WOOD WELCOMES VISITORS AROUND THE WORLD WITH BEAUTIFUL, SUSTAINABLE BUILDING SOLUTIONS

WOOD IN HOSPITALITY & TOURISM

West Wing, Penticton Lakeside Resort And Conference Centre
Photo: Jon Adrian

INTRODUCTION

CONTENTS

PHOTOS:

FRONT COVER

Penticton Lakeside Resort
Jon Adrian

Yi Jing Yuan Multi-Function Hall
Xijiao State Guest Hotel
Suzhou Crownhomes Co., Ltd.

The Pallet Brewhouse and Kitchen
Sameer Chawda

Farming Leisure Tourist Service Centre
Yang Qian

BACK COVER

Yi Jing Yuan Multi-Function Hall
Xijiao State Guest Hotel
Suzhou Crownhomes Co., Ltd.

Design, functionality and aesthetics of a structure are vital components to success in the competitive hospitality industry. Owners and developers of hotels, restaurants, banquet halls and other hospitality venues are constantly balancing their desire to design unique, innovative buildings that provide exceptional guest experiences against their need to build and operate sustainable, affordable, functional facilities.

Trends drive the hospitality market, but the long-recognized benefits of building with wood — a sustainable, beautiful and reliable building material — continue to provide value for building owners.

Wood products from the forests of British Columbia (B.C.) are used to build tourist and hospitality buildings around the world. The popularity of B.C. wood is one of the many drivers adding to Canada's leadership in wood design and construction.

Developers and architects are continuously balancing the need for fresh, imaginative design ideas with the practicalities of meeting client needs for budget and construction schedules. Wood is a cost competitive, versatile and easy to work with solution, making it a good choice for a wide array of applications.

Humans thrive from a connection with nature, and use of exposed wood provides biophilic benefits, which is the innate sense of wellness humans feel when they're surrounded by natural materials. Designers are increasingly using biophilic design principles to create warm and friendly spaces that help guests feel welcome and comfortable.

Use of wood also helps companies in the hospitality industry meet their sustainability goals, which is an increasingly important criteria for guests. Life cycle assessment studies point to the significant advantages wood provides for sustainable construction, including reduced carbon emissions, positive effect on water quality and overall environmental impact when measured over the life of the structure. People value the environmental benefits offered by a building material from a renewable resource, making wood the natural choice.

PRACTICAL BENEFITS

Besides working to give guests a positive experience, hospitality and tourism businesses have practical facility requirements as well.

Cost effective construction leaves more money for amenities and other visible features that help attract visitors. Wood is readily available, which means it can be sourced locally and delivered quickly.

Wood structures are easy to fabricate and install using local labour, making them a cost-competitive alternative to other building systems like concrete or steel. Wood's light weight reduces foundation requirements and costs. All these factors help a business owner complete the building project quickly and efficiently, allowing them to earn revenue sooner.

Wood has proven performance when it comes to safety, comfort, acoustics and durability. For example, wood is durable and naturally resistant to corrosive environments, making it well-suited for use in humid pool areas. Wood delivers high-quality acoustic performance, as it is naturally sound-dampening and offers excellent noise control, important for both busy public and private hospitality spaces. Wood buildings are designed to meet the same level of seismic, wind and fire performance as buildings made from other materials, making them as safe as steel and concrete structures.

Wood's design versatility also provides benefits. Long-span engineered wood components like glue-laminated timber (glulam) and cross-laminated timber (CLT) panels allow building designers to create open spaces free from support columns, accommodating clear-span requirements for everything from meeting and banquet rooms to spacious hotel lobbies.

THE WEST WING PENTICTON LAKESIDE RESORT AND CONFERENCE CENTRE

PENTICTON, B.C., CANADA

When owners of the Penticton Lakeside Resort and Conference Centre decided to expand operations by building a six-storey hotel addition, they had ambitious goals. Penticton's waterfront location on the south shore of Okanagan Lake offers visitors many competing resort options, so owners wanted an iconic property that took advantage of the beautiful views. They also wanted to complete construction and open doors to the new facility in less than a year, in time for the busy summer season.

Architects used a mass timber building system with exposed glulam beams and columns and CLT panels from from B.C. to create the new West Wing at the Penticton Lakeside Resort, a 70-suite hotel with a sleek, contemporary design. The team completed construction of the 4,665 square-metre structure in less than 12 months.

The structure was constructed of Douglas-fir glulam beams and columns, left exposed to the interior to create a spacious, striking atrium. Glulam was also used to build a dramatic 30-foot high wall using a double lattice of beams to frame the windows. The lattice, which hangs down three stories, is suspended from the sixth floor.

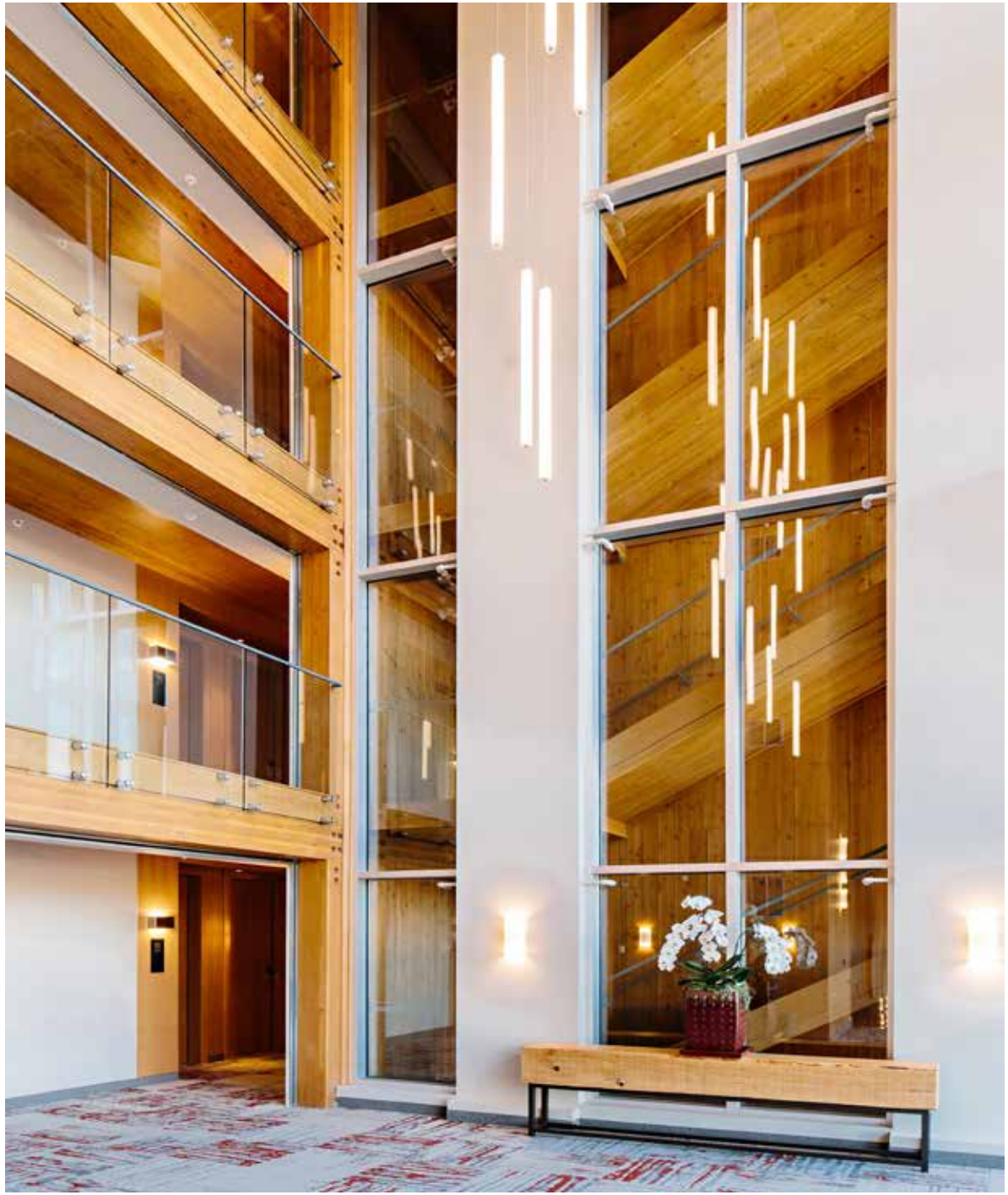
CLT panels, up to nine feet wide and 41 feet long, and glulam were used for all major elements of the building, providing both a cost-effective structure and a unique architectural finish.

Use of wood provided another benefit. The Lakeside Resort was built on a flood plain where building codes required that all new buildings be constructed on pilings. Wood's light weight reduced the overall building weight and eliminated the need for pile foundations, saving the developer both money and time.

Because of the optimistic schedule, speed of construction was critically important. Large CLT panels, produced in B.C., were quickly and efficiently lifted into place by crane. Crews also prefabricated the light wood framing components for the property, saving an estimated six weeks in construction time.

Since the CLT and glulam were left exposed wherever possible, no additional finishes were required, providing additional time and cost savings.

SIZE	4,665 square metres
COMPLETION	2017
ARCHITECT	HDR | CEI Architecture
STRUCTURAL ENGINEER	RJC Consulting Engineers
GENERAL CONTRACTOR	Greyback Construction
OWNER	RPB Hotels & Resorts
PHOTOS	John Bilodeau and Jon Adrian



SIZE	15,552 square metres
COMPLETION	2014
ARCHITECT	Pacific Coast Architecture Inc. and Stanley Paulus Architect Inc.
STRUCTURAL ENGINEER	John Bryson & Partners Structural Engineers
GENERAL CONTRACTOR	Northland Properties
OWNER	Northland Properties
PHOTOS	Courtesy of Northland Properties

SANDMAN SIGNATURE KAMLOOPS HOTEL

KAMLOOPS, B.C., CANADA

The Sandman Hotel Group manages more than 50 hotels, resorts and inns across North America and the United Kingdom, making them one of Canada's fastest-growing, privately-owned hospitality companies.

The company is dedicated to smart design and friendly hospitality; their goal is to provide guests with a relaxed, comfortable stay. They use wood in most of the new properties they build.

The Sandman Signature Kamloops Hotel was the first six-storey wood-framed hotel built in the city. The property has 202 guest rooms, including 100 suites, along with two onsite restaurants. Additional hotel amenities include an indoor swimming pool with hot tub, a fitness room and business centre, along with banquet and meeting rooms.

Interior load-bearing walls were constructed of concrete; the builder then suspended the wood-framed floor joists from the concrete walls. They chose this construction methodology to help avoid accumulative shrinkage in the building. All non-load-bearing interior and exterior walls were wood framed. Since the Kamloops hotel is located adjacent to rail lines that run through the city, architects added acoustic drywall and extra insulation to the wood-framed exterior walls to provide quiet and privacy. The roof was built using engineered wood trusses.

To help welcome guests, wood was used to build the two-storey heavy timber canopies at both hotel entrances and placed reclaimed wood accent walls at entrances to the hotel and one of the restaurants. Wood's durability in humid environments was also a consideration. They used western red cedar tongue-and-groove decking for the ceiling in the indoor swimming pool and hot tub area.

One of Sandman's core values is a commitment to sustainability, a commitment that is reflected in their choice of wood for constructing new facilities. Economics and speed of construction provided additional benefits, as did access to framers and carpenters in Kamloops with the expertise needed to build the structure quickly, efficiently and cost-effectively. Since the company works to maximize the value of their suburban locations and has seen success in building six-storey hotels using wood, this building type is now typical for Sandman's new construction.

KEY-OH LODGE

BURNS LAKE, B.C., CANADA

Sometimes, wood is used in a hospitality building to reflect the culture and heritage of an area. Key-Oh Lodge is one example. Burns Lake is a close-knit community with a rich Indigenous heritage, and the Lodge reflects both the Ts'il Kaz Koh First Nation's close affinity with its beautiful location, surrounded by lakes, mountains and outdoor recreation, and the woodworking skills of its members.

Visitors who enter this 42-room, two-storey lodge are immediately struck by the way in which they feel welcomed. The Key-Oh Lodge, owned and operated by the Ts'il Kaz Koh First Nation, provides a warm and comfortable place for visitors to rest. Since opening in 2017, occupancy rate has remained high, providing strong revenues and healthy employment for Band members.

Wood from B.C. features prominently in the structure. Guests enter the Lodge through a soaring heavy-timber-framed vestibule and exterior canopy. Beautiful wood carvings welcome visitors into the lobby; the carvings represent the Ts'il Kaz Koh First Nation community's main families. The spacious lobby also serves as a cultural discovery space, with historical artifacts and community art pieces on display. The 2,181 square-metre travel lodge also features fitness and breakfast areas, as well as a business centre with conference room.

While the heavy-timber lobby was framed onsite, affordability and speed of construction prompted the use of prefabricated wood modules to construct the lodge rooms. This significantly reduced the project timeline, allowing the lodge to become operational more quickly. It also helped avoid winter site work, which would have slowed construction. It took just seven months from module production to occupancy, and overall construction, including site work, was completed in just over a year.

Modules were built at a prefabrication facility in the Fraser Valley using plywood sheathing, laminated veneer lumber (LVL) and dimension framing lumber sourced from a local mill run by the Ts'il Kaz Koh First Nation, harvested from nearby pine beetle-affected forests. The modules were shipped to Burns Lake and set in place onsite; they then added wood trusses made with dimension lumber to form the pitched roof. The lobby area was framed on site using LVL, laminated strand lumber (LSL) and heavy timber wood trusses; they also used solid tongue-and-groove pine decking for the ceiling.

Wood's ability to provide design flexibility was also important. The hotel was constructed and sited so that it can be expanded in the future.

SIZE	2,181 square metres
COMPLETION	2017
ARCHITECT	Boni Madison Architects
STRUCTURAL ENGINEER	Canstruct Engineering Group
CONSTRUCTION MANAGER MODULE FABRICATOR INSTALLER	Metric Modular
OWNER	Ts'il Kaz Koh First Nation
PHOTOS	Metric Modular

"Construction of the Key-Oh Lodge brought many benefits to the Burns Lake community. Wood was harvested from our forests and milled by our local sawmill. The beautiful timber-framed lobby gives us a place to showcase the work of many local artists, and the use of wood throughout the project reinforces our commitment to sustainability."

- Chief Dan George, Ts'il Kaz Koh First Nation

"Hospitality design is a challenging area where the interiors need to stay fresh and appealing with the future trends in design. The Pallet Brewhouse and Kitchen is a microbrewery that was designed with this thought. Designers have created an experience through fusion of sustainable and natural materials with straight lines in contemporary design. Wooden packing pallets are the highlight of the design. Overall, it gives an unconventional, international look."

THE PALLET BREWHOUSE AND KITCHEN

BENGALURU, INDIA

The restaurant business in the Whitefield, Bengaluru area, called the 'Silicon Valley of India,' is competitive, as establishments vie to attract hungry and thirsty tech workers. These young professionals appreciate good design, place high value on quality food, and want a comfortable environment in which to enjoy it. Innovation and creativity are important, and sustainability matters.

The Pallet Brewhouse and Kitchen wanted to meet these criteria while differentiating itself to draw customers away from competing establishments. They also wanted an inventive interior that would reflect their creative beer and food offerings. So, they used the natural look of wood to create a friendly pub atmosphere where programmers and tech workers can relax and unwind after a long workday.

The resulting 1,250 square-metre microbrewery and restaurant is a casual yet hip place whose inventive use of wood pallets to form unique interior patterns has helped attract patrons. The Pallet's advertising even uses phrases such as 'décor to match your drinks' and 'come for the brews, stay for the views'.

To create the distinctive aesthetic, the architects initially planned to use old shipping pallets to decorate the restaurant's interior. However, wood quality, damage and species variation found in recycled pallets made the initial idea unworkable. Instead, they decided to build new pallets using spruce-pine-fir (SPF) from B.C., which allowed them to minimize waste and replicate the look and feel of recycled pallets but with higher quality wood.

Architects used more than 5,100 wooden pallets to create false ceilings, room dividers, backdrops, bottle racks and other design elements in the large space. They also used the SPF as plank walls in a private tasting room. The relatively simple design concept capitalizes on the natural colour of Canadian softwood while using a familiar form (pallets) to create unique patterns and textures.

Ready availability of SPF played a crucial role in winning this project, since a local wood supplier in India was able to source and supply the 43 cubic metres of material in just a few days. The lumber was already seasoned and planed, which helped speed installation.

The Pallet's innovative design earned the architects a Platinum award at the International A'Design Award & Competition in 2018, and a Bronze award in the Sustainable Products, Projects and Green Design category of the International Design Awards.

SIZE	1,250 square metres
COMPLETION	2017
ARCHITECT/INTERIOR DESIGNER	Studio K-7 Designs Pvt. Ltd.
OWNER	Spoonability Hospitality LLP
PHOTOS	Sameer Chawda

SIZE	857 square metres
COMPLETION	2018
ARCHITECT	Green-A Architecture & Decoration Design Co., Ltd.
STRUCTURAL ENGINEER	Weizhou Fu and Xiaotian Xing (Canada Wood), with Equilibrium Consulting
GENERAL CONTRACTOR	Suzhou Crownhomes Co., Ltd.
DEVELOPER	Shanghai Donghu Group Co., Ltd.
PHOTOS	Suzhou Crownhomes Co., Ltd.

YI JING YUAN MULTI-FUNCTION HALL XIJIAO STATE GUEST HOTEL

SHANGHAI, CHINA

Since it was built in 1960, the five-star Xijiao State Guest Hotel has hosted banquets and events attended by domestic and foreign dignitaries, including Chairman Mao, Deng Xiaoping, Queen Elizabeth II, the Emperor of Japan and President Obama. Conference, meeting and event space at this 'oasis in the city' is in high demand.

In 2016, the Shanghai Donghu Group approached Canada Wood China to support incorporating wood into the construction of a new banquet hall on the hotel grounds. The structure is designed to showcase the suitability of wood construction for hospitality facilities, providing a functional yet warm venue for dining, meetings and special events. The striking wood-frame building fits perfectly within its secluded lakeside location, blending with the surrounding trees to provide an elegant and private setting.

The single-storey, 857 square metres structure was framed with glulam beams and columns fabricated in China using Douglas-fir lumber from B.C. The glulam was designed to create a three-dimensional architectural form simulating a row of trees, creating a unique building profile. The roof structure was created using several equal-size folded structural plates, staggered with each other in clear geometric logic to create a dynamic roof line. Most of the glulam connectors were hidden to preserve the smooth wood surface.

Skylights allow natural light to brighten the interior, creating dynamic shadows that highlight the architectural features inside. Interior ceilings and walls were adorned with clear hemlock and SPF dimensional lumber, creating an architectural framework that casts a warm, inviting ambiance. The interior wood grille backdrop provides a balanced sense of geometry; each of the grille slats were installed using embedded metal connectors instead of nails.

Offsite prefabrication of the wood components enabled quick, efficient construction; it also helped minimize damage to the land and surrounding landscape during construction. Crews began construction in March 2018; the building was completed just seven months later.

Although they had a limited construction budget, the design team created a unique meeting space which reflects the natural, warm texture of the wood. Wood also provided sustainability benefits, offering a total potential carbon reduction of about 557 metric tons. Altogether, the building used about 212 cubic metres of wood, all of which was imported from Canada.

FARMING LEISURE TOURIST SERVICE CENTRE

GANYU DISTRICT, LIANYUNGANG CITY, JIANGSU PROVINCE, CHINA

Thanks to active promotion and support from China's Ministry of Agriculture, rural tourism in China is growing. The effort is part of a national policy designed to help increase income and provide jobs in poor rural areas by promoting domestic tourism.

The Farming Leisure Tourist Service Centre is located near the seaport city of Lianyungang in eastern China, between Shanghai and Beijing. The spacious, wood-framed Centre houses a tourist information desk, exhibition area, souvenir shops, restaurants and more — all designed to welcome visitors and help them learn about agriculture in the region.

The beautiful structure is of hybrid construction, framed with concrete and wood. Western red cedar from B.C. was used to create the elaborate glulam trusses, which were fabricated in China.

The design team used finite element calculation software to determine the glulam specifics and engineer the complex wood roof structure. They designed the glulam roof beams with a uniform curvature, which reduced fabrication complexity and cost, and shortened the construction schedule. The software also automatically generated shop drawings for the fabricator, which improved accuracy and reduced production time.

Use of wood also helped the design team meet stringent seismic requirements, since the Centre sits in an earthquake-prone area. Research and testing have proven that timber components, assemblies and entire structures are capable of meeting or exceeding the most demanding earthquake and seismic design requirements. Wood is inherently flexible and lightweight, making it ideal for use in high seismic areas.

Construction of the wood structure went smoothly. The contractor strategically positioned the glulam trusses to help simplify the complicated process. Once all the roof trusses were hoisted and fixed with temporary supports, the contractor made partial adjustments to the glulam trusses to match the building's modeling simulation. This enabled the contractor to perfect the spacing while ensuring the stable installation of every beam.

The structure's design was meaningful, and the choice of glulam beams gave the design team great flexibility in terms of roof shape. The wood roof design evolved from the traditional herringbone sloping roof, which looks like the Chinese character for 'person' from the side; it refers to 'three intelligent elements — heaven, earth and person', which means that people should live in harmony with nature by following the laws of the universe. Architects took full advantage of wood's beauty, leaving the glulam beams exposed to the interior. The warmth of wood helps welcome visitors to the Centre and creates a beautiful facility to promote agriculture in the area.

SIZE	2,829 square metres
COMPLETION	2018
ARCHITECT	Suzhou Crownhomes Co., Ltd.
STRUCTURAL ENGINEER	Suzhou Crownhomes Co., Ltd.
OWNER	Jiangsu Zhenyu Agriculture Development Co., Ltd.
PHOTOS	Yang Qian

SIZE	1,644 square metres
COMPLETION	2017
ARCHITECT	Shinichiro Nakahara /Landscape Products Co., Ltd.
STRUCTURAL ENGINEER	Tojo Sekkei
GENERAL CONTRACTOR	Chuo Kensetsu
OWNER	Komasa Jyozo Co., Ltd.
PHOTOS	Hironori Nakayama

KANOSUKE DISTILLERY

KAGOSHIMA PREFECTURE, JAPAN

As interest in Japanese whisky has grown, so has the number of local distilleries, along with the number of tourists visiting them. These local craft distilleries need to differentiate themselves, not only with the quality of their whisky but also with the experience they offer for tourists who visit from all over the world.

Kanosuke Distillery, which opened in 2018, is owned by renowned *shochu* producer Komasa Jyozo; *shochu* is another popular distilled liquor in Japan. In establishing Kanosuke, the owner knew how important it would be to present quality at every level, so they incorporated wood into the design of a distillery that differentiates itself not only with its innovative whiskies but with its dramatic building and location.

The sleek, modern facility was designed to blend in with its natural surroundings along Fukiagehama, Japan's longest sand beach. The architects chose wood for the exterior of this beachfront distillery because it fit with the distillery's rugged location, helping the building blend naturally into the striking coastline.

The exterior of the two-storey, u-shaped distillery building features naturally-weathering wood cladding and tan brick. The builder used clear western red cedar siding from B.C. to give the beachfront distillery its clean, natural lines, which is complemented by the symmetrical form and gable roof. Architects wanted a material for the building's exterior that would stand up to the harsh climate, so the durability of western red cedar made it a perfect fit. Cedar also provides a natural resistance to termites found in the hot and humid region.

The distillery's beautiful location and proximity to the sea not only provides visitors with a unique tasting experience, it also impacts the whisky's flavor, since warm weather speeds whisky's maturation. Inside, the distillery houses three pot stills, which is also unique for a small craft distillery; different still shapes yield different whisky flavours.

The striking Kanosuke Distillery was designed to hint at the innovative whiskies produced within, and the wood-clad exterior helps distinguish the distillery's unique brand to tourists visiting the area.

Farming Leisure Tourist Service Centre
Photo: Yang Qian

REDEFINE THE GUEST EXPERIENCE

Architects and developers in the competitive hospitality industry are challenged every day to design and build facilities that will attract visitors. Innovative properties define a company's brand, and the wide range of building material options make wood an ideal choice.

Design possibilities with wood are virtually unlimited; architects and developers can use everything from mass-timber products like CLT for structural elements to reclaimed wood for accent walls. Wood is versatile; both mass-timber and wood-frame structures can be built quickly. Wood is a safe, strong and cost-competitive building material that can be used in a wide variety of building applications.

As more people seek environmentally friendly restaurants, hotels and resort properties, owners and developers are employing eco-friendly design and construction techniques to help the business differentiate itself. Wood, particularly when left exposed, indicates to guests that sustainability matters to the establishment. Wood is a renewable, sustainable building material with a lighter carbon footprint than other building materials like steel or concrete. Wood also contributes to the durability and energy efficiency of a facility, which further adds to its environmental advantages.

Wood from B.C. is readily available around the world, making it an ideal building material that can be easily used to meet expectations of the growing number of guests looking for eco-friendly travel options and unique visitor experiences.

The Pallet Brewhouse and Kitchen
Photo: Sameer Chawda

Penticton Lakeside Resort
Photo: Jon Adrian

INNOVATION PARTNERS

Forestry Innovation Investment

British Columbia
www.gov.bc.ca

Natural Resources Canada
Ressources naturelles Canada

Canada Wood

ITY & TOURISM

naturally:wood®

Consider the environment — use paper from responsibly managed sources.

Published October 2019