Chamaecyparis thyoides
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 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.

Mechanical Properties (2-inch standard)

<table>
<thead>
<tr>
<th></th>
<th>Specific gravity</th>
<th>MOE x10^6 lbf/in²</th>
<th>MOR lbf/in²</th>
<th>Parallel lbf/in²</th>
<th>Perpendicular lbf/in²</th>
<th>WML* in-lbf/in³</th>
<th>Hardness lbf</th>
<th>Shear lbf/in²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>0.31</td>
<td>0.75</td>
<td>4700</td>
<td>2390</td>
<td>240</td>
<td>5.9</td>
<td>290</td>
<td>690</td>
</tr>
<tr>
<td>Dry</td>
<td>0.32</td>
<td>0.93</td>
<td>6800</td>
<td>4700</td>
<td>410</td>
<td>4.1</td>
<td>350</td>
<td>800</td>
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</tbody>
</table>

*WML = Work to maximum load.
Reference (11).
Drying and Shrinkage

<table>
<thead>
<tr>
<th>Type of shrinkage</th>
<th>0% MC</th>
<th>6% MC</th>
<th>20% MC</th>
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<tbody>
<tr>
<td>Tangential</td>
<td>5.4</td>
<td>4.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Radial</td>
<td>2.9</td>
<td>2.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Volumetric</td>
<td>8.8</td>
<td>7.0</td>
<td>2.9</td>
</tr>
</tbody>
</table>

References: 0% MC (11), 6% and 20% MC (9).

Kiln Drying Schedules

Conventional temperature/moisture content-controlled schedules

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<tbody>
<tr>
<td>Standard</td>
<td>T12-A4</td>
<td>NA</td>
<td>T11-A3</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

aReference (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)