

American hardwood lumber grading Q&A series: article no. 5

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by Bob Sabistina, Grading consultant to the American Hardwood Export Council

I started this column one year ago because of my close relationship with the American Hardwood Export Council (AHEC) and the response has been very positive. Through AHEC and their promotional efforts around the world, I was able to give grading seminars in over fifteen countries last year. This year, our efforts will be in cooperation with the National Hardwood Lumber Association (NHLA), the rules-making Association for North American Hardwoods. I urge you to contact AHEC's office in London to locate a seminar coming to your area. If you have a question regarding the rules for grading American hardwood lumber or if there is any other topic you would like to see in future articles pertaining to hardwoods from the USA, please contact me at: Bob.Sabistina@AHEC.org. Dit e-mailadres is beschermd tegen spambots. U heeft Javascript nodig om het te kunnen zien.

In other exciting news, in November, I was appointed Executive Director for the American Walnut Manufacturers Association (AWMA). The AWMA is comprised of both sawmills and distribution yards that specialise in the production of American black walnut. Of all the questions I received last year, Walnut was at the top of the list of most requested. This month's article will address some of those questions.

American black walnut remains one of the most popular, yet least understood species for the export market. It is popular for cabinet and furniture manufacturers because of its unmatched workability and lustrous finishing qualities. It is least understood when it comes to the grading rules and the expected perception of quality. This article will address the grading rules for walnut and try to clear up some of the confusion surrounding this most important American timber. American black walnut grows throughout the eastern half of the United States with the largest concentration centered in the Midwest. Standing walnut timber makes up less than one percent of the hardwood forest in the US, which has led to important grading differences from other, more prevalent, hardwood species.

What is "steamed walnut"?

The first process in preparing walnut lumber for sale is to steam the fresh-sawn boards. The steaming process will darken the normally cream-coloured sapwood, allowing it to blend more

readily with the chocolate heartwood in the finishing process. For best results, the steaming should occur as soon as the lumber is sawn and the moisture content is at its highest. The lumber should be flat-piled and the sapwood areas should be in contact with the heartwood areas of each board. The flat-piled stacks are then placed in a steamer, similar to a smokehouse, and hot steam is pumped on to the lumber for several days. Once steamed, the sapwood is no longer considered in the grading rules, and the lumber is placed on stickers for kiln-drying.

The NHLA grades for walnut are FAS, FAS1Face, Selects, #1 Common, and #2A Common, similar to the Standard grades for other hardwood species. FAS walnut can be the most confusing because it combines the current clear-face cutting method of grading with the former method of defect grading.

My supplier says that FAS walnut is graded by counting defects. What does this mean?

Defect grading was first used back in the early 1900's. Instead of calculating the percentage of clear wood on the board, the inspector simply counts defects. The width of the piece will determine the amount of defects allowed. In FAS walnut, the defect method is applied to boards 6 foot and 7 foot long and the clear cutting method applies to boards 8 foot and longer.

FAS walnut will allow boards with a minimum width of 5 inches. For walnut boards that are 6 and 7 foot long to qualify for FAS, the grader is simply counting the number of defects present, ie; knots, wane, splits, etc. Boards that are 5, 6, and 7 inches wide will allow 1 Standard Defect and boards 8 inches and wider will allow 2 Standard Defects. In addition, a small amount of wane is permitted, along with up to six inches of split on the ends. Yes, it can be very confusing to picture this in print, suffice to say it takes many hours of practice to apply these rules on a practical basis.

Can you please talk about what a "Standard Defect" is?

The following chart sums up the minimum requirements needed and the most common defects allowed. A full description can be found on pages 28-30 of the current 2007 edition of the NHLA Rules book

FAS WALNUT 6' & 7'- Graded on the Defect Method

Minimum width = 5"

Boards 5", 6", & 7" wide allow one Standard Defect

Boards 8" & wider admit two Standard Defects

Also allows: 6" split, 12" of wane in 6' boards, 14" of wane in 7' boards

One Standard Defect includes:

One knot with average diameter not over 1 1/4"

Two knots when added together not over 1 1/4"

Wane not over 12" in 6' boards, 14" in 7' boards

Post Script: If you have any questions regarding the NHLA grading rules or terminology pertaining to American hardwoods you can contact me at: [Dit e-mailadres is beschermd tegen spambots. U heeft Javascript nodig om het te kunnen zien.](#)

I will try to answer all in upcoming issues. For more information on available literature pertaining to the grades, as well as species and upcoming seminars, please contact AHEC directly.

American Hardwood Export Council

The American Hardwood Export Council (AHEC) is the leading international trade association for the US hardwood industry, representing the committed exporters among US hardwood companies and all the major US hardwood product trade associations. AHEC concentrates its efforts on providing architects, specifiers, designers and end-users with technical information on the range of species, products and sources of supply.

AHEC produces a full range of technical publications which are available free of charge by visiting www.ahec-middleeast.org , www.sustainablehardwoods.info & www.americanredoak.info or by faxing (44)

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