# technology transfer fact sheet



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# *Chamaecyparisthyoides* Family: Cupressaceae Atlantic White 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 term *thyoides* means "like *Thuja*", a related genus containing northern white cedar. The other two North American species are Port Orford cedar (*Chamaecyparis lawsoniana*) and Alaska cedar (*Chamaecyparis nootkatensis*).

**Other Common Names:** Amerikansk vit-ceder, Atlantic white cedar, cedar, cedre blanc d'Amerique, cedro bianco, cedro bianco americano, cedro blanco americano, cipres blanco, cipresso bianco, coast white cedar, juniper, kogelcypres, post cedar, retinospora, southern white cedar, swamp cedar, swamp-cedar, swano white cedar, vit-cypress, white cedar, white chamaecyparis, white cypress, witte Amerikaanse ceder, zeder-zypresse.

# Distribution

Atlantic white cedar is native to the Coastal Plain of the eastern US from central Maine south to northern Florida and west to southern Mississippi.

# The Tree

Atlantic white cedar reaches heights of 60 feet, with diameters of 1 foot. Under optimal growth conditions, this tree can reach heights of 120 feet, with diameters of 5 feet.

# The Wood

#### General

The sapwood of Atlantic white cedar is narrow and white, while the heartwood is light brown with a reddish or pinkish tinge. The wood has a characteristic aromatic odor when freshly cut and has a faint bitter taste. It is light weight and has a fine texture and a straight grain. It is moderately soft, low in shock resistance and is weak in bending and endwise compression. It is very resistant to decay, works easily with tools, shrinks little, finishes smoothly, holds paint well and splits easily.

				Compression					
	Specific gravity	MOE x10 <sup>6</sup> lbf/in <sup>2</sup>	MOR lbf/in <sup>2</sup>	Parallel lbf/in <sup>2</sup>	Perpendicular lbf/in <sup>2</sup>	WML <sup>a</sup> in-lbf/in <sup>3</sup>	Hardness lbf	Shear lbf/in <sup>2</sup>	
Green	0.31	0.75	4700	2390	240	5.9	290	690	
Dry	0.32	0.93	6800	4700	410	4.1	350	800	
<sup>a</sup> WML = Work to maximum load. Reference (11).									

# **Mechanical Properties (2-inch standard)**

#### **Drying and Shrinkage**

	Percentage of shrinkage (green to final moisture content)					
Type of shrinkage	0% MC	6% MC	20% MC			
Tangential	5.4	4.3	1.8			
Radial	2.9	2.3	1.0			
Volumetric	8.8	7.0	2.9			
References: 0% MC (1) 6% and 20% MC (9).	1),					

# Kiln Drying Schedules<sup>a</sup>

Conventional temperature/moisture content-controlled schedules<sup>a</sup>

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-A4	NA	T11- A3	NA	NA	NA

<sup>a</sup>Reference (1,8).

Working Properties: It works easily with tools, finishes smoothly, holds paint well and splits easily.

Durability: Atlantic white cedar is rated as resistant to very resistant to heartwood decay (11).

**Preservation:** No information available at this time.

**Uses:** Historical: poles, shingles, wooden ware (tubs, pails & churns) and lumber (siding molding, water tanks, boat construction, boxes, crates and fencing).

Currently: cooperage, wooden household furniture, boat building, fencing and industrial millwork.

**Toxicity:** No information available at this time.

#### Additional Reading and References Cited (in parentheses)

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