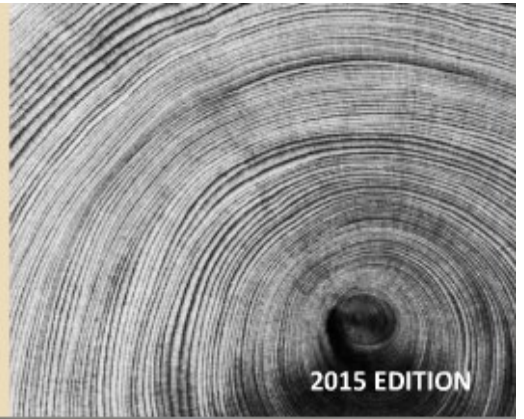


HARDWOOD PLYWOOD

Grading Guide



2015 EDITION

A GUIDE TO UNDERSTANDING POPULAR HARDWOOD PLYWOOD FACE VENEER GRADES



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From the tree to works of art: A guide to understanding the hardwood plywood standard

An introduction from Ang Schramm

Trees are amazing. They provide us with shelter, warm our hearths, and shade us from the heat of the summer sun. But they also give us far more as they offer up their inner distinctiveness to serve us as one of the most functional and attractive of all materials for quality kitchen and bath cabinetry, fine furniture, architectural millwork, store fixtures, and wall furnishings, to name just a few.

Wood is a unique material for decorative applications in that by its very nature no two pieces can ever be exactly alike. Its appearance may be consistent for a given species within a broad and generalized range, but even wood from the same tree can

vary in aesthetics and physical properties. Growth conditions such as geography and climate, availability of water and nutrients, adverse weather, genetics, pestilence, injury, competition for space, bacterial or viral infection, the presence of extraneous compounds contributing to the color of heartwood, the lighter color of sapwood, and the presence of limbs and their relationship to figure and knots, are but a few of the factors contributing to this phenomenon.

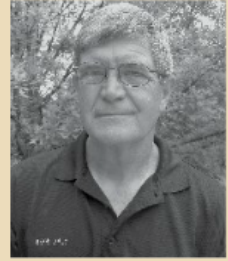
It is the purpose of this publication to help us give some order to this assortment of characteristics in a practical manner with an overview of the industry standard

grading tables and other content, including veneer production, core options, and plywood manufacture. With a sound understanding of the inherent individuality of trees, we have the rare opportunity to make every project or job a signature work of art!

Our goal is to provide this information in a way that is easy to understand and that will give us a valuable tool to help enhance communication and ensure that all your expectations are met when you choose Columbia Forest Products' PureBond® Hardwood Plywood.



HARDWOOD PLYWOOD Grading Guide



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A Complete Guide to Hardwood Plywood and Face Veneer

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RED OAK (*Quercus rubra* and related species)



**Red Oak
Plain Sliced A**



**Red Oak
Plain Sliced B**



**Red Oak
Plain Sliced Back 1**

Common names: Red Oak, Northern Red Oak, Southern Red Oak; more than 10 other names

Sources: North America

Characteristics: Sharp contrast between coarse early wood and smooth late wood. Early wood vessels are typically open and not occluded. Heartwood color is light tan to pinkish to reddish brown to dark tan or khaki. Large rays produce pronounced flake appearance across the grain when the wood is quarter sliced. Rift cutting minimizes the flake appearance.

Common cuts: Plain sliced, Quarter sliced, Rift cut

Uses: Kitchen and bath cabinetry, fine furniture, architectural millwork, molding, flooring, architectural as wall paneling, casework, office furniture.

Availability: Plentiful

Price: \$\$-\$\$\$ depending on specifications



**Red Oak
Rotary Whole Piece A**



**Red Oak
Rotary Whole Piece B**



**Red Oak
Rotary Whole Piece C**



**Red Oak
Rotary Back 1**

Natural Characteristics	A Grade	B Grade	C Grade
Small Conspicuous Burls & Pin Knots — Comb. Avg. Number	12 per 4 x 8' panel	24 per 4 x 8' panel	No limit
Conspicuous Burls — Max. Size	3/8"	1/2"	No limit
Conspicuous Pin Knots Average Number Max. Size: Dark Part Max Size: Total	1 per 3 sq ft 10 per 4 x 8' panel 1/8" 1/4"	1 per 2 sq ft 16 per 4 x 8' panel 1/8" 1/4"	No limit
Scattered Sound and Repaired Knots Comb. Average Number Max. Size — Sound Max. Size — Repaired Avg. Number — Repaired	No	1 per 8 sq ft 4 per 4 x 8' panel 3/8" 1/8" 1 per 8 sq ft	1 per 4 sq ft 8 per 4 x 8' panel 1/2" 1/2" 1 per 8 sq ft
Mineral Streaks	Slight, Blending	Few to 12"	Yes
Bark Pockets	No	Few to 1/8" x 1"	Few to 1/4" x 2"
Worm Tracks	No	Slight	Few
Vine Marks	Slight	Yes	Yes
Cross Bars	Slight	Yes	Yes

Important Disclaimer

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