

******THIS IS A NEW APPENDIX. – PLEASE READ CAREFULLY.******

**WOOD CORE SAMPLING
Sapwood vs. Heartwood**

GENERAL

The heartwood in a tree is the area of growth near the heart of the tree trunk and it is very dense and very resistant to decay. The heartwood does not accept treatment and it will not absorb chemicals when treated. The sapwood is newer growth of the wood, and it is less dense and susceptible to decay. It does accept chemical treatment to prevent decay.

When a core sample of wood is tested for penetration, the amount of treatment penetration is measured in inches from the outer face of the core or as a percentage of sapwood penetration. A wood post that contains a little sapwood and more heartwood will retain less treatment but the heartwood itself will prevent decay. A post that contains more sapwood needs to have a greater amount of treatment retention and penetration, since sapwood will decay considerably without treatment.

When sampling treated sawn wood products, the core must be taken from the edge that contains the largest amount of sapwood and towards the heart of the lumber. Figures A and B show the correct way to take a core from the sawn wood product. Before drilling a core in the wood, the inspector should look at the end of the post to decide which side will contain the least amount of heartwood. The test results for these cores will give a better indication of the amount of treatment retained by the wood product.

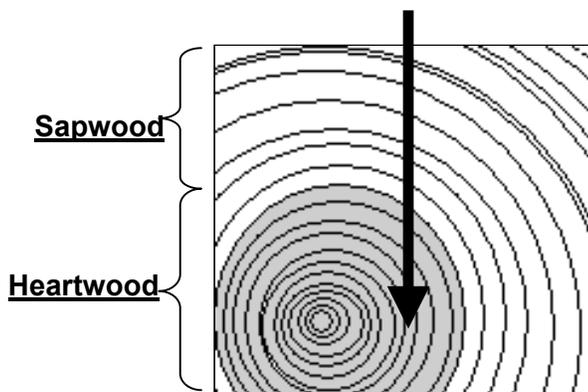


Figure A: Correct

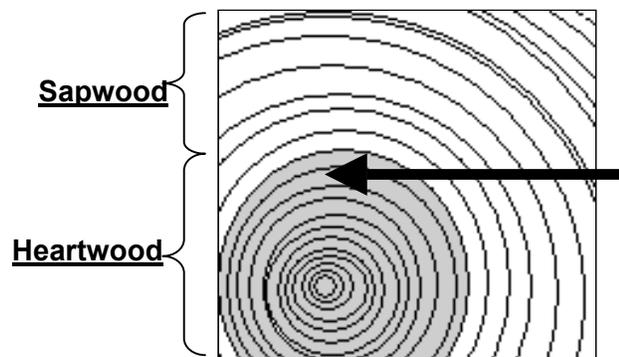


Figure B: Correct

Figures C and D show the incorrect way to drill a core from a sawn wood post. In this case, the core would be almost all heartwood and the test would result in very little preservative retained, giving a misleading result.

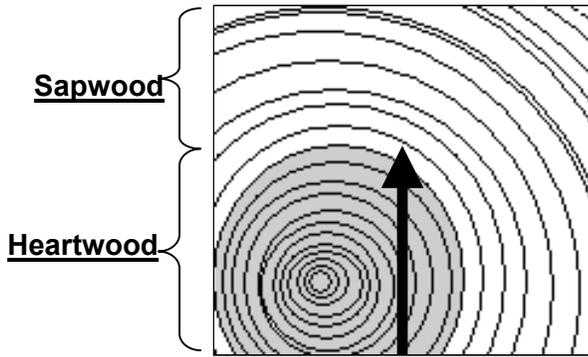


Figure C: Incorrect

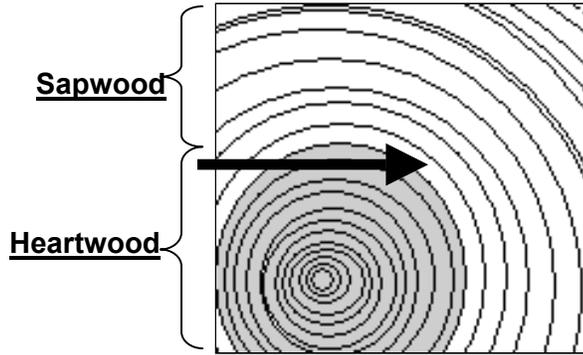


Figure D: Incorrect

For material that is round, the core should be taken perpendicular to the surface and towards the center of the post, as shown in Figure E.

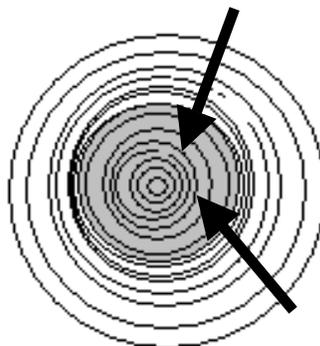


Figure E: Correct