impact.”

Wood has been used in the construction of all kinds of interiors, buildings, structures and enclosures for centuries, primarily due to its availability, ease of use and physical properties. Over a period of time as society has become more informed and sophisticated, it has become evident that wood, a sustainable resource unlike any

other, requires human interaction and good management to ensure true sustainability.

With growing pressure to reduce the carbon footprint of the built environment, building designers are increasingly being called upon to balance functionality and cost objectives with reduced environmental impact. Wood helps to achieve that balance

and it outperforms concrete and steel in terms of embodied energy, greenhouse gas emissions and air & water pollution.

Wood showcases the beauty of nature, radiates warmth and adds value. As a natural material, it brings inherent feelings of being connected to the environment and brightens any space. This has been





an important consideration in most of the public spaces and most certainly in restaurants, reception areas, lodges, hotel accommodations and hospitality.

For example, eating and drinking are social activities best enjoyed in a warm, relaxing and comfortable atmosphere. These activities have had a long association with wood which has traditionally been used for making tables, chairs and other furniture as well as for wine casks and beer barrels. Wood floors and exposed beams have been features of hotels and restaurants across the world for centuries and continue to lend a unique quality to contemporary dining establishments.

NITA LAKE LODGE, CANADA

Situated in the Resort Municipality of Whistler, British Columbia (B.C.), Nita Lake is a world-class ski destination in the heart of the province's Coast Mountains. In addition to 77 guest rooms with related dining, leisure, meeting, retail and other facilities, the project includes a new train station that was the point of entry to the town for many visitors who attended the 2010 Olympic and Paralympic Winter Games. The location is both prominent and sensitive, perched on the Shore of Nita Lake, situated on the axis of Lake

Placid Road and highly visible from the Valley Trail which parallels the lakeshore to the west. The two main components of the building – the train station and the lodge – are separately expressed, and the mass of each is further broken down to reduce the apparent scale and help the lodge sit comfortably among its residential neighbours.

The architectural expression recalls that of early mountain lodges and train stations, with multiple gables and balconies, and a portecochère. Many of these design elements are built in heavy timber or in a wood-steel composite construction. Many accents and details are also in wood, those that are structural being in Douglas-Fir and those that are simply decorative being in Western Red Cedar.

The primary structure of the building is cast-in-place concrete. However, the ancillary structures are built either entirely of wood or of a combination of steel and wood. Canopy structures support green roofs and are constructed completely of heavy timber.

Local Douglas-Fir and Western Red Cedar are featured throughout the complex in a variety of secondary structural and exterior finishing applications.

Wood also plays a key role in creating the interior character of the hotel. The public route through the building that connects Lake Placid Road to the lakeshore is identified by a river of blue stones that passes between Douglas-Fir faced columns that are similar in appearance to those outside.

In summary, using wood for interior or exterior applications plays a key role in mitigating climate change. Hospitality venues comprise a major component of such applications.

Trees and forest products play a critical role in protecting the environment and reducing greenhouse gases such as carbon

dioxide (CO₂). Using wood products that store carbon will help minimise our carbon footprint over the long term.

Wood species from British Columbia (B.C.), Canada come from sustainably managed forests and are certified either by FSC or PEFC. India has strongly endorsed the need to protect its forest resources and encourages imports of forest products from sustainable suppliers like Canada. This helps to reduce the demand for logging of timber in India and in tropical rainforests around the world. Canadian Wood from B.C. such as Western Hemlock, Douglas-fir, Western Red Cedar, Yellow-Cedar and SPF are now available in India. ▲

Peter Bradfield is the Technical Advisor, Forestry Innovation Consulting India, Canadian (B.C.) Wood Products. With over 40 years of experience in the wood & woodworking industry internationally, Bradfield leads FII India's educational and direct outreach activities to a wide range of audiences. His most prestigious postings include Managing Director, MacMillan Bloedel Pty Ltd; Managing Director, Weyerhaeuser Imports Pty Ltd; and Managing Director, Western Forest Products Pty Ltd. He is also the Owner at Camelia Trading, Sydney, Australia.

Over his career, Peter has gained a reputation as the "WRC expert" in Australia & New Zealand, and the "go to guy" for all B.C. species. He brings with him a passionate belief of making the unimaginable possible.