Identifying Old American Chestnut Wood

By Ken Salem, Salem Board & Beam

American chestnut wood has a warm beautiful tone. But the once abundant wood is only available today through reclamation. Chestnut can be found in almost any structure built before the 1930-40s and located within the tree’s historical range. It was favored for construction because it was straight, rot resistant (people said American chestnut lasted one year longer than stone), and was lighter and therefore easier to use than other hardwoods.

Distinguishing American chestnut wood from other reclaimed woods can be a confusing proposition. Most recycled chestnut comes from planking, beamng, rafters and floor joists. Due to age and exposure to natural elements, many of these components turn a brown or gray color regardless of the type of wood. Because old wood tends to look similar, it becomes important to penetrate the skin to determine its origin. I have found a sharp jackknife the best readily available and least obstructive tool to examine the internal grain and coloring of old wood.

Chestnut has a very distinct appearance when a knife slices into the interior. The depth of the cut is important, as the outer growth rings (sapwood), can be very light. However, when the sapwood is penetrated, chestnut takes on a deep chocolate brown color that graduates to a golden honey the deeper you move into the core. The initial dark coloring can be 1/4” to 2” deep depending on its past use and exposure. American chestnut has a naturally high level of tannic acid and will turn much darker if used as floor boards in a barn, as the high ammonia content of animal excretions will further darken the wood.

Another telltale sign of American chestnut is the relatively large growth rings when compared to say red oak, which is commonly mistaken for chestnut. Oak also has rays that streak through its grain when quarter-sawn.

A third manner of differentiating American chestnut is by its weight. Because of the molecular makeup and larger growth rings, the weight of chestnut is approximately 2/3rds that of white or red oak. Although these techniques can help distinguish chestnut, irregularities often exist.

Salem Board and Beam is a furniture building company that uses primarily reclaimed and recycled lumber, with American chestnut our specialty. Visit our web site, www.salemboard.com or call 413-585-0078.