DIFFERENCE BETWEEN HEARTWOOD AND SAPWOOD

In over 300,000 tests which have been made at the Forest Products Laboratory, Madison, Wis., on the various species of wood grown in the United States, no effect upon the mechanical properties of wood due to its change from sapwood into heartwood has ever been noticed. Any difference in the strength of heartwood and sapwood can usually be explained by the growth and density of the wood.

In other than mechanical properties, there are differences between heartwood and sapwood which have an important bearing on their use for various purposes. The sapwood of most American species is considerably less resistant to decay than the heartwood, and where the wood is used without preservative treatment in situations which favor decay, the sapwood is likely to have a much shorter life. In these particular cases, therefore, strength requirements may have an indirect bearing on the choice between heartwood and sapwood, inasmuch as wood infected with decay is likely to have its strength properties, particularly that of shock resistance, greatly reduced.