



Services Offered

- Free Quotation
- Hand Selection for Color
- Custom Milled Timbers
- Custom Milling To Pattern
- Pre-priming
- Pre-staining
- Fire-Treated Shingles
- Delivery to Remote Job Sites
- International Shipments





Bear Creek Lumber

Reclaimed Wood

www.bearcreeklumber.com

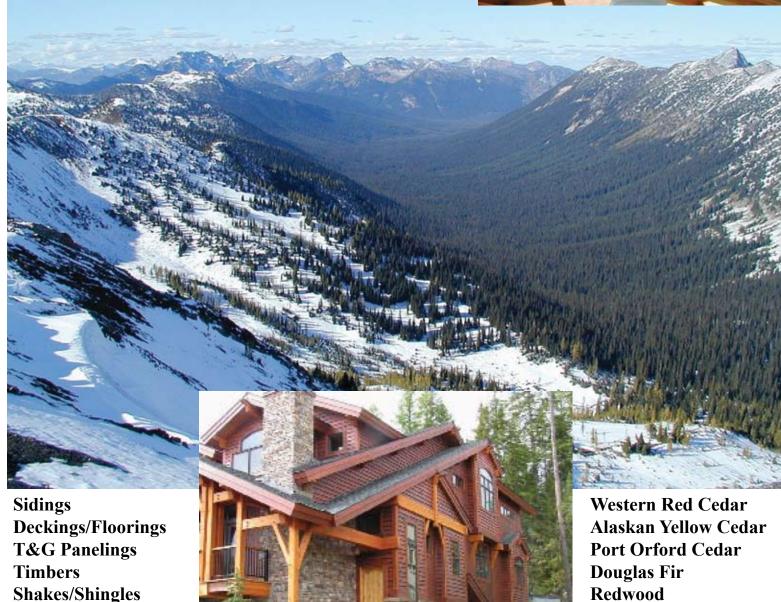
(800) 597-7191 fax (509) 997-2040 email: customerservice@bearcreeklumber.com P.O. Box 669 495 Eastside Cty Rd. Winthrop, WA 98862

Bear Creek Lumber

Top Quality Wood Products For Custom Homes and Fine Woodwork



Ipe/Mahogany



Bear Creek Lumber A Unique Company in A Unique Place BEAR CREEK LUMBER





Since it opened in 1977, Bear Creek Lumber has been an unusual company. Located in the Methow Valley of Washington State, one of America's most unpopulated and remote sections of the country, Bear Creek Lumber has its fingers on the pulse of the Northwestern speciality timber industry while connecting with custom builders and architects from all over the world.

Top Quality Products

Bear Creek Lumber's inventory is almost exclusively high end finish lumber and timber products, whose use is for appearance rather than just serviceability. Clear vertical grain, in particular, is our speciality. We handle a variety of clear grades, as well as select tight knot materials. We have a limited stock of lower grade materials. We can ship to almost any destination in the world.

Who Buys From Bear Creek?

Bear Creek Lumber's customers include architects, custom home builders, contractors, woodworkers, boat and airplane builders, owner-builders, small industries that use high end wood products, craftsmen, remodelers and restoration specialists. The latter are usually delighted to find that Bear Creek Lumber can usually match historical patterns, and materials, when they are called for.

Family Owned and Operated

Bear Creek Lumber is an example of the American dream come true. The Bannick family arrived in the Methow Valley, home of Bear Creek, with only a 20-yr. old car and a thousand dollars in savings. They wanted to stay, and saw an opportunity to start a lumber company where none existed. From a backyard operation, they have turned their company into what is today an internationally known lumber business recognized for its high quality products and friendly customer service.

Award Winning

In 2004, the company founders, Cloud and Ela Bannick were awarded the Small Business Administration's Small Business Team of the Year Award for all of Eastern Washington State. They have been joined by



the second generation of family members, their children who are running the company's computer systems, as well as helping with sales and freight. In addition the company has a strong staff of a dozen others who are fully cross trained in all aspects of the company operations. The company's website has been judged to be one of the best on the Internet for lumber products. Its monthly newsletter reaches builders from all over the world and is available upon request. They can also be read online.

Visit Us!

Bear Creek Lumber's home is one of the ultimate natural vacation spots in the USA. Surrounded by 2 million acres of federally owned forest and wilderness, the Methow Valley is a gateway to hiking, mountain biking, rock climbing, nordic & alpine skiing, fishing and wildlife viewing that you would not expect in the lower 48 states. There are many lodging opportunities and excellent restaurants, as well as equipment rentals for all your adventures.

You can even come just to see the lumber! The North Cascades Highway, pictured here, is one of America's most scenic routes, running from the Puget Sound region to the Columbia River. 90 miles of wilderness driving that takes you right by Bear Creek Lumber. Plan a trip to see us

What Bear Creek Lumber Can Do For You

Bear Creek Lumber can provide a number of solutions for your speciality wood needs. We handle order sizes that range from a full truckload to a single unit of lumber. Occasionally, we can also help with just a few pieces of a certain product, based on size and availability. For best shipping and handling value, we recommend a minimum order size of 1000 board feet for most items.

Our website www.bearcreeklumber.com acts as a virtual showroom of our products, but each sale is handled by an experienced salesman who will make every effort to give you the best possible service. Feel free to call 800-597-7191 for information.

While we are located far from the beaten track, we can delivery the material you need, as directly as your local lumberyard when it comes to speciality wood products. Let us assist you with your next project that calls for these remarkable and durable prod-

Bear Creek Lumber Product Chart

Western Red **Clear Vertical Grain** Tongue and Groove Sidings, Panelings Cedar Bevel and Rabbeted Bevel Siding, Flooring A & Better Clear Channel Rustic Siding, Board and Batt Siding **D& Better Clear** Deckings, Roof Decking Trim, Timbers/Beams, **Patio Clear** Select Knotty (Select Tight Knot) Shakes /Shingles (all grades), Fencing, Framing Alaskan Clear Vertical Grain **Tongue and Groove Sidings, Panelings Yellow Cedar** A & Better Clear **Roof/Truck Tongue and Groove Decking** (Pacific Cypress) **D& Better Clear Board and Batt Siding, Framing, Flooring** Patio Clear Deckings, Trim, Timbers/Beams Select Knotty (Select Tight Knot) Shakes /Shingles (many grades)

Port Orford Cedar Clear Mixed Grain, CVG Tongue and Groove Siding, Panelings Select Knotty (Select Tight Knot) Roof Decking, Trim, Timbers/Beams (Oregon White

Standard and Better **Board and Batt Siding, Flooring** Cypress)

Douglas Fir CVG, C and Better, D and Better Tongue and Groove Sidings, Panelings

#1 and Better Timbers, Beams, Joists, Fascia #2 and Better **Board and Batt Siding, Flooring #1 Select Structural Deckings, Roof Decking Trim**

Ponderosa Pine C and Better Clear, D and Better Tongue and Groove Siding, Paneling Board and Batt Siding, Roof Decking #2

Ipe, Mahogany Clear, Select Planks, Decking, Tongue and Groove

Hemlock Clear Vertical Grain **Board Stock, Tongue and Groove, Cants**

Mixed Grain Clear Timbers and Beams

Redwood* Clear Vertical Grain **Tongue and Groove Sidings, Panelings**

Bevel and Rabbetted Bevel Siding, Flooring All Heart A Clear **B All Heart Clear** Channel Rustic Siding, Board and Batt Siding **B** Heartwood Mix Deckings, Roof Decking Trim, Timbers/Beams

*limited quantities

Other wood species available in limited quantities or by special order only:

Incense Cedar Mixed Grain Clear, Knotty Tongue & Groove Siding/ Paneling, Timbers, Decking Spruce (Engelmann, Sitka) C and Better Clear, Mixed Clear, #2, #3 Cants, Tongue and Groove, Timbers, Roof Decking **Spruce Pine Fir (SPF)** Mixed Grain Clear, Knotty **Roof Decking**

Appalachian Hardwoods such as oak, maple, walnut, American cherry

Clear, Select

Planks, Pre-finished Flooring (limited selection) Available in flooring only

Posts and Beams, Timbers, Flooring, Trim



Bear Creek Lumber offers all of the above products for sale. These are either in inventory or readily available. Some products must be custom milled. There is an additional charge for milling in these cases. Some products can be pre-stained or fire-treated. Bear Creek Lumber can make these arrangements for you. Products not listed may also be available by special order. Custom milling and special order product orders usually involve additional time to be processed Six to eight weeks after receipt of funds is a common time frame for special/custom orders. Bear Creek Lumber does not offer a price list but is happy to quote on any materials list as a package or on any individual product. We can also quote on optional packages which compare species or patterns. Monthly specials are listed online from www.bearcreeklumber.com and in our monthly newsletter.



How To Get Pricing and Other Information

Bear Creek Lumber does not publish a pricelist.

e-mail: customerservice@bearcreeklumber.com fax (509) 997-2040, or phone (800) 597-7191

All orders are quoted from the customer's construction material list, which can be sent to Bear Creek's customer service (CS) desk as a quote request. Our CS department can answer your questions and if you are in need of pricing, will refer you on to a salesperson. To expedite this process please have the following information available before you make your request:

- Product Species
- Product size, including lengths if specified lengths are needed, and number of pieces
- Product grade
- Footage needed (can be square footage, lineal footage or board footage)
- Shipping destination (city, state, zip)

If you are unsure of any of these lumber specifications, our sales or CS staff can offer you a variety of choices to work with. When you have made your final decision, they will send you a Purchase Agreement (PA) which must be signed by you before any lumber can be shipped. Carefully review the Purchase Agreement, before signing, to make sure that the product and terms are what you need. In addition to the signed PA, Bear Creek Lumber requires full or (with credit approval) partial prepayment, prior to shipment. All partial prepayment orders must be paid in full (C.O.D.) upon delivery. We advise our customers that full prepayment is the fastest route for shipping their orders. It saves us time and saves you money, since there are C.O.D. fee's that start at \$45, depending on the amount to be collected. BCL now accepts credit cards, along with checks, and all other traditional forms of payment.

How long will it take to get my order?

In-stock items can be shipped within 30 days of payment. Custom milling requires 45-60 days, and at some times of the year possibly longer. Customers with Fall and Spring orders may want to arrange shipping ahead of time, since those are the busiest shipping periods of the year. Bear Creek Lumber will hold your lumber package at our plant with a deposit, and we will ship when you are ready for the receipt of that order. Many customers will purchase materials ahead of schedule to hold special price levels, if they know what they need in advance.

Special Orders

About 50% of Bear Creek Lumber's sales are custom orders. Bear Creek Lumber makes every effort to work with the customer on their special needs. Custom milling is available, but minimum order requirements do apply. When products are being processes by third parties, there can be delays beyond the control of Bear Creek Lumber.

Pre-staining can be arranged by Bear Creek Lumber, but BCL does not do the actual pre-stain work and does not assume responsibility for any problems with the finished product.

Shipping

Bear Creek Lumber can handle all freight arrangements and in many cases can deliver directly to your job site! However, you may find shipping to a nearby terminal will save time and money. Ask your salesperson for more details. Customers are also welcome to pick up their orders themselves at our will-call desk, or can make their own freight arrangements.

It is the Buyer's Responsibility to unload their order as soon as it is delivered. A forklift is often recommended.

Address is Essential for Quote Requests

If you are interested in e-mailing in a quote request, please include an address to ship to (including zip code!!), and a fax number that we can send the quote to. This information is crucial for us to have, in order for us to calculate the cost of shipping.

Small Orders

We use UPS or the postal service for the smallest orders. UPS will only accept pieces under 8 ft. long, but this is often convenient for customers looking for just a few pieces. We use common carriers for unit size loads (approximately 500 to 2,000 board feet). We ship these products to a central terminal where they are taken to destinations all over the United States.

• Larger Orders

Larger orders can save you money on shipping costs. We hire an independent carrier who hauls with a 48 ft. flatbed truck to a particular region. We ship this way about once or twice a week. Some access restrictions may apply. Please inform your salesman whether the road to your job site can accommodate up to 70 feet in length for a trucks turnaround capability. Narrow, winding and steep roads may prevent delivery. If this is the case, please advise us of your alternative delivery/unloading arrangements. Your local lumber yard will often assist you with your unloading needs.

• Wrapping and Packaging

Bear Creek Lumber has been shipping products nationwide for many years. Our shipping staff is well-versed in the art of packaging for the road. Every product will be wrapped against weather and road damage with appropriate side and bottom protection. It is covered in reusable abrine (water-repellent) lumber wrap which is fully banded with steel banding. Each unit is usually weighs thousands of pounds but most commonly are 2,000 lbs. in weight. *If, for any reason, you find your product has been damaged en route, note the damage on the bill of lading before signing off on the delivery paperwork. Then file the complaint with the freight company for damage reimbursement.*

• Overseas/ International Shipments

Bear Creek Lumber will containerize products for shipment overseas and/or deliver to the dock of choice. Products will be appropriately wrapped for the type of shipping they will encounter. We can also arrange for delivery in Canada and Mexico.

COVERAGE ESTIMATOR:

Determine the amount of material you need for the basic types of wood siding/paneling by multiplying square footage to be covered by factor (length X width X factor). Allowance for waste and trim should be added. Width of boards may vary slightly.



Product	Nominal Size	Dress	Face	Area Factor
	1 x 6	5 1/2	5 1/8	1.17
Shiplap/Channel Rustic	1 x 8	7 1/4	6 7/8	1.16
Siding	1 x 10	9 1/4	8 7/8	1.13
	1 x 12	11 3/4	10 7/8	1.10
	1 x 4	3 3/8	3 1/8	1.28
Tongue and Groove	1 x 6	5 1/2	5 1/8	1.19
Siding /Paneling	1 x 8	7 1/8	6 7/8	1.19
	1 x 10	9 1/8	8 7/8	1.10
	1 x 4	3 1/2	3 1/2	1.14
	1 x 6	5 1/2	5 1/2	1.09
Surfaced Four Sides (S4S)	1 x 8	7 1/4	7 1/4	1.10
	1 x 10	9 1/4	9 1/4	1.08
	1 x 12	11 1/8	11 1/8	1.07
	1 x 4	3 1/2	3 1/2	1.60
	1 x 4	5 1/2	5 1/2	1.33
Clapboard Bevel Siding	1 x 8	7 1/4	7 1/4	1.28
(1" lap)	1 x 10	9 1/4	9 1/4	1.21
17				





For 5/4 -inch material multiply the area by 1.25 For 2-inch material, multiply the above factor by 2

Fastening

Western Red Cedar has good fastening properties but its natural preservatives have a corrosive effect on some unprotected metals in close contact, causing a black stain on the wood. Fasteners should be corrosive resistant such as aluminum, brass, silicon bronze, hotdipped galvanized or stainless steel. Nails and screws used to fasten Western Red Cedar should be about one-third longer than those used to fasten hardwood species. Because it is free of pitch and resin, Western Red Cedar has excellent gluing properties, comparable to those, for example, of old growth Redwood and American Chestnut. It works well with a wide range of adhesives.

Finishing

Although Cedar is a naturally durable species, leaving it untreated is not recommended because a finish or protective coating will greatly increase its service life. Cedar is free of pitch and with its high degree of dimensional stability, it is the best of the softwoods for accepting paints, stains, oils and other coatings. For our website, see Guide to Finishing Western Red Cedar (Literature).

With its straight grain and uniform texture, Western Red Cedar is among the easiest and most rewarding woods to work with. It takes a fine finish in all hand and machine operations, takes fasteners without splitting and is easily sawn and nailed. When working with Western Red Cedar, sharp cutters are recommended.

Products, Grades and Sizes

There are few more versatile building materials than Western Red Cedar which is ideal both for indoor and outdoor uses. Western Red Cedar lumber is available in visual stress grades for construction and finishing uses in a range of lengths, widths and thicknesses. It is available in clear or knotty grades with smooth surfaced, combed or rough sawn finishes; kiln dried or unseasoned (green); flat grain and vertical grain.

Western Red Cedar is used to manufacture a range of specialty products such as siding, paneling, structural decking and outdoor decking. Detailed product information is available from the Western Red Cedar Lumber Association. Cedar produced by the Western Red Cedar Lumber Association includes specialty end use grades as well as products graded to National Lumber Grading Authority (NLGA) rules. NLGA grades are approved by the American Lumber Standards Board of Review and are accepted under all US building codes.

Technical Features of Western Red Cedar

Acoustic properties: Cedar tends to dampen sound transmission

22 lb/ft3 Density(oven-dry): Specific Gravity (oven dry): 0.35 Durable species Durability: Fasteners: Corrosion resistant only

(stainless steel aluminum, hot-dipped galvanized, brass, etc.)

Paints, stains, varnishes, oils and waxes all work well Finishing:

Flame spread rating: 69 (class II) Smoke developed classification: 98

k value (12% mc) 0.74 BTU in.per square ft.h degrees F

1.35 in. of thickness R value:

Cedar is the most stable softwood species Stability:

Workability: Easy to cut, saw, nail and glue

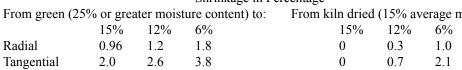
Table 1. Comparative Softwood Densities (pcf)

Species Oven-Dry Density Western Red Cedar Douglas Fir 31 27 Ponderosa Pine 34 Southern Pine

Table 2. Direction of Shrinkage

Shrinkage in Percentage

From green (25% or greater moisture content) to: From kiln dried (15% average moisture content) to: 12% 12% 6% 15% 6%







- 1. Radial shrinkage applies to the width of vertical grain lumber: tangential to the width of flat grain lumber.
- 2. Shrinkage does not begin until the fiber saturation point is reached.
- 3. 15% is the average equilibrium moisture content of wood during the summer in the Pacific Northwest.
- 4. 12% is the summer average equilibrium moisture content in dry areas of the Pacific North-
- 5. 6% is the average equilibrium moisture content for interiors of heated buildings

Bear Creek Lumber

Western Red Cedar

Known for its extremely fine and even grain, its flexibility and strength in proportion to its weight, Western Red Cedar is a species of wood whose lumber can be used in a variety of ways. Western Red Cedar is renowned for its high impermeability to liquids and its natural phenol preservatives, which make it ideally suited for exterior use and interior use where humidity is high.

The cellular composition of cedar, millions of tiny air-filled cells per cubic inch, provides a high degree of thermal insulation on both roof and wall applications. Western Red Cedars' slow growth and natural oily extractives are responsible for its decay resistance and its rich coloring, which ranges from a light straw color in the sapwood to a reddish pink in



the heartwood. It is a stable wood that seasons easily and quickly, with a very low shrinkage factor. It is free of pitch and has excellent finishing qualities.

Western Red Cedar is Bear Creek Lumber's main inventory item. offered in siding patterns, paneling patterns, and boards for board-on-board siding, trim, and fascia. Bear Creek also carries cedar decking, timber and beams, and shakes and shingles. Additional grades and sizes are available upon request.

Tree of Life (Arbor Vitae)

The earliest residents of the Pacific Northwest called it the "Tree of Life". And for all the centuries since, Western Red Cedar has been a vital part of our outdoor lifestyle. As a home siding material, real Western Red Cedar is still the natural choice of value-minded homeowners. For some very natural reasons.

Cedar is a living legend for its "grown-in-the-wood" resistance to moisture, decay and insect damage. Cedar also has exceptional dimensional stability. It lays flat, stays straight, retains fasteners and provides a firm base for many types of stains and paints. Properly finished and installed, it could be the last siding your home will ever need.

With its richness of grain, texture and color, Cedar offers a timeless complement to any architectural style, from traditional to contemporary. Natural leaders always attract imitators. That's why so many artificial sidings have contrived to look like Cedar right down to the fake "grain" and embossed "knots". Unfortunately, none of them last like Cedar. In fact, during periods of rainfall or high humidity, some of these fair-weather wonders go all to pieces. The only real alternative? Go natural with Red Cedar!

Cedar siding comes in a wide choice of designs and grades. There's one that's exactly right for your home's architectural style, as well as your budget. Bevel, pattern board, and board-and-batten are the most popular siding styles and each of these categories offers a variety of distinctive decorative effects. Cedar takes stain or paint with ease, unlike artificial sidings, it allows you to match existing colors when extending your home. That can't be done with faded plastics. Cedar siding can be refinished quickly to any color.



Cedar Finishes

The use of a quality finish recommended by your building supply dealer will enhance your Cedar siding's good looks and natural durability. It responds beautifully to oilbased stains in your choice of lightly tinted transparent finishes for a natural effect, or pigmented semi-transparent finishes. Solid colors can be achieved through the use of a 100% acrylic latex paint (for smooth face) or stain (for rough face) over an alkyd oil primer. Look for a coating that contains a mildewcide and ultraviolet shielding properties. Varnishes and other film-forming coatings which can crack and peel are not recommended for use on Cedar siding. Or, request Cedar as a prefinished product. Your salesman will be happy to explain the prefinishing and pre-staining services we offer.

Physical Properties of Western Red Cedar

Density

One of the lightest commercial softwoods, the density of Western Red Cedar at oven-dry conditions is approximately 22 pounds per cubic foot with a relative density (specific gravity) of 0.35. For comparative oven-dry densities of cedar and some other softwood species, see table 1 (backpage). Cedar's low density enhances its insulation value and makes it an easy wood to transport and handle.

Dimensional Stability

Like all woods, Western Red Cedar is hygroscopic and will absorb or discharge moisture to attain equilibrium with the surrounding atmosphere. However, it has a very low shrinkage factor and is superior to all other coniferous woods in its resistance to warping, twisting and checking. The size differential between dry and unseasoned Western Red Cedar is given in Table 2.

Thermal Conductivity

Wood is an excellent thermal insulator. This is an important characteristic since good thermal insulators help keep buildings cool in the summer, and reduce heating costs in the winter.

The conduction of heat in wood is directly related to its density. Woods with low density have the highest thermal insulating value because such woods contain a high proportion of cell cavities. In dry wood, these cavities are filled with air which is one of the best known thermal insulators.

With its low density and high proportion of air spaces, Western Red Cedar is the best thermal insulator among the commonly available softwood species and is far superior to brick, concrete and steel. It has a coefficient of thermal conductivity (k value) at 12% mc of 0.74 BTU in, per square ft.h degrees F. The R value (the reciprocal of k) for Western Red Cedar is 1.35/in. of thickness.

Acoustical Properties

An important acoustical property of wood is its ability to damp vibrations. Wood has a cellular network of minute interlocking pores which converts sound energy into heat by frictional and viscoelastic resistance.

Because of the high internal friction created by the cellular pore network, wood has more sound damping capacity than most structural materials. Floor, ceiling and wall assemblies of wood can provide effective economical sound insulation and absorption when properly utilized. Western Red Cedar is particularly effective in this regard and can be used to help reduce noise or to confine it to certain areas.

Flame Spreading Ratio

Flame spreading ratings describe the surface burning characteristics of interior finishes. They are used to regulate the use of interior finish materials to reduce the probability of rapid fire spread. Materials are burned in a test furnace for a relative assessment of flammability. The lower the flame spread rating, the more the material resists the spread of fire.

Building codes in North America generally define as interior finish any exposed material that forms part of the building interior. This usually includes interior wall and ceiling finishes, flooring, windows, doors and other wood products. US codes set the maximum flame spread rating for interior wall and ceiling finishes in most buildings at 200. The flame spread rating for Western Red Cedar is 69 (Class II rating).

Smoke developed classifications reflect the amount of smoke released by burning material. They are used in conjunction with flame spread ratings to regulate the use of interior finish materials where the potential to generate smoke or control smoke movement is of major fire safety importance.

US codes set the maximum smoke developed classification for interior wall and ceiling finishes in most buildings at 450. The smoke developed classification for Western Red Cedar is

Western Red Cedar's flame spread rating and smoke developed classification compare well with the ratings of many other species of both softwood and hardwood. Because of its favorable performance, Western Red Cedar can be used for interior finish in some building applications where other species would not be permitted.

Durability

Historically, native peoples of the Pacific coast prized cedar for its long lasting qualities and used wood and bark from cedar trees for most of their building needs. Evidence of cedar's durability are the many cedar artifacts still in good condition today.

Properly finished and maintained, cedar will deliver decades of trouble-free service. If exposed for prolonged periods to conditions where decay could be a factor, such as where the wood is in contact with the ground, cedar should be treated with suitable wood preservatives.











Western Red Cedar Products

Available from Bear Creek Lumber

2-inch

3-inch

5/4-inch

Eased Edge

www.bearcreeklumber.com (800) 597-7191 fax (509) 997-2040



Rough cut

S4S

Tongue and Groove Tongue and Groove Resawn or Smooth Face Shiplap Pattern

Decking

Board Sizes Available

1/2-inch to 2-inchs, any width, or length 3-inch to 12-inch, any width, length Standard Tight Knot, Select Tight Knot Standard Tight Knot, Select Tight Knot Clear, Vertical Grain Clear Clear, Vertical Grain Clear

Custom Patterns

Timber/Decking Sizes

CEDAR SHAKE & SHINGLES PRODUCTS

Available in 18-inch and 24-inch. Other sizes available upon request

Cedar Shakes

Siding

Channel Siding

Board and Batt

Rabbeted Bevel

Bevel Siding

Hand-Split Shakes

These shakes have split faces and sawn backs. Cedar logs are first cut into desired lengths. Blanks or boards of proper thickness are split and then run diagonally through a band saw to produce two tapered shakes from each blank. Available in Premium Grade (100% edge grain) or Number 1 Grade (Up to 20% flat grain allowed in each bundle).

These shakes are sawn both sides. Premium and Number 1 Grades are the most common. Premium Grade is 100% edge grain, 100% clear and 100% heartwood. Number 1 Grade allows up to 20% flat grain in each bundle. Number 2 and 3 Grades are also available.

Tapersplit Shakes

Produced by hand, using a sharp bladed steel froe and a mallet. The natural shingle-like taper is achieved by reversing the block, end-for-end, with each split. Premium Grade only.

Straight-Split Shakes

Produced by machine or in the same manner as tapersplit shakes except that by splitting from the same end of the block, the shakes acquire the same thickness throughout. Premium Grade only.

Cedar Shingles

Number 1 Blue Label

The premium grade of shingles for roofs and sidewalls. These top-grade shingles are 100% heartwood, 100% clear and 100% edge grain. Available in 16" or 18" or 24" lengths.

Number 2 Red Label

A good grade for many applications. Not less than 10" clear on 16" shingles, 11" clear on 18" shingles and 16" clear on

24" shingles. Flat grain and limited sapwood are permitted in this grade.



Fancy Cut Shingles

Available by the box or square, Bear Creek Lumber carries a limited assortment of these shingles. Minimum order size may apply for certain shingles.



Pre-staining, mildecide, and/or fire treatment is available for most shake and shingle products.

PACIFIC COAST YELLOW CEDAR

FINISH, K.D.

2" and Thinner
2" and Wider
502. Finish is customarily shipped kiln dried and surfaced four sides.
Grade descriptions are based on a piece 8" wide and 12' long. The number of characteristics in larger or smaller pieces may vary in proportion to the size of the piece.
Pieces 5" and narrower are graded from one face and both edges, eigens 8" and part wider from one press end one adequater.

prieces of and wider from one face and one edge, pieces of and wider from one face and one edge. In addition to the following specific provisions applicable to Finish, the appropriate provisions in all other paragraphs in the rules apply. There are three grades of Finish: "B and Better", "C" and "D." 502.b. "B AND BETTER" FINISH

A supreme quality grade recommended and widely used for nterior and exterior trim and cabinetwork where the finest finish in natural, stained or enamelled finish is important. Characteristics which may appear on pieces in this grade and the

miting provisions are:

Cup - approximately 1/8".
Splits - short, in 5% of the pieces.
Torn grain - very slight.
Skips - occasional slight on back.

Knots - 2, sound tight pin or 3 small bark seams or pockets. 502.c. "C" FINISH A high quality grade recommended and widely used for interior and exterior trim and cabinet work where a high quality natural, stained

r enamelled finish is important

Characteristics which may appear on pieces in this grade and the miting provisions are:

Cup - approximately 1/8".
Stained wood - medium.
Splits - short, in 5% of the pieces
Checks - small.

Orleans - Sindin.
Torn grain - slight.
Skips - occasional slight on edges and back.
Knots - 2 sound tight small or equivalent smaller or 4 small bari

10% of the pieces in a shipment may have a 3" cutout 3' or mo rom either end in pieces 12' and longer, provided such pieces a

All or nearly all of the permissible characteristics of the grade are never present in maximum size or number in any one piece. Any piece with an unusual combination of characteristics which seriously fects normal serviceability is excluded from the grade

The last Published Grading Rules for Pacific Coast Yellov

Bear Creek Lumber www.bearcreeklumber.com (800) 597-7191 fax (509) 997-2040

(Under 3" in thickness)

Pieces 5" and narrower are graded from one face and both edges pieces 6" and wider from one face and one edge. 551.b. "B AND BETTER" INDUSTRIAL

A supreme quality grade.

Characteristics which may appear on pieces in this grade and the

imiting provisions are:

Splits - short, in 5% of the pieces.

Checks - 4 small, none through.

Criecks - 4 smail, note unough.
torn Grain - very slight.
Knots - 3 sound tight pin or 3, small bark seams or pockets.
All or nearly all of the permissible characteristics of the grade an

never present in maximum size or number in any one piece. Any piece with an unusual combination of characterristics which seriously affects normal serviceability is excluded from the grade. 551.c. "C" INDUSTRIAL

A high quality grade. Characteristics which may appear on pieces in this grade and their

imiting provisions are: Stained Wood - medium

Torn Grain - slight

Skips - occasional slight on face; small on edges.

Knots - 4, sound tight small or equivalent pin, or 4 not firmly fixed or unsound 1/2 the size of sound tight knots; or 4, small bark

Each piece shall contain 50% to 70% of (a) and/or (b) and bark

Each piece shall contain 33-1/3% to 50% of (a) and/or (b) and

20% of the pieces in a shipment may have a 3" cutout 3' or more from either end in pieces 12' and longer.

All or nearly all of the permissible characteristics of the grade are never present in maximum size or number in any one piece. Any piece with an unusual combination of characteristics which serious fects normal serviceability is excluded from the grade.

FACTORY LUMBER

Shop

555. Factory lumber shall be measured for the percentage of cuttings which can be obtained with the grade work carried to each

cutting piece.
555.a. DRESSED THICKNESSES.
The following thicknesses shall be considered standard. all other thicknesses shall be considered special.

	Nominal	Finished	
	Thicknesses	Thicknesses S2S	Lengths
	I nches	Inches	
1	cut full size	5/32	
1-3/8	cut full size	1-5/32	
1-5/8	cut full size	1-13/32	
2	cut full size	1-25/32	3' and longer, not more
2-1/2	cut full size	2- 9/32	than 25%
3	cut full size	2-3/4	3' to 6';
4	cut full size	3-3/4	multiples of 1'.

WIDTHS

Standard widths shall be 5" and wider. (permitting 15% 3" and 4", 3" and longer). Shop Lumber is usually shipped in random widths hough specified widths may be supplied. Widths 6" and narrower shall not be more than 1/8" scant when dry; 8" and wider widths shall not be more than 1/4" scant when dry.

SIZE OF CUTTINGS:

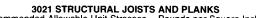
(a) 9-1/2" or wider by 18" or longer (b) 5" or wider by 3' or longer.

(c) A strip 2" or wider the length of the piece, or 12' or longer. 555.b. GRADE OF CUTTINGS.

(a) shall be clear on both sides. (b) & (c) shall have a face equal to "B and Better" Finish. 555.c. SELECT SHOP. Each piece shall contain 70% or more of (a) and/or (b) and/or (c)

cuttings. 555.d. NO. 1 SHOP.

Each piece shall contain 33-1/3% to 50% of (a) and/or (b) and (c) cuttings.



2" - 4" Thick

		Bending		Compression			
Species	Grade	Stress at Extreme Fibre	Longitudinal Shear	Parallel to Grain	Perpendicular to Grain	Tension Parallel to Grain	Modulus of Elasticity
Douglas fir-Larch	Select Structural No. 1 No. 2 No. 3	1,900 1,600 1,300 750	90	1,400 1,250 1,050 650	460	1,250 1,050 850 500	1,930,000 1,930,000 1,740,000 1,540,000
Hem-Fir	Select Structural No. 1 No. 2 No. 3	1,400 1,200 950 550	75	1,150 1,050 850 550	235	900 800 660 350	1,620,000 1,620,000 1,460,000 1,300,000
Eastem hemlock -Tamarack Pacific Coast Yellow Cedar Jack pine	Select Structural No. 1 No. 2 No. 3	1,650 1,400 1,150 650	86	1,200 1,050 900 550	335	1,100 950 750 450	1,400,000 1,400,000 1,260,000 1,120,000
Red pine Western white pine Eastern white pine Western cedars	Select Structural No. 1 No. 2 No. 3	1,250 1,050 850 500	65	900 800 650 400	235	800 700 550 300	1,210,000 1,210,000 1,080,000 970,000





Yellow Alaskan Cedar



Alaskan Yellow Cedar **Pacific Cypress**

First used by the West Coast Indians for their historic Totem Poles and great war canoes, it is a rare and often difficult to find lumber species.

Its durability and ease of tooling makes it readily adaptable for the construction and finishing of homes, schools, factories, churches, recreational centers and a variety of commercial and industrial

Known as Alaska Cypress, Pacific Coast Cypress, as well as Alaskan yellow cedar, it grows in a band from Southern Alaska to Southern Oregon. It is one of the slowest growing trees in North America and includes trees that are 700-1200 years old. 50-60 annual rings per inch are not uncommon.



Found only on the Pacific coast of North America, this rare and exceptionally beautiful wood species seeks out high and adventurous sites and often grows to the tree line. It is a medium sizes tree, with a thin bark. It is slow growing with high disease and decay resistance, as well as oils that make it very aromatic. It grows from Alaska south to Oregon with the largest areas of growth in British Columbia and SE Alaska.

Primary Uses

Yellow cedar can be used for floors, doors, decks, ceiling paneling, custom woodworking, and millwork. It is very popular for carving as well as versatile when used in industrial applications.

It has been traditionally used for boatbuilding because of its longterm durability. Racing boat enthusiasts have often used it for high performance shells, and for bridge decking. It stands up to constant wear and load impacts without forming ridges or splitting. It does not splinter, so it is also used on stadium seating.

Appearance and Properties

The wood from Yellow Cedar has always been prized because of its many superlative features. Its distinct and uniform yellow color is much admired. Its sapwood is very similar in color to its heartwood, with an extremely fine texture and unusually straight grain. When green, the wood gives off a pungent almost sulfurous odor. This fades quickly once cut. One of the most durable of all softwoods, it has exceptional resistance to insects and marine borers, as ell as decay, which attributes to its long life. It is harder than most commercial softwoods, with good impact resistance. It seasons well, with low shrinkage. It machines easily and smooths to a silky finish.





Pictured from left to right: Clear yellow cedar 2 x 10 in NYC pergola; Knotty yellow cedar fascia in Hawaii; clear yellow cedar decking in Michigan; clear yellow cedar tongue and groove in sauna in California;

Below, clear yellow cedar interior tongue and groove in Washington State log home ceiling.



Alaska yellow cedar is exceptionally strong

The American Lumber Standards Committee has created a new species designation for this rot-resistant wood. Tests have shown that Alaskan yellow cedar has the strength of Douglas fir.

The Forest Service has done studies that show that its decay resistance goes up to 80 years with no deduction in strength or preservative properties.

Characteristics

Texture Light yellow in color, straight grained, even, compact texture with its natural oils giving it a smooth waxlike finish.

Strength A strong wood with density equivalent to 29 lbs. per cubic foot at 12% moisture.

Rigidity Rigid tough and shock resistant

Durability Resists weather, rot, termites and corrosion from acid solutions. Has 2 1/2 times the life expectancy of Douglas Fir in vats and flumes.

Fire Resistance Takes almost twice as long to reach flame break-through as other softwoods.

Nail holding Has excellent nail-holding ability.

Splintering It does not splinter, making it ideal for stadium seats, playground equipment and deck railing.

Workability Easy to work with and holds glue well.

Wearability Dense and tough, it is highly resistant to wear. Excellent for bridges, decks, boats and paneling.



Termite bioassays with Alaska cedar shown this wood to be slightly more durable than redwood. Short-term exposure to high termite activity also resulted in slightly higher termite mortality than redwood. The same study also revealed that given a choice, subterranean termites actually preferred Alaska cedar less than redwood. Alaska cedar be considered to be a reasonable material construction substitute for redwood in terms of its resistance to subterranean termites.

University of Hawaii research under the direction of Dr. Kenneth Grace



Alaska Yellow Cedar Products

Available from Bear Creek Lumber

Siding Deck	ing Tong	ue and Groove	Timbers
Channel Siding	2 inch	V Groove Pattern	Clear and/or Appearance
Board and Batt	3 inch	Edge & Center Bead	Structural
Bevel Siding	5/4 inch	Flooring Pattern	Hand hewn
Rabbeted Bevel	Eased Edge	Custom Patterns	Rough cut
Tongue and Groove	Tongue and Groove	Resawn or Smooth Fa	ace S4S

Board Sizes Available

1/2 inch to 2 inchs, any up to 12 inch, any length Standard Tight Knot, Select Tight Knot Clear, Vertical Grain Clear

Timber/Decking Sizes

3 inch to 12 inch, up to 12 inch, any length Standard Tight Knot, Select Tight Knot Clear, Vertical Grain Clear

Port Orford Cedar

Port-Orford-cedar (POC) is one of the white-cedars in a group of "false-cypresses," numbering three native species in the U.S. and four additional species in Japan and Taiwan.

The Port-Orford-cedar (Chamaecyparis lawsoniana) was first discovered in its small natural range along the California/Oregon coast in 1851. The total range was only about 200 miles long north and south and about 50 miles deep, shared by both states, about 70 percent in Oregon.

Port-Orford-cedar, also known as Port-Orford white-cedar, Oregon-cedar and Lawson cypress prefers a mild climate with plenty of rain (40-90 inches annually)! High humidity and misting from the Pacific Ocean are also factors in the healthy growth of this tree in its natural areas. The range has been extended by planting the original and its variations around much of the northern half of the world and in New Zealand.

These large attractive and very shade-tolerant trees grow to 125' to 180' in 500 years, with diameters of 3 1/2'inches to 6 inches. A record tree, 219' tall with a diameter of 12', standing in Siskiyou, Oregon may be 700 years old. The wood of Port-Orford-cedar is clear with a straight, but somewhat uneven, medium grain. The wood is yellow-white in color, sometimes with tinges of red and has a bitter ginger taste. Sapwood is hardly distinguishable from heartwood. Of relatively light weight and good strength, this wood has a specific gravity of 0.40 and weighs about 27 pounds per cubic foot at 8% moisture content, about the same as eastern hemlock and a little heavier than eastern white pine.

The wood dries easily,+ and quickly with no problems. It works well in every respect with power or hand-tools, polishes and takes paint, stain and all finishes extremely well. Its ease in staining makes it simple to imitate mahogany and other higher priced woods, adding to its popularity as a fine cabinet wood. Port-Orford-cedar is very stable in any application and when exposed to soil, water or weather is considered to be one of the most durable of woods.

The unique, strong ginger-like scent, due to a volatile oil, can be overpowering and continued exposure to this aroma is known to cause kidney problems. Dust masks and skin protection are recommended to avoid ingestion or contact with the oil or sawdust.

Port-Orford-cedar has been used for a wide variety of things from the Hawaiian Presidential Palace to Japanese Buddhist temples, California gold mine timbers and building construction. It was used for high quality boats – Sir Thomas Lipton used this wood for his Shamrock series of 100' racing sailboats, built as challengers for the Americas Cup just prior to World War

This wood is in great demand in China and Japan for coffins, and for temple construction because of its close relationship to Hinoki cypress (Chamaecyparis obtusa) which is though to have a spiritual nature.



Port Orford Cedar has earned a reputation for strength and decay-resistance. Historically, this strongest of all the cedar products has been the preferred wood for building boats, railroad ties, and fence posts (its heartwood has an in-ground life of 20-25 years).

Strength, durability and natural decayresistance make POC the ideal wood for timbers reknown for beauty and structural integrity, useful for both indoor and outdoor uses.

POC is a lightly colored wood, allowing it to accept stains nicely. And with a fine texture, straight grain, and pleasant, sweet-spicy scent, it's an excellent choice for interior woodwork.

Decking made from POC is not only strong, it's safe for children. Its texture remains smooth with no raised grain or slivering, and its durability makes it ideal for use in high-traffic outdoor sites.

Port Orford Products Available From Bear Creek Lumber

- Timbers
- Beams
- Tongue and Groove
- Siding or Paneling
- Decking

Available in C and Better, D and Better Clear or Clear Vertical Grade (special order only. Also knotty grades as pictured above and below in T&G.



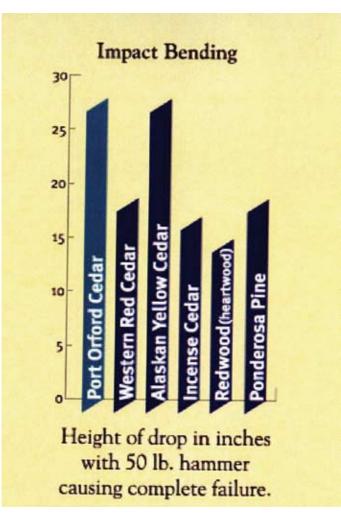
Port Orford Cedar Products

Available from Bear Creek Lumber

Siding 1	Decking	Tongue and Groove	Timbers
Channel Siding	2 inch	V Groove Pattern	Appearance
Board and Batt	3 inch	Edge & Center Bead	Structural
Bevel Siding	5/4 inch	Flooring Pattern	Hand hewn
Rabbeted Bevel	Eased Edge	Custom Patterns	Rough cut
Tongue and Gro	oove Tongue and C	Groove Resawn or Smooth Fa	ce S4S

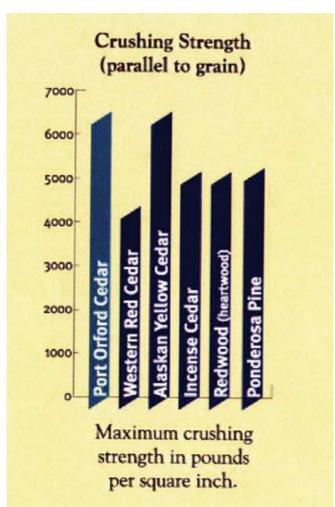
Board Sizes Available

5/8 inch to 2 inches, any width, length Standard Tight Knot, Select Tight Knot Clear, Vertical Grain Clear



Timber/Decking Sizes

3-inch to 12 inch, any width, length Standard Tight Knot, Select Tight Knot Clear, Vertical Grain Clear



Incense-Cedar

Incense-cedar (Calocedrus decurrens (synonym Libocedrusdecurrens)) grows in California, southwestern Oregon, and extreme western Nevada. Most incense-cedar lumber comes from the northern half of California. Sapwood of incense-cedar is white or cream colored, and heartwood is light brown, often tinged with red. The wood has a fine, uniform texture and a spicy odor. Incense-cedar is light in weight, moderately low in strength, soft, low in shock resistance, and low in stiffness. It has low shrinkage and is easy to dry, with little checking or warping.

Incense-cedar is used principally for lumber and fence posts. Nearly all the high-grade lumber is used for pencils and venetian blinds; some is used for chests and toys. Much incense-cedar wood is more or less pecky; that is, it contains pockets or areas of disintegrated wood caused by advanced stages of localized decay in the living tree. There is no further development of decay once the lumber is dried. This low-quality lumber is used locally for rough construction where low cost and decay resistance are important. Because of its resistance to decay, incense-cedar is well suited for fence posts. Other uses are decking and interior tongue and groove which Bear Creek Lumber stocks in 1 and 2 in tongue and groove.





GOALS OF SUSTAINABLY MANAGED FORESTRY

•Ensures timber harvest is ecologically sound, socially and economically beneficial to local communities

•Creates market incentives for producers to responsibly manage forests and harvest timber

•Gives consumers the power to positively "vote" for conservation when they buy wood products

•Contributes to the preservation of forests and forest wildlife worldwide.

Restoration Logging

Bear Creek Lumber has a 85-acre tree farm that it manages under the goals of sustainably managed forestry. Its overgrown suppressed stands of Douglas fir are logged for better forest environmental health.

Trees that should be spaced 30 feet apart are typically targeted (as seen right with blue paint markings). This wood is particularly dense. This product is excellent for a variety of uses from rail fencing (using small diameter logs) to posts and poles for construction. Whole trees are available for sale.



Products Available from Restoration Logging

and-peeled

(peeled or unpeeled)
Whole Tree Logs
Poles
Unpeeled Rail Fencing
Character Logs

Sizes available
1 inch to 18 inch diameter
in lengths up to
30 ft and longer

Bear Creek Lumber

Douglas Fir Western Larch

Douglas Fir (Pseudotsuga menziesii) is not a true fir at all, it is a distinct species named after Archibald Menzies, a Scottish physician and naturalist who first discovered the tree on Vancouver Island in 1791, and David Douglas, the Scottish botanist who later identified the tree in the Pacific Northwest in 1826. Douglas Fir is North America's most plentiful softwood species, accounting for one fifth of the continent's total softwood reserves.



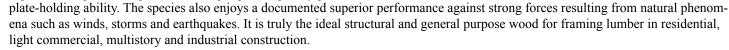
Western Larch (Larix occidentalis), sometimes called Mountain Larch or Western Tamarack, was discovered in 1806 in western Montana. It is one of only three conifers that sheds its needles in the winter, with new needles developing in spring. Western Larch is native to eastern Oregon and Washington, Idaho, Montana, and southern interior British Columbia. Like Douglas Fir, it is among the strongest and hardest softwood species.

Douglas Fir timberlands are the most productive softwood timberlands in the U.S. in terms of volume per acre. More softwood lumber is produced in Oregon than in any other state due in large part to the predominance of Douglas Fir in its coastal forests. Known as the "timber basket," where systematic replanting has been documented since 1912, the northwestern region is governed by some of the world's toughest environmental laws providing protection for habitat, watersheds, soils and biological diversity, thus

fostering a multiplicity of forest values in perpetuity. Reforestation and management practices are not voluntary, they are enforced by law. Although production is much greater in Douglas Fir, the two species account for more than 45 percent of all Western softwood produced annually. Each year, more than 1.5 billion tree seedlings are planted in the U.S. -- some five new trees for each American. Nationally, annual forest growth has continually exceeded harvest since the 1940s. In the West, forest growth exceeds harvest by 35 percent or more each year.

Characteristics and Attributes

When architects and engineers look for the best in structural lumber, their first choice repeatedly is Douglas Fir. It is dimensionally stable and universally recognized for its superior strength-to-weight ratio. Its high specific gravity provides excellent nail and



The Douglas Fir/Western Larch species combination has the highest modulus of elasticity (E or MOE) of the North American softwood species. This is the ratio of the amount a piece of lumber will deflect in proportion to an applied load; it is a reflection of the species' high degree of stiffness, an important consideration in the design of floors and other systems.

In strength properties, Douglas Fir/Western Larch has the highest ratings of any Western softwood for extreme fiber stress in bending (Fb); for tension parallel-to-grain (Ft); for horizontal sheer (Fv); for compression perpendicular-to-grain (Fc); and for compression parallel-to-grain (Fc//).

These physical working properties, as well as to the moderate durability of its heartwood and its excellent dimensional stability, provide the reasons many builders use Douglas Fir as the standard against which all other framing lumber is judged. It is also tight knotted and close-grained, adding the bonus of beauty to its structural capabilities.



Douglas Fir Strength

Douglas Fir is one of the few species available in large sizes from managed timberlands. It is preferred for heavy timber framing and large members are available in a variety of grades manufactured for construction uses where larger material is needed to meet the engineering requirements of the design. Douglas Fir timbers are best known for their tough fiber, dense grain structure and strength. They are additionally valuable for their rustic beauty and excellent "Heavy Timber" fire ratings in the model building codes. Timbers are can be shipped unseasoned and may be specified rough cut or surfaced four sides (S4S). Bear Creek Lumber offers both green and kiln dried timbers.







Timbers

Douglas fir is recognized as the strongest of all softwoods and is often specified for timbers because of its strength. Bear Creek Lumber offers timbers in all sizes and grades, with a good selection of ap-

pearance grade products for timber framing. All timbers and beams are available F.O.H.C. (Free of Heart Center), and all beams are available in lengths up to 40 feet - although most lengths over 20 feet are special order items. Timbers and teams can be ordered rough-cut or surfaced.



Wood Paneling, Cabinets and Furniture

Designers appreciate the rich visual quality of Douglas fir texture and grain as well as its beautiful response to fine craftsmanship and finishing. A favorite wood for custom cabinets, furniture and millwork, it works easily and resists wear. When sawn to expose vertical grain, Douglas fir is particularly handsome.

Appearance and dimensional stability are critical

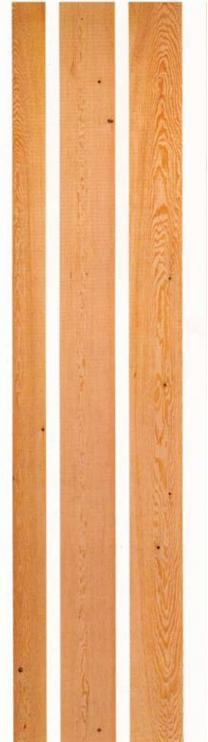
Douglas fir paneling can transform any room into a dramatic, elegant space. The wood's fine appearance is clearly visible in a variety of applications such as edge-grain veneers for formal wall paneling or solid plank paneling for an informal look. When acclimated prior to installation, Douglas Fir retains its shape and size without shrinking, swelling, cupping, warping, bowing or twisting. The uniform grain and tough fiber holds stain well and keeps fasteners firmly in place.

Douglas fir (and Western Larch to a lesser extent) paneling is run in a variety of patterns. In many cases, the grade of the patterned material reflects the grade of the starting material, adhering to similar requirements for allowable characteristics. Grades for paneling include the finish grades for highest appearance and the Commons or Alternate Board grades for knotty products.

Flooring

Wood floors in gyms, factories and homes take an incredible beating. Douglas fir's strength, beauty and old-fashioned toughness are all prime reasons for choosing this long-lasting wood. Douglas fir provides a tough surface that will hold a finish, maintain its appearance under extreme wear and remain level without cracking, scuffing or splintering.

Douglas fir flooring is available in 1x4 (nominal) sizes in standard lengths 4 feet and longer. Flooring is machined tongue-and-groove and may be finished in any grade. Bear Creek Lumber offers both a select knotty grade and a clear grade fir flooring.



Bear Creek Lumber Sells Appearance Grades

For versatility and beauty, few woods in the world match the magnificence of Douglas Fir and Western Larch. Unlike the structural grades, appearance lumber is milled and graded according to aesthetic rather than structural performance criteria. Color, grain pattern, texture, knot type and size are the factors that influence the grade. For this reason Douglas Fir and Western Larch are usually separated in the appearance grades and marketed as distinct species to allow a larger range of visual choices for discriminating end users.

Douglas Fir's light rosy color is set off by its remarkably straight and handsome grain pattern. While similar, Western Larch is slightly darker in color. Of the two species, Douglas Fir is more widely available in the appearance grades. Both species will "redden" over time when exposed to light. Their tough fiber make both species difficult to work with hand tools. However, both respond admirably to sharp power tools and machine to an exceptionally smooth, glossy surface. Both paint easily and can hold all types of stains and finishes.

Moisture content levels are carefully controlled in the highest grades to ensure these premium products will meet the strict dimensional stability requirements of finish carpenters, furniture manufacturers and cabinet makers. The less "perfect" grades are an economical choice for many utilitarian applications.

Many designers and consumers agree the aesthetic appeal of clear, light, straight, vertical-grain Douglas Fir is unsurpassed among the world's softwood species. However, the highest appearance grades of Douglas Fir and Western Larch are manufactured from trees older than those which yield primarily structural framing products. And while substantial volumes of clear and nearly clear Douglas Fir are available from long-rotation, managed western timberlands, the clear grades are less abundant and considerably more expensive than knotty

More About Clear vs. Knotty Grades

The highest grade categories, "Finish" and "Selects," include the grades for clear and nearly clear lumber in either vertical or flat grain (If grain pattern is not specified, these grades will be shipped as a mixed grain combination of vertical and flat grain). Finish and Select grades of Douglas Fir are recommended for interior trim and cabinet work with either natural, stain, or enamel finishes where the finest appearance is important.

Douglas Fir "Commons" (WWPA Rules) or "Alternate Boards" (WCLIB Rules) are typically used for shelving, sheathing or run-to-pattern for siding and paneling. These products are nominal 1 inch thickness, surfaced to 3/4 inch and are generally grade stamped on the back or ends.

The highest grades are used where fine appearance in a knotty material is required, such as for soffits, fascia, cornices, shelving or run-to-pattern for siding and paneling. Depending on the criteria for the application, other grades in knotty products are used primarily in housing and light construction where wood is exposed for its beauty and character (e.g. shelving, paneling, siding, fences, boxes) or for its utility and serviceability in crating, subfloors, roof and wall sheathing and concrete forms. The lowest grades are generally available from most hardware/lumber outlets. Bear Creek Lumber does not generally sell dimensional lumber such as studs, #2 framing or economy grade fir in any size.

Douglas Fir Products Available from Bear Creek Lumber

Siding Tongue and Groove Timbers Decking Logs **Board and Batt** Clear grade 2-inch V Groove Pattern Appearance Green/air Tongue and Groove Clear grade 3-inch Edge & Center Bead Structural 8-18 inch Wavy Bevel Siding Clear grade 5/4-inch Flooring Pattern peeled or Hand hewn Tongue and Groove Custom Patterns Rough cut unpeeled Resawn or Smooth Face S4S

Board Sizes Available 5/8 inch to 2-inchs, any width, length Standard Tight Knot, Select Tight Knot Clear, Vertical Grain Clear

Timber/Decking Sizes 3-inch to 12-inch, any width, length Standard Tight Knot, Select Tight Knot Clear, Vertical Grain Clear



Available in Decking

Thicknesses of 3/4, 5/4, 6/4 and 8/4Widths: 4 to 12 inch (wider by special order) Tongue and Groove by Custom Order

IPÊ (ee-pav)

An incredibly durable Brazilian Hardwood rated by the US Forest Lab for 25 years plus. Naturally resistant to fire (rated class A by the NFPA or class 1 by the UBC) insects, moisture, and movement, this air dried hardwood (16-20%) is perfect for exterior commercial and residential applications such as decks, docks, or exterior furniture. In service for over 25 years from Diner Key Marina in Miami, to the Atlantic City Boardwalk, IPE has proven durability. It can be sealed to maintain its natural beauty or it can be allowed to weather to be a beautiful silver gray. It is available in a variety of standard dimensional lumber sizes and can be used for entire projects. It is easily cut with standard carbide tipped blades but requires pre-drilling and screwing with stainless steel screws. Hidden fastening systems area also available. Standard decking size is 4/4 material (net 3/4" thickness) not 5/4 or 8/4 and on 24" centers the 4/4 material will provide a 100 lb live load rating far surpassing any cedar, redwood or CCA pressure treated material. It has a hardness rating of 3640 Janka, almost 3 times that of northern Red Oak at 1260 Janka. IPE also resists surface checking and is naturally resistant to molds, which are the two most destructive forces to the face of decks. When compared to other decking materials such as redwood, cedar, or CCA pressure treated materials, IPE gives **longer life** (3-5 times the life span), stronger resistance to fire, weather, insects and movement and is competitively priced with high grades of cedar and redwood. If you compare the one time cost of IPE to the 3-5 times you replace other materials over the life span of IPE, the value of IPE becomes very clear!

Other Names for Ipe

Pau d'arco; ipe tabaco; lapacho; ironwood; greenheart; tahauri, cortez; Brazilian Walnut

Height/Weight

Trees routinely grow to 150 feet and can reach 200 feet with trunk diameters of six feet. Weight varies from 60 to 75 pounds per cubic foot with s specific gravity of 1.08.

Properties

Usually air dries rapidly with very slight checking or warping. material can be difficult to work and difficult to saw. Hardness of material can cause cutting edges to dull. High quality carbine and diamond tipped blades are recommended as well as pre-drilling when surface fastening. Machining material creates a fine yellow dust that can be hazardous to breathe and can cause dermatitis. Ipe is highly resistant to fungus and insect attack.



Span Values

40lbs/SF 50lbs./SF 60lbs./SF Nominal size 1 x 4 32 inches 30 inches 28 inches 24 inches 1 x 6 38 inches 34 inches 32 inches 28 inches $5/4 \times 6$ 42 inches 38 inches 36 inches 32 inches

Dimensional Stability-Very stable, minimal checking and warping

Low Maintenance

NFPA Fire Rating: Class A

Highly Decay Resistant

Low Movement in Service

Weight- 60-75 lbs per cubic ft.

Bending Strength- 26,000

Mod. of Elasticity (PSI)- 3,308,000

100lbs/SF

Swietenia macrophylla and S. humilis are referred to as Mahogany, a tropical evergreen or deciduous tree that can attain heights of 150 feet. It is a dark-colored wood largely used for household furniture, the product of a large tree indigenous to Central America and the West Indies. Mahogany is a member of the Meliaceae, which includes other trees with notable wood for cabinet making. Swietenia macrophylla is world renowned for its beautifully grained, hard, red-brown wood. It has been harvested since 1500 A.D. for its wood, with large branches being in higher demand than the trunk. This is due to the closeness of the grain in the branch's wood. Mahogany is used for furniture, fixtures, musical instruments, millwork, cars, ships, boats, caskets, airplanes, foundry patterns, veneer, and plywood.

The history of the term Mahogany raises a taxonomic controversy. When the Yoruba tribe was brought from Nigeria to Jamaica as slaves, they believed a tree in Jamaica was just like one back home. The American mahogany, S. mahogani, looked identical to the African Mahogany, Khaya sengalensis. For this reason the Yorubas



referred to American Mahogany as they did African Mahogany, M'Oganwo. Over time the term was changed to M'Ogani by the Yorubas. Americans spelled it how they heard it, and thus M'Ogami became Mahogany. The controversy is that the Yorubas believed African and American Mahogany to be the same tree, but French botanist Adrien de Jussieu (1830) insisted that they were from two different genera. He based this on his African Mahogany specimens having four parted flowers instead of the five parts displayed by American Mahogany.

The first exports were originally received from Jamaica; 521,300 ft. were exported from that island in 1753. It is known botanically as Swietenia Mahogani, and is a member of the order Meliaceae. It bears compound leaves, resembling those of the ash, and clusters of small flowers, with five sepals and petals and ten stamens which are united into a tube. The fruit is a pear-shaped woody capsule, and contains many winged seeds. The dark-colored bark has been considered a febrifuge, and the seeds were used by the ancient Aztecs with oil for a cosmetic, but the most valuable product is the timber, first noticed by the carpenter on board Sir Walter Raleighs ship in 1595 for its great beauty, hardness and durability. Dr Gibbons brought it into notice as well adapted for furniture in the early part of the 18th century, and its use as a cabinet wood was first practically established by a cabinet-maker named



Wollaston, who was employed by Gibbons to work up some mahogany brought to England by his brother. It was introduced into India in 1795, and is now cultivated in Bengal and as far north as Saharunpur.

In March of 1960, a study of American Mahogany was carried out in Mexico. It resulted in enough fruits and flowers with four parts to disprove the myth that American Mahogany is only five parted. This being the only diagnostic difference between African Mahogany, Khaya and American Mahogany, Sweitenia , the classification of Khaya needs to be changed back to Swientenia sengalensis (Lamb, 1966). The Yoruban insistence on both Mahoganies being the same tree during the 1600's in Jamaica prompted the study in 1960 which verified their belief.

The timber of species of Cedrela and Melia, other members of the order Meliaceae, are used as Mahogany, and the product of the West African Khaya senegalensis is known as African

mahogany. There is some confusion between the product of these various trees. Herbert Stone (The Timbers of Commerce, I904) says: "The various species of mahogany and cedar are so confusing that it is difficult to make precise statements as to their structure or origin. I know of no convincing proof that any of the American kinds met with on the English market are the wood of Swietenia Mahogani, nor that those shipped from Africa are the wood of Khaya senegalensis. These two genera are very nearly allied to Cedrela and Melia, and it is difficult to separate any of the four from the rest by the characters of the wood. After giving the most careful attention to every detail, I lean to the view that most if not all of the mahoganies commonly met with are Cedrelas."

Current availability of Mahogany at Bear Creek Lumber Planks in 4/4, 8/4,12/4 and 16/4 inch Random Width/Random Length (units such as seen on right subject to prior sale) in very limited stock of both varieties.



Western Hemlock

Western hemlock (Tsuga heterophylla) is also known as West Coast hemlock, Pacific hemlock, British Columbia hemlock, hemlock—spruce, and western hemlock—fir. It grows along the Pacific coast of Oregon and Washington and in the northern Rocky Mountains north to Canada and Alaska. Western hemlock is moderately light in weight and moderate in strength. It is also moderate in hardness, stiffness, and shock resistance. Shrinkage of western hemlock is moderately high, about the same as that of Douglas-fir (Pseudotsuga menziesii). Green hemlock lumber contains considerably more water than does Douglas-fir, and requires longer kilndrying time. Western hemlock is used principally for pulpwood, lumber, and plywood. The lumber is used primarily for building material, such as sheathing, siding, subflooring, joists, studding, planking, and rafters, as well as in the manufacture, of ladders.

Appearance is almost identical to amabilis fir. It has a fine straight grain with little difference between heartwood and sapwood, which is uniform in color, ranging from creamy white to light gold.



Spruce (Sitka and Engelmann)

Sitka Sitka spruce (Picea sitchensis) is a large tree that grows along the northwestern coast of North America from California to Alaska. It is also known as yellow, tideland, western, silver, and west coast spruce. Much Sitka spruce timber is grown in Alaska, but most logs are sawn into cants for export to Pacific Rim countries. Material for U.S. consumption is produced primarily in Washington and Oregon. The heartwood of Sitka spruce is a light pinkish brown. The sapwood is creamy white and shades gradually into the heartwood; the sapwood may be 7 to 15 cm (3 to 6 in.) wide or even wider in young trees. The wood has a comparatively fine, uniform texture, generally straight grain, and no distinct taste or odor. It is moderately lightweight, moderately low in bending and compressive strength, moderately stiff, moderately soft, and moderately low in resistance to shock. It has moderately low shrinkage. On the basis of weight, Sitka spruce rates high in strength properties and can be obtained in long, clear, straight-grained pieces. Sitka spruce is used principally for lumber, pulpwood, and cooperage. Other important uses are furniture, planingmill products, sashes, doors, blinds, millwork, and boats. Sitka spruce has been by far the most important wood for aircraft construction.



Hemlock Products

Available from Bear Creek Lumber

Tongue and Groove V Groove Pattern Custom Patterns Flush Pattern Timbers
Appearance
Structural
Resawn or Smooth Face

Board Sizes Available

1 inch and 2 inch up to 12 inches in width Larger sizes available by special order Clear, Vertical Grain Clear



Spruce Products

Available from Bear Creek Lumber

Tongue and Groove V Groove Pattern

Custom Patterns Flush Pattern

TimbersAppearance

Structural Resawn or Smooth Face

Resawii of Sillootii I

Board Sizes Available

5/8 inch to 3 inches, any width, length Clear, Vertical Grain Clear

Timber/Decking Sizes

3-inch to 12 inch, any width, length Clear, Vertical Grain Clear

California Redwood

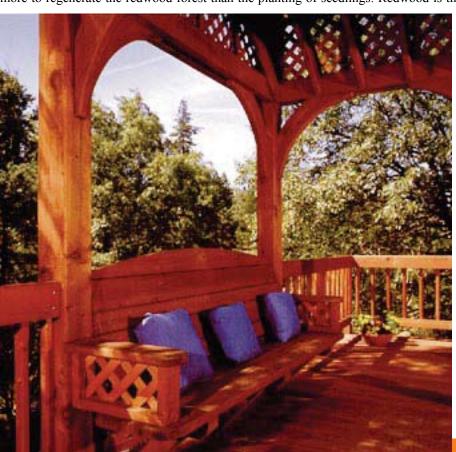
The Redwood trees of California have been harvested since the time of the first Spanish settlers, 400 years ago. It is a highly prized lumber product renowned for several unique features. One of the most dimensionally stable of the western softwoods, redwood is not prone to checking and splitting, and therefore is less damaged by weathering. It is decay-resistant in all heartwood grades, so heartwood can be used near the ground. Redwood is more insect repellent in all-heartwood grades than other woods, yet it is lightweight.

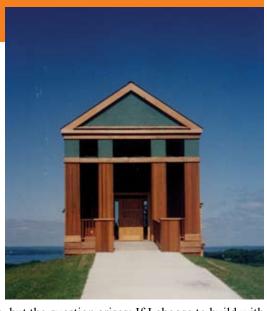
Despite being one of the lightest of softwoods Redwood provides adequate strength for a wide variety of uses. It is superior in insulation values. The minute cell structure with thousands of air-filled cavities accounts for Redwood's thermal insulation values. Redwood is easily machined, easy to saw and nail and has superior gluing properties as well as superior finish-holding ability. It is known for its easy maintenance and beautiful color: a deep reddish brown that darkens with age. Redwood is most often used for applications where high moisture levels are a problem for other types of wood. It is also specified for its exquisite coloring.



Redwood is a popular building material due to its beauty and longlasting performance, but the question arises: If I choose to build with redwood, what is the effect on the environment? Hundreds of thousands of acres of redwood parks and groves have been preserved forever by state and federal agencies. The commercial redwood forests tend to be different in nature from the parklands. These forests are seldom 100% redwood; typically, they are a mixture which can include redwood, Douglas fir, white fir, hemlock and hardwoods. Today's commercial forests are predominantly young growth. These are privately-owned lands where redwood mills and tree farmers have planted and grown redwood trees specifically to be harvested. Less that 8% of today's redwood lumber production comes from virgin old growth forests. The redwood industry is relying on young growth timber for the bulk of its production. Land that can sustain and nurture redwood trees is extremely valuable, and the private owners take good care of this resource.

Five major companies in the redwood region operate tree nurseries with a total output of more than 13 million seedlings annually—4.5 million of them redwoods—to support their reforestation programs, and the productivity of all industrial redwood land is fully maintained after harvest. State law requires it, and good business practice dictates it. The species' own tenacity probably does even more to regenerate the redwood forest than the planting of seedlings. Redwood is the only softwood in the country that sprouts from





stumps. These new young trees grow quickly, thriving on the existing, mature root system. In some areas, early pioneers were actually unable to clear redwood forests to make pasture land. The trees kept returning in spite of all their efforts.

Today, California's Forest Practice Act, the strictest in the nation, requires that every harvest operation must be reviewed in advance and approved by the California Department of Forestry and Fire Protection. If an adequate number of trees are not left on the harvest site to make up the new forest, state law requires the landowner to replant to assure that a new stand is established. The law further requires the State Board of Forestry "...to provide for protection of soil, air, fish and wildlife, and water resources."

Future of the Forest

California's redwood forest may be seen in two parts today. One part includes the more than 350,000 acres preserved in public parks and reserves, slowly reshaped by nature decade after decade. The other part is the growing, productive forest—a habitat for a wide variety of wildlife and a resource for man, managed to serve a number of needs and values.

Heartwood

Clear All Heart

Finest architectural heartwood grade, normally Certified Kiln Dried (also available unseasoned), well manufactured, free of defects one face (reverse face may have slight imperfections). Available surfaced or saw-textured.

Uses Siding, paneling, trim, cabinetry, molding, fascia, soffits, millwork. Also fine decks, hot tubs, garden structures, industrial storage and processing tanks.



Quality heartwood grade containing limited knots and other characteristics not permitted in Clear All Heart and Heart Clear. Available kiln dried or unseasoned. This grade can be surfaced or saw-textured.

Uses Siding, paneling, trim, fascia, molding and other architectural uses. Quality decking, garden shelters and other above-ground outdoor applications.

Sapwood

Clear

Same general quality as Clear All Heart except contains sapwood in varying amounts. Some imperfections not permitted in Clear All Heart. Normally Certified Kiln Dried (also available unseasoned). Available surfaced or saw-textured.

Uses Siding, paneling, trim, cabinetry, molding, fascia, soffits. Also quality decking, garden shelters and other above-ground applications.

B Grade

Quality grade containing sapwood, limited knots and other characteristics not permitted in Clear. Certified Kiln Dried; also unseasoned. Available surfaced or saw-textured.

Uses Siding, paneling, trim, fascia, molding and other architectural uses; quality decking, garden shelters and other above-ground outdoor applications.

Courtesy of California Redwood Association



There are over thirty different grades of redwood lumber including general purpose grades and specialized grades for a single use. Redwood is graded by appearance and durability, with criteria defined by the Redwood Inspection Service.

Excellence of appearance is a major factor in the grading of redwood. Clearness (freedom from knots) is the determinant for the highest grades. Other grades are categorized by number, size and nature of knots and the presence of other characteristics such as stains, crook or manufacturing defects that may occur.

For durability and resistance against insects and decay—redwood is graded by its color. Reddish-brown heartwood from the inner portion of the tree contains extractives that render it resistant to decay. The cream-colored sapwood that develops in the outer growth layer of the tree does not possess the heartwood's resistance to decay and insects. As a rule of thumb, all heartwood grades of redwood will have the word "Heart" in the grade name.

Architectural grades include Clear All Heart, Clear, Heart Clear, Heart B and B Grade, are normally sold kiln dried (preshrunk and stress free), and are used for the finest exterior and interior architectural uses. No other wood equals these finish grades in beauty and dimensional stability. They are the choice grades for siding, paneling, trim and cabinetry where attractiveness and tight joinery are desired.

Recycled Redwood

Bear Creek Lumber offers recycled redwood including the 3 x 6 pictured at right salvaged from from former water tanks. There is a limited amount of this material but will be available as long as it lasts.



Redwood Products*

Available from Bear Creek Lumber



Siding Decking Timbers

Tongue and Groove 2 inch Appearance Grade

Board and Batt 3 inch Rough cut Bevel Siding 5/4 inch S4S

Eased Edge

*limited quantities in stock

Rabbetted Bevel

www.bearcreeklumber.com (800) 597-7191 fax (509) 997-2040

Ponderosa Pine

Ponderosa Pine is one of America's abundant tree species, covering approximately 27 million acres of land. Stands can be found from Canada to Mexico and from the Pacific Coast eastward to the Black Hills of South Dakota. Its growth range covers an area encompassing more than 35 percent of the total acreage of the U.S.

Oregon, Washington and California account for a major share of the annual harvest. Arizona and South Dakota are also important producing areas with lesser amounts coming from Idaho, Wyoming, Montana, Utah and New Me

Ponderosa Pine trees average 100' to 160' in height, with some exceeding 180'. The trees range from 2-4' in diameter, with the rate of growth depending upon altitude, soil, temperature and rainfall. Mature Ponderosa Pines can be easily identified by their distinctive orange-brown bark which is arranged in large plates. The dark yellow-green needles are 5-10" long and grow in clusters of three. The cones, similar in color to the bark, are 3-6" long and 2-4" in diameter. Seeds are 5/16-3/8" long with a 3/4-1" wing.

In pure, or nearly pure, stands of Ponderosa Pine there is a standing inventory of approximately 188 billion board feet of lumber; in mixed stands there are additional billions of board feet in unmeasured inventory. Most Ponderosa trees grow, mature and survive for about 125 years before they are lost to natural causes such as rot, insect damage, fires or wind throw. Occasionally, a lone specimen will survive for nearly 200 years. Their typical site is on semi-arid plateaus and slopes, often surrounded by juniper and sage.

Ponderosa Pine forests are usually selectively harvested rather than clear cut. This method of logging removes only the overmature trees, and leaves the other trees to re-seed and mature. Selective harvesting often makes it difficult to identify a recently logged stand.

The Western pines are distinct from the Southern Yellow pines which are denser and pitchier, with widely different characteristics and uses.



Blue Stain pine tongue and groove



Pine Products

Available from Bear Creek Lumber

Tongue and Groove	Timbers	Logs
V Groove Pattern	Appearance	Green/air
Edge & Center Bead	Structural	8-18 inch
Flooring Pattern Hand	hewn peele	d or
Custom Patterns	Rough cut	unpeeled
Resawn or Smooth Fac	e S4S	-

Board Sizes Available

1 x 4 through 1 x 12 up to 16 ft lengths 6/4 moulding, #2 and #3 common, D& Btr, C& Btr Clear

Timber/Decking Sizes

3 inch and larger, any width Up to 16 ft, Longer Available Clear, #1 or #2 grades

Production

The annual production of Ponderosa Pine ranks third in volume after Douglas Fir and Hem-Fir (the two species preferred for structural framing), but second in total value. Oregon is the nation's leading supplier of Ponderosa Pine, producing approximately 1.3 billion board feet annually. California is second with slightly more than one billion board feet.

U.S. softwood lumber exports are led by Douglas Fir and Hem-Fir, with Ponderosa Pine in third place. Canada is the largest importer of Ponderosa Pine, with Mexico and japan as distant runners-up. The applications for Ponderosa Pine in Canada and abroad are very similar to those in the United States.

Seasoning

All Ponderosa Pine is dried before surfacing to assure uniformity of the finished size. It is seasoned in temperature and humidity-controlled dry kilns or stacked and air-dried until the moisture content reaches the desired level--from 12 to 19 percent.

Blue Stain

As with other pines, Ponderosa can be subject to blue stain if a felled tree or green lumber becomes too warm before it is dried. Blue stain does not affect strength and is admissible in some of the lower grades. It can be hidden with paint or enhanced with clear finishes depending on user preference.

Ponderosa Pine



Ponderosa Pine Grading & Quality Control

- **Grading** Lumber Grading Rules assure users of Ponderosa Pine and other softwoods consistent standards of quality, regardless of which mill produces the lumber
- Appearance Grades Ponderosa Pine Boards are graded primarily on appearance for a multitude of applications. There are three grades of Selects and five grades of Commons (WWPA Rules) and there are also Alternate Board grades available (West Coast Lumber Inspection Bureau Rules).





Characteristics & Best Uses

Ponderosa Pine has a minimal amount of reddish-brown heartwood and an exceptionally wide sapwood which is honey-toned or straw-like in color. It has a straight, uniform grain which machines to a clear, smooth surface. When freshly sawn or surfaced, its pleasant smell is reminiscent of the forests where it grows. Ponderosa Pine is often specified when appearance rather than strength is of primary importance.

• Dimensional Stability

All woods shrink and swell to some degree as their moisture content fluctuates with atmospheric conditions. However, Ponderosa is relatively unaffected by changes in humidity after drying, making it valuable for work that requires close-fitting joints. It has a uniform cell structure and shrinks only a moderate amount, in comparison to other softwood species. It seasons beautifully with minimal splitting, cupping, or warping.

Paneling

Pine paneling is often associated with Early American decor in kitchens, family rooms, dens and bedrooms. However, new finishing techniques and patterns make it appropriate for contemporary or traditional settings. Many patterns are reversible, offering a choice of pattern or surface finish in a single panel. However, it's important to remember that paneling boards are inspected and graded on the patterned or face side; the back or reverse side may have characteristics which would make it a lower grade, but desirable for a specific design effect.

Bear Creek Lumber carries a limited selection of paneling patterns in stock, but can special order any of the standard patterns. Bear Creek can arrange to have a unique pattern custom milled.

Finishing

Ponderosa Pine takes most finishes beautifully, including paint, stain, lacquer and varnish. Unlike some of the heavier woods, paints and stains do not raise the grain; however, knots should be sealed before painting to prevent them from bleeding through the finished surface.

