

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



Ang Schramm

Director of Technical Services

Author of
A Complete Guide to Hardwood Plywood and Face Veneer

Past Panel Products Director
HPVA

Past Chair HPVA Technical Committee

Director and Instructor
Columbia Forest Products University

MAPLE NATURAL (*Acer saccharum*, *A. nigrum*)

Common names: Rock Maple, Sugar Maple, White Maple

Sources: USA and Canada

Characteristics: Sapwood varies from soft pinkish white to light yellow to light khaki in color. Surface is smooth, tight, and dense. Heartwood ranges from dark brown to green to black. Typically sold as white maple due to its broadly defined uniform light color. Growth rings are light and at times imperceptible. Susceptible to insect assault resulting in brown streaks called worm track and sometimes incorrectly sugar streaks.

Common cuts: Rotary cut, Plain sliced, Half round, Quarter sliced and Rift cut usually pulled from sliced quarters

Uses: Decorative veneer and lumber primarily for kitchen cabinetry and furniture. Excellent surface for painting.

Availability: Readily available

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



**Maple Natural
Plain Sliced A**



**Maple Natural
Plain Sliced B**



**Maple Natural
Plain Sliced Back 1**



**Maple Natural
Rotary Whole Piece A**



**Maple Natural
Rotary Whole Piece B**



**Maple Natural
Rotary Whole Piece C**



**Maple Natural
Rotary Back 2**

MAPLE SAP (*Acer saccharum*, *A. nigrum*)

Common names: Rock Maple, Sugar Maple, White Maple

Sources: USA and Canada

Characteristics: Sapwood varies from soft pinkish white to light yellow to light khaki in color. Surface is smooth, tight, and dense. Heartwood ranges from dark brown to green to black. Typically sold as white maple due to its broadly defined uniform light color. Growth rings are light and at times imperceptible. Susceptible to insect assault resulting in brown streaks called worm track and sometimes incorrectly sugar streaks.

Common cuts: Rotary cut, Plain sliced, Half round, Quarter sliced and Rift cut usually pulled from sliced quarters

Uses: Decorative veneer and lumber primarily for kitchen cabinetry and furniture. Excellent surface for painting.

Availability: Readily available

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



**Maple Sap
Plain Sliced A**



**Maple Sap
Plain Sliced B**



**Maple Sap
Plain Sliced Back 1**



**Maple Heavy Bird's Eye
Rotary Spliced A**



**Maple Sap
Rotary Whole Piece A**



**Maple Sap
Rotary Whole Piece B**



**Maple Sap
Rotary Whole Piece C**



Maple Bird's Eye Detail

Natural Characteristics	A Grade	B Grade	C Grade
Small Conspicuous Burls & Pin Knots — Comb. Avg. Number	10 per 4 x 8' panel	16 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 8 sq ft 4 per 4 x 8' panel 1/8" 1/4"	1 per 4 sq ft 8 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	Slight	Yes
Bark Pockets	No	Few to 1/8" x 1"	Few to 1/4" x 2"
Worm Tracks	Slight	Slight; Ash Yes	Yes
Vine Marks	Slight	Slight	Yes
Cross Bars	Slight	Yes	Yes

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