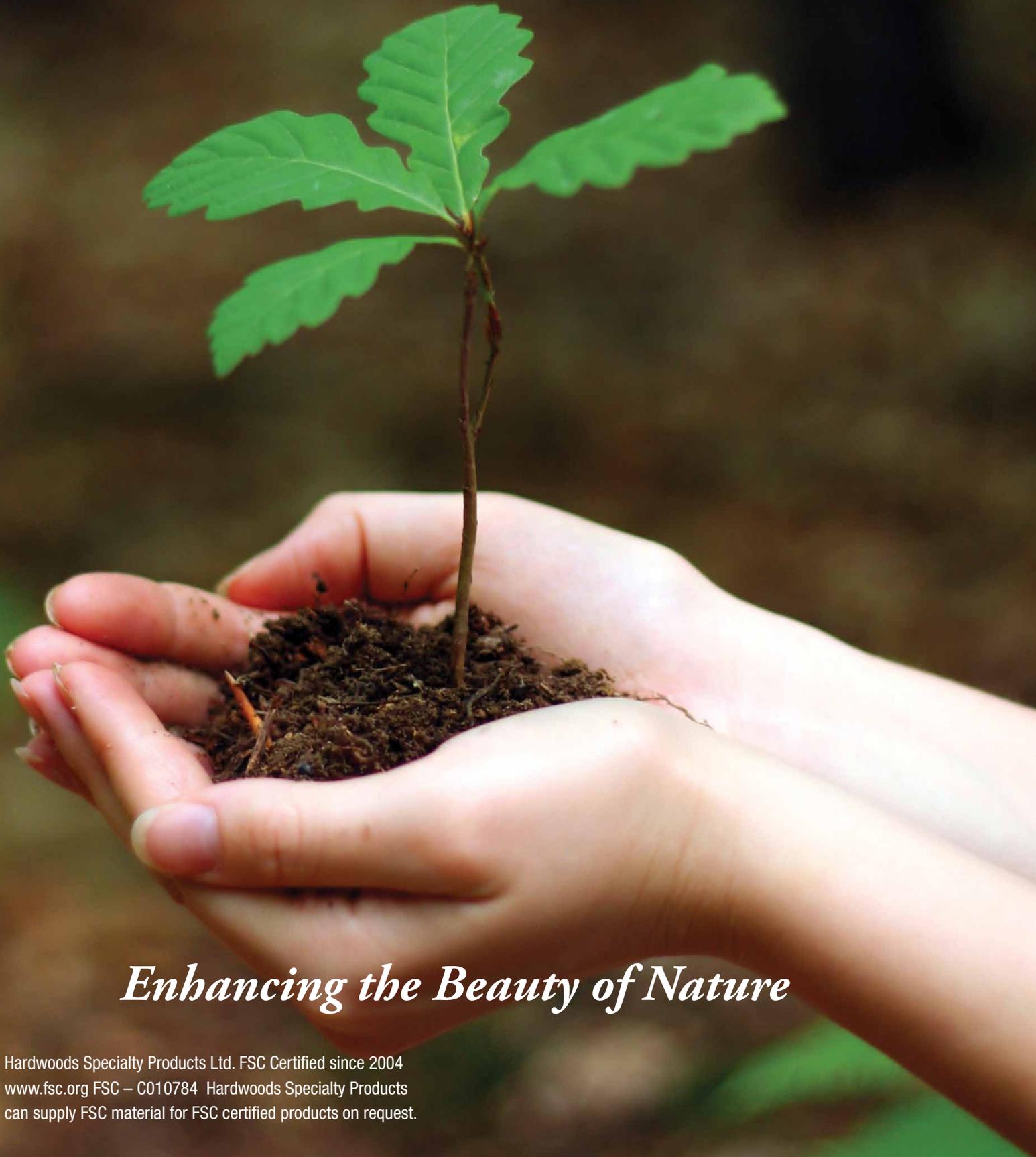


Echo Wood[®]

environmentally responsible wood products



Enhancing the Beauty of Nature



Hardwoods Specialty Products Ltd. FSC Certified since 2004
www.fsc.org FSC – C010784 Hardwoods Specialty Products
can supply FSC material for FSC certified products on request.

The mark of
responsible forestry

Echo Wood®

environmentally responsible wood products

Hardwoods Specialty Products is committed to sustainable alternatives to our natural wood resources. Echo Wood® provides endless opportunities in creating the look of the most common, to the most exotic and rare species.

The process of manipulating common wood fiber through computer design and technology enables us to reproduce the natural appearance of nearly any species you desire. This environmentally responsible alternative produces architectural real wood veneers that are defect free and consistent in color and grain, time and time again.

Hardwoods Specialty Products, one of North America's largest hardwood wholesale distributors, has teamed with Dehua TB Engineered Wood Co., LTD for the exclusive distribution of Echo Wood® in North America. Together we are committed to continually providing the market with products that promote the preservation and sustainability of the world's natural wood resources.



Dehua TB Engineered Wood Co., LTD is part of Dehua Group Holding Co., LTD. Established in 1992, Dehua has quickly grown to one of China's largest wood processing companies with nearly 3 million square feet of manufacturing facilities, and a quarter of a million acres of forestry land. The 395,000 square foot engineered wood factory is located in Wukang Town, Deqing County, near the Hardwoods Specialty Products' offices and is the largest manufacturer of engineered wood products in Zhejiang province.

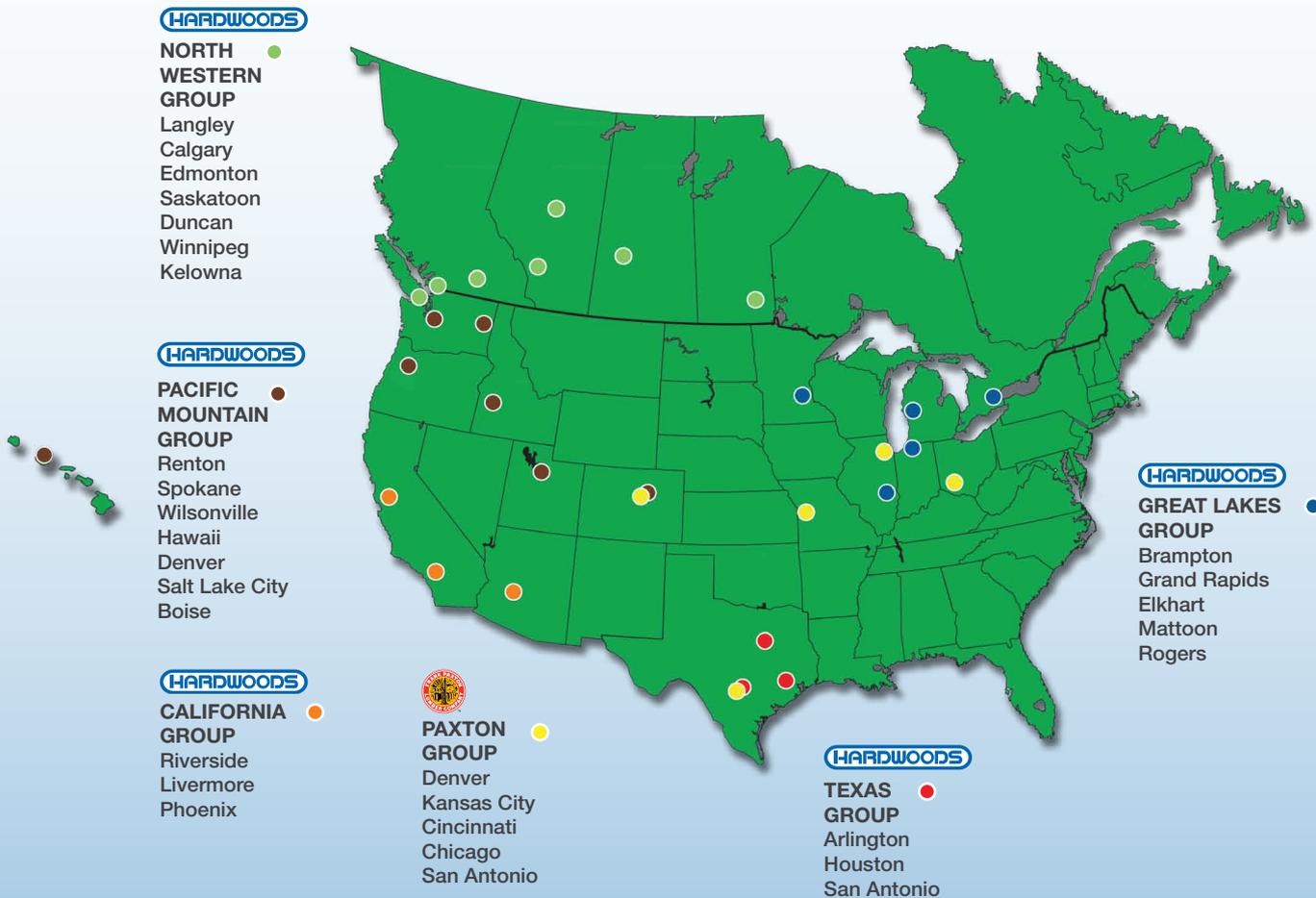
Dehua TB Engineered Wood Co., LTD is ISO 9001, and ISO 14001 certified for environmental management, and is certified by the Forestry Stewardship Council (FSC) for chain of custody. They also hold the China Environmental Labeling Certificate and are members of the World Wildlife Fund Forestry and Trade Network.



For more than eight decades Hardwoods Specialty Products has been providing hardwood products to North America. We remain steadfast in our commitment to worldwide sourcing of high quality wood products, excellent customer service, competitive pricing and sustainable forestry management.

Echo Wood[®]

**Distributed World-Wide from our North American
Distribution Centers**



The Preferred Hardwood Source

For more information please visit our website

www.hardwoods-inc.com



Frank Paxton Lumber Company

A Division of Hardwoods Specialty Products

www.paxtonwood.com



Hardwoods Specialty Products Ltd. FSC Certified since 2004
www.fsc.org FSC – C010784 Hardwoods Specialty Products
 can supply FSC material for FSC certified products on request.

The mark of
responsible forestry



Contact Information

For general information contact the nearest distribution center.

For international and direct shipments, contact Echo Wood product Management at (602) 278-5000

Please visit us online at www.hardwoods-inc.com



NORTH WESTERN CANADA GROUP

ALBERTA GROUP

CALGARY, AB

Phone (403) 236-9100

EDMONTON, AB

Phone (780) 455-5111

SASKATON, AB

Phone (306) 244-8081

WINNIPEG, MB

Phone (204) 633-6150

BC GROUP

LANGLEY, BC

Phone (604) 856-1111

KELOWNA, BC

Phone (250) 491-7677

DUNCAN, BC

Phone (250) 715-1485

CALIFORNIA GROUP

LIVERMORE, CA

Phone (925) 455-5858

PHOENIX, AZ

Phone (602) 278-5000

RIVERSIDE, CA

Phone (951) 653-9433

LAKE STATES GROUP

BRAMPTON, ON

Phone (905) 792-6600

ELKHART, IN

Phone (574) 295-7600

GRAND RAPIDS, MI

Phone (616) 784-9800

MATTOON, IL

Phone (217) 234-9663

ROGERS, MN

Phone (763) 428-3153

PACIFIC MOUNTAIN GROUP

BOISE, ID

Phone (208) 323-7711

DENVER, CO

Phone (303) 373-5300

KAPOLEI, OAHU, HI

Phone (808) 682-0845

RENTON, WA

Phone (425) 251-1213

SALT LAKE CITY, UT

Phone (801) 972-4215

SPOKANE, WA

Phone (509) 921-7702

WILSONVILLE, OR

Phone (503) 570-0211

TEXAS GROUP

ARLINGTON, TX

Phone (817) 633-8333

HOUSTON, TX

Phone (832) 200-3555

SAN ANTONIO, TX

Phone (210) 666-1966



FRANK PAXTON LUMBER COMPANY

CINCINNATI, OH

Phone (513) 984-8200

DENVER, CO

Phone (303) 399-6810

KANSAS CITY, MO

Phone (816) 483-7000

CHICAGO, IL

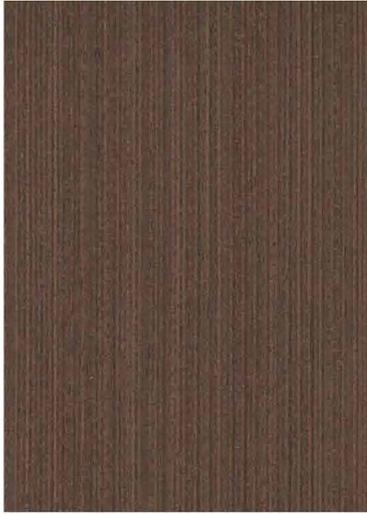
Phone (773) 767-1207

SAN ANTONIO, TX

Phone (210) 653-9663

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Environmental Attributes of Echo Wood®

Sourcing

Echo Wood® is manufactured using two different species:

Ayous (*Triplochiton Scleroxylon*) also known as Obeche or Samba. This fiber source is primarily harvested in the central region of West Africa, specifically Western Cameroon. It remains abundant and is secure throughout its natural growth range, with little to no threat to its population. Along with the procurement of certified wood, our factory works directly with the Cameroon local governments to comply with their Forest Management Plan with the primary focus being sustainability. Ayous logs, certified by the Forestry Stewardship Council are the fiber source for all FSC certified Echo Wood®.

Basswood (*Tilia*) also known as Linden. This fiber source is primarily harvested from plantations in Northern China and is a close relative to Basswood found in North America and Europe. Our factory works with Basswood plantations to ensure all government regulations are complied with while using sustainable forestry practices to harvest this fiber.

Through supervised forest management programs and consultation with independent foresters, our mill ensures harvesting methods are monitored for sustained yield management and minimal environmental impact. The factory also maintains membership in many international organizations such as the World Wildlife Fund Forestry and Trade Network, holds the China Environment Labeling Certificate, is certified for ISO 14001 Environmental Management and is certified by the Forestry Stewardship Council (FSC) for chain of custody. Dehua TB (FSC cert. #SGSHK-C0C-006659) and Hardwoods Specialty Products (FSC cert. #SCS-C0C-000144) are committed to sustainable forestry management and encourages all who participate in the forestry supply chain to do the same.

By using readily available and FSC certified Ayous, harvested using sustainable forestry practices and plantation grown Basswood, we can create the look of almost any exotic veneer such as Ebony, Zebrawood, Rosewood, Teak, and Wenge while saving these great forests for future generations. All fiber purchased for production is harvested in compliance with the CITES International Trade Agreement.

Quick Facts

- More than 85% of Echo Wood® veneers are offered FSC certified
- All Echo Wood® veneers are CARB Phase 2 compliant
- All dyes used in producing Echo Wood® are water based and contain no heavy metals
- 100% of the harvested fiber is used in the production of Echo Wood®
- Saplings are re-planted at 10 times the harvest rate
- Defect free panels offer maximum yield and minimal waste

LEED Credit Support

- Echo Wood® Veneers can be laid up on any environmental substrate including 100% recycled wood particle board or MDF produced with no added Urea formaldehyde
- LEED credit support MR 4 and IEQ 4.4
- Echo Wood® can be laid up regionally to reduce fossil fuel emissions - LEED credit support MR 5
- Echo Wood® can be laid up on an FSC certified platform - LEED credit support MR 7



Echo Wood® Reconstituted Real Wood Veneer

General Information

Our reconstituted wood products echo nature's most desired and rare species without impacting the sustainability of these great forests. The use of common wood fiber from well managed, plantation grown and FSC certified forests, provide an excellent resource for the production of Echo Wood® products. These products provide a practical alternative to achieving the look of even the most expensive and rare woods, by providing the highest quality, **architectural wood veneers, panels and edge tape** available. These environmentally responsible veneers are **defect free and consistent in color and grain time and time again.**

Applications

Echo Wood® has been designed for interior applications where achieving consistency in grain and color with the warmth and beauty of real wood is desired. Among the many uses for Echo Wood® are Finish Carpentry, Millwork, Store Fixtures, Display Cases, Contract Furniture, Residential Furniture, Kitchen Cabinetry, Interior Doors, Vanities and Wall Coverings.

Technical Information

Veneer Thickness

0.6mm

Veneer sizes

Widths: 630mm and 1260mm

Lengths: 2480mm and 3100mm

Edge Tape Sizes

0.6mm x 20mm-300mm

2mm x 20mm-300mm

All Echo Wood® veneers are compliant with the California Air Resource Board Phase 2(CARB2) requirements for formaldehyde emissions.

Available Veneer Backing

- 10 mil paper - moisture resistant, flexible
- 2 ply wood backer - flexible
- Duraback - moisture resistant, flexible
- Fabric - drywall friendly, flexible
- Fleece - flexible, non moisture resistant
- Phenolic - moisture resistant, rigid
- Polyback - phenolic replacement, moisture resistant, flexible
- PSA - peel and stick, flexible
- Plywood - all patterns are available laminated to the plywood core of your choice. Most products are available prefinished are fire rated.

Quality Assurance

All Echo Wood® veneers start from the highest "A" grade wood fiber. Proprietary moulds are used to consistently shape the grain pattern in every block produced. Only the highest quality water based dyes are used. The product undergoes quality control inspections in each step of the production process, ensuring that only the highest quality products are brought to market. A final visual inspection of each veneer is done to ensure quality and color accuracy before it is shipped from the factory.



Project specification sheets like the one below can be easily downloaded from our web site at www.hardwoods-inc.com

Echo Wood® Specification		
Item		Vendor
DESCRIPTION	Engineered Wood - Echo Wood	
NAME	Qtr Wenge (insert veneer name)	Hardwoods Specialty Products
		5302 W. Buckeye Bldg. A
STYLE#	WG-111Q (insert veneer code)	Phoenix, AZ 85043
FSC CERTIFIED	Yes/No	Ph 602-278-5000
LOCATION	See drawings for details	Contact: Rich Gorrill
		Email: rgorrill@hardwoods-inc.com
COLOR	Dark wood - Wenge	Web: www.hardwoods-inc.com
GRAIN - CUT	Straight grain cut (quartered)	
THICKNESS	0.6mm	
UV LIGHT RESISTANCE	UV inhibitor must be used in finish	
FINISH	Clear lacquer 12% sheen	
BACKING	Veneer is laminated to a substrate	
	See drawings for details	
ECHO WOOD SPECIFICATION	Face veneer to match architect's sample. Veneers shall be cut from "A" grade Basswood or Ayous logs. Veneers shall be stacked in proprietary moulds to consistently produce grain pattern of architect's sample.	
	Water soluble dyes shall be used to produce color of architect's sample.	
	Wood block is cut into composite veneer, thus providing finished product equal to architect's sample. Finished veneer shall be dried to 10-12% moisture content.	
NOTES	Veneer to match architect's sample. No substitutions.	



Installation

Echo Wood® can be ordered already laminated to your choice of substrates, and delivered to the fabricator for further processing. The fabricator may also do their own lamination by following the installation instructions below.

Surface Preparation

Echo Wood® veneers should be bonded to a high quality backer, plywood, Medium Density Fiberboard (MDF), Particleboard (PBC) or similar product using a ridged glue line and following the directions of the adhesive manufacturer. The more resistant the substrates are to dimensional change (expansion and contraction due to humidity and temperature) the better the results. It is critical that Echo Wood® is properly acclimated a minimum of 48 hours along with the substrate and adhesive prior to fabrication. Contact cement can only be used with Echo Wood® veneers that have a phenolic backer or other backers that are approved for use with contact cement and should not be used with fleece or raw back veneer.

Before applying the Echo Wood® veneer, carefully inspect the face and back for oil, grease, wax, dirt, dust or other contaminants. The surface must be smooth, all holes, indentations, bumps or raised areas must be either filled or sanded smooth. For most panel products, a balancing backer should be used to avoid warping.

Finishing

Echo Wood® veneers are primarily intended to have a clear lacquer, varnish, polyester or other standard finishing materials applied to them. Echo Wood® veneers can take a stain, but each species will have varying results. Test finishes on a sample before finishing a final product. Finish all edges to help prevent moisture absorption.

All wood veneers will fade or change color with exposure to a strong light source. UV inhibiting finishes are necessary to retard fading or color change.

Project Conditions

Care should be taken to ensure that Echo Wood® veneers/panels are installed in a project that has suitable environmental conditions (ambient temperature exceeding 65 degrees Fahrenheit and relative humidity of 40-60%).

Maintenance

The finished surface should be cleaned and maintained in accordance with the recommendations of the finish manufacturer's specifications.

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Storage and Handling

All wood veneers are subject to ambient atmospheric conditions such as humidity and temperature. Optimum conditions for handling and storing Echo Wood® veneers are when ambient temperatures exceed 65 degrees Fahrenheit with a relative humidity of 40-60%. Echo Wood® veneers should be stored horizontally with a dark, non-transparent cover completely protecting them from UV light. Care should be taken to not fold, crease, dent, or scratch the veneers.

Limitations

Echo Wood® veneers are not recommended for exterior use or direct application to concrete or other similar products. Dyes used in the production of Echo Wood® veneers are sensitive to natural and artificial UV light. As with all natural woods, Echo Wood® could fade or change color with prolonged exposure to UV light. A UV inhibiting finish must be used with all wood products.

Limited Warranty

Hardwoods Specialty Products US LP warrants that Echo Wood® veneers are free from defects in materials and workmanship at the time of their delivery to you. Hardwoods Specialty Products US LP will honor only those claims for defective material or workmanship that are reported to your distributor within 25 days from the date you accept delivery of the product in question. With respect to claims of defective product received within that period, your exclusive remedy for a loss or claim resulting from the use of Echo Wood® veneers shall be, at Hardwoods Specialty Products US LP's sole option, the repair or replacement of any such product proven to be defective. This warranty does not apply to damages resulting from faulty installation of the product or resulting from accident, alteration, misuse, tampering, negligence, or abuse. In no event shall Hardwoods Specialty Products US LP be responsible for any incidental, special, exemplary and/or consequential damages, and any such damages, regardless of the legal theory upon which they are based, are hereby specifically disclaimed. This limited warranty constitutes the sole warranty provided by Hardwoods Specialty Products US LP with respect to Echo Wood® veneers, and all other warranties of any kind, whether expressed or implied (including any implied warranties of merchantability or fitness for a particular purpose), are hereby excluded. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



Stocking Program

Veneers found in this section represent a stocking inventory of both FSC certified and non certified material, all available in composed 8' and 10' veneer with matching edge tape.

- No minimum order quantities
- Veneers are available for prompt shipment
- Matching edge tape in both 0.6mm and 2mm thickness are also available for prompt shipment

EchoWood®

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EchoWood®
Qtr. Champagne
Champ-2Q
STOCKING ITEM

Available



EchoWood®

**PS Rosewood
RW-3350C**

STOCKING ITEM



EchoWood®
PS Walnut
WT-3160C
STOCKING ITEM

Available



EchoWood®

**PS Teak
TK-3168C**

STOCKING ITEM



EchoWood®

**Qtr. Zebrano
ZB-011S**

STOCKING ITEM



EchoWood®

Rift White Oak
OAK-12-1S

STOCKING ITEM

Available



EchoWood®

Qtr. Teak
TK-016S

STOCKING ITEM

Available



EchoWood®

**Qtr. Mahogany
NA-203S**

STOCKING ITEM

Available



EchoWood®

**Qtr. Wenge
WG-111Q**

STOCKING ITEM

Available



EchoWood®

Qtr. Macassar Ebony
EB-7001S

STOCKING ITEM

Available



EchoWood®

**Qtr. Walnut
WT-139S**

STOCKING ITEM

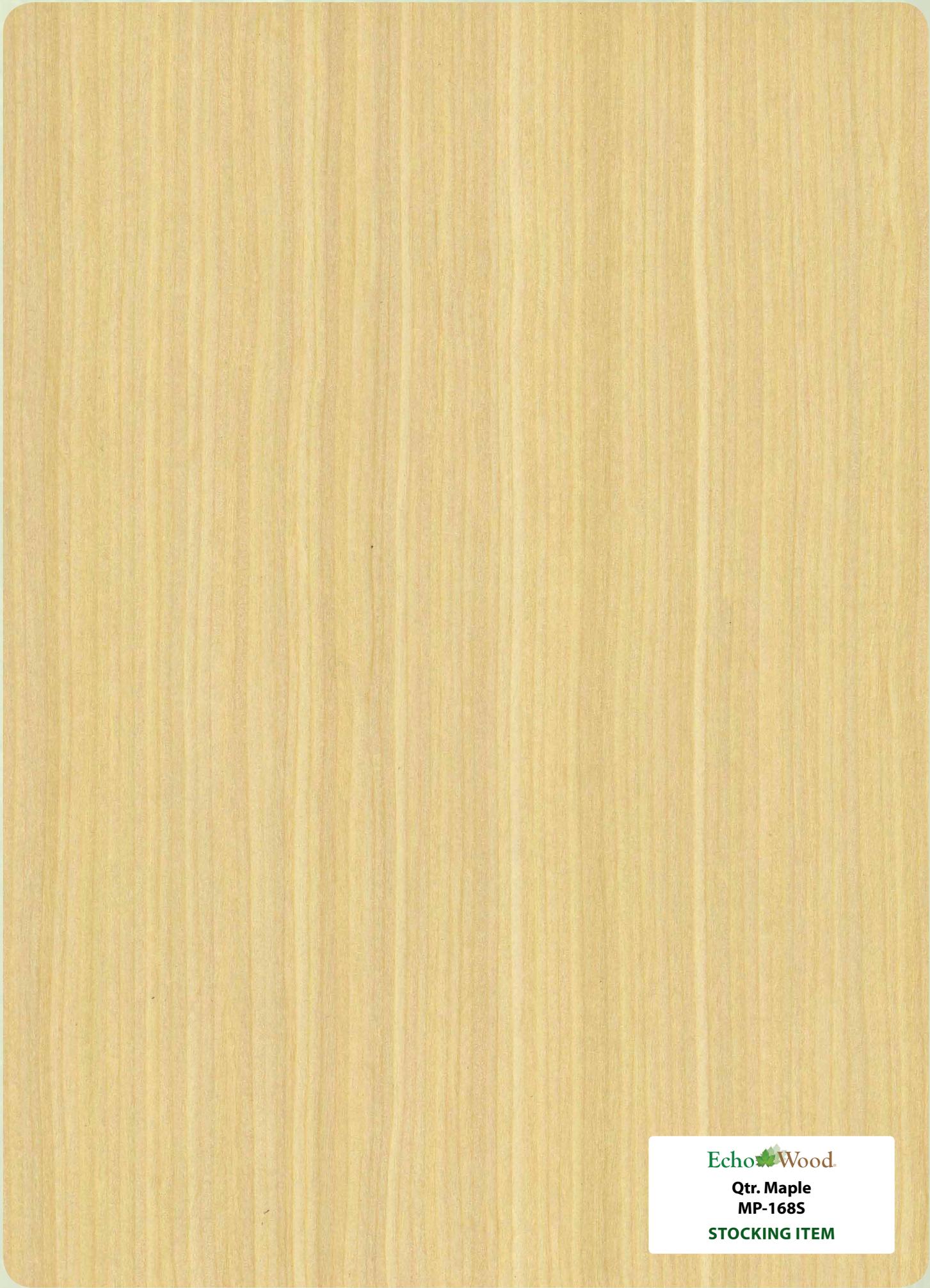
Available



EchoWood®
Qtr. Gun Metal Ebony
WT-2450S
STOCKING ITEM



EchoWood®
Nantucket 1Q
NAN-1Q
STOCKING ITEM



EchoWood®
Qtr. Maple
MP-168S
STOCKING ITEM



EchoWood®
Qtr. Cherry
CH-311S
STOCKING ITEM



EchoWood®
VG Fir
Fir-3Q
STOCKING ITEM



Special Order and Custom Colors & Patterns

Veneers found in this section represent a random sampling of just some of the special order colors and patterns available.

- Average lead time is 90-120 days
- Minimum quantities apply

Not finding what you are looking for? We can also work with your company to create custom veneers for your specific needs. This process requires extended lead-times and volume commitments, but once established, we deliver that same defect free, environmentally responsible veneers, while meeting the needs of your signature design.



EchoWood

Qtr. Macassar Ebony
EB-2716S

SPECIAL ORDER



EchoWood

Qtr. Zebrawood
ZB-114S

SPECIAL ORDER



EchoWood

PS Rosewood
SZ-2588C

SPECIAL ORDER



EchoWood

Qtr. Macassar Ebony
EB-3095S

SPECIAL ORDER

EchoWood

Rift OAK
OAK-2785S
SPECIAL ORDER

EchoWood

Qtr. Teak
TK-204Q
SPECIAL ORDER

EchoWood

Qtr. Macassar Ebony
EB-2327S
SPECIAL ORDER

EchoWood

Qtr. Macassar Ebony
EB-121S
SPECIAL ORDER

EchoWood

PS Beech
BB-2759Q

SPECIAL ORDER

EchoWood

PS Walnut
WT-1001N

SPECIAL ORDER

EchoWood

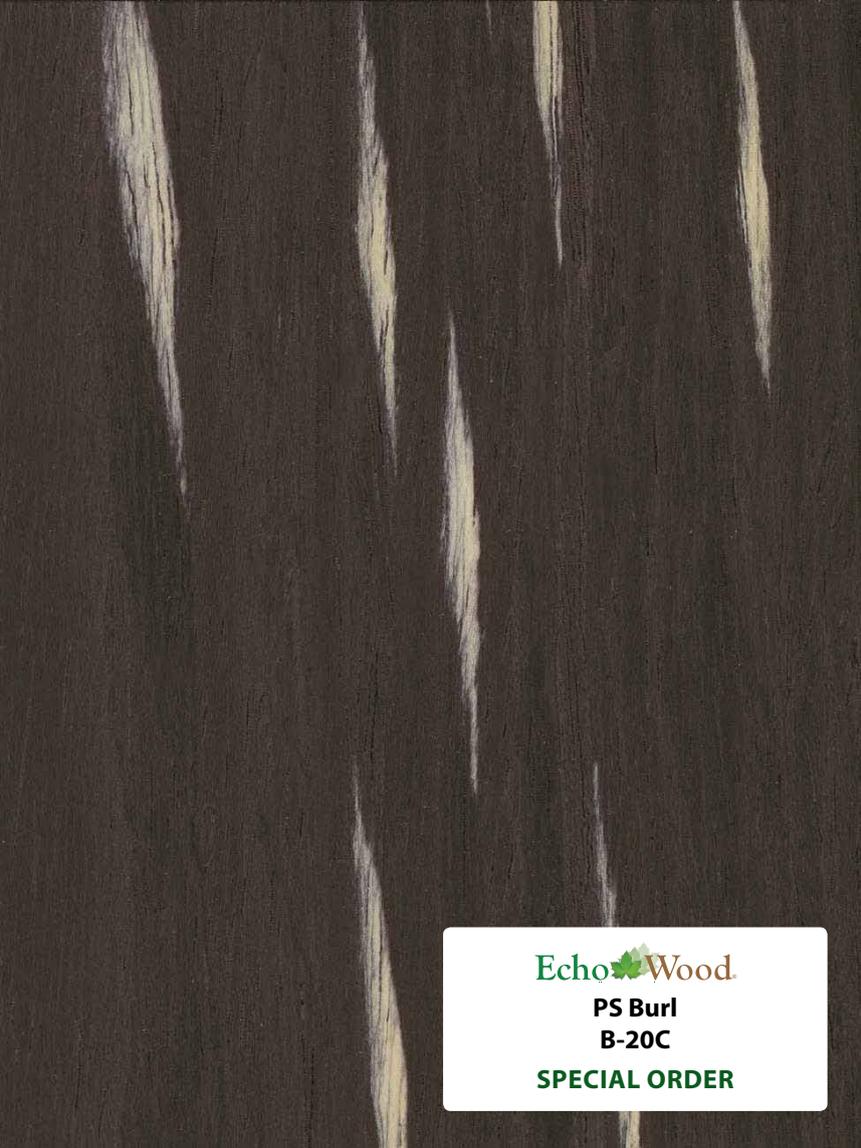
PS Cherry
CH-303C

SPECIAL ORDER

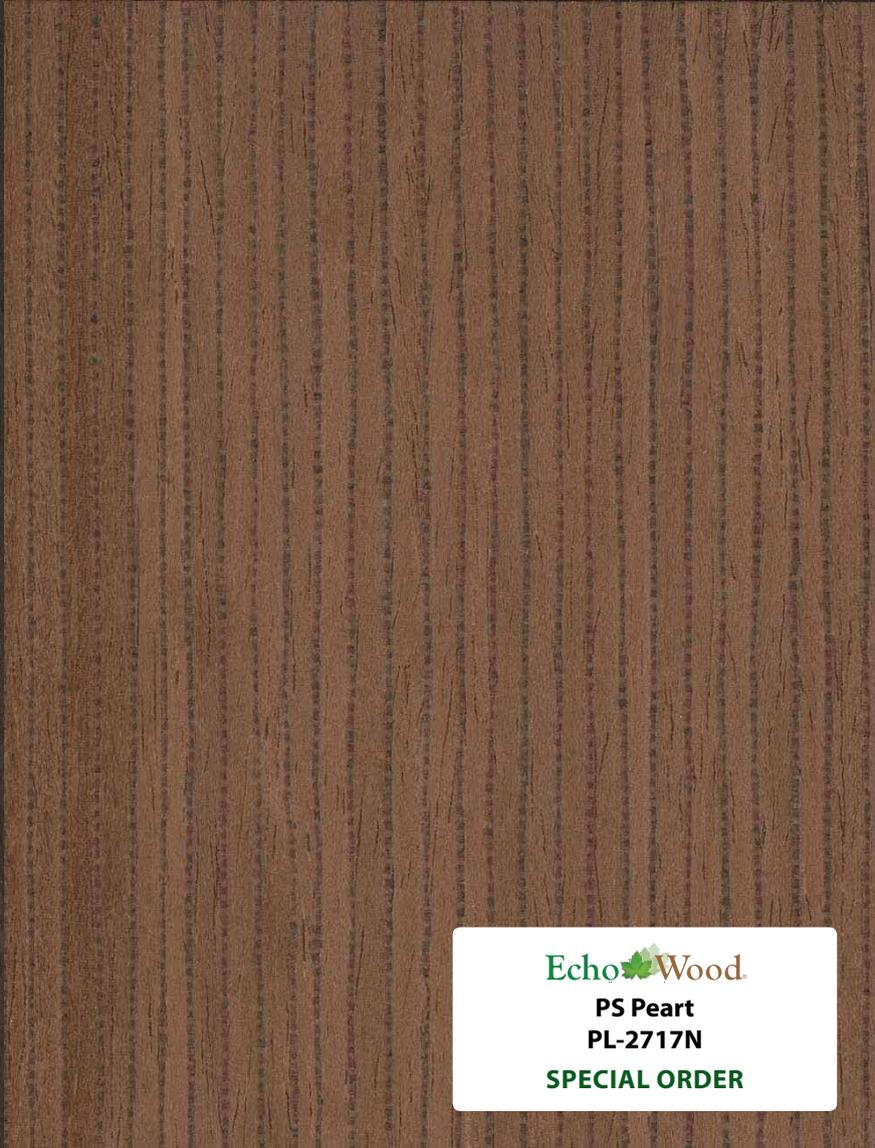
EchoWood

Qtr. Wenge
TD-2640Q

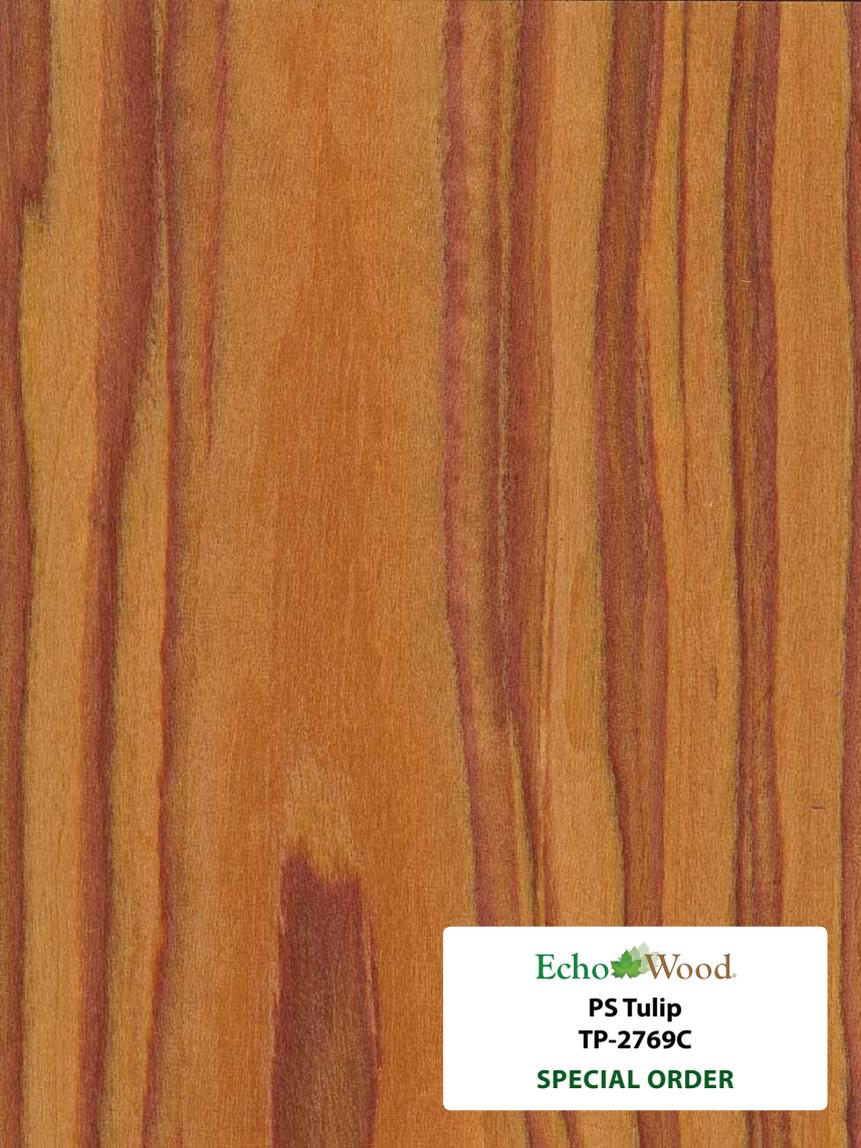
SPECIAL ORDER



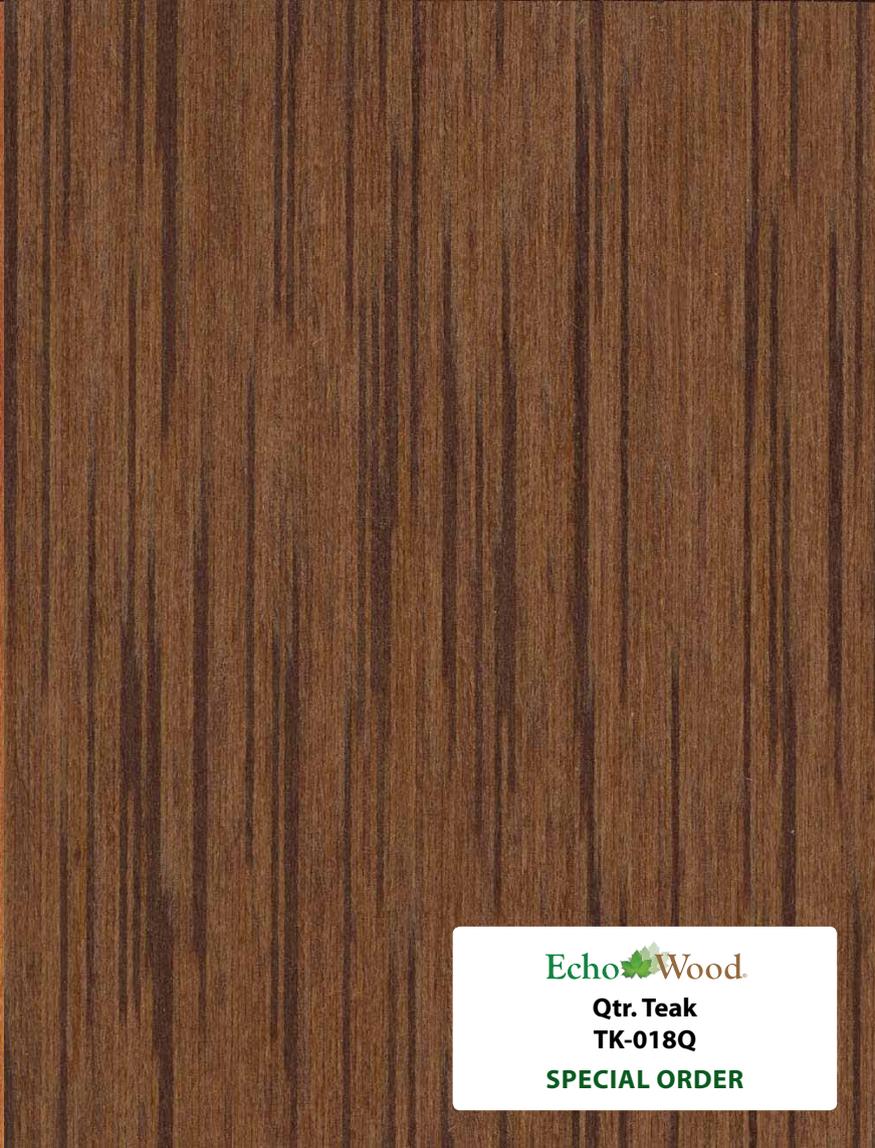
EchoWood
PS Burl
B-20C
SPECIAL ORDER



EchoWood
PS Peart
PL-2717N
SPECIAL ORDER



EchoWood
PS Tulip
TP-2769C
SPECIAL ORDER



EchoWood
Qtr. Teak
TK-018Q
SPECIAL ORDER

EchoWood

Qtr. OAK
S.OAK-2833Q
SPECIAL ORDER

EchoWood

Qtr. Ash
WA-8Q
SPECIAL ORDER

EchoWood

Rift OAK
B.OAK-617S
SPECIAL ORDER

EchoWood

Rift OAK
G.OAK-5S
SPECIAL ORDER

EchoWood

Qtr. Ash

WA-11Q

SPECIAL ORDER

EchoWood

PS Walnut

WT-1004C

SPECIAL ORDER

EchoWood

Qtr. Maple

MP-2855S

SPECIAL ORDER

EchoWood

Qtr. Elm

ELM-01Q

SPECIAL ORDER

EchoWood

Qtr. Vine
DV-2243S

SPECIAL ORDER

EchoWood

Qtr. Macassar Ebony
EB-2120S

SPECIAL ORDER

EchoWood

Qtr. Wenge
TD-2781S

SPECIAL ORDER

EchoWood

Qtr. Teak
TK-15S

SPECIAL ORDER

EchoWood

Qtr. Vine
SV-1192S

SPECIAL ORDER

EchoWood

Qtr. Vine
DV-2714S

SPECIAL ORDER

EchoWood

Qtr. Teak
TK-32Q

SPECIAL ORDER

EchoWood

Qtr. OAK
OAK-2829Q

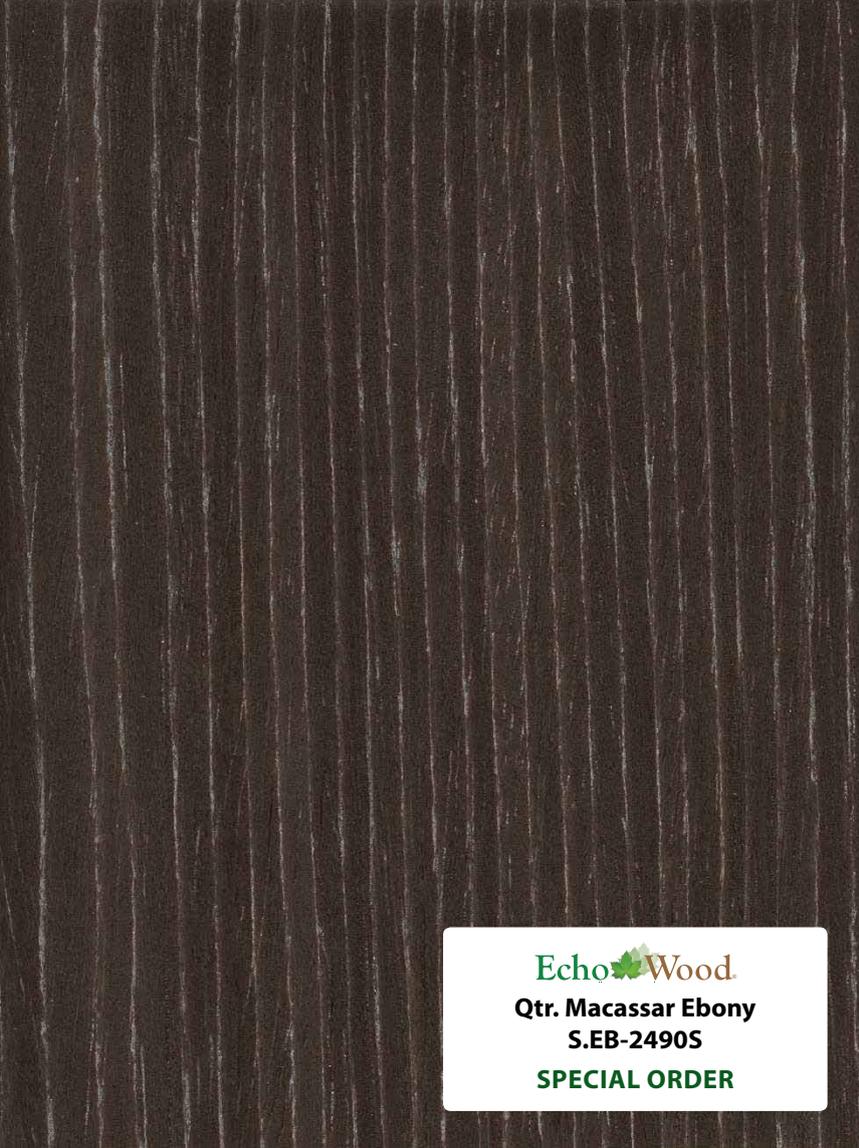
SPECIAL ORDER

Echo  Wood.
Qtr. Macassar Ebony
EB-2745S
SPECIAL ORDER

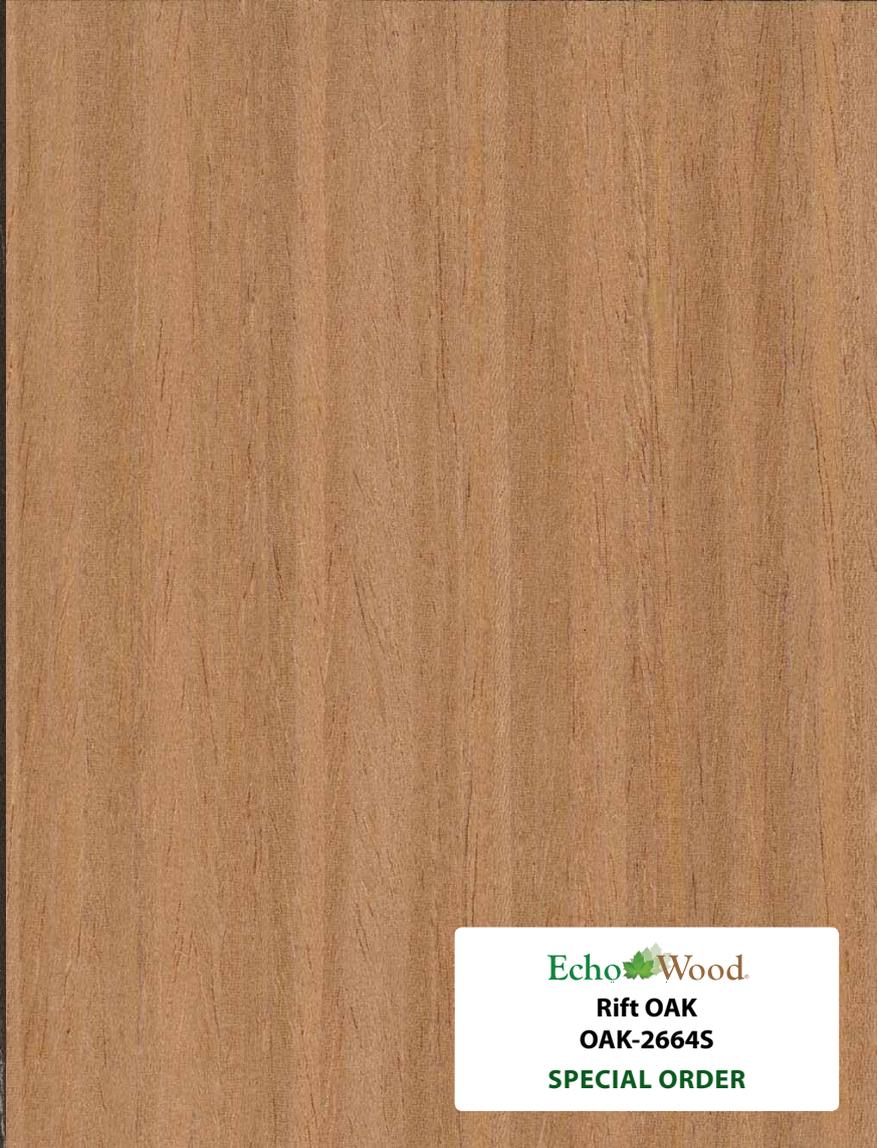
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EB-2349Q
SPECIAL ORDER

Echo  Wood.
Qtr. Macassar Ebony
EB-2690S
SPECIAL ORDER

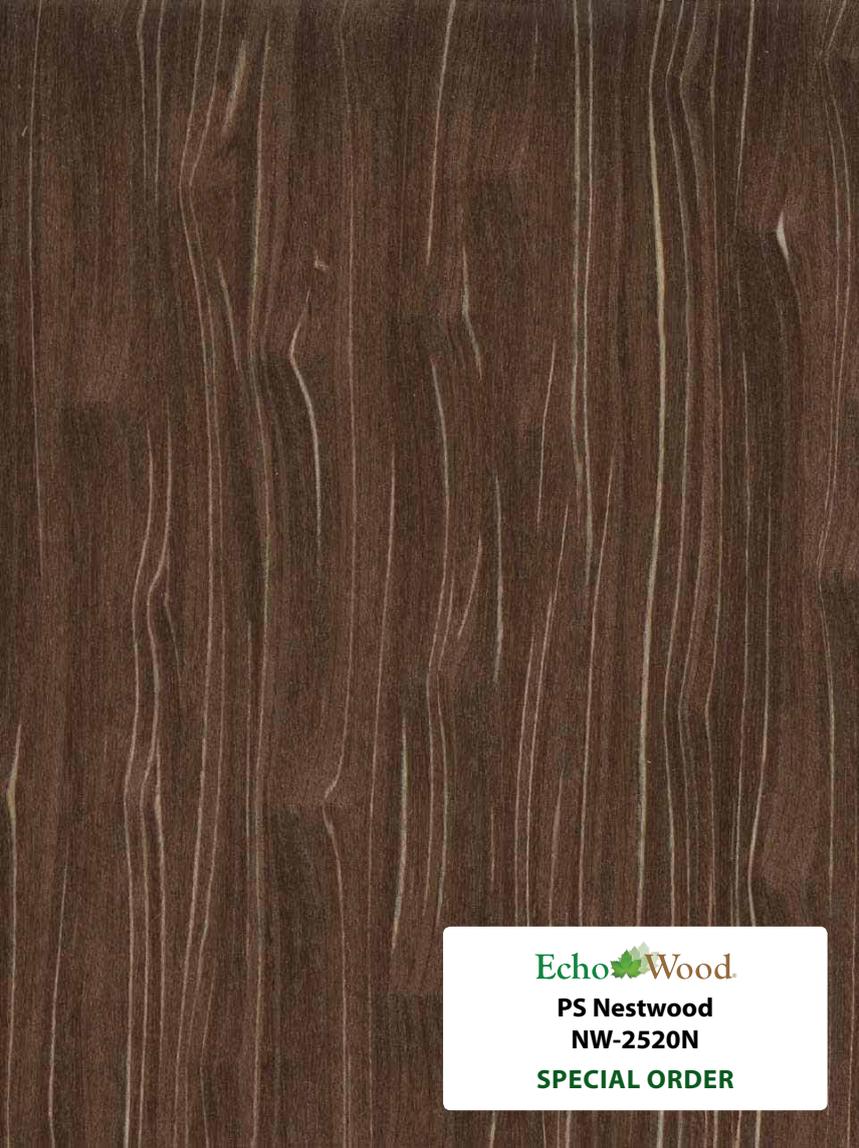
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EB-2191S
SPECIAL ORDER



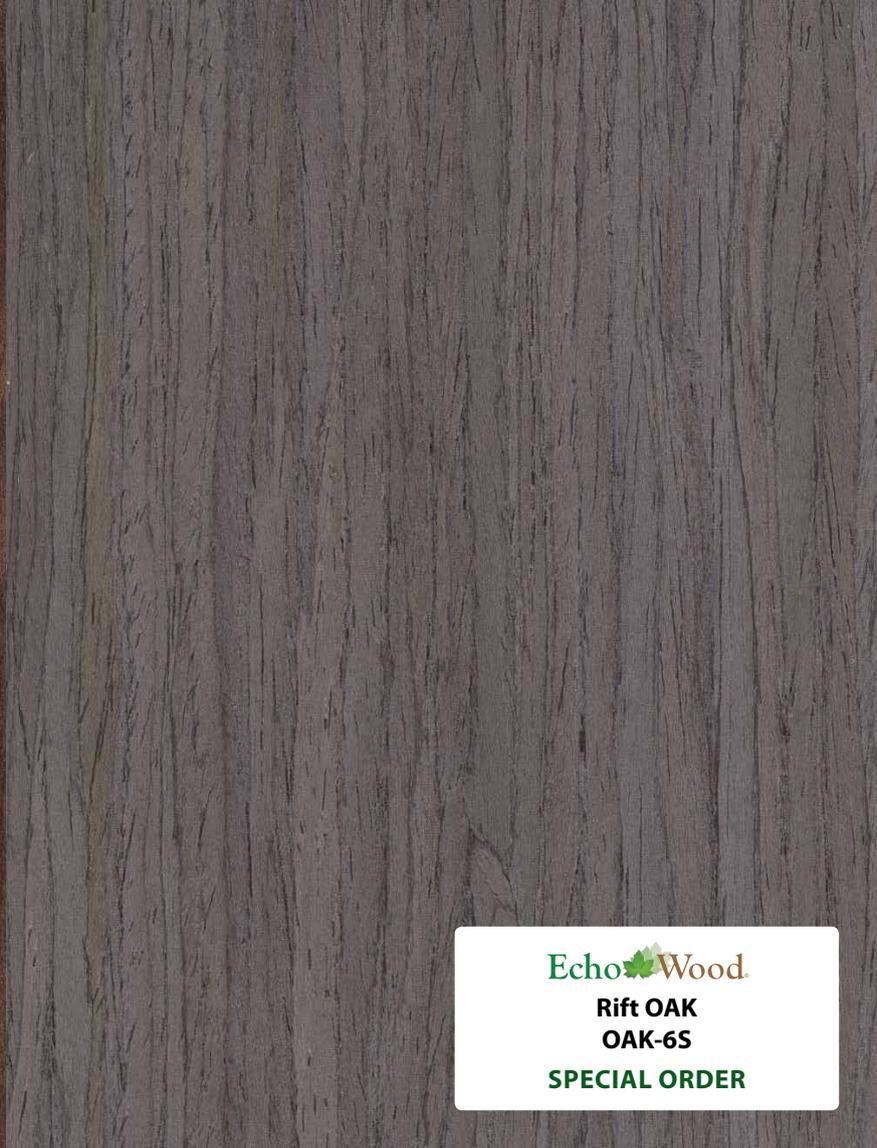
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Qtr. Macassar Ebony
S.EB-2490S
SPECIAL ORDER



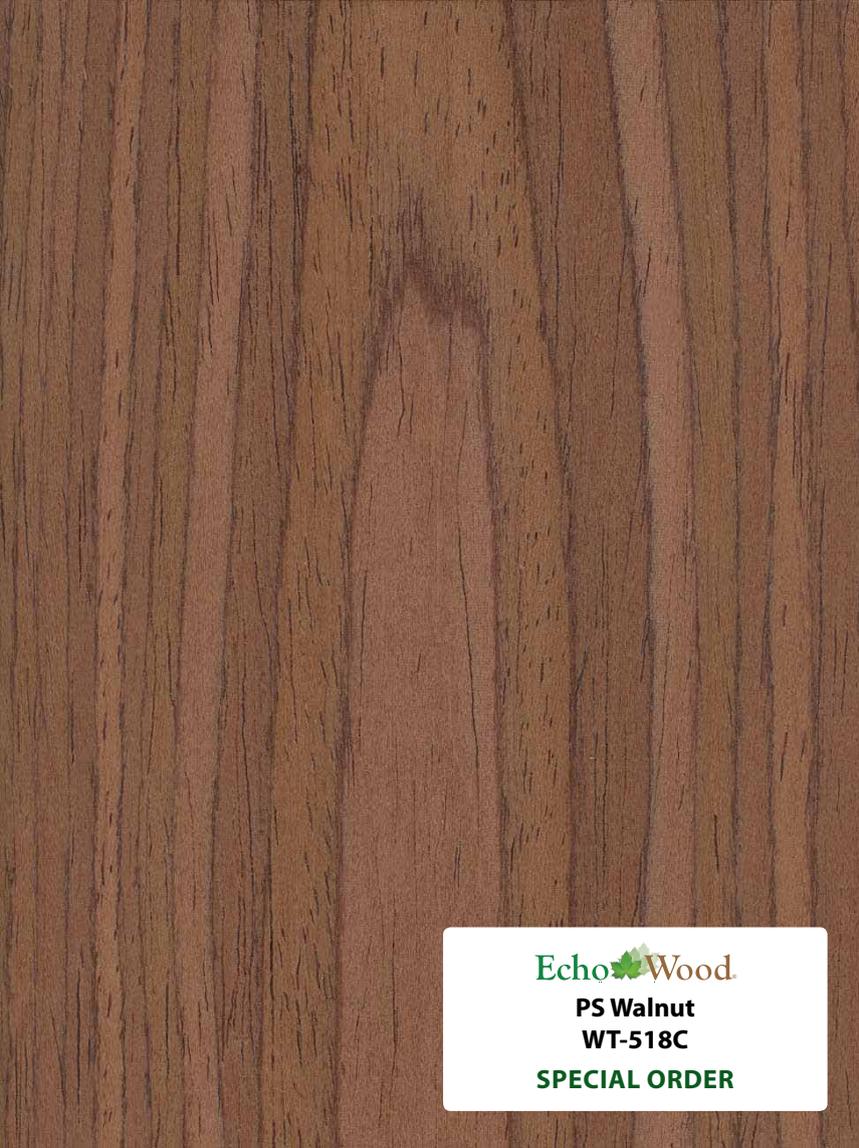
EchoWood.
Rift OAK
OAK-2664S
SPECIAL ORDER



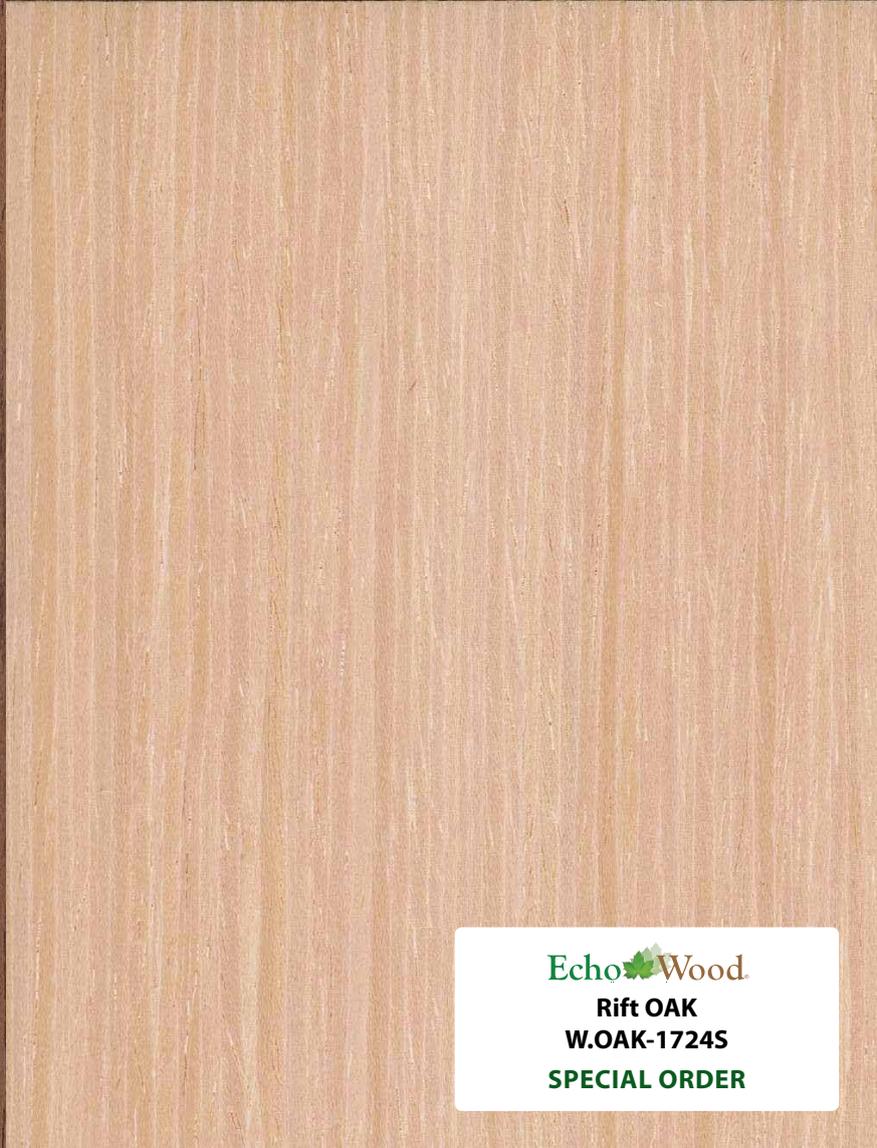
EchoWood.
PS Nestwood
NW-2520N
SPECIAL ORDER



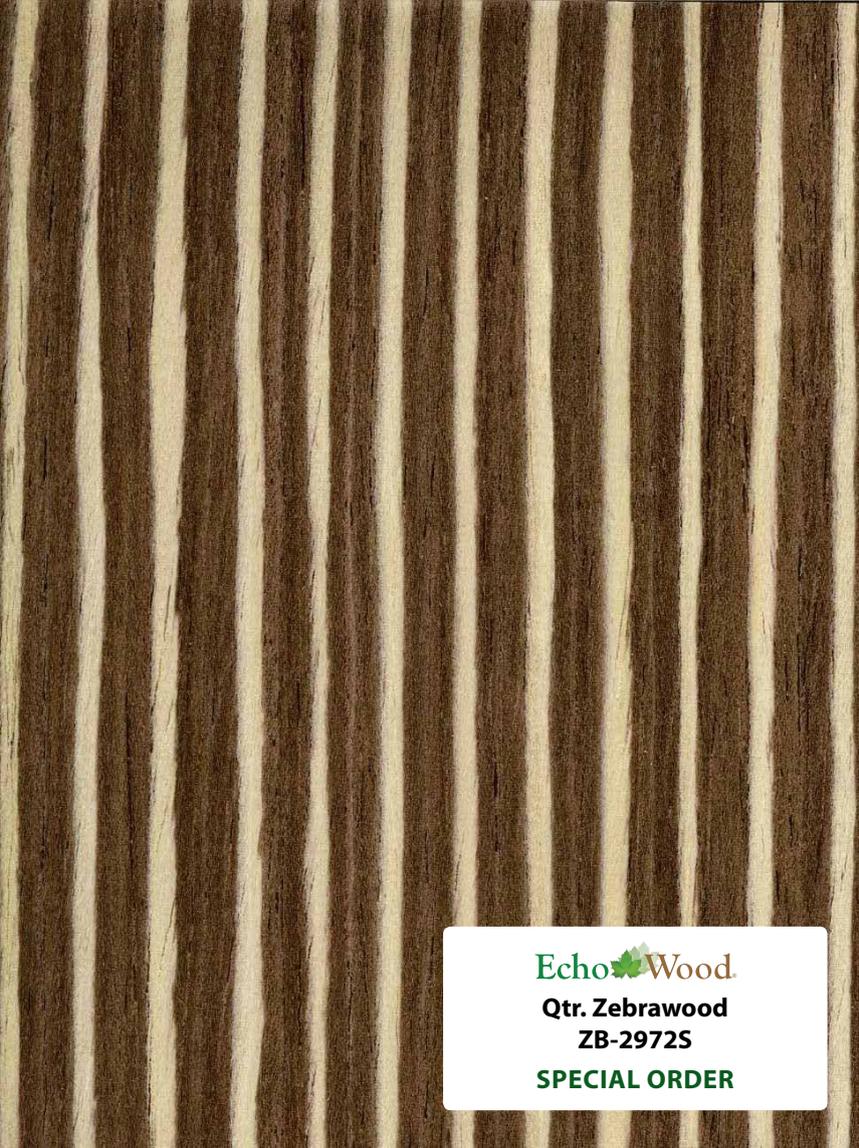
EchoWood.
Rift OAK
OAK-6S
SPECIAL ORDER



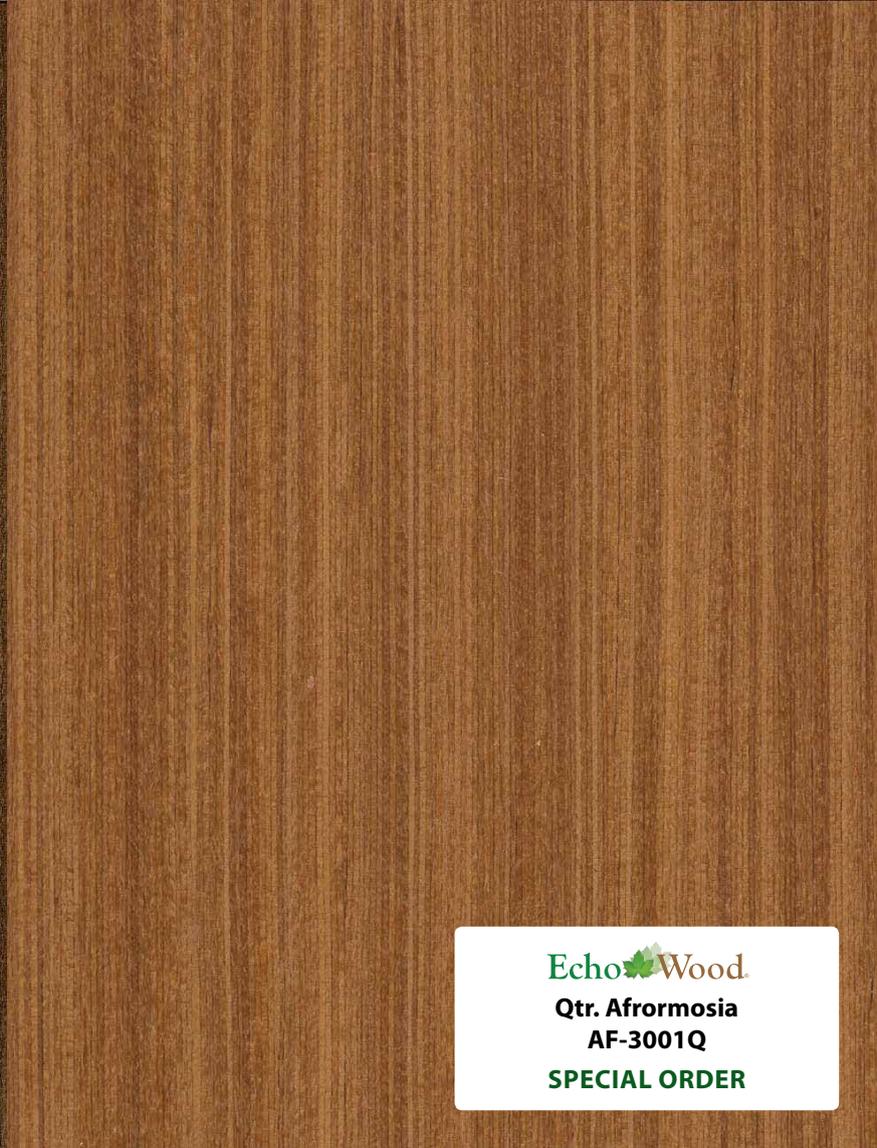
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PS Walnut
WT-518C
SPECIAL ORDER



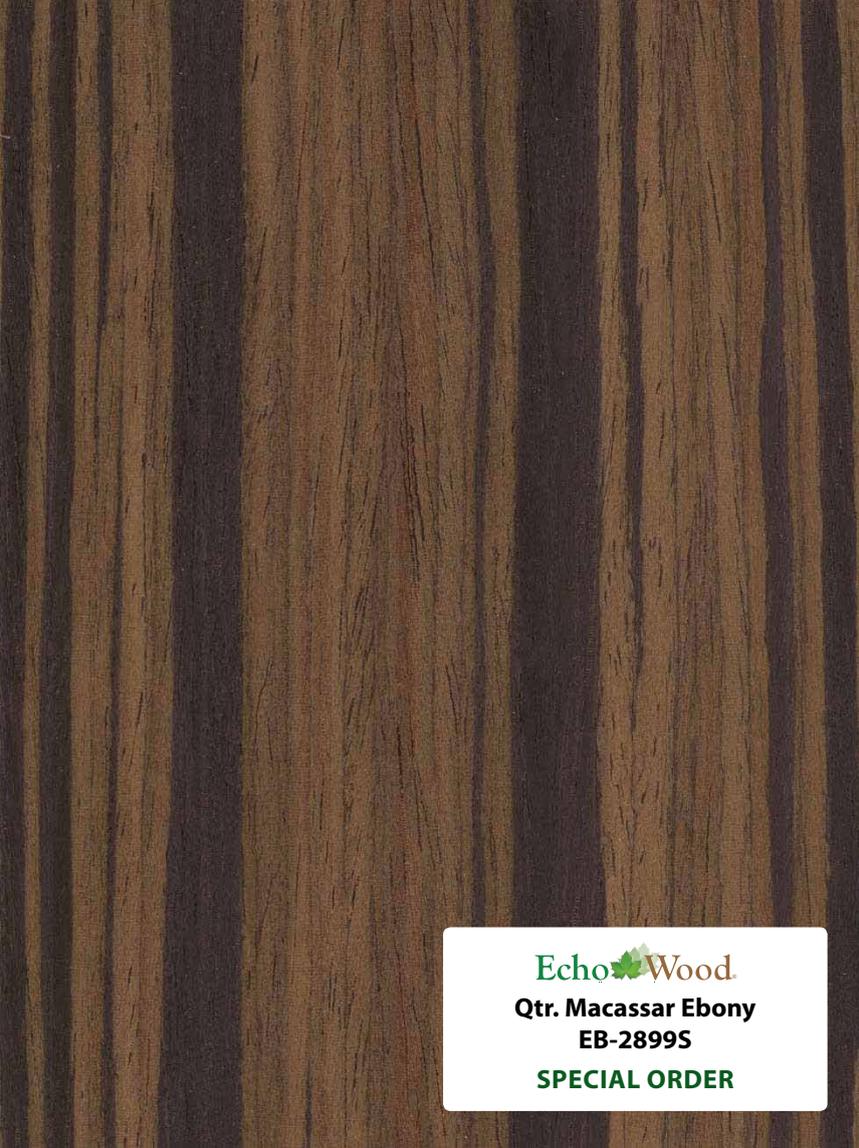
EchoWood
Rift OAK
W.OAK-1724S
SPECIAL ORDER



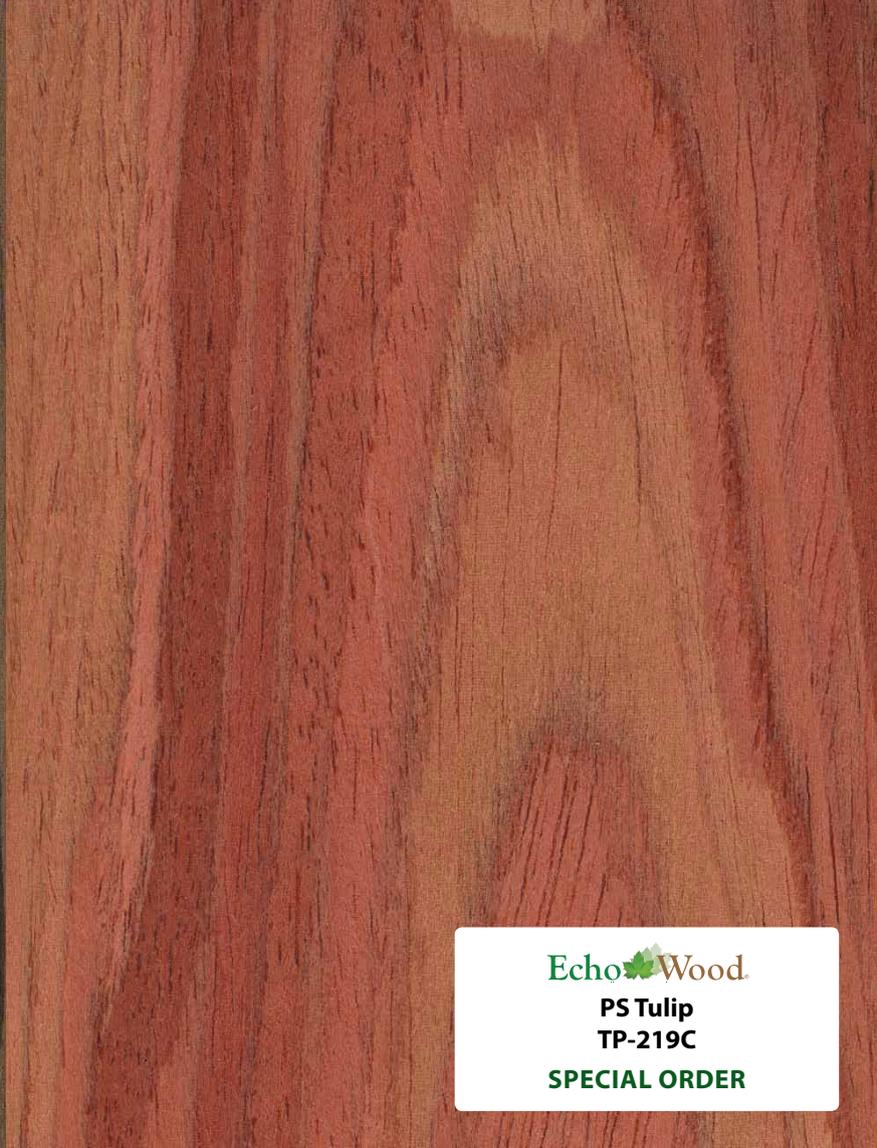
EchoWood
Qtr. Zebrawood
ZB-2972S
SPECIAL ORDER



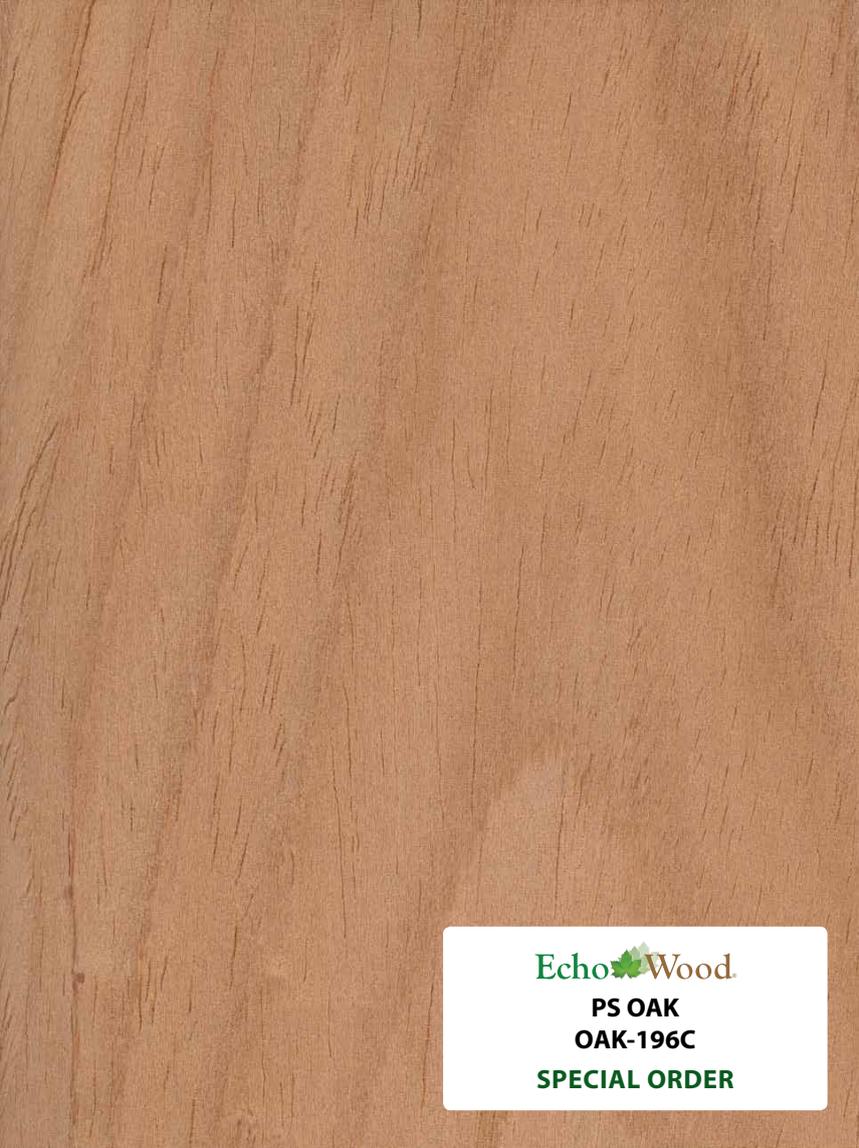
EchoWood
Qtr. Afrormosia
AF-3001Q
SPECIAL ORDER



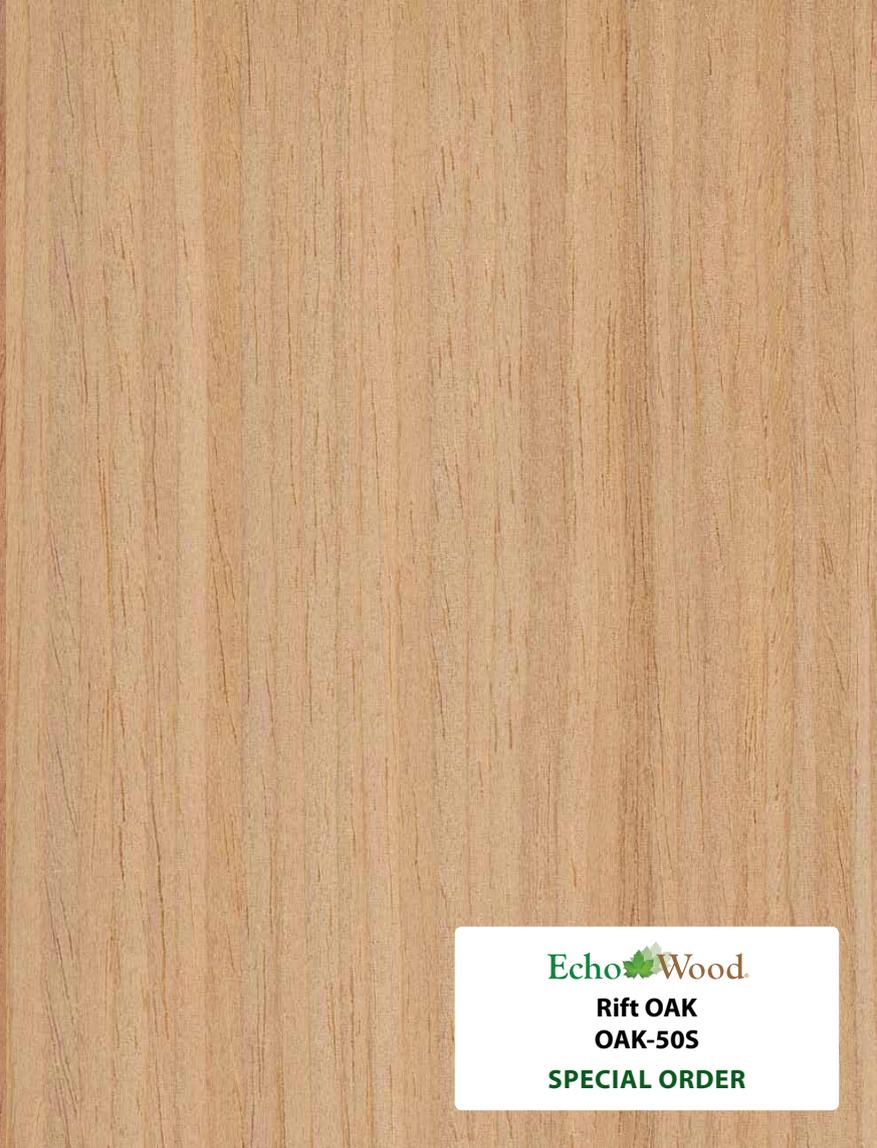
EchoWood
Qtr. Macassar Ebony
EB-2899S
SPECIAL ORDER



EchoWood
PS Tulip
TP-219C
SPECIAL ORDER



EchoWood
PS OAK
OAK-196C
SPECIAL ORDER



EchoWood
Rift OAK
OAK-50S
SPECIAL ORDER

EchoWood

Qtr. Teak
TK-1687Q

SPECIAL ORDER

EchoWood

PS Rosewood
SZ-022C

SPECIAL ORDER

EchoWood

Qtr. Teak
TK-018Q

SPECIAL ORDER

EchoWood

Qtr. Teak
TK-018S

SPECIAL ORDER

EchoWood

Qtr. Teak
TK-2629Q

SPECIAL ORDER

EchoWood

Rift OAK
OAK-2239S

SPECIAL ORDER

EchoWood

Qtr. Teak
TK-015S

SPECIAL ORDER

EchoWood

Qtr. Teak
TK-EVL-019S

SPECIAL ORDER

EchoWood

Qtr. Macassar Ebony
EB-2201S

SPECIAL ORDER

EchoWood

Qtr. Macassar Ebony
EB-304Q

SPECIAL ORDER

EchoWood

Qtr. Wenge
TD-2621Q

SPECIAL ORDER

EchoWood

Qtr. Macassar Ebony
EB-123S

SPECIAL ORDER

EchoWood

PS Macassar Ebony

EB-2542N

SPECIAL ORDER

EchoWood

Qtr. Macassar Ebony

EB-2776S

SPECIAL ORDER

EchoWood

Qtr. Wenge

TD-5006Q

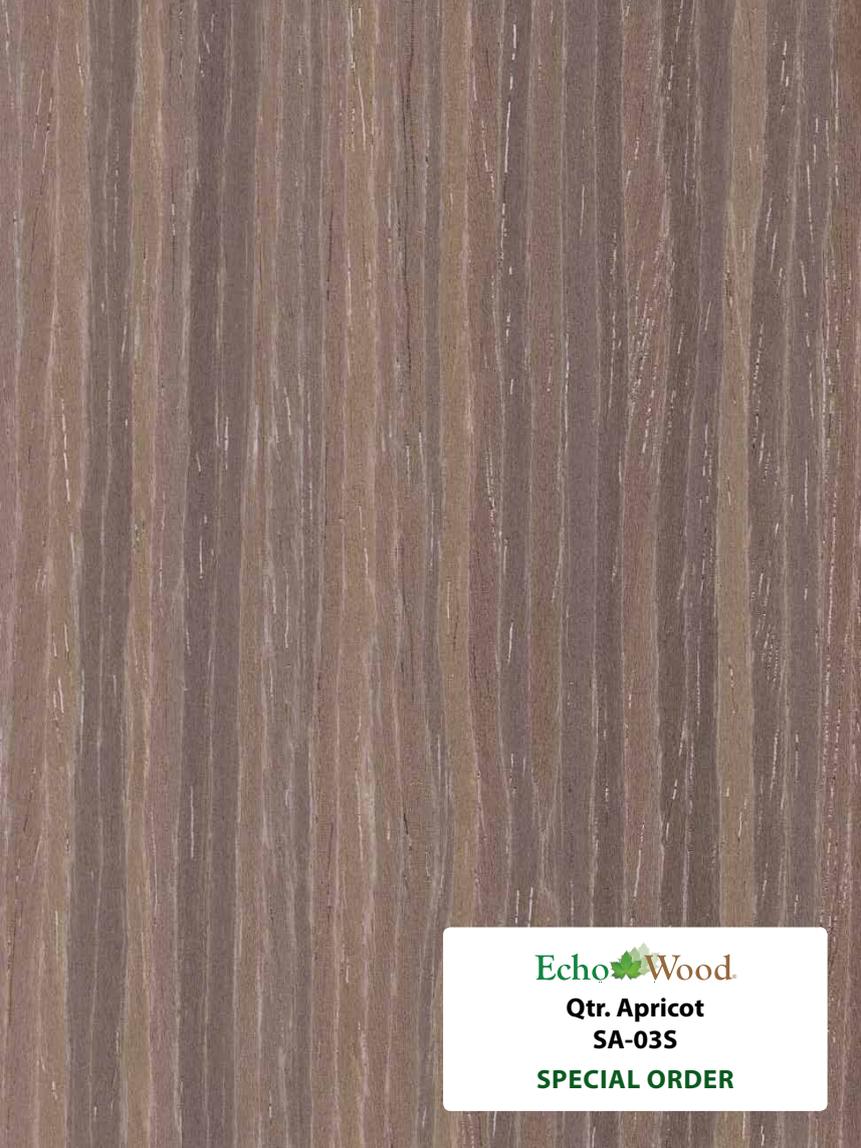
SPECIAL ORDER

EchoWood

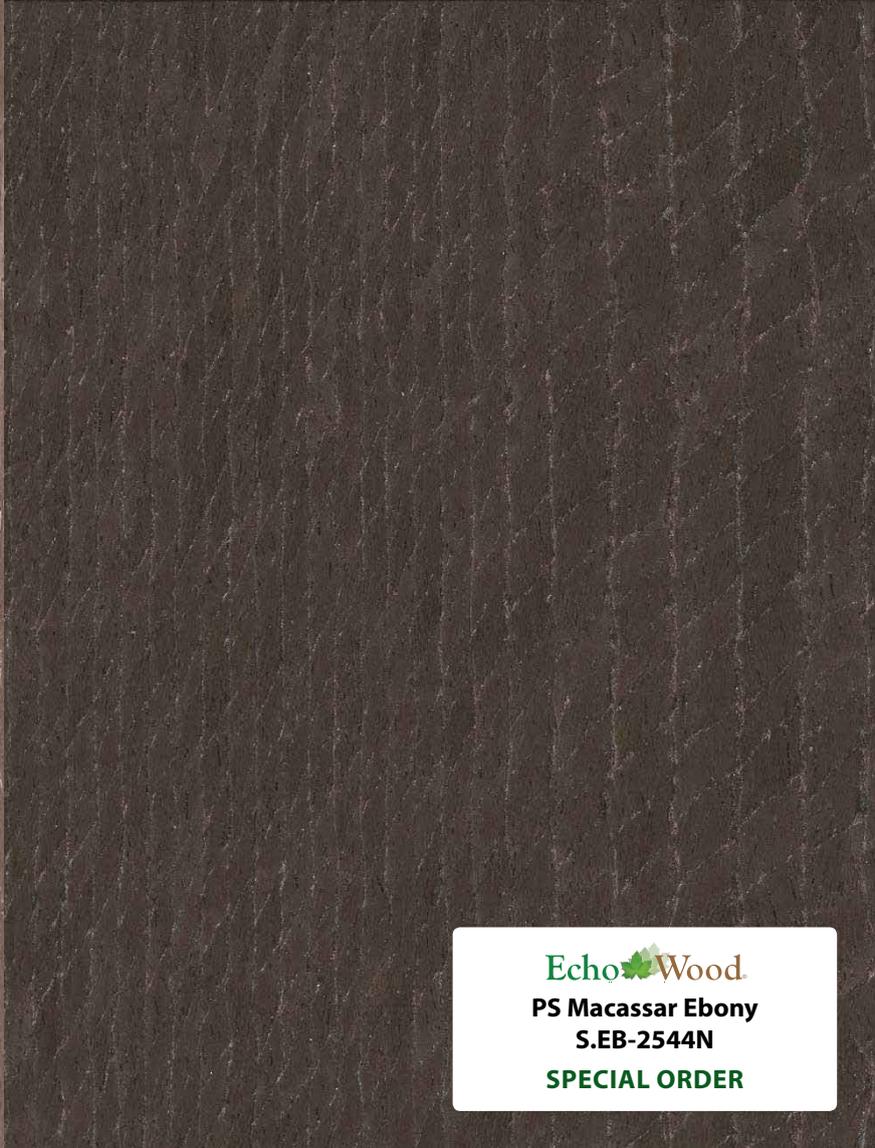
Rift OAK

OAK-09S

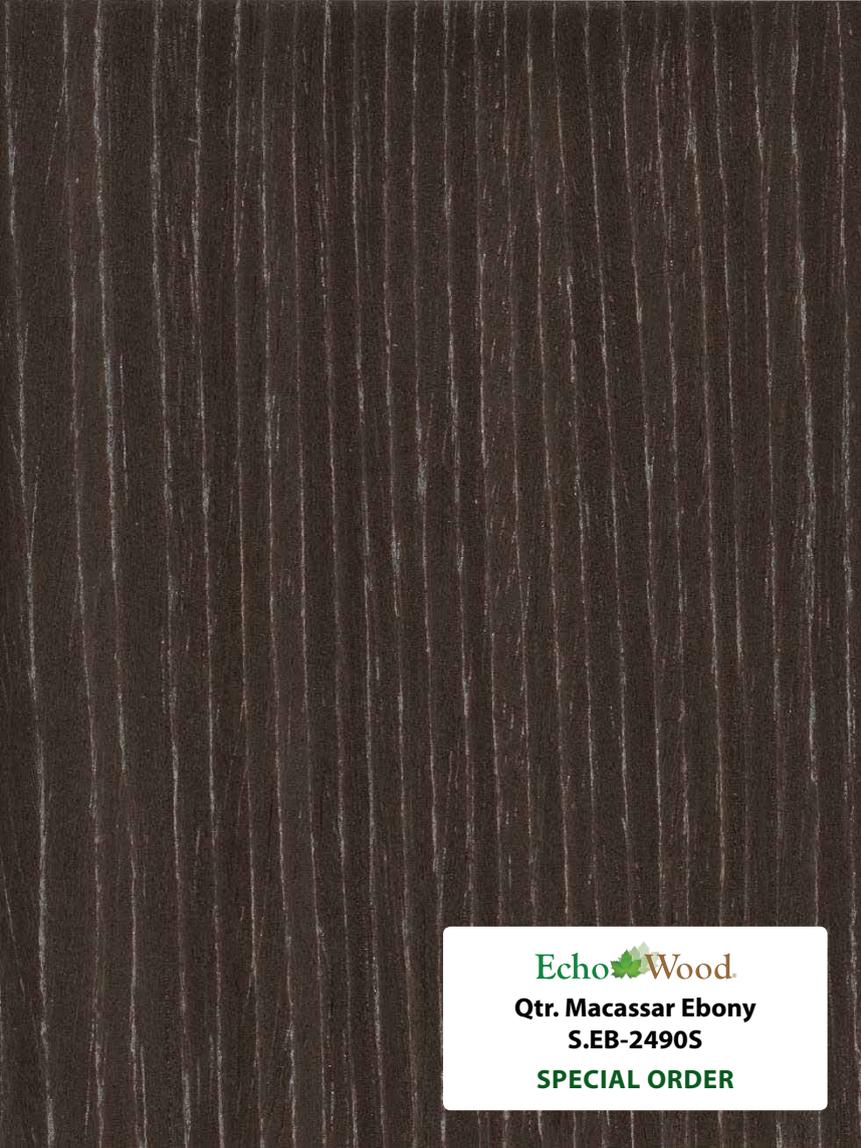
SPECIAL ORDER



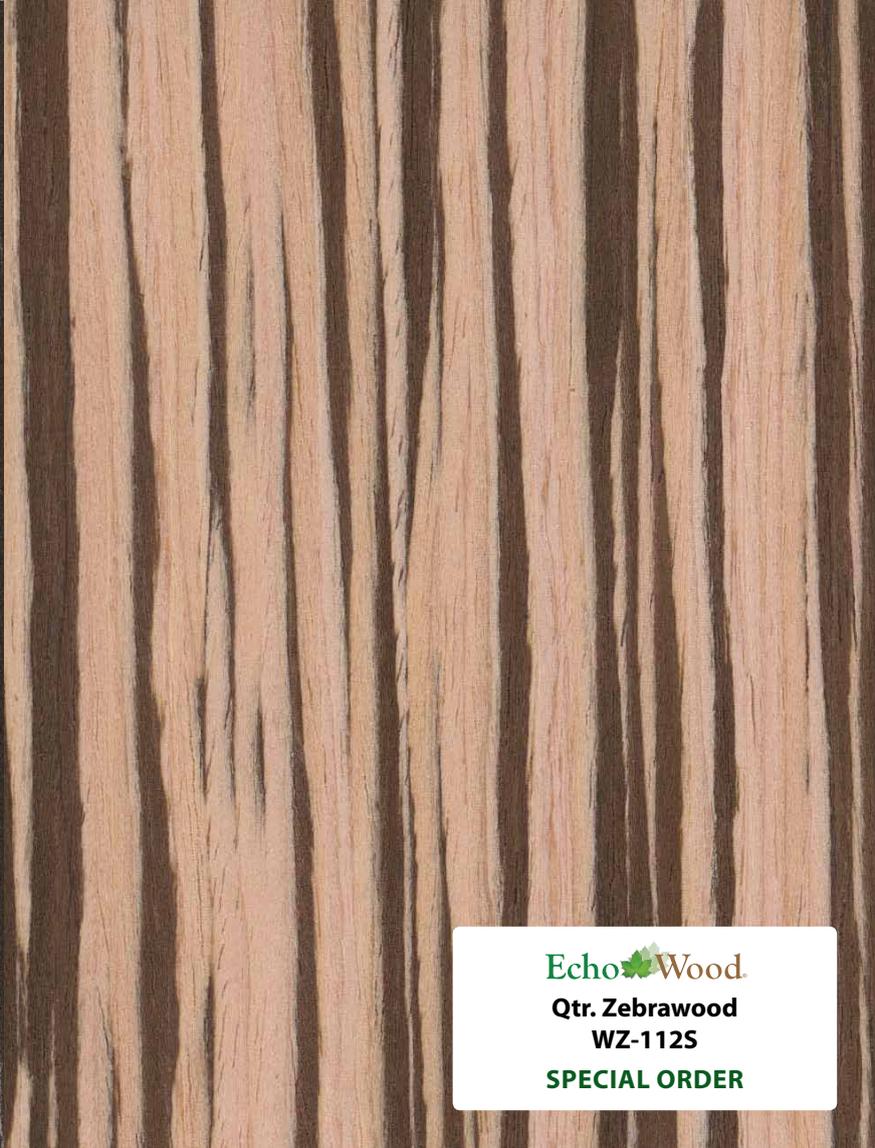
EchoWood
Qtr. Apricot
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