WOOD VENEER GUIDE

NATURAL CUT & STRATAWOOD™

Gunlocke®

NATURAL CUT VENEER

QUARTER CUT NUTMEG WALNUT

STRATAWOOD™ VENEER

FLAT CUT NUTMEG WALNUT

WOOD VENEER HISTORY

NATURAL CUT VENEER

Wood veneer, distinctive and luxurious, has its roots in Ancient Egypt over 4000 years ago where it was used for decorative purposes on the tombs of pharaohs. In this early application, each piece of veneer, similar to today, was meticulously sawn and then bonded to the underlying material.

While veneers were also used in Europe subsequently, they remained rare until the post-Middle Ages era. The Renaissance marked a turning point, sparking heightened interest in the art of veneering. By the 17th century, French ébénistes and woodworkers began including unique materials such as ebony and tiny pieces of wood burl to craft opulent works of art. This era also saw the development of specialized tools, contributing to the advancement and refinement of veneering techniques.

The advent and patenting of the cutting lathe played a pivotal role in the history of wood veneer. This innovation facilitated high-speed production and increased accessibility to the material. By the 1970s, furniture manufacturers had honed techniques to produce remarkably thin veneers without compromising the structural integrity or performance of the wood.

Today, wood veneer has become a versatile, earth-friendly material produced in an extensive array of wood species, colors, and finishes. The journey from its ancient origins in Egypt to the contemporary era reflects not only technological advancements but also the enduring appeal of wood veneer as a timeless, sustainable, and luxurious element in the craftsmanship of fine furniture.

Since 1902, Gunlocke leads the commercial furniture industry with finely crafted products fashioned from both solid wood as well as sliced natural wood veneers.

Gunlocke offers two types of genuine wood veneer: natural cut and Stratawood. They appear very similar but have distinct production processes and advantages.

STRATAWOOD VENEER

Stratawood is the Gunlocke brand name for our portfolio of reconstituted real wood veneer, a standard on many products in our portfolio. Gunlocke developed a straight grain Stratawood in 2010 to maintain a repeatable color and grain pattern that preserves the natural beauty of wood, while at the same time achieves the highest environmental standards.

Like natural cut veneer, Stratawood provides a beautiful real wood surface. However, the design aesthetic and processes behind Stratawood and natural veneer are different. The unique process to create Stratawood is similar to natural veneer, but with the added benefit of greater uniformity in color and grain pattern, which enables matching identical veneered panels throughout an entire office.

With the evolution of sustainable practices in cultivating and harvesting rapidly renewable resources, along with new milling and manufacturing techniques, Gunlocke has since expanded the Stratawood offering.

VENEER FACTS & PROCESSES

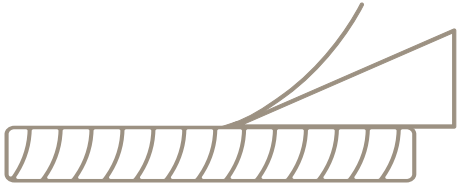
NATURAL CUT VENEER

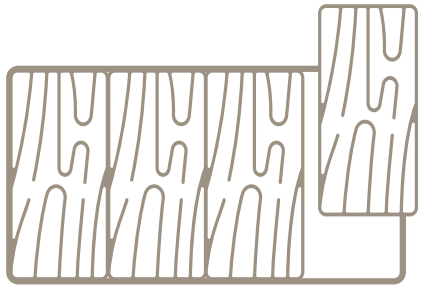
SOURCING NATURAL WOOD VENEER

The process for creating natural wood veneer begins with the careful selection of high-quality wood logs. Typically, unique or visually appealing hardwood species are chosen to achieve a variety of aesthetic options. These logs are meticulously sliced or peeled, yielding thin sheets of veneer. Different slicing methods, such as rotary cutting and plain slicing, yield different grain patterns. The selected veneer sheets are then dried to achieve the appropriate moisture content, ensuring stability and preventing warping.

MANUFACTURING NATURAL WOOD VENEER

Once the veneer sheets are prepared, they may undergo further treatments to enhance their appearance and durability. This might involve staining or dyeing to achieve desired colors, as well as the application of finishes and coatings to protect the surface while enhancing the depth and clarity of the wood. Advanced manufacturing technologies, including cutting lathes, have streamlined the production of veneer, yielding extremely thin sheets and many more pieces from each log. The result is a versatile material that preserves the natural beauty of the wood while offering flexibility in colors, patterns, and finishes.



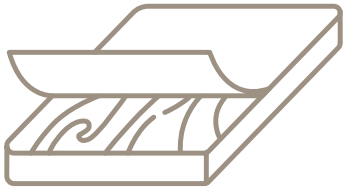


APPLICATION TO FURNITURE

The application of natural wood veneer to furniture is a skilled, intricate process. Craftsmen carefully hand select and arrange veneer sheets to create patterns and designs that enhance the visual appeal of the final piece. The veneer is then bonded with adhesives to a substrate, often a less expensive but more stable and sustainable material than solid wood. This bonding process involves specialized machinery that uses heat and pressure to ensure a strong and seamless adhesion. Once applied, the veneer-covered substrate is shaped and finished to create the final furniture piece. The result is furniture that combines the natural beauty of wood with the practical advantages of stability and resistance to warping and cracking, offering a balance of aesthetics and durability.

VENEER FACTS & PROCESSES

STRATAWOOD VENEER



STRATAWOOD VENEER PRODUCTION

Engineered from authentic wood, Stratawood veneer has a repeatable and consistent grain pattern, distinguishing it from the unavoidable variability found in natural veneers. Derived from Obeche & European Basswood trees, the manufacturing process involves rotary cutting, drying, stacking, and dyeing. Afterward, dyed glues are injected between each veneer leaf, and the composite is then pressed into sizable rectangular blocks. These blocks are then sliced to produce sheet veneer with a uniform grain pattern, closely resembling natural cut wood species.

ECOLOGICAL ADVANTAGES OF STRATAWOOD

Stratawood has significant ecological benefits, as it is exclusively sourced from Obeche & European Basswood trees grown and harvested sustainably under the Forest Stewardship Council (FSC) guidelines. Obeche & European Basswood trees are known for their rapid renewability and fast growth, enabling Stratawood's eco-friendly practices status and allowing it to contribute to LEED certification, specifically the Rapidly Renewable Materials credit.

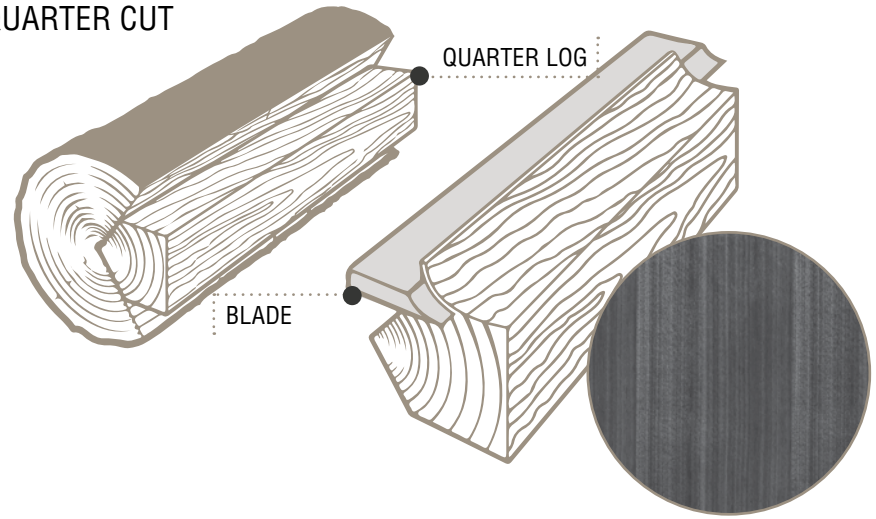
COST EFFICIENCY AND YIELD

Highly efficient processing methods are a key advantage of Stratawood, enabling twice the yield over natural cut veneers. The unique milling process results in an 80% yield from each log for Stratawood, compared to an average of only 40% yield from the natural cut processes. This increased yield not only increases environmental sustainability but also creates cost savings. The cost-effectiveness of Stratawood enables pricing that is 10% lower than natural cut veneer, creating an option for customers seeking both quality and affordability in wood veneer products.

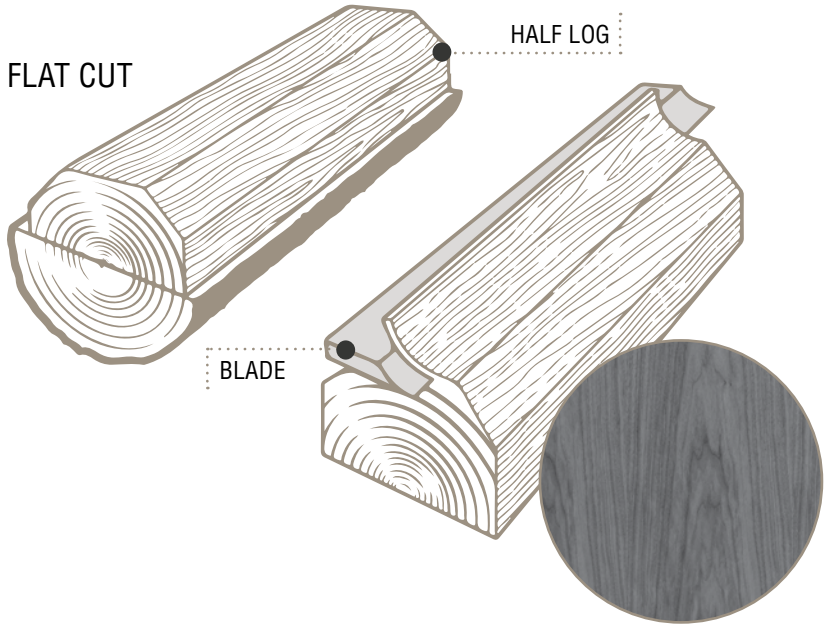
NATURAL VENEER CUTS

Natural veneer by its nature exhibits differences in grain pattern and tone. This is expected and, in fact, contributes to the beauty and individuality of each product. Flat cut veneers emphasize the variations of wood by highlighting peaks and valleys in the grain patterns, often called “cathedrals”. Quarter Cut and rift cut veneers are a premium cut that maintains variations in the grain but without cathedral patterns.

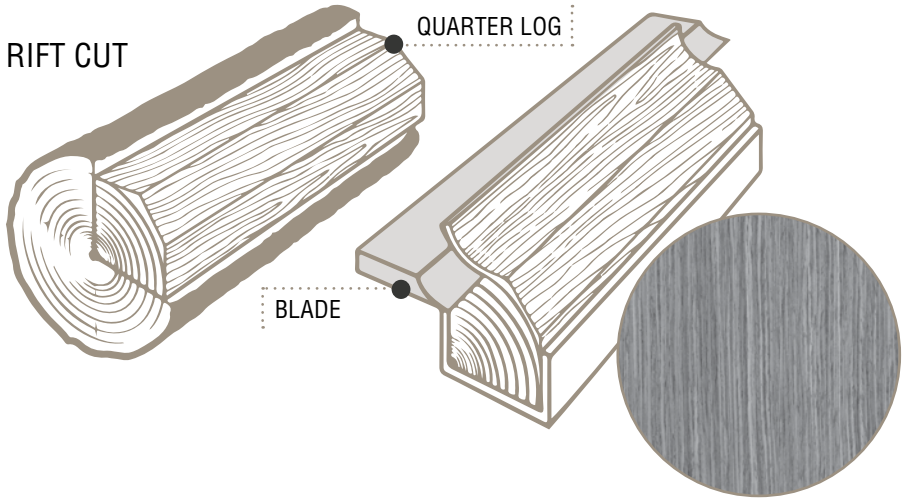
QUARTER CUT



FLAT CUT

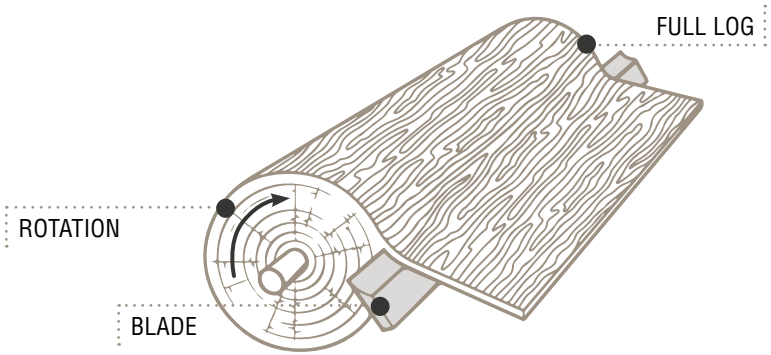


RIFT CUT



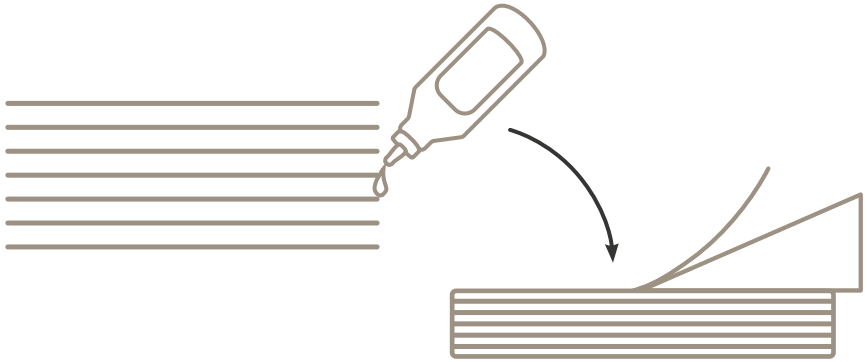
STRATAWOOD VENEER CUTS

Stratawood is a natural, FSC®-certified reconstituted real wood veneer that is designed to exhibit a consistent grain pattern and color. It is available in either a flat cut, rift cut, or straight cut.



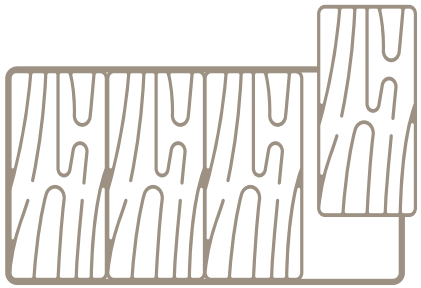
HARVEST AND MILLING

Stratawood veneer starts with responsibly sourced, fast growing Obeche and European Basswood trees. Logs arrive at the mill to be rotary sliced, yielding twice that of traditional natural cut milling processes.



VENEER PRODUCTION

Veneer leaves are glued and pressed into composite blocks. Composites are sliced into sheet veneer with patterns closely resembling natural flat cut and rift cut veneers.

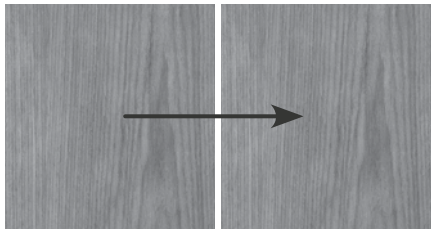


VENEER APPLICATION

Veneer is shipped to Gunlocke in the rolling mountains of Western New York to be made into beautiful furniture products. Skilled craftsmen hand-select, arrange, and apply leaves of veneer in a variety of unique patterns. Worksurfaces are protected by Gunlocke's proprietary finish system, creating exceptional clarity, durability, and beauty.

LAYUP PATTERNS

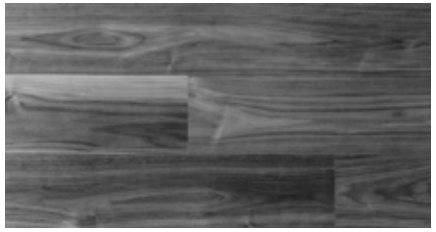
Natural Cut & Stratawood Veneer
Veneer leaves are typically arranged in the order they were sliced. Skilled craftsman hand-select, trim, lay out, and glue the pieces together at their edges to make faces. The veneer can be laid-up in a variety of ways that produce different patterns, but the two most common are slip match and book match.



SLIP MATCH

A standard pattern on all Gunlocke natural cut and Stratawood veneers, consecutive flitches of veneer are slid or “slipped” across each other and joined side by side, creating a repeating grain pattern across the panel.

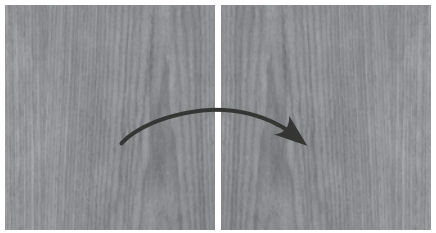
- While some color contrast can occur at the joints, slip matching produces mainly uniform color because all leaves are similarly oriented, resulting in a repeated grain that generally prevents the “barber pole” phenomenon.
- Slip matching is a common technique, often used with natural flat cut, quarter cut, rift cut, and all Stratawoods to provide a clean straight grain look.



PLANK MATCH

An optional plank veneer layup utilizing either natural flat cut walnut or natural rift cut oak veneer slices.

- Available on Letchworth and Saranac table worksurfaces.
- Unlike slip matched veneer patterns, plank veneers are arranged in a deliberately staggered pattern to highlight the unique figuring of each piece.



BOOK MATCH

A common request on natural cut veneers, consecutive flitches of veneer are flipped open facing each other like pages in a book, creating a mirror image of the previous leaf.

- The symmetrical pattern accentuates the grain, figure, and decorative characteristics of the log.
- Book matching can sometimes create a type of color variation called “metamerism” where lighting changes in type or angle can yield a variation.
- Book matching is is a common technique and is often used with flat, quarter, or rift sliced veneers.

LESS COMMON LAYUP PATTERNS

8-PIECE SUNBURST

HERRINGBONE

BOX MATCH

DIAMOND MATCH

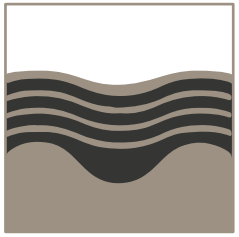
SPECIES & FINISHES

Natural wood includes variations in color, grain and texture. These variations give natural wood products beauty and character, often making each piece unique. Minor variations are common from one piece of furniture to the next even though they are finished at the same time. Exposure to light and the the natural aging process causes a darkening of natural wood products over time. Light finishes on wood products enhance the natural characteristics of wood and do not mask variation in grain and texture.

CHERRY MAPLE OAK WALNUT

SPECIES

While natural cut wood veneers are composed of specific hardwood species, such as cherry, maple, oak, and walnut, Stratawood veneer closely mimics those species through a process of milling, cutting, and dying the wood.



The open pore worksurface finish is a water-based finish with a 20 sheen and provides a natural and luxurious appearance, while maintaining a high-level of durability and repairability.

FINISHES

These finishes are protected by the Gunlocke proprietary wood finish system, utilizing a combination of topcoats engineered for various applications used in the furniture industry. It is exceptionally clear and durable, accenting the beauty of the wood. The durability, depth, clarity, and beauty of these wood finishes meet discerning expectations, while often exceeding indoor air quality (IAQ) standards.

PARQUET MATCH

SWING MATCH

REVERSE OR END GRAIN BOX

REVERSE DIAMOND

SUSTAINABILITY & WELLNESS

NATURAL CUT VENEER

FSC Sustainably Grown Trees
Gunlocke natural cut veneers are FSC certified. It is a deliberate choice to source hardwoods that are responsibly grown and harvested. To help preserve the eco-system of the exporting countries and to discourage over harvesting and clear cutting, the FSC has instituted guidelines for how trees can be grown and harvested. Gunlocke produces furniture from four hardwood species: Cherry, Maple, Oak, and Walnut. None of which are rare or unique, but they are exceptionally high quality, durable, and attractive.

STRATAWOOD VENEER

FSC Sustainably Grown Trees
Stratawoods are intrinsically FSC certified by nature of their sourcing and creation. Stratawood is produced with trees that have been FSC grown and have been handled under the FSC chain of custody.

LEED Credit
Utilizing trees that are rapidly renewable and fast growing allows Stratawood veneer to contribute to the LEED Rapidly Renewable Materials credit.

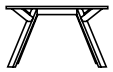
40% Yield from Raw Materials
Though the yield appears low when compared to Stratawood, it is higher than constructing furniture from solid wood. The initial purpose of the development of veneers was twofold: first, as an alternative to solid wood that allows the builder to preserve the aesthetic appeal of high-end wood species while minimizing the use of expensive and rare woods; second, to create more stable and durable pieces less prone to warping and cracking over time compared to solid wood construction. This durability also yields longevity, another element of sustainability.

80% Yield from Raw Materials
Stratawood has an 80% yield from raw materials, minimizing the impact on the environment from manufacturing. This is more than double the 40% yield that natural wood veneers produce from raw material to finished product.

INTERNATIONAL WELL BUILDING INSTITUTE™

Wellness in the Workplace
Natural wood materials contribute to Gunlocke's certification of WELL® V1, Key Contributions of Wood. Included in that certification are 1) Air 25 Toxic Material Reduction – Part 5, Urea-Formaldehyde Restriction for furniture and composite wood products – 100 ppm. 2) Mind 88 Biophilia I Qualitative (contributions on incorporating nature's patterns and environmental elements like natural veneer. 3) Mind 97 Material Transparency – Part 1, Material Information. Disclosure of all ingredients down to 1,000 ppm concentration level. Applies to interior finishes and finish materials, furnishings (including workstations) and built-in furniture.

COMPARISON MATRIX

CATEGORY	ATTRIBUTE	NATURAL CUT VENEER	STRATAWOOD VENEER
 Sustainability	FSC Certified	Yes	Yes
	LEED Rapidly Renewable Materials Credit	No	**Yes**
 Pricing	Cost	Higher by 10% on average	Lower by 10% on average
	Grades	V2 (Flat Cut), V3 (Rift Cut & Quarter Cut)	V1 (Flat Cut & Rift Cut), V2 (Straight Cut)
 Cut Types Offered	Flat Cut	Yes	Yes
	Rift Cut	Yes	Yes
	Quarter Cut	**Yes**	No
	Straight (Striated) Cut	No	**Yes**
 Species	Cherry	Yes	Yes, in appearance
	Walnut	Yes	Yes, in appearance
	Oak	Yes	Yes, in appearance
	Maple	**Yes**	No
 Colors/Finish	Grain & Color Consistency	Good	**Excellent**
	Number of Color Choices	26	**38**
	Finish/Sheen	Open Pore 20 sheen on worksurfaces 30 sheen on chassis	Open Pore 20 sheen on worksurfaces 30 sheen on chassis
 Products	Product Compatibility	**Credentials, Silea, Briefing, Saranac, Letchworth, Cube & Cylinder Tables, Calm Tables**	Silea, Briefing (currently)

MAKING THE CHOICE

NATURAL CUT VENEER

Each type of veneer has distinctive properties that address different aesthetic attributes, budgetary needs, environmental impact, and several other traits.

TIMELESS AUTHENTICITY AND UNIQUENESS

Natural wood veneers embody an unmatched richness derived from their random patterns, knots, and the natural imperfections inherent in wood. This distinctive variability offers an organic and genuine touch, providing character that cannot be replicated. Chosen by leading designers and collectors for centuries, natural wood veneers have enduring beauty, always classic and relevant, and creating an impact that aesthetically matures.

CRAFTSMANSHIP, ARTISTRY, AND EMOTIONAL CONNECTION

Natural wood veneers are a canvas for showcasing unparalleled craftsmanship and artistry. Skilled woodworkers carve, shape, and finish real wood with precision, allowing for intricate detailing and customization. This degree of craftsmanship fosters a deep emotional connection to the surroundings, providing an unmistakably sensory experience. The tactile sensation, the scent of wood, and the stunning visual appeal create an impact that resonates on aesthetic and emotional levels.

MAKING THE CHOICE

STRATAWOOD VENEER

ACHIEVING VISUAL UNITY

Stratawood veneer options empower design potential, offering a diverse aesthetic palette. They offer consistent colors and patterns that harmonize with natural veneers and laminates, enabling an unmatched level of visual continuity.

RESPONSIBLE SOURCING AND SUSTAINABILITY

Stratawood originates from rapidly renewable, plantation grown Obeche and Euro Basswood trees. These species are FSC Certified, responsibly grown, sourced, replenished, and efficiently milled to maximize output and minimize environmental impact.

UNCOMPROMISING QUALITY

Stratawood delivers precision crafted perfection. While there may be price savings of up to 10% over other veneers on specific products, it is not a low-cost solution, but instead provides a complementary alternative.

NATURAL CUT VENEER OFFERING

VENEER 2—NATURAL FLAT CUT


Light Cherry
NC701


Shaker Cherry
NC774


Burnished Cherry
NC777


Cinnamon/
Biltmore Cherry
NC260


Medium Red Cherry
NC512


Lowell Ash Cherry
NC394


Light Walnut
NT601


Nutmeg Walnut
NT629


Pinnacle Walnut
NT679


Skyline Walnut
NT625


Florence Walnut
NT579


Sumatra Walnut
NT693


Ebony Walnut
NT509


Natural Maple
NE800


Harvest Maple
NE856

VENEER 3—PREMIUM NATURAL CUTS


Nutmeg Walnut
Quarter Cut
QT629


Pinnacle Walnut
Quarter Cut
QT679


Light Walnut
Quarter Cut
QT601


Sumatra Walnut
Quarter Cut
QT693


Skyline Walnut
Quarter Cut
QT625


Florence Walnut
Quarter Cut
QT579


Ebony Walnut
Quarter Cut
QT509


Phantom Ecru
Rift Cut Oak
RF912


Fawn Cypress
Rift Cut Oak
RF108


Light Rift Cut Oak
RF301


Dark Rift Cut Oak
RF331

VENEER 4—PLANK LAYUP


Nutmeg Flat
Cut Walnut
PNT629


Pinnacle Flat
Cut Walnut
PNT679


Skyline Flat
Cut Walnut
PNT625


Light Flat
Cut Walnut
PNT601


Sumatra Flat
Cut Walnut
PNT693


Phantom Ecru
Rift Cut Oak
PRF912


Light Rift Oak
PRF301


Dark Rift Cut Oak
PRF331

STRATAWOOD VENEER OFFERING

VENEER 1—STRATAWOOD FLAT & RIFT CUT


Clear Cherry
EC700


Light Cherry
EC701


Lowell Ash Cherry
EC394


Burnished Cherry
EC777


Shaker Cherry
EC774


Cinnamon/
Biltmore Cherry
EC260


Medium Red Cherry
EC512


Clear Walnut
ET600


Light Walnut
ET601


Nutmeg Walnut
ET629


Pinnacle Walnut
ET679


Skyline Walnut
ET625


Florence Walnut
ET579


Sumatra Walnut
ET693


Ebony Walnut
ET509


Phantom Ecru
Rift Cut Oak
EF912


Fawn Cypress
Rift Cut Oak
EF108


Clear Rift Cut Oak
EF300


Light Rift Cut Oak
EF301


Dark Rift Cut Oak
EF331

VENEER 2—STRATAWOOD STRAIGHT GRAIN


Clear Cherry
SC700


Light Cherry
SC701


Lowell Ash Cherry
SC394


Burnished Cherry
SC777


Shaker Cherry
SC774


Cinnamon/
Biltmore Cherry
SC260


Clear Washed Walnut
SW600


Pinnacle Walnut
ST679


Light Walnut
ST601


Smoked Grey
Washed Walnut
SW612


Skyline Walnut
ST625


Florence Walnut
ST579


Sumatra Walnut
ST693


Smoked Onyx
Washed Walnut
SW697


Clear Oak
SF300


Clear Silver Oak
SB100


Portico Teak
Silver Oak
SB150


Dark Oak
SF331


Belair Maple
SE934


Phantom Ecru Maple
SE912

Field Elm Maple
SE599

Beigewood Maple
SE878

Clear Maple
SE800

Harvest Maple
SE856

AGING & NATURAL IRREGULARITIES

AMBERING

Inherent to all wood, both natural cut veneers and Stratawood

2017

2018

2019

2020

The color of wood can change over time with exposure to visible as well as ultraviolet light. Walnut lightens, while cherry and maple darken over time. Oak is least affected but the golden tones grow richer over time. This phenomenon is called photochemical degradation (also referred to as Ambering). This is caused by the photo oxidation of the lignin, phenolic compounds, and other wood extractives found in natural wood products. Each natural and reconstituted (Stratawood) wood species reacts differently to light exposure. Cherry and walnut are the most common photochemically reactive species found in Gunlocke products, but all species of wood show some level of photochemical reactivity.

The outer surface of wood can darken or lighten depending on the species, turning yellow and/or brown, based upon the specific characteristics of the wood and the amount of light exposure the furniture receives. This change is fastest at first, showing the most dramatic changes shortly after exposure. The rate of change slows as exposure length increases. However, it never stops completely.

This color change is most noticeable when new product is added to an existing installation or items are left on a worksurface for an extended period. While distracting at first, these sections will eventually “catch up” to the surrounding areas since the color changes occur quickly at first and slow later. The time needed to “catch up” is dependent upon when and how long the piece has been exposed to light.

There is no way to permanently stop this natural occurring process without covering the wood with an opaque coating.

Original walnut veneer sample (left) on a similar walnut veneer worksurface after exposure to visible and ultraviolet light over time.

CHARACTER TRAITS

Distinctive to natural cut veneers

Natural cut veneers exhibit these types of irregularities, decreasing uniformity, but perhaps adding some of the character traits not found in Stratawood.

Pin Knot
A knot less than 1/4 inch diameter. Point where small branch did not fully develop.

Worm Tracks
Marks caused by various types of wood attacking larvae. Common in Maple.

Pitch Pocket
Mark resulting from resin in accumulated growth rings. Common in Cherry.

Mineral Streak
Black marking. Cause is undetermined.

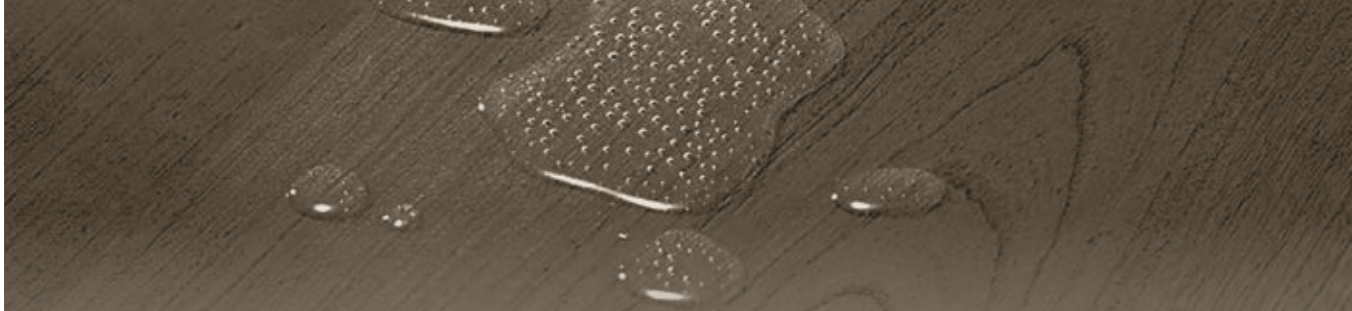
Medullary Ray
Radial vertical tissues, across the growth rings that enable transmission of sap. Produces a decorative spotted figure in quarter sawn veneer.

GRAIN DIRECTION AND LIGHT ANGLES

Each piece of veneer has a unique grain pattern and texture. As the veneer is applied to furniture in varying horizontal and vertical positions and angles, different types of light and viewing angle can significantly impact the perceived color. The official word that describes this phenomenon is “metamerism” , where two colors appear to match under one lighting condition, but do not exactly match when the light or angle of the wood grain changes.

Matched veneer slices arranged with uniform grain alignment.

Matched veneer slices arranged with top slice rotated 90˚



CARE, MAINTENANCE & WARRANTY

WOOD FINISH CLEANING

To care for new furniture, it must be dusted regularly and with an occasional thorough cleaning. All spills should be removed immediately and not allowed to dry. For general maintenance, wipe the surface in the direction of the grain with a clean, water dampened, soft cloth. Dry with a soft cloth.

12-YEAR WARRANTY

Gunlocke warrants to the original purchaser all products to be free from defects in material and workmanship for a twelve-year period from the date of shipment.

This 12-year warranty applies to all products sold and installed by a Gunlocke authorized agent for normal, commercial, single-shift service. Gunlocke will repair, or at its option, replace defective merchandise, free of charge.

Wood owes its inherent beauty to variations in color, grain, and texture. Therefore, these variations are not considered defects. There may be minor variations from one piece of furniture to the next even though they are finished at the same time. Exposure to light and the aging process will cause color changes in natural wood products. Light finishes on wood products do not mask the natural characteristics of wood. Gunlocke does not guarantee the exact matching of grain, pattern, and color.

These finishes do not cover any of the natural characteristics of the wood, including nature’s colorations, pitch pockets, and the variations of steam bent wood. Merchandise will not be replaced because of these natural variations.

Gunlocke®

One Gunlocke Drive
Wayland, NY 14572
800 828 6300

GUNLOCKE.COM

Our commitment to the environment. A vibrant, healthy planet yields the products we create and our future is dependent upon the commitment we make to stewardship and sustainability. Find out more at **Gunlocke.com/environment**

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