CYPRESS INTERNATIONAL, LLC

Manufacturers & Distributors of High Quality Yellow Cedar

YELLOW CEDAR LUMBER PRODUCTS

OUR COMMITMENT TO SUSTAINABILITY

To ensure that high quality Yellow Cedar (aka Alaska Yellow Cedar and Cypress) timber stands and products remain available for generations to come,

we support responsible timber harvesting methods that result in sustainable yielding forests in the Pacific Northwest.

General Qualities and Characteristics of Yellow Cedar

- **Decay**: It is naturally decay resistant and has a high durability. Used for centuries for boat-building, oars and paddles.

- **Grain**: Yellow Cedar has a fine grain, heavier and harder than Western Red Cedar. It has indistinct growth patterns with faint rings. It is not uncommon to see 50-60 annual rings per inch.

- **Color**: The color varies from shades of light to dark honey. Yellow cedar will fade to gray if left out in the elements.

- **Strength**: Structural grades and used in bridges and specialty construction projects.

- **Machining Qualities**: It is prized for its easy workability and that it does not tend to splinter.

- **Glue Laminating**: Glues more easily with resin glues than using non-resin glues. Can be used satisfactorily for laminated beams under well controlled conditions.

- **Acid Resistance**: Yellow Cedar is suitable for acid tanks and chemical containers. It will last about twice as long as Douglas Fir.

COMMON PRODUCT USES

- Boat Construction, oars, pilings, marine buoys, water tanks, pipes, soaking tubs and saunas
- Framing and Construction
- Structural and Appearance Decking

- Outdoor uses: Such as porch & patio, garden furniture, green houses, railings and raised garden beds
- Paneling and soffits
- Replaces treated railroad ties when used near waterways

- Stadium seating & park benches
- Millwork and Joinery: Including cabinet work, door frames, window sashes, casings, moldings and flooring

PROPERTIES

Physical Properties:

Density		29 lbs / cubic foot
Specific Gravity (12% MC)	Standard	0.42
Hardness (N)	Side	2510
	End	3960
MOE (Mps)	Green	9240
	Air Dry	11000
MOR (Mpa)	Green	45.8
	Air Dry	79.7
COMPRESSION PARALLEL (Mpa)	Air Dry	45.9
COMPRESSION PERPENDICULAR (Mpa)	Air Dry	4.74
SHEAR (Mpa)	Air Dry	9.21
CLEAVAGE (N/mm Width)	Air Dry	45.4
SHRINKAGE	Radial (OD)	3.7%
OD = oven dry	Tangential (OD)	6.0%
	Volumetric (OD)	9.4%
air = air dry 12%	Volumetric (Air)	5.0%
	Tang / Rad ratio	1.6

Visual Properties:

COLOR	
Heartwood	Pale yellow to dark yellow.
Sapwood	Pale yellow in fresh wood to greyish-yellow in older wood.
Heartwood / Sapwood Contrast	The sapwood is narrow and there is little contrast between the heartwood and sapwood.
Latewood / Earlywood Contrast	The annual growth rings are very narrow and there is a gradual transition from earlywood to latewood.
Grain	
The wood is generally straight-grained and has a fine, even texture.	
Figure	
Plainsawn lumber or rotary-cut veneer: Faint growth ring. Quartersawn lumber or quarter-sliced veneer: None.	
Knots	
Tight knots.	
Other	
Wood of yellow-cedar is aromatic, especially when freshly cut. Free from pitch and resin. Wood tends to develop brown discoloration when it is in contact with iron or iron compounds under damp conditions.	

Tables: data compiled by Forintek Canada Corp.

Working Properties:

Yellow-cedar is considerably harder when dry than most commercial softwoods so it is strong. It is known for its exceptional working properties and can easily by machined and finished. It turns, planes and shapes well and can be sanded to a smooth finish. The wood glues satisfactorily, has moderate nail and screw holding ability, and takes a good finish.

Process	Performance	Comments
Machining		
Planing	Excellent planing quality	Recommended planer settings: 20 degree hook and 8, 12, 16, or 20 kmpi (knife marks per inch) No major defects. Slight dulling effect on cutting tools
Turning	Medium to high surface quality	Good surface quality when turned using a rotary knife lathe
Sawing	Easy to work with tools	Known for its exceptionally good working qualities
Boring	Moderate	Much better boring quality with brad point bits than with single twist bits
Mortising	Good to moderate	Excellent mortising quality is found with a hollow chisel mortise
Shaping	Good shaping quality	Recommended: The use of a counter piece for end-grain shaping
Veneering	N/A	
Sanding	Excellent	
Fastening		
Screwing	Moderate	Average screw retention: 476 lb.
Lateral Nail Holding	N/A	
Nail Retention	Good	Equivalent to Douglas Fir
Gluing	Satisfactory	Bonds satisfactorily with good-quality adhesives under a moderately wide range of bonding conditions
Finishing		
Staining	Moderately easy	Natural finish looks best. As stain gets darker, uneven color is pronounced. A wash coat would even out color differences
Painting	Moderate paint holding ability	Older wood should be wiped with paint thinner to remove surface 'greasiness'
Lacquering	Good to moderate	Reasonably smooth results with only two topcoats
Waxing	Good	Good results are obtained when using light- to medium-colored waxes (e.g. Mellow Pine, Chestnut)
Drying		
Ease of Drying	Moderately easy	Dries without difficulty, but there is a tendency for surface checking to occur in thick stock with some end splitting if the drying is forced
Durability		
Natural Decay Resistance	Durable	Appropriate for outdoor usage
Treatability	Impermeable	Can be improved by incising

Strength properties:

Strength properties at 12% moisture content of Longleaf Pine, Shortleaf Pine, Douglas Fir, Yellow-cedar and Western Red Cedar:

	Compression			Tension	Sheer	Static Bending		
	Parallel to grain		Rt. Angle	Rt. Angle	Parallel	FSPL	MR	E
	FSPL	MCS	FSPL	MTS	PSI	PSI	PSI	10_6 PSI
Longleaf Pine	6150	8220	950	470	1500	9300	14300	1.93
Shortleaf Pine	5090	7270	750	470	1390	7700	13100	1.76
Douglas Fir	5850	7430	870	340	1160	7800	12200	1.95
Western Red Cedar	4360	5020	610	220	860	5300	8000	1.04
Yellow-Cedar	5210	6310	770	360	1130	7100	11100	1.42

When Longleaf Pine equals 100%

Longleaf Pine	100%	100%	100%	100%	100%	100%	100%	100%
Shortleaf Pine	83%	88%	79%	100%	93%	83%	92%	91%
Douglas Fir	95%	90%	92%	72%	77%	84%	85%	101%
Western Red Cedar	71%	61%	64%	47%	57%	57%	56%	54%
Yellow-Cedar	85%	77%	81%	77%	75%	76%	78%	74%

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When Douglas Fir equals 100%

Douglas Fir	100%	100%	100%	100%	100%	100%	100%	100%
Western Red Cedar	75%	68%	70%	65%	74%	68%	66%	53%
Yellow Cedar	89%	85%	89%	106%	97%	91%	91%	73%

Where:

FSPL - Fibre Stress at proportional limits
MCS - Maximum Crushing Strength
MTS - Maximum tensile strength
MSS - Maximum Sheer Strength
E - Modulus of elasticity

CORPORATE VISION

Our shared company vision is to become a dynamic manufacturer and distributor of Yellow Cedar, through constructive partnerships, continuous product improvement and support of sustainable forest practices.

At the heart of our success are the people - employees, customers and vendors who are rooted in past and present company endeavors, that make way for a vibrant future.

WHERE OUR PRODUCTS GO:

Pedestrian Bridge in Fort McMurray, Canada

Water Reservoir cover in Northern California

Yellow Cedar Water Transmission Pipe for a Hydroelectric Plant in Tasmania

University of Berlin –Yellow Cedar Siding

Cypress International, LLC

OUR MISSION

- To provide the global marketplace with the highest quality Yellow Cedar products available. Manufactured and distributed by us, for our customers who desire premium lumber at a fair market value, to that end, promote and encourage forest health and sustainability for future generations.

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Adkison Footbridge at the Mt. Pisgah arboretum - Lane County OR

Yellow Cedar Hand Rail

For more information regarding our products and services please visit our website at www.westwindfp.com