Lumber and Building Materials
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In Lumber business, it offers processed, kiln dried and planned lumber from Canadian Forest Products Ltd (CANFOR), Vancouver, British Columbia, Canada in SPF (Spruce, Pine & Fir) species to Indian market.

CANFOR manages and harvests forests that contain a number of species. The dominant species mix for CANFOR lumber products is Western Spruce-Pine-Fir (SPF). CANFOR also manufactures lumber products using Eastern SPF. All of CANFOR’s SPF is ideal for residential and commercial construction. CANFOR follows and maintains a strict Green policy. It supports the best environment protection practices at all its manufacturing plants in as much as ‘no native wood’ from natural forest is used at any of its facilities.

SPF Lumber refers to a group of four species of lumbers commonly known as, White Spruce (Picea glauca), Engelmann Spruce (Picea engelmannii), Lodgepole Pine (Pinus contorta), and Alpine Fir (Abies lasiocarpa). All these species yield high grade of lumber with relatively small, sound tight knots. Lumber produced from spruce-pine-fir Species is known and marketed together as SPF in trade parlance.

Spruce-Pine-Fir (SPF) group of Lumber is grown in Western Canadian provinces. It is ideal for residential and commercial construction. Compared to other species of Softwood framing lumber, SPF is straighter, more stable, lighter in weight and easier to cut and nail. These attributes have made SPF the dominant species of framing lumber in the world.

All SPF Lumbers entering the stream of trade are kiln dried to a moisture content of 19% or less.

The value added variants of SPF is known as Engineered Lumber. In common parlance, the variants of Engineered Lumber are designated as follows:

- Long Length Finger Jointed (LL-FJ) SPF
- MSR (Machine Stress Rated) Lumber
- Long Length Finger Jointed MSR (FJ-MSR)
- Treated SYP Lumber

As you dig through the pages on this site, you will discover these variants, its feature, benefits and areas of applications.

Famous Canfor brands are
Advantages of SPF Lumber

Canfor SPF is ideal for residential and commercial construction due to its low cost and high strength to weight ratio. Western SPF lumbers tend to be available in larger sizes. The combination of the species and growth conditions in western Canada result in tall straight trees which produces strong straight lumber that when dried correctly is stable and ideal for construction.

Canfor SPF lumber is seasoned uniformly in dry kilns to a moisture content of 19% or less. Kiln drying inhibits natural staining of the wood, improves its strength and stiffness, enhances its appearance and increases its resistance to decay and attack by insects.

Canfor SPF has a high strength-to-weight ratio and is well known for its outstanding working properties. It takes and holds nails exceptionally well and is easily worked with hand and power tools. It has good gluing, painting and staining properties.

Canfor’s manufacturing facilities utilise Laser grading stations to assist the manual graders to ensure laser accuracy on details such as wane and straightness. Canfor’s expertise in kiln-drying and SPF lumber manufacturing ensures that all our production is carefully dried to ensure stability and moisture content accuracy.

Grading Rules & Dimensions Of Lumber

Canfor grades Lumber in accordance with the Grading standards set out by National Lumber Grades Authority of Canada (NLGA).

Canfor Lumber products are graded by hand and by machine to ensure that grading accuracy and consistency is maintained from shift to shift, day to day and mill to mill. Mechanical grading process involves Laser Grading Optimiser techniques. The online laser scans each piece of lumber as it passes through the grading station. The scanning process checks each piece of lumber for deviations in terms of grading rules. The manual graders then look for other defects that will affect the grade and intended use. This combination allows graders to concentrate on fewer defects and make better grading decisions.

The Lumber Grade – Your Guarantee of Quality Building Products

A lumber grade is the quality control standard. It signifies a minimum standard describing the characteristics allowed in a piece of lumber. Each piece of lumber is assigned a grade based on its quality, using a rule which considers the intended use of the piece, the size of the piece, its quality, and in some cases its species. Quality is affected by the number and/or size of characteristics and the way these characteristics affect strength and appearance.

No. 1 and No. 2 grade lumber are the most common lumber grades and are recommended for most general construction uses. Identical design values are given for No. 1 or No. 2 grade lumber for SPF (Spruce-Pine-Fir) by NLGA.
Most lumber used in house building is a Grade 2 or better. The differences between Select Structural, No. 1 and No. 2 grade lumber relates to appearance and strength characteristics. In India, at present, while we offer only Grade 2 and Better, Utility and Grade 3 from stocks, enquiries for higher grades are solicited.

Grade 3 and Economy is ideal for secondary manufacturers who recover a good portion of higher grades out of these lower grades in the process of further conversion.

Every single piece of Lumber distributed by Canfor bears a mark for its designated grade in terms of NLGA of Canada.

Canfor SPF Lumber is generally available in following dimensions:

<table>
<thead>
<tr>
<th>Species*</th>
<th>Nominal Rough Sawn Size in Inch</th>
<th>Surfaced Dry Size in Inch</th>
<th>Surfaced Dry Size in mm</th>
<th>Length in feet</th>
<th>Length in Meter</th>
<th>Available Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF/D.Fir</td>
<td>2” x 3”</td>
<td>1-½” x 2-½”</td>
<td>38mm x 64mm</td>
<td>6’ - 20’</td>
<td>1.8 M to 6.1 M</td>
<td>Grade 2 and Better, Grade 3 Economy</td>
</tr>
<tr>
<td>SPF/D.Fir</td>
<td>2” x 4”</td>
<td>1-½” x 3-½”</td>
<td>38mm x 89mm</td>
<td>6’ - 24’</td>
<td>1.8 M to 7.3 M</td>
<td>Grade 2 and Better, Utility, Grade 3 Economy</td>
</tr>
<tr>
<td>SPF/D.Fir</td>
<td>2” x 6”</td>
<td>1-½” x 5-½”</td>
<td>38mm x 140mm</td>
<td>6’ - 24’</td>
<td>1.8 M to 7.3 M</td>
<td>Grade 2 and Better, Grade 3 Economy</td>
</tr>
<tr>
<td>SPF/D.Fir</td>
<td>2” x 8”</td>
<td>1-½” x 7-¼”</td>
<td>38mm x 184mm</td>
<td>6’ - 24’</td>
<td>1.8 M to 7.3 M</td>
<td>Grade 2 and Better</td>
</tr>
<tr>
<td>SPF/D.Fir</td>
<td>2” x 10”</td>
<td>1-½” x 9-¼”</td>
<td>38mm x 235mm</td>
<td>6’ - 24’</td>
<td>1.8 M to 7.3 M</td>
<td>Grade 2 and Better</td>
</tr>
<tr>
<td>SPF/D.Fir</td>
<td>2” x 12”</td>
<td>1-½” x 11-¼”</td>
<td>38mm x 286mm</td>
<td>6’ - 24’</td>
<td>1.8 M to 7.3 M</td>
<td>Grade 2 and Better</td>
</tr>
</tbody>
</table>

Note: Illustration or reference to Inch and Feet is only for guidance of the users in areas following Imperial system of measurement.

For a full list of options on dimension lumber, please visit http://www.canfor.com/products/wood/lumber/dimension.asp
Several Engineered variants of SPF Lumber has been developed over the period of time to improve the performance of an ordinary Lumber for applications where it has proved to be inadequate owing to inherent limitations of lumber in terms of varying degrees of mechanical and physical properties across its length and cross sections.

Further, the lumber being an organic product is susceptible to decay while in contact with water or ground, fungal and termite infestation in tropical climatic conditions. To improve upon its performance in difficult exterior and interior conditions, SPF and SYP (Southern Yellow Pine) Lumber is vacuum pressure treated with suitable preservatives to enhance the service life of lumber similar to corrosion or decay of metal in comparable conditions.

Some of these engineered variants of the lumber are described and discussed as follows:

Machine Stress Rated (MSR) Lumber
MSR is a value added variant of SPF. It refers to a machine stress rated lumber that ensures a minimum strength performance in engineered applications, where an ordinary SPF would be failing in its performance.

Another value added variant of MSR Lumber is finger jointed MSR (FJ-MSR). The applications where long length of machine stress rated lumber is required, FJ-MSR is an answer. FJ-MSR is composed of short sections of MSR lumber that is tested for minimum design strength. It is straight, stable and consistent in performance. The product has all the benefits and attributes of solid wood in its strength, nail holding, stiffness and ductility.

Falling downgrade of FJ-MSR marginally failing in the machine stress rating is often described as long length finger jointed (LL-FJ) SPF lumber.

Both FJ-MSR and LL-FJ SPF lumbers are available in lengths up to 36’ or 11 Meter in cross sections of 38mm x 89mm and 38mm x 140mm. Other cross section like 38mm x 184mm is also available on request on prior arrangement.

For more details on these value added products, please download following product information sheets

Long length Finger Joined MSR - Cost effective straightness.
Long length Finger Joined Lumber - Cost effective straightness.

Distinct advantages of Engineered Lumber:
- Superior straightness when compared to solid wood substitutes,
- Superior stability, less likely to warp or twist,
- Easy to cut, nail and drill - behaves just like solid lumber,
- Cost effective alternative to other engineered products such as laminated strand lumber (LSL) and laminated veneer lumber (LVL),
- Light in weight when compared to LSL and LVL

Product Applications:
- Long length roof rafters,
- Balloon wall components and hybrid construction methods,
- Tall walls, that require extreme straightness,
- Tall sheer walls,
- Headers, Columns and Posts,
- Residential and commercial applications,
- Furniture Cabinetry,
**Pressure Treated Lumber**

The most significant engineered value added variant of lumber is preservative treated lumber to guard against decay, fungal and termite infestations in tropical and exterior service conditions of high humidity, contact with water and ground.

Canfor has developed MicroPro™ micronized wood protection technology commonly known as MCQ and its variant as ACQ.

While MCQ treated lumber is fresher and brighter with a more modern and natural appearance, ACQ treated wood is in idle alternative to traditional pressure treated lumber.

**Distinct features of MCQ treated MicroPro™ Lumber**

- Lighter “Natural” color.
- Better corrosion protection for exterior code-approved fasteners and hardware.
- Approved for aluminum contact.
- Better paint and stainability because of its lighter color.
- Treated wood warranty programs.**
- End uses include interior and exterior Above Ground, Ground Contact, and Fresh Water immersion
- 15 year limited warranty for fencing.
- Lifetime limited warranty for Above Ground general uses.
- Lifetime limited warranty for Ground Contact and Fresh Water general uses.

<table>
<thead>
<tr>
<th>End Use</th>
<th>Preservation Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialty Uses Above Ground - fence boards, panels, and specialty products</td>
<td>.15 pcf</td>
</tr>
<tr>
<td>General Uses Above Ground - Decking, joints, beams, and sills</td>
<td>.25 pcf</td>
</tr>
<tr>
<td>Ground And Fresh Water Contact - Decks, fence posts, and docks</td>
<td>.40 pcf</td>
</tr>
<tr>
<td>Critical Structural Members - Building posts</td>
<td>.60 pcf</td>
</tr>
</tbody>
</table>

**Distinct features of ACQ treated lumber**

- ACQ products are durable and designed for outdoor construction
- The most effective and widely used alternative to traditional pressure treated wood
- Lifetime Residential and Agricultural Limited Warranty against structural damage caused by decay and termites
- Ideal for structural lumber, sill plates, outdoor furniture, playground products, patios, decks, garden edging, and landscaping structures
- Building code compliant
- Copper-based preservative with a co-biocide
- Offers consumers a choice in pressure treated wood products
- The preservatives in ACQ products meet AWPA standards
Health & Safety

Important Technical details on treated lumber

- MCQ pressure treated wood has corrosion rates on metal products similar to CCA pressure treated wood and untreated wood. Use fasteners and hardware that are in compliance with the manufacturer’s recommendations and the building codes for their intended use. When using aluminum products in conjunction with MicroPro™ treated wood, refer to the MicroPro™ Fastener and Hardware Information Sheet for additional information.

- Do not burn preserved wood.

- Wear a dust mask and goggles when cutting or sanding wood.

- Wear gloves when working with wood.

- Some preservative may migrate from the treated wood into soil/water or may dislodge from the treated wood surface upon contact with skin. Wash exposed skin areas thoroughly.

- All sawdust and construction debris should be cleaned up and disposed of after construction.

- Wash work clothes separately from other household clothing before reuse.

- Preserved wood should not be used where it may come into direct or indirect contact with drinking water, except for uses involving incidental contact such as fresh water docks and bridges.

- Do not use preserved wood under circumstances where the preservative may become a component of food, animal feed, or beehives.

- Do not use preserved wood as mulch.

- Only preserved wood that is visibly clean and free of surface residue should be used.

- If the wood is to be used in an interior application and becomes wet during construction, it should be allowed to dry before being covered or enclosed.

- Disposal Recommendations: Preserved wood may be disposed of in landfills or burned in commercial or industrial incinerators or boilers in accordance with federal, state, and local regulations.

- If you desire to apply a paint, stain, clear water repellant, or other finish to your preservative treated wood, we recommend following the manufacturer’s instructions and label of the finishing product. Before you start, we recommend you apply the finishing product to a small exposed test area before finishing the entire project to insure it provides the intended result before proceeding.

- Projects should be designed and installed in accordance with federal, state, and local building codes and ordinances governing construction in your area and in accordance with the National Design Specifications (NDS) and the Wood Handbook.

- Mold growth can and does occur on the surface of many products, including untreated and treated wood, during prolonged surface exposure to excessive moisture conditions. To remove mold from the treated wood surface, wood should be allowed to dry. Typically, mild soap and water can be used to remove remaining surface mold.