



Chamaecyparis nootkatensis

Family: Cupressaceae

Alaska Cedar

The genus *Chamaecyparis* is composed of six species native to Japan, Taiwan, and both coasts of North America. The word *chamaecyparis* is derived from the Greek *chamai* (dwarf) and *kuparissos* (cypress). The name *nootkatensis* relates to Nootka Sound, on Vancouver Island, B.C., where it was discovered. The other two North American species are Atlantic white cedar (*Chamaecyparis thyoides*) and Port Orford cedar (*Chamaecyparis lawsoniana*).

Chamaecyparis nootkatensis-Alaska cedar, Alaska cypress, Alaska ground cypress, Alaska yellow cedar, Alaska zeder, amerikansk cypress, cedro giallo, cipres americano, cipres nootka, cipresso americano, cipresso americano, cipresso dell'Alasca, cipresso nootka, cipresso nootka, cypres de Nootka faux, cypres du nutka, cypres jaune, faux cypres de nootka, faux cypres de nootka, nootka cypres, nootka chamaecyparis, nootka cypress, Nootka cypress, nootka cypress, nootka false cypress, Nootka Sound cypress, nootka-false cypress, nutka cypres, nutka-cypress, nutka-zypresse, Pacific Coast yellow cedar, Sitka cypress, Sitka yellow-cedar cypress, sitka-zypresse, yellow cedar, yellow cypress.

Distribution

The coastal forests from southwestern Alaska through British Columbia to northern California.

The Tree

Alaska cedar trees grow to heights of 120 feet with a six foot diameter (9). Trees from Alaska are frequently older than 300 years, Dominant trees can be from 300 to over 700 years old, with a record of over 1,040 years(5)

The Wood

General

The sapwood is narrow and slightly lighter than the bright, clear yellow heartwood. It has a slight odor best described as "raw potatoes". The wood is moderately heavy, soft, fine textured, straight grained, easily worked and durable. It is rated as moderate in strength, stiffness, hardness and shock resistance.

Mechanical Properties (2-inch standard)

	Specific Gravity	MOE Gpa	MOR MPa	Compression		WML ^a KJ/m3	Hardness N	Shear MPa
				Parallel MPa	Perpendicular MPa			
Green	0.42	5.17	32.4	16.5	1.65	40.7	1290	4.76
Dry	0.44	6.41	46.9	32.4	2.83	28.3	1560	5.52

^aWML = Work to maximum load.
Reference (12).

Drying and Shrinkage

Type of shrinkage	Percentage of shrinkage (green to final moisture content)		
	0% MC	6% MC	20% MC
Tangential	6.0	4.8	2.0
Radial	2.8	2.2	0.9
Volumetric	9.2	7.4	3.1

References: 0% MC (12),
6% and 20% MC (11).

Kiln Drying Schedules^a

Conventional temperature/moisture content-controlled schedules^a

Condition	4/4, 5/4 stock	6/4 stock	8/4 stock	10/4 stock	12/4 stock	British schedule 4/4 stock
Standard	T12-A3	NA	T11- A2	NA	NA	J

^aReference (2,10).

Conventional temperature/time-controlled schedules^a

Condition	Lower grades			Upper grades			
	4/4, 5/4 stock	6/4 stock	8/4 stock	4/4, 5/4 stock	6/4 stock	8/4 stock	12/4, 16/4 stock
Standard	287	290	290	287	290	290	NA

^aReferences (2,10).

Working Properties: The timber of Alaska cedar is readily worked by both hand and machine tools. Their is a slight dulling effect on cutting edges, but it usually finishes very well. In lumber with a wavy grain, there is a tendency for the grain to pick up in planing and molding. It nails and glues well and holds paint, stains and varnishes satisfactorily (6).

Durability: Alaska cedar is rated as resistant to very resistant to heartwood decay (12).

Preservation: Alaska cedar is resistant to preservative treatment (6).

Uses: Used locally for interior trim, furniture, small boat hulls and canoe paddles (9). Used commercially for battery separators, bedding for heavy machinery, boat building, bridge and dock decking, carving, cooling towers, framing, furniture, heavy flooring, marine piling, molding, musical instruments, paneling, toys, patterns, sash doors, stadium seats, utility poles, water and chemical tanks, and window boxes.

Toxicity: No information at this time.

Additional Reading and References Cited (in parentheses)

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11. Summitt, R. and Sliker, A. CRC handbook of materials science. Vol. 4. Boca Raton, FL: CRC Press, Inc.; 1980.
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