# **B.C. COASTAL SPECIES AND LUMBER GRADES**

BRITISH COLUMBIA

WESTERN HEMLOCK DOUGLAS-FIR WESTERN RED CEDAR YELLOW CEDAR





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## Introduction

British Columbia (B.C.) is Canada's most western province. It is recognized as a global leader in sustainable forest management and provides customers around the world with an array of quality forest products.

B.C.'s size and range of climates make it the most diverse province in Canada both biologically and ecologically. Its forests cover 55 million hectares in two very different regions—on the Pacific Coast and in the province's interior.

B.C.'s coast forest region covers 16.5 million hectares<sup>1</sup> and has five commercially available coniferous species, each with its own unique characteristics. Due to the temperate climate conditions and longer harvest rotation, the trees tend to be larger than those in the interior of the province.

This publication provides information about the coastal softwood species of British Columbia–Western Hemlock/Amabilis Fir (marketed together as Hem-Fir), Douglas-Fir, Western Red Cedar and Yellow Cedar.

It offers a high-level overview of the most commonly produced and exported lumber products from B.C.'s coastal species, and their intended end uses. While it speaks generally to grades, it is not a grading manual. It is intended to support high-level discussion and education in export markets.

B.C. softwood species are strong and resilient, with aesthetic properties that are suitable for a wide range of applications, including framing, flooring, timber frame construction, doors, windows, joinery and furniture, bridge, dock, and marine uses.

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## Coastal Forest Area of B.C.



### Key Facts

- 95 percent<sup>2</sup> of B.C.'s forests are publicly owned.
- A fraction of one percent of B.C. forests is cut annually. By law, these lands are reforested promptly.
- For every tree harvested in B.C., three seedlings are planted. This results in approximately 200 million seedlings planted every year.
- B.C. has some of the highest rates of forest certification in the world with more than 47 million hectares<sup>3</sup> of certified forest.
- B.C. has 40 different species of native trees, including commercial species such as Western Hemlock, Douglas-Fir, Western Red Cedar and Yellow Cedar, which are used for a wide array of structural or finishing applications.

# B.C.: A Leader in Sustainable Forest Management

B.C. sustains its abundant natural forests for future generations through stringent regulations, reforestation and careful management based on the latest science. Its comprehensive forest management laws and regulations are further enhanced by third-party forest certification, with the province having some of the highest rates of certification worldwide.

Modern forest practices maintain a balance of forest values, including water and soil quality, fish and wildlife habitat, biodiversity, as well as community and recreational opportunities. B.C. supports forest diversity across the province by planting native tree species in combination with natural regeneration. After harvesting on public lands, forest companies remain responsible for the site until the trees have grown into a new, healthy forest.

Only 10%<sup>4</sup> of the world's forests are certified.
36%<sup>5</sup> of the certified forests worldwide are in Canada.
164 million hectares<sup>6</sup> of certified forests are in Canada.
10%<sup>7</sup> of certified forests worldwide are in B.C.

# B.C.: A Sustainable Source for Certified Wood Products

Consumers around the world are environmentally conscious, and want to know they are buying forest products that have been harvested from legal, sustainable sources and manufactured to the highest standards.

Businesses and governments also have rising expectations when it comes to the environmental reputation of forest products. Third-party forest certification provides assurance that B.C. forest products meet internationally recognized standards for sustainable forest management.

In Canada, there are three third-party certification programs:

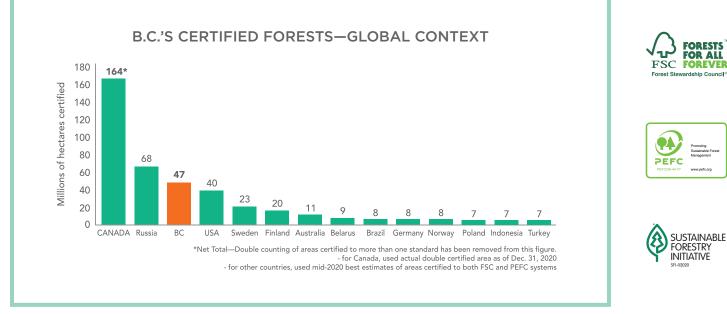
- 1. <u>Canadian Standards Association's Sustainable Forest</u> <u>Management Standard (CSA)</u>,
- 2. Forest Stewardship Council (FSC) and
- 3. <u>Sustainable Forestry Initiative (SFI)</u>.

These voluntary certification programs (see the sample labels below) are endorsed and overseen by one of two

independent non-profit organizations, the Programme for the Endorsement of Forest Certification (PEFC) and the Forest Stewardship Council (FSC). CSA and SFI are recognized by PEFC.

While there are some differences in these third-party certification programs, they all provide documented verification that a forest company is operating legally and sustainably, and promotes common principles that meet internationally accepted standards for sustainable forest management and the protection of habitat, soils, water and wildlife.

Chain of Custody (CoC) certification is a way to track raw materials that come from B.C.'s certified forests at each stage of a product's lifecycle–from forest operations and factory fabrication to the end-user or retail floor. The FSC and SFI programs have their own chain-of-custody standards and CSA has adopted the PEFC chain-of-custody standard and PEFC labeling.



SOURCE: CERTIFICATION CANADA: WWW.CERTIFICATIONCANADA.ORG AS OF DEC 31/20

# B.C.'s Coastal Tree Species

#### Western Hemlock Amabilis Fir

Western Hemlock (Tsuga Heterophylla) and Amabilis Fir (Abies Amabilis) are the two most abundant species of trees growing in the coastal region of B.C. They account for about 60 percent of the mature forest in this region.

These two species have very similar physical properties and are often processed and marketed together as a species group designated as Hem-Fir.

The Hem-Fir species commonly reach heights of up to 35 m to 55 m, with diameters at the bottom of the tree often in excess of 90 cm.

The Clear and Shop/Factory grades of these species makes them ideal for many appearance and joinery applications such as panelling, furniture, mouldings, windows and doors. As Hem-Fir is free of pitch and resins, its wood easily accepts a quality paint or stain–it can be made to look like any hardwood species. Hem-Fir is also a very dense softwood and, along with its superior machining and nail and screw holding properties, its compatibility with most adhesives makes it an excellent choice for appearance applications.

Hem-Fir has high strength, stiffness and density properties which make it ideal for most structural and industrial applications. It is commonly used for construction purposes such as framing lumber, heavy timbers and engineered wood components. Other common uses include furniture frames, cable reels, and packaging and crating purposes.

Hem-Fir is also easily pressure treated, and is widely used in North America for outdoor purposes like fencing and decorative landscape structures.



### Coastal Douglas-Fir

Douglas-Fir (Pseudotsuga Menziesii), is Canada's largest conifer. One of the best known and highly prized of the Canadian softwood species, it makes up approximately 10 percent of the coastal forest and often grows in pure stands on deep, moist sites.

It ranges from 35 m to 85 m in height, and up to 120 cm in diameter.

These large, strong, tall trees have fine-grained, clear material that is uniform in texture, light in colour and has

a warm finish. Clear grades of Douglas-Fir are often used in the manufacture of furniture, windows, doors, joinery and cabinets.

Douglas-Fir's natural characteristics of high strength, stiffness, density and natural durability make it an excellent choice for a variety of structural, construction and industrial applications. It is widely specified by builders and engineers for structural performance components such as heavy timber applications and the manufacture of glue-laminated beams.



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#### Western Red Cedar

Western Red Cedar (Thuja Plicata) grows at low to mid elevations along the coast and can reach heights of up to 60 m and a diameter of 2.5 m. It makes up approximately eight percent of B.C.'s total growing stock and is one of the province's most commercially valuable species.

Its natural resistance to decay, its pleasing aroma, its excellent durability and its dimensional stability make it ideal for a variety of outdoor uses such as roof shingles, exterior siding, decking, outdoor furniture and landscape features. Interior uses include panelling for saunas, walls, ceilings and other general millwork applications.

The density, strength and stiffness of Western Red Cedar is lower than that of other coastal softwoods, so it is not commonly used for structural applications, although some architects and designers do specify it for exposed, non-structural applications where appearance is the prime consideration.



#### Yellow Cedar

B.C. Pacific Coast Yellow Cedar (Chamaecyparis Nootkatensis) is a medium-sized tree that grows up to 30 m tall and 90 cm in diameter. It is commonly found in the moist, damp conditions of northern and western Vancouver Island and Haida Gwaii. It often grows singly or in small clumps in a mixture with other conifers. Yellow Cedar is a relatively scarce tree that makes up about five percent of the coastal forest, and like Western Red Cedar it has a high commercial value.

Yellow Cedar is one of the world's most durable woods with exceptional longevity. It is unique in that it has the

high density, stiffness and strength ratios of the Hem-Fir species, but also the high natural durability and stability of Western Red Cedar.

Pitch and resin free, the uniform, pale yellow colours of its heartwood and sapwood make the Clear and Shop grades ideal for temple and shrine projects, fine cabinetry, and exterior and interior millwork applications. Structural grades are commonly used for exterior applications such as bridges, decking and landscaping projects.





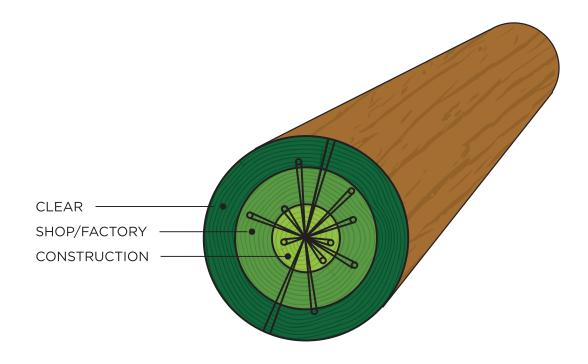
# Lumber Grades

This publication illustrates the most commonly produced and exported lumber grades in boards, structural dimension lumber and timbers from B.C.'s coastal softwood species.

Coastal mills usually process species in separate production runs so they can be manufactured into products best suited to the unique physical properties and characteristics of each species.

The logs are wide so they often have large portions of clear, defect-free lumber in the outer third. The next layer still contains many short clear cuttings between defects so it is best for shop/factory applications, while the innermost third has the most knots and is most applicable for construction or industrial purposes, or projects desiring a knotty appearance. Coastal lumber is available in a wide variety of thicknesses, widths and lengths. Depending on its intended end use and application, it can be kiln dried to a moisture content of 19 percent or less to increase structural integrity, to improve appearance workability, and to reduce shipping weight. It can also be heat treated to meet phytosanitary import requirements.

Most appearance grade lumber (Clear and Shop/Factory) exported from B.C. meets R-List rules, while some Factory/ Shop and all Construction grade lumber is certified under North American Lumber Grades (NLGA) rules. Some producers are able to manufacture lumber in sizes unique to certain countries where in-house grading rules apply.



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#### R-List Export Grades and National Lumber Grades Authority (NLGA)

#### Appearance Grades

Appearance products, including Clear and Shop/Factory, are graded for aesthetic and visual appeal, their lack of defects and the uniformity of their grain. They are generally not grade stamped as they are not intended for construction or structural purposes. Grade descriptions are based on pieces 203 mm wide by 3.6 m long. Detracting characteristics on smaller or larger pieces are proportional to the size by grade. Pieces 127 mm and narrower are graded from the best face and both edges; pieces 152 mm and wider from best face and one edge.

#### R-List Export Clears (all species)

R-LIST EXPORT CLEARS come in three grades and are available in either Vertical Grain (VG) or Mixed Grain (MG). These are the highest grades the industry produces and, when remanufactured, yield varying percentages of long length clear cuttings.

The grades of #2 CLEAR and #3 CLEAR are often combined in the same package and sold as a #2 CLEAR, maximum 15% #3 CLEAR (85/15), or a #3 CLEAR and BETTER (BTR).

Allowable characteristics are based on the thickness, width and length of the board.

#### #2 CLEAR & BTR.

The highest grade of Clear in terms of quality and price. It is typically used in applications where uniformity of colour, grain and appearance is of utmost importance. This grade will provide the highest amount of long length, clear recovery where a natural finish is required.

Larger pieces are frequently manufactured into high-value specialty items such as panelling and veneers. This grade permits three irregularities on the best face, and four on the reverse.

#### #3 CLEAR

A slightly lower grade than #2 CLEAR which allows slightly more defects on the best and reverse faces. This is the first grade of Clear that allows for a knot to go through from one face to the other.

A high percentage of long length clear recovery can be expected from this grade.

#### #4 CLEAR

A lower grade in terms of expected recovery of clear fibre. It allows for more and slightly larger defects than that of the higher grades of Clear.

Depending on the end use, this grade still allows for a relatively high percentage of clear recovery by ripping and cross-cutting.

Naturally occurring defects in this grade can often be covered up by a high-quality paint or stain.

#### NLGA—Shop Grades (all species)

Shop grade lumber products (SELECT SHOP, #1 SHOP and #2 SHOP) are available in either Vertical Grain (VG) or Mixed Grain (MG). These mid-range grades will yield varying percentages of 1.0 m to 2.0 m clear cuttings.

Shop grades are primarily intended for manufacturers of cabinets, doors, windows, furniture, mouldings and millwork.

Shop rules apply generally to stock that is 51 mm or less in thickness and wider than 75 mm. The grades are determined by the percentage of .91 m and longer clear cuttings that can be recovered after having removed the defects present on the board.

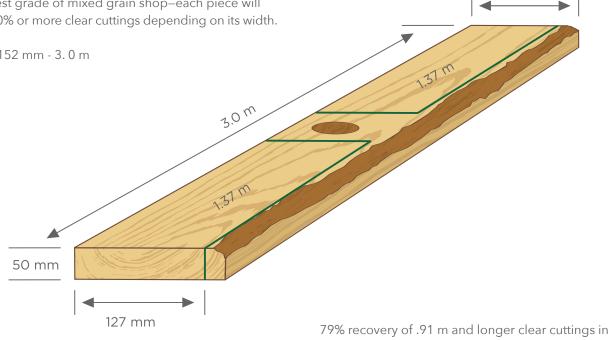
The grades of SELECT SHOP, #1 SHOP and #2 SHOP are often combined together in the same package and sold as a #2 & BTR SHOP.

152 mm

#### SELECT SHOP (MG)

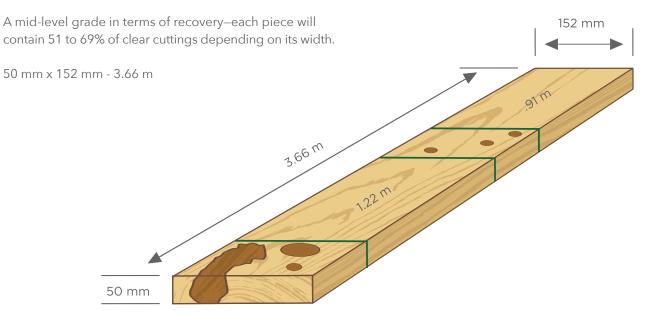
The highest grade of mixed grain shop-each piece will contain 70% or more clear cuttings depending on its width.

50 mm x 152 mm - 3.0 m



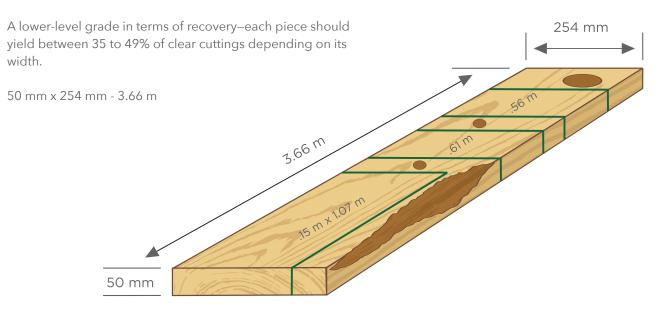
this illustration

### #1 SHOP (MG)



58% recovery of .91 m and longer clear cuttings in this illustration

#### #2 SHOP (MG)



49% recovery of .91 m and longer clear cuttings in this illustration

#### Doorstock (VG)

B.C. also produces lumber that is specifically targeted for door producers. Purchasing these grades gives much more predictability in determining expected recovery.

Doorstock rules are based on the number of stiles, rails and muntins that are available within a piece. The grade of the board will be determined by the number and quality of defects on its worst face. It is common for FACTORY SELECT VG and #1 SHOP VG to be combined in the same package and sold as a FACTORY SELECT/#1 SHOP - VG.

#2 SHOP VG is usually packaged and sold as a separate grade.

#### FACTORY SELECT (VG)

For a piece to make this grade, it must have at least 70% or more clear cuttings that are at least 2.06 m to 2.5 m in length and 100 mm and 150 mm in width.

#### #1 SHOP (VG)

For a piece to make this grade, it must have at least 50% or more .61 m or longer clear cuttings, with one cutting that is at least 2.06 m in length and 100 mm and 150 mm in width. 50 mm x 100 mm - 3.6 m 50 mm 50 mm 50 mm 89% recovery of clear cuttings in this illustration (with at least one of the cuttings being longer than 2.06 m

at least one of the cuttings being longer than 2.06 m in length)

#### #2 SHOP (VG)

For a piece to make this grade, it will normally contain at least 33% or more clear cuttings that are between .61 m to 2.0 m in length and 100 mm and 150 mm in width. 50 mm x 254 mm - 3.66 m 3.66 m 3.66 m 3.66 m 3.66 m

79% recovery of 61 mm and longer clear cuttings in this illustration

# NLGA Factory Grades (all species)

Shop lumber pieces that are thicker than 50 mm and wider than 75 mm in width are often referred to as Flitches. Flitches are specifically graded for the recovery of longer length clear cuttings. Typically, Flitches are Mixed Grain (MG) so when the board is resawn vertically, the developing pieces will generally have a Vertical Grain (VG) appearance. Flitches are graded on the expected recovery of 25 mm thick boards that contain 61 mm and longer clear cuttings.

There are two grades of Flitches–FACTORY FLITCH and SHOP FLITCH.

These grades are often used by door, window, panel and cabinetry makers. Depending on the sawmill, the grades can be sold separately, or packaged together as a FACTORY FLITCH/SHOP FLITCH.

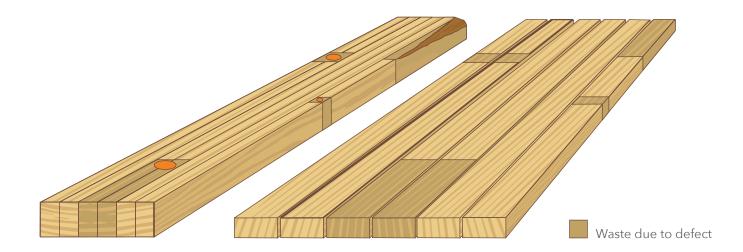
#### FACTORY FLITCH

Any type of defect is allowed in this grade that can be removed by ripping or crosscutting, which will result in the recovery of 80% or more, 25 mm thick, by full width, 61 mm and longer clear cuttings.

If the Flitch is longer than 3.66 m, half of the clear cuttings recovered must be 2.1 m or longer.

#### SHOP FLITCH

A lower grade in terms of recovery than a FACTORY FLITCH. This grade requires 60% or more, 25 mm thick, by full width, 61 mm and longer clear cuttings.



#### NLGA—Dimension Lumber (Hem-Fir and Douglas-Fir)

Structural Joists and Planks grades, which include SELECT STRUCTURAL, #1 STRUCTURAL, #2 STRUCTURAL AND #3 STRUCTURAL, provide the highest building engineering design values. The most common sizes available in these grades are 38 mm by 90 mm and wider. They are intended for most building construction applications whose design values are based on horizontal applications. Vertical application in each grade is not limited. These products are individually grade stamped.

When sold overseas the stock is typically invoiced on a net metric count per cubic metre even though the labels on the packages may be in imperial measure.

Below is a list of structural grades:

#### SELECT STRUCTURAL

Tight, well spaced, sound, firm, encased and pith knots are allowed as long as they do not exceed the specific size based on width or equivalent displacement. This grade is used where load bearing and span engineering values are paramount such as roof supports, floor joists and decking supports.

It can also be used for tight knot appearance grade furniture or panel applications.

#### #2 STRUCTURAL

Allows knots of any quality in sizes not to exceed the specific size based on width or equivalent displacement. Used for general construction, laminated beams, marine and decking applications when treated, roofing trusses and floor joists.

It is common practice to include the grades of SELECT STRUCTURAL, #1 STRUCTURAL, and #2 STRUCTUAL in the same package and sell it as a #2 & BTR. STRUCTURAL.

Like the SELECT STRUCTURAL, this grade can also be used for tight knot appearance grade furniture or panel applications.

#### #3 STRUCTURAL

Allows knots of any quality in sizes not to exceed the specific size based on width or equivalent displacement. This is the lowest grade that will be grade stamped by our grading agencies.

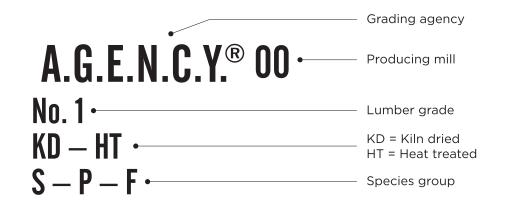
Used in construction, forming and other applications where strength requirements are fewer. It is also used for industrial applications such as cable reels, packaging and crating components, and is commonly used as frames for upholstered furniture and hidden bed components.



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# Lumber Grade Stamps

Dimension lumber manufactured in Canada must have uniform quality requirements and meet Canadian lumber grading rules such as NLGA or R-List. Lumber products are visually graded by graders approved by an accredited agency who in turn are accredited by the Canadian Lumber Standards Accreditation Board (CLSAB). Each piece is grade stamped on one face, two feet from one end of the piece. This is so the stamp is clearly visible during construction. Most appearance grades do not have lumber stamps so the entire piece can be used. Some of the more commonly used grading stamps from B.C.'s coastal region are shown below.



The Canadian Mill Services Association (CMSA) can provide advice or answer questions about lumber grade marking in B.C. Visit <u>www.canserve.org</u> for more information.



### Lumber Grade Images

The images on the following pages illustrate grades from the low end to the high end of each grade (a supplementary table of contents for each species and grade introduces this section).

The dimensions of the products depicted in each image are nominal sizes in the Imperial system. The description 2 x 4 means two inches thick by four inches wide—the lengths of the boards are typically in feet. The size in metric will depend on dried or green and rough or surfaced (planed). If supplied rough, the size will depend on the specific supplier. For a surfaced-dry product, the metric size for this item could be 38 mm x 90 mm x 3,046 mm.

Lumber purchases based on the grades illustrated in this book will contain any combination of pieces from each image, as all qualify for the grade represented. There is no guarantee, unless specified, just how many pieces of each quality will appear in a specific package of lumber. It is important to recognize that the combination of pieces received will vary from supplier to supplier.

## Lumber Grade Images Index

#### #2 Clear

| Hemlock                                    |      |
|--|------|
| Rough KD                                   |      |
| 2X4  | 23   |
| 2X4 - Vertical Grain                       | . 24 |
| 2X6  | 25   |
| 2X6 - Vertical Grain                       | . 26 |
| S4S KD                                     |      |
| 2X8 - Max. 15% #3 Clear                    | . 27 |
| S4S Green                                  |      |
| 105X105 - Max. 15% #3 Clear (top face)     | 28   |
| 105X105 - Max. 15% #3 Clear (reverse face) | 29   |
| Douglas-Fir                                |      |
| S2S KD                                     |      |
| 2X6 - Max. 15% #3 Clear (top face)         | 30   |
| 2X6 - Max. 15% #3 Clear (reverse face)     | .31  |
| S4S Green                                  |      |
| 2X6 - Max. 15% #3 Clear (top face)         | . 32 |
| 2X6 - Max. 15% #3 Clear (reverse face)     | 33   |
| Western Red Cedar                          |      |
| S4S KD                                     |      |
| 2X4  | . 34 |
| Rough Green                                |      |
| 2X4  | . 35 |
| 2X6  | . 36 |
| 2X8  | . 37 |
| Yellow Cedar                               |      |
| S4S KD                                     |      |
| 2X6  | 38   |
| Rough Green                                |      |
| 1X6  | . 39 |
| 2X4  | 40   |
| 2X6  | . 41 |
| #7 Close                                   |      |
| #3 Clear                                   |      |
| Hemlock                                    |      |
| Rough KD                                   |      |
| 2X6 - Vertical Grain                       | . 42 |
| S4S KD                                     |      |
| 2X8  | 43   |
| Douglas-Fir                                |      |
| S2S KD                                     |      |
| 2X6 (top face)                             | .44  |
| 2X6 (reverse face)                         |      |
| #A Clear                                   |      |

#### #4 Clear Hemloo

| mlock                |    |
|----------------------|----|
| Rough KD             |    |
| 2X6                  | 46 |
| 2X6 - Vertical Grain |    |
|                      |    |

| S4S KD                                 |          |
|--|----------|
| 2X84                                   | 8        |
| S4S Green                              |          |
| 105X105 4                              | 19       |
| Douglas-Fir                            |          |
| S2S KD                                 |          |
| 2X65                                   | 0        |
| Western Red Cedar                      |          |
| Rough Green                            |          |
| 2X45                                   | 51       |
| 2X65                                   | 52       |
| 2X85                                   | 53       |
| Salast Shan                            |          |
| Select Shop                            |          |
| Hemlock                                |          |
| Rough KD                               |          |
| 2X55                                   | ,4       |
| S4S KD                                 |          |
| 2X85                                   | 55       |
| Douglas-Fir                            |          |
| S2S KD                                 |          |
| 2X65                                   | 6        |
| #1 Shop                                |          |
| Hemlock                                |          |
| Rough KD                               |          |
| 2X5                                    | 57       |
| S4S KD                                 |          |
| 2X8                                    | 58       |
| Douglas-Fir                            | -        |
| S2S KD                                 |          |
| 2X65                                   | ;9       |
| S4S Green                              |          |
| 545 GIREN                              |          |
|  |          |
| 2X6 (top face)6                        | 50       |
| 2X6 (top face)6<br>2X6 (reverse face)6 | 50       |
| 2X6 (top face)6                        | 50       |
| 2X6 (top face)6<br>2X6 (reverse face)6 | 50       |
| 2X6 (top face)                         | 50       |
| 2X6 (top face)                         | 50<br>51 |

S4S Green

# Lumber Grade Images Index (cont'd)

| Doorstock                             |  |
|---------------------------------------|--|
| Hemlock                               |  |
| Rough KD                              |  |
| 2X5 - Factory Select - Vertical Grain |  |
| 2X5 - #2 Shop - Vertical Grain        |  |
| Factory Flitch                        |  |
| Hemlock                               |  |
| S4S Green                             |  |
| 105X10569                             |  |
| Shop Flitch                           |  |
| Hemlock                               |  |
| S4S Green                             |  |
| 105X10570                             |  |
| J Grade                               |  |
| Hemlock                               |  |
| S4S KD                                |  |
| 2X4                                   |  |
| 2X6                                   |  |
| 2X8                                   |  |
| Douglas-Fir                           |  |
| S2S KD                                |  |
| 2X4                                   |  |
| 2X4                                   |  |
|                                       |  |
| #1 Merch                              |  |
| Hemlock                               |  |
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| 105X105 (top face)76                  |  |
| 105X105 (reverse face)77              |  |
| 45X90 (top face)                      |  |
| 45X90 (reverse face)                  |  |
| Douglas-Fir                           |  |
| S4S KD                                |  |
| 105X105 (top face)80                  |  |
| 105X105 (reverse face)                |  |
| #1 Structural                         |  |
| Douglas-Fir                           |  |
| Rough Green                           |  |
| 4X6 (top face)82                      |  |
| 4X6 (edge)                            |  |
| 4X8 (top face)84                      |  |
| 4X8 (edge)                            |  |
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| 6X6 (reverse face) 87                 |  |
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#### #2 & Better Structural

| Hemlock                |
|------------------------|
| S4S KD                 |
| 2X4                    |
| 2X6                    |
| 2X892                  |
| Rough Green            |
| 6X6 (top face)93       |
| 6X6 (reverse face)94   |
| Douglas-Fir            |
| S4S KD                 |
| 2X4                    |
| Rough Green            |
| 6X6 (top face)96       |
| 6X6 (edge)97           |
| 6X8 (top face)98       |
| 6X8 (edge)99           |
| S4S Green              |
| 2X6 (top face)100      |
| 2X6 (reverse face) 101 |
| 2X8102                 |
| Structural             |

| #3 | Structural |
|----|------------|
|    | Hemlock    |

| Hemlock     |  |
|-------------|--|
| S4S KD      |  |
| 2X4         |  |
| 2X6         |  |
| 2X8         |  |
| Douglas-Fir |  |
| S4S KD      |  |
| 2X4         |  |
| 2X8         |  |
| S4S Green   |  |

| 2X6 (top face)     | . 108 |
|--------------------|-------|
| 2X6 (reverse face) | .109  |

#### **Miscellaneous Industry Grade**

| Hemlock                           |
|-----------------------------------|
| Rough KD                          |
| 2X6 - Genban110                   |
| Yellow Cedar                      |
| Rough Green                       |
| 2X6 - Select Tight Knot (STK) 112 |
| S4S Green                         |
| 2X6 - #1 Select Tight Knot (STK)  |

KD, ROUGH - #2 CLEAR 2X4





KD, ROUGH - #2 CLEAR - VERTICAL GRAIN 2X4





KD, ROUGH - #2 CLEAR 2X6





KD, ROUGH - #2 CLEAR - VERTICAL GRAIN 2X6





KD, S4S - #2 CLEAR, MAX. 15% #3 CLEAR 2X8





GREEN, S4S - #2 CLEAR, MAX. 15% #3 CLEAR (TOP FACE) 105X105





GREEN, S4S - #2 CLEAR, MAX. 15% #3 CLEAR (REVERSE FACE) 105X105





KD, S2S - #2 CLEAR, MAX. 15% #3 CLEAR (TOP FACE) 2X6





KD, S2S - #2 CLEAR, MAX. 15% #3 CLEAR (REVERSE FACE) 2X6





GREEN, S4S - #2 CLEAR, MAX. 15% #3 CLEAR (TOP FACE) 2X6



GREEN, S4S - #2 CLEAR, MAX. 15% #3 CLEAR (REVERSE FACE) 2X6





### WESTERN RED CEDAR

KD, S4S - #2 CLEAR 2X4

















KD, S4S - #2 CLEAR 2X6

















KD, ROUGH - #3 CLEAR - VERTICAL GRAIN 2X6





KD, S4S - #3 CLEAR 2X8





KD, S2S - #3 CLEAR (TOP FACE) 2X6





KD, S2S - #3 CLEAR (REVERSE FACE) 2X6





KD, ROUGH - #4 CLEAR 2X6





KD, ROUGH - #4 CLEAR - VERTICAL GRAIN 2X6





KD, S4S - #4 CLEAR 2X8





GREEN, S4S - #4 CLEAR 105X105





KD, S2S - #4 CLEAR 2X6

















KD, ROUGH - SELECT SHOP 2X5





KD, S4S - SELECT SHOP 2X8





KD, S2S - SELECT SHOP 2X6





KD, ROUGH - #1 SHOP 2X5





KD, S4S - #1 SHOP 2X8





KD, S2S - #1 SHOP 2X6





GREEN, S4S - #1 SHOP (TOP FACE) 2X6





GREEN, S4S - #1 SHOP (REVERSE FACE) 2X6





KD, ROUGH - #2 SHOP 2X5





KD, S4S - #2 SHOP 2X8





KD, S2S - #2 SHOP 2X6





GREEN, S4S - #2 SHOP (TOP FACE) 2X6





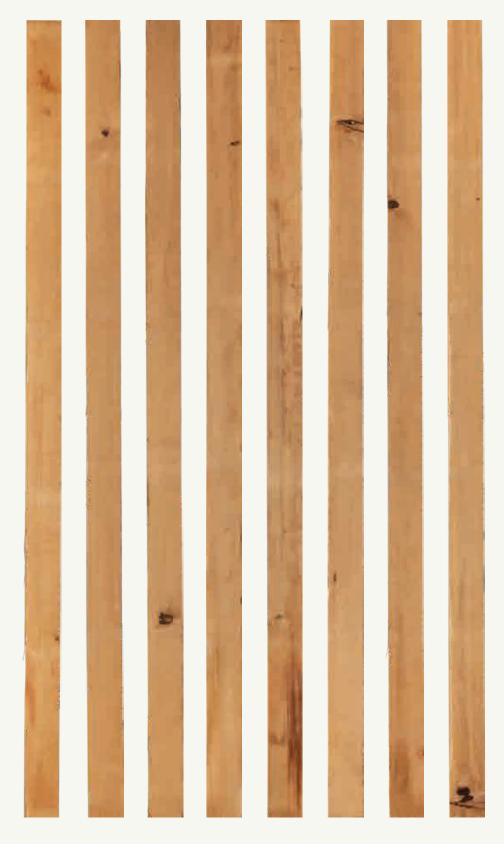
GREEN, S4S - #2 SHOP (REVERSE FACE) 2X6





KD, ROUGH - DOORSTOCK - FACTORY SELECT -VERTICAL GRAIN 2X5





KD, ROUGH - DOORSTOCK - #2 SHOP - VERTICAL GRAIN 2X5





GREEN, S4S - FACTORY FLITCH 105X105





GREEN, S4S - SHOP FLITCH 105X105

























GREEN, S4S - #1 MERCH (TOP FACE) 105X105





GREEN, S4S - #1 MERCH (REVERSE FACE) 105X105





GREEN, S4S - #1 MERCH (TOP FACE) 45X90





GREEN, S4S - #1 MERCH (REVERSE FACE) 45X90





KD, S4S - #1 MERCH (TOP FACE) 105X105





KD, S4S - #1 MERCH (REVERSE FACE) 105X105





GREEN, ROUGH - #1 STRUCTURAL (TOP FACE) 4X6





GREEN, ROUGH - #1 STRUCTURAL (EDGE) 4X6





# GREEN, ROUGH - #1 STRUCTURAL (TOP FACE) 4X8





GREEN, ROUGH - #1 STRUCTURAL (EDGE) 4X8





GREEN, ROUGH - #1 STRUCTURAL (TOP FACE) 6X6





GREEN, ROUGH - #1 STRUCTURAL (REVERSE FACE) 6X6





GREEN, ROUGH - #1 STRUCTURAL (TOP FACE) 6X8





GREEN, ROUGH - #1 STRUCTURAL (EDGE) 6X8











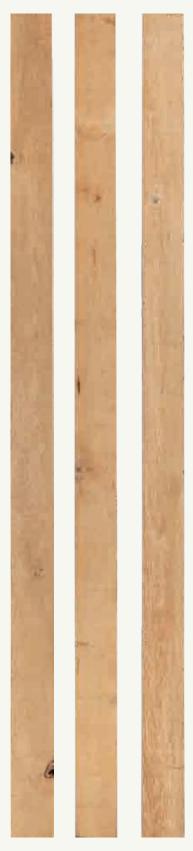






GREEN, ROUGH - #2 & BETTER STRUCTURAL (TOP FACE) 6X6





GREEN, ROUGH - #2 & BETTER STRUCTURAL (REVERSE FACE) 6X6









GREEN, ROUGH - #2 & BETTER STRUCTURAL (TOP FACE) 6X6





GREEN, ROUGH - #2 & BETTER STRUCTURAL (EDGE) 6X6





GREEN, ROUGH - #2 & BETTER STRUCTURAL (TOP FACE) 6X8





GREEN, ROUGH - #2 & BETTER STRUCTURAL (EDGE) 6X8





GREEN, S4S - #2 & BETTER STRUCTURAL (TOP FACE) 2X6





GREEN, S4S - #2 & BETTER STRUCTURAL (REVERSE FACE) 2X6





























GREEN, S4S - #3 STRUCTURAL (TOP FACE) 2X6





GREEN, S4S - #3 STRUCTURAL (REVERSE FACE) 2X6





KD, ROUGH - GENBAN 2X6





## YELLOW CEDAR

GREEN, ROUGH - SELECT TIGHT KNOT (STK) 2X6





## YELLOW CEDAR

GREEN, S4S - #1 SELECT TIGHT KNOT DECKING (STK) 2X6







## Resources/Information

Forestry Innovation Investment (FII) is a Crown agency of the Government of British Columbia, the westernmost province of Canada. Our international market offices are supported by the Canadian federal government through Natural Resources Canada (NRCan) to promote B.C., Canada as a global supplier of quality, environmentally responsible wood products and sustainably managed forests. Through seminars, exhibitions, networking events and media channels under the Canadian Wood and Canada Wood names, our teams are creating awareness about B.C. wood products and the benefits of wood use in various applications. Wood experts assist leading manufacturers, builders/ developers, architects and interior designers in identifying the right species and appropriate grades of Canadian wood for their projects. Business development teams support wood importers by identifying and connecting them with B.C. lumber companies for a steady supply of Canadian wood species.

To learn more about wood species and lumber grades in your market, please visit:

Canadian Wood Vietnam: www.canadianwood.com.vn Canadian Wood India: www.canadianwood.in Canada Wood China: www.canadawood.cn Canada Wood Japan: www.canadawood.jp Canada Wood Korea: www.canadawood.or.kr

#### End Notes

- <sup>1</sup> https://www.for.gov.bc.ca/rco/#general%20info
- <sup>2</sup> Data source 2020
- <sup>3</sup> Data source 2020
- <sup>4</sup> Data source 2020
- <sup>5</sup> Data source 2020
- <sup>6</sup> Data source 2020
- <sup>7</sup> Data source 2020



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