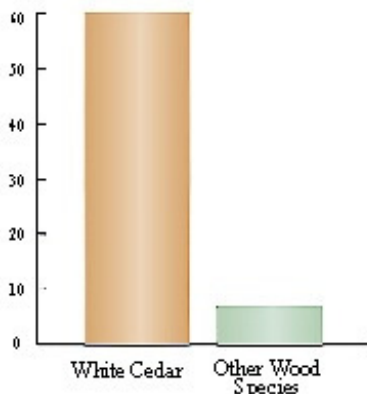


COMPARISON OF THE ATTRIBUTES OF WHITE CEDAR VS. PINE

White Cedar	White Pine, Yellow Pine, etc.
<p>Blessed with natural preservatives, that make it one of the most decay/rot resistant and insect tolerant woods available. Minimal cracking/checking. Cracks will not penetrate the heartwood.</p> <p style="text-align: center;"><i>Source - (1)</i></p>	<p>Not naturally resistant to rot or insects. Kiln drying typically used to kill existing insects in wood. Requires preservative treatments to prevent future rot and insect damage. However, these treatments lose their abilities once the logs crack, opening up unprotected areas. Large cracks are common, often penetrating the heartwood.</p> <p style="text-align: center;"><i>Source - (1)</i></p>
<p>According to a University of Maine study, initiated to determine the natural durability of various species of commonly used woods, untreated white cedar was found to possess a high natural durability, even under ground contact conditions, as attested by the existence of surveyor's corner posts and rail fences still serviceable after 50 to 60 years or more.</p> <p style="text-align: center;"><i>Source - (2)</i></p>	<p>The life expectancy of untreated wood species, (other than cedar) commonly used in log home construction, with ground contact, range from 3 to 7 years.</p> <p style="text-align: center;"><i>Source - (3)</i></p>
<p>Has less moisture when green (3500 lbs. per cord), making it easier to reach desired moisture content levels. Cedar can be naturally air-dried to a 14-16% moisture level in a fairly short time. Air drying allows the wood to acclimate itself to the new moisture level without harming its' molecular structure.</p> <p style="text-align: center;"><i>Source - (2)</i></p>	<p>Pine averages 4700 lbs. per cord immediately harvest. The natural character of the specks is to retain moisture and in turn, release it very slowly it is "forced out" unnaturally, risking possible cell rupture.</p> <p style="text-align: center;"><i>Source - (2)</i></p>
<p>White cedar has the highest "R" value of any of the wood species used in log home production. A rating of 1.41 "R"/inch of thickness.</p> <p style="text-align: center;"><i>Source - (4)</i></p>	<p>The "R" value of various Pine species used in log production averages 1.12 "R"/inch of thickness.</p> <p style="text-align: center;"><i>Source - (4)</i></p>
<p>According to the ASHRAE Handbook, the "R" Factor /Thermal Mass Factor of White cedar is 3.78.</p> <p style="text-align: center;"><i>Source - (5)</i></p>	<p>According to the ASHRAE Handbook, the "R" Factor/Thermal Mass Factor of Pine is 2.76.</p> <p style="text-align: center;"><i>Source - (5)</i></p>

Life Expectancy of Untreated Wood with
Ground Contact
(years)



Source References

1. Source:
www.fsu.edu/trees/pages/northernwhitecedar.html
2. Source:
UMO - Forest Products Laboratory and Forest Service, U.S. Dept. of Agriculture
3. Source:
Forest Service, U.S. Dept. of Agriculture
4. Source:
U.S. Dept. of Agriculture - Wood Handbook
5. Source:
ASHRAE Handbook
(American Society of Heating, Refrigerating and Air-Conditioning Engineers)