technology transfer fact sheet



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Juniperusvirginiana Family: Cupressaceae Eastern Redcedar

Eastern redcedar is one species of about 50 in the genus *Juniperus*, native to North America [14], Central America [11], West Indies [5], Bermuda [1] and the Old World [25]. The word *juniperus* is the classical Latin name, while the word *virginiana* means "of Virginia".

Other Common Names: Amerikaanse magnolia, amerikansk rod-ceder, bleistift-zeder, blyerts-en, cedar, cederhoutboom, cedre, cedre de Virginie, cedre rouge, cedre rouge americain, cedro per matite, cedro rosso americano, cedro vermelho, coast juniper, coast red cedar, eastern red juniper, **eastern red cedar**, enebro americano, enebro criollo, enebro rojo americano, enebro virginiano, genevrier rouge, genevrier rouge de l'Amerique, ginepri d'america, ginepro della Virginia, Ienuparul virginiana, juniper, pencil cedar, pencil juniper, red juniper, red cedar, rod-en, sabina de costa, sand cedar, savin, savin red cedar, southern juniper, southern red cedar, southern red juniper, Tennessee red cedar, Virginiaanse jeneverbes, Virginian cedar, Virginian pencil, cedar, Virginische zeder, Virginische potlood-ceder, virginische sevenboom, virginischer wacholder.

Distribution

Eastern redcedar is native to the eastern half of the United States, from Maine west to New York, Quebec, Ontario, Michigan, Minnesota, South Dakota and North Dakota south to Nebraska and Texas east through Florida and Georgia.

The Tree

Eastern redcedar has the widest distribution of any other conifer in the eastern United States. It can reach heights of 120 feet and 4 feet in diameter. It is a "pioneer" species, being one of the first trees to invade disturbed areas. It grows very slowly, trees that are 20 years old are only about 20 feet tall with a diameter of 3 inches. Older trees have wide, fluted, buttressed bases.

The Wood

General

Eastern redcedar has a thin, white sapwood, while the heartwood is red to deep reddish-brown. The sapwood may be in stripes, alternating with stripes of heartwood. The wood is moderately low in strength and stiffness, but it is high in shock resistance. It shrinks little during drying and is good dimensional stability. It is easy to work and has moderate hardness. It splits easily, and has good nailing and gluing properties.

				Compression					
	Specific gravity	MOE x10 ⁶ lbf/in ²	MOR lbf/in ²	Parallel lbf/in ²	Perpendicular lbf/in ²	WML ^a in-lbf/in ³	Hardness lbf	Shear lbf/in ²	
Green	0.44	0.65	7000	3570	700	15.0	650	1010	
Dry	0.47	0.88	8800	6020	920	8.3	900	NA	
^a WML = Work to maximum load. Reference (13).									

Mechanical Properties (2-inch standard)

Drying and Shrinkage

	Pero (green to	Percentage of shrinkage (green to final moisture content)				
Type of shrinkage	0% MC	6% MC	20% MC			
Tangential	4.7	3.8	1.6			
Radial	3.1	2.5	1.0			
Volumetric	7.8	6.2	2.6			
References: 0% MC (13 6% and 20% MC (12).	i),					

Kiln Drying Schedules^a

Conventional temperature/moisture content-controlled schedules^a

Condition	4/4, 5/4	6/4	8/4	10/4	12/4	British schedule
	stock	stock	stock	stock	stock	4/4 stock
Standard	T5-A4	NA	T5-A3	NA	NA	NA

^aReference (3, 10).

Working Properties: Eastern redcedar is easy to work with both hand and machine tools and has a straight grain. It has tight knots, which can add to the beauty of the wood. It splits easily, hold nails well and has excellent gluing properties.

Durability: The heartwood is highly resistant to decay and attack by insects, including termites. The scent of the wood is said to be a natural insect repellent, although this has not been shown to be true scientifically.

Preservation: No information available at this time.

Uses: Fenceposts, chests, wardrobes, closet linings, pencils, carvings, pet bedding, furniture, flooring, scientific instruments, small boats and household items. Oil from the wood (cedrol) is used in the manufacture of perfumes and medicines. It is also used for Christmas trees.

Toxicity: May cause dermatitis and respiratory problems (4, 9 and 14).

Additional Reading and References Cited (in parentheses)

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