

## Spruce-Pine-Fir (SPF) – a specialist for structural framing and prefabricated homes

Spruce-Pine-Fir (SPF) comprises of three principal species – White spruce, Lodgepole pine and Alpine fir. They share many common characteristics and properties. These trees of the SPF group are the most abundant species in the interior forests of B.C. and most commercially important.

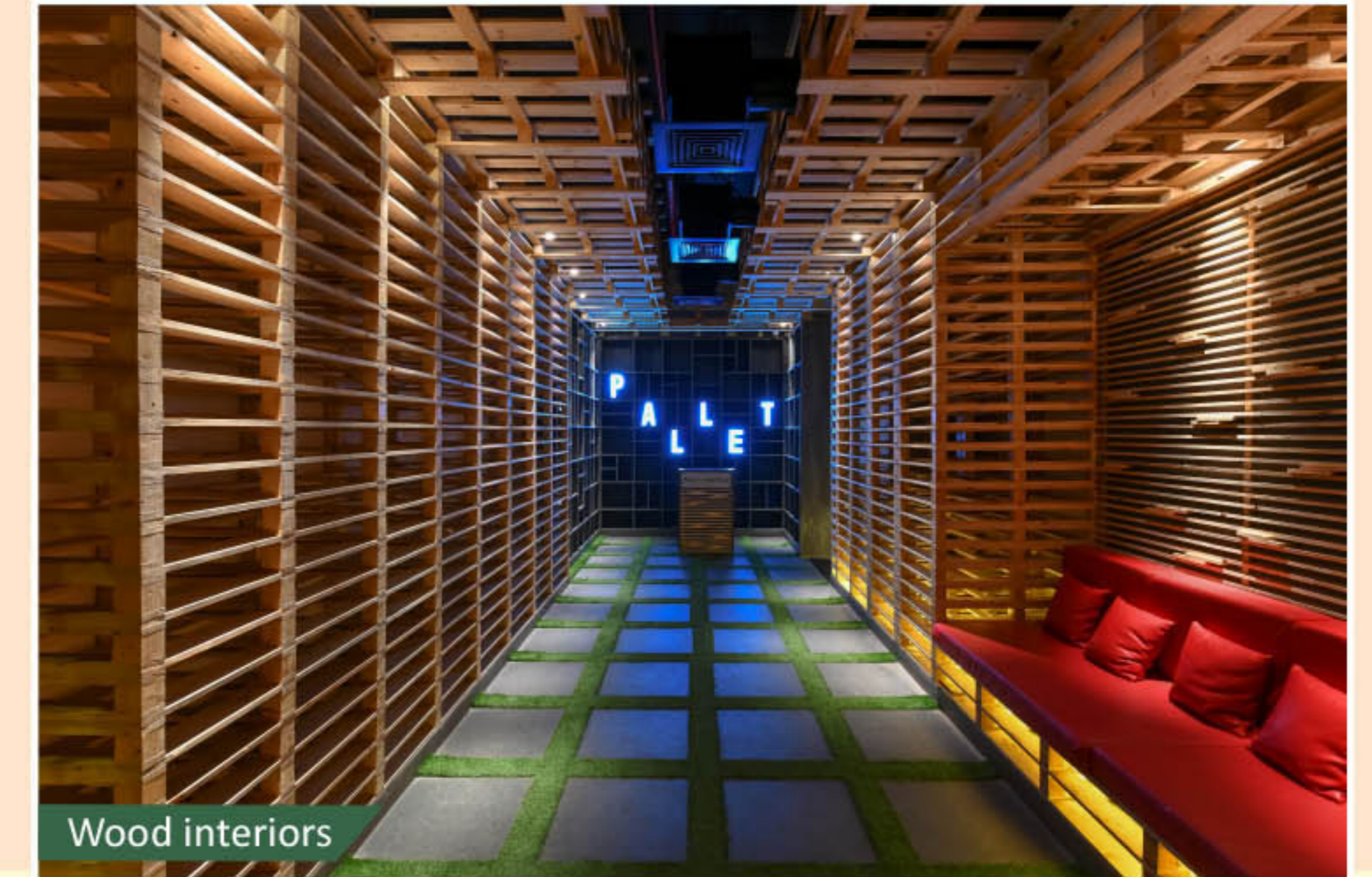
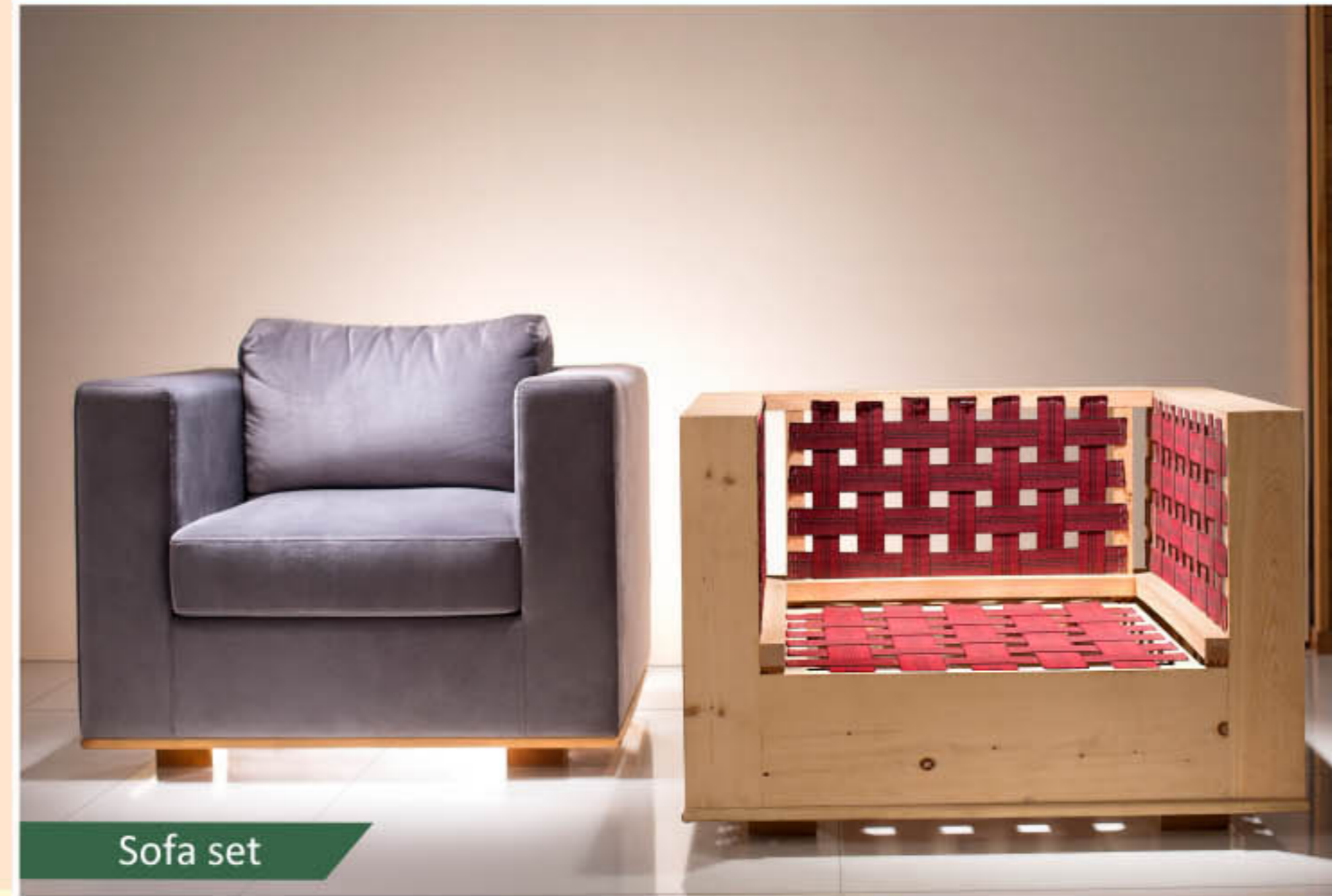
SPF has been used in all types of structural framing applications globally. It is especially appreciated by house builders for its excellent strength, light weight, ease of handling and good working properties.

Canadian Wood promotes four other distinct wood species from B.C., Canada, in addition to SPF. They are Western hemlock, Douglas-fir, Yellow cedar, and Western red cedar. **All these five species are legally harvested, certified, and sourced from sustainably managed forests of British Columbia (B.C.), Canada.** Each of these species is suitable for a wide range of indoor and outdoor applications.



### SPF- Suitability for structural, furniture and wood interior applications

- Strong, stiff and stable, it is considered as a versatile lumber for residential, commercial and industrial buildings.
- Its strength, dimensional stability and excellent nailing properties makes it an ideal choice for the prefabricated home industry.
- Kiln seasoning enhances its strength, stiffness, appearance and increases its resistance to decay and insects. Seasoning improves its dimensional stability and thermal resistance, while reducing shrinkage & warping.
- It has a smooth texture with good painting and staining properties.
- It has excellent nail holding capacity and can be worked easily with hand and power tools.
- Is readily available in wide range of sizes and lengths.
- It is the most abundant species group and continuous reforestation ensures its future availability.



### Enabling sustainable housing solutions in India using SPF

The world today is increasingly concerned about global warming and the carbon footprint. Accordingly, the world is adopting alternative materials and technologies as a measure to mitigate these environmental challenges. One such step is increased usage of sustainable materials and techniques in construction by architects, developers and builders. There is an encouraging trend emerging in India by using wood in structural applications by leading architects, contractors/manufacturers, developers and especially in the hospitality sector. India is an attractive market for sustainable construction solutions with many opportunities yet to be explored.

Canada is an acknowledged leader in advanced building techniques with proven expertise in building with wood. Canadian Wood engages with contractors / manufacturers in India as knowledge partners, providing practical training and sharing best practices in building with wood, using different techniques. These include Wood Frame Construction (WFC), Tongue & Groove (T&G), Post & Beam etc., used in many of the display projects. Such elegant display houses can be seen at Chennai, Mysuru, Hyderabad and Bengaluru.



### Building a wood frame construction (WFC) house with Spruce-pine-fir (SPF)

WFC commonly involves dimension lumber, engineered wood products, and structural wood panels to make walls, floor, and roof assemblies. These elements provide rigidity, a framework for installing mechanical systems, insulation and supports the interior and exterior finish. There is an upward trend in increased usage of wood in the home category by leading architects, manufacturers and high net worth individuals (HNIs) looking at villas, country homes and farmhouses as a lifestyle statement.

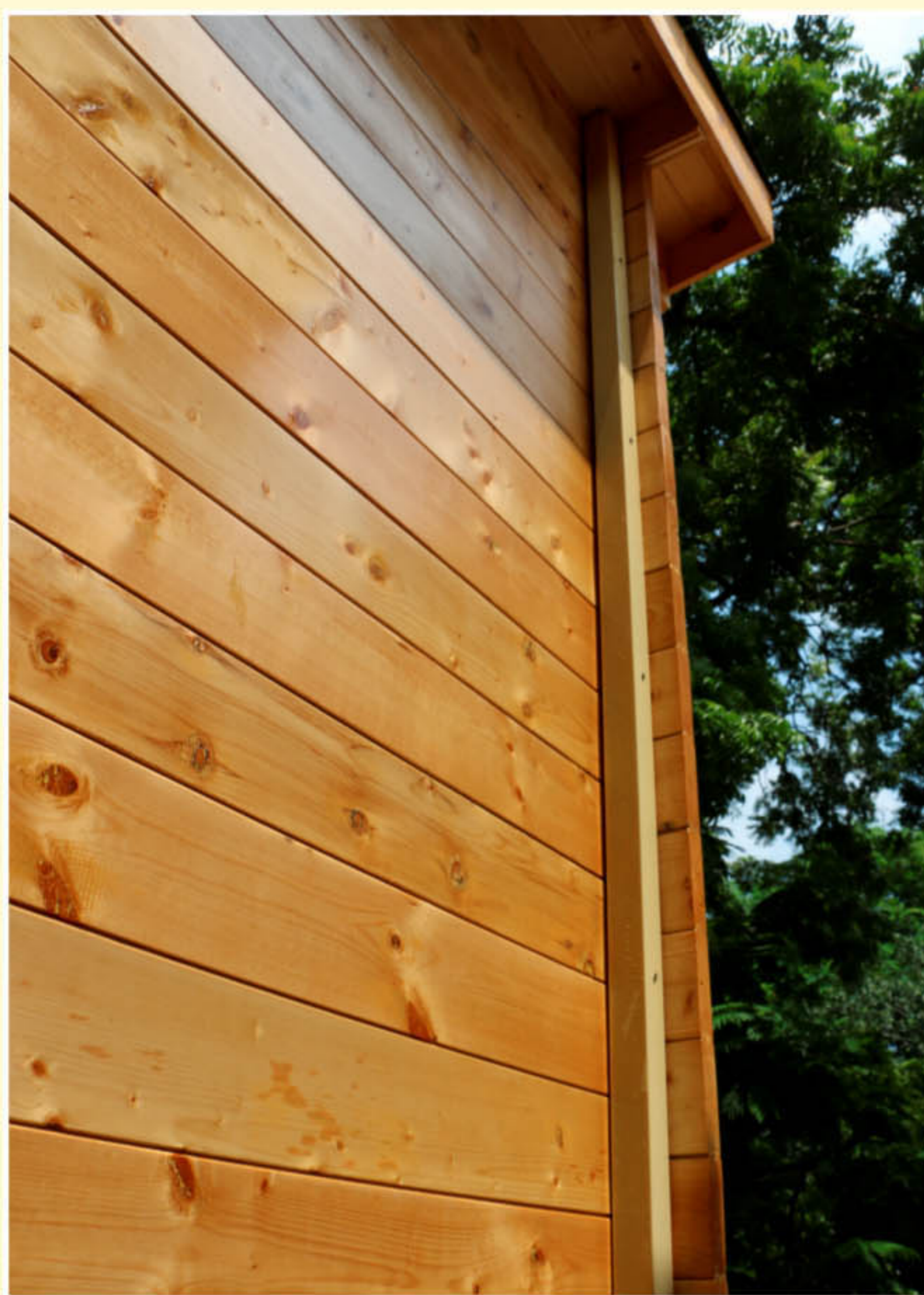


Wood Frame Construction in progress

### Building a Tongue & Groove (T&G) style house with Spruce-pine-fir (SPF)

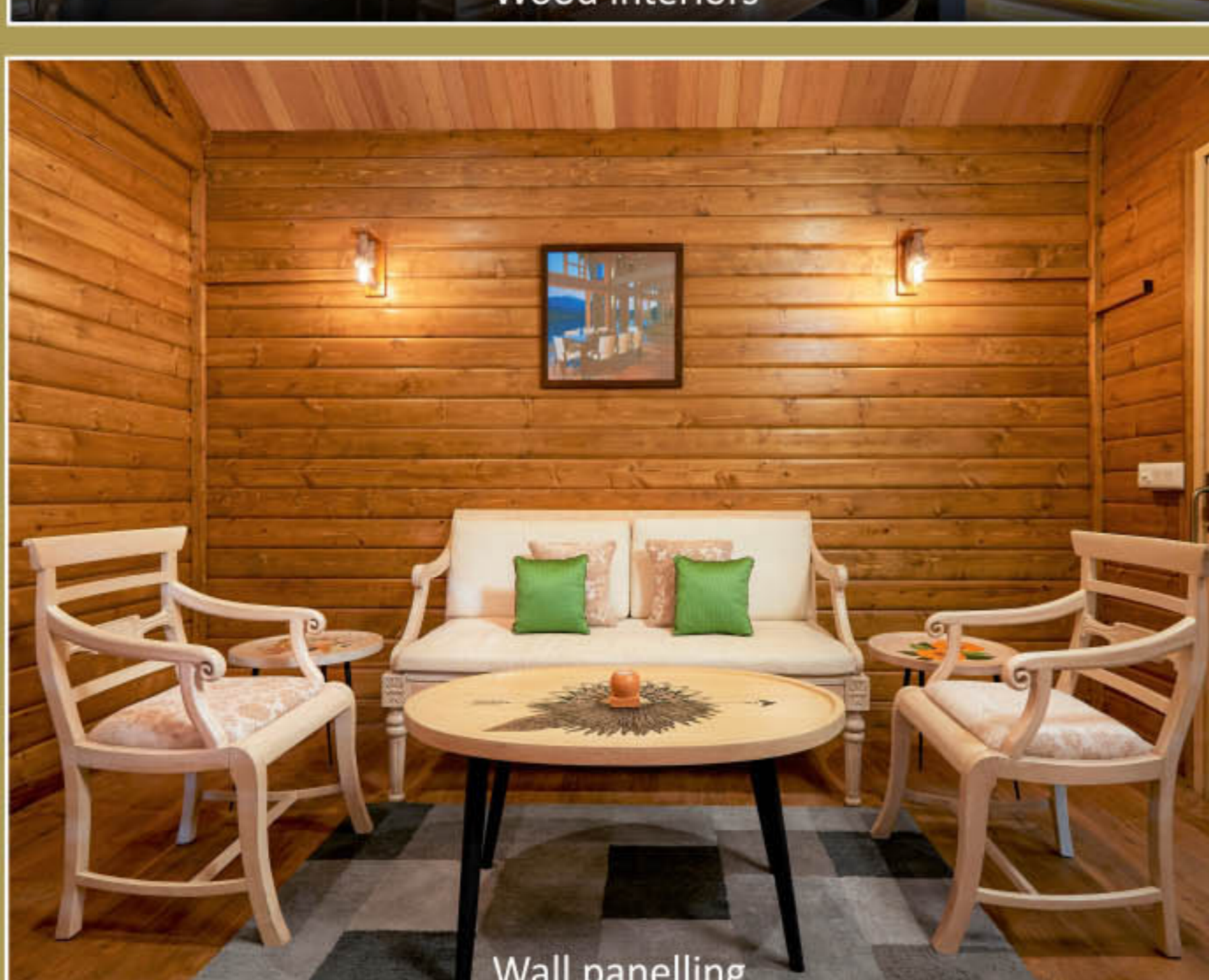
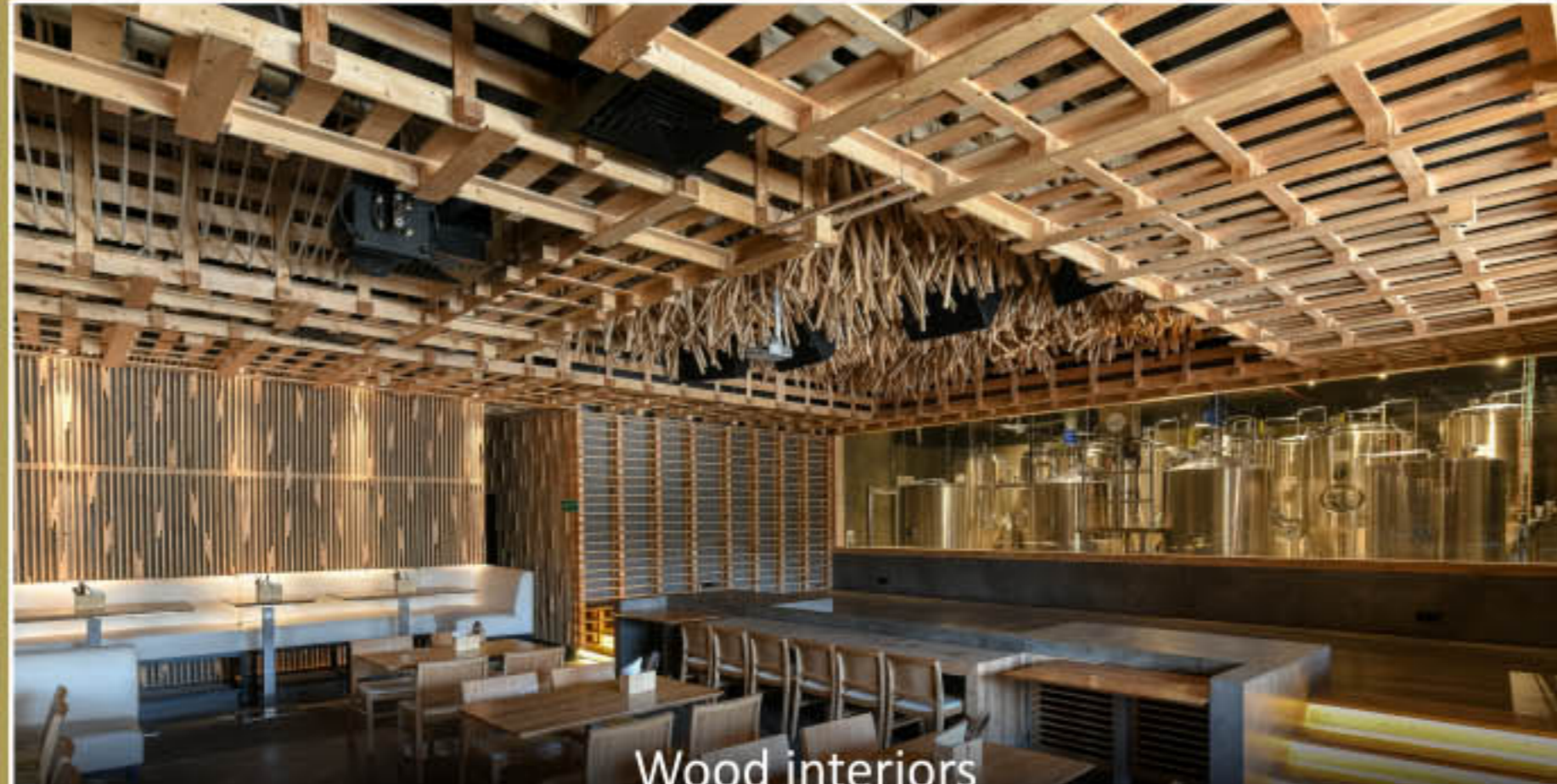
The T&G style of construction is a very organic and efficient way of building since the entire structure can be prefabricated in the factory from the drawing. A major advantage of prefabrication method is that every component can be made and pre-finished prior to leaving the factory with only a final coat to be done after construction.

The hospitality industry is increasingly looking at building resorts using wood in structural applications, particularly in the case of beach and hill resorts where permits are often issued for “temporary housing” only. This is a sizeable opportunity for T&G style housing and resort accommodation. Also, the beauty and appeal of T&G construction in India for resort living is the all-encompassing look and feel of wood and being part of nature.



Tongue & Groove (T&G) house

### Other applications - wood interiors and handcrafted gift items



**The World Nature Conservation Day** is observed annually on 28th July. The occasion aims to create awareness about the need to pre serve the environment and natural resources to keep the world healthy. For us at Canadian Wood, nature conservation and sustainability go hand-in-hand. The B.C. forests are a model example of reforestation for the rest of the world!

