

VeneerSupplies.com

The Internet Source for Exotic Veneer & Supplies

Hello!

Buying an item without seeing it directly in front of you doesn't make the decision easy but with the popularity of Internet ordering, it's something that most of us have had to come to deal with. I want you to know that I fully understand the trepidation of online shopping and I'll do my best to make sure that your purchase is simple, secure, and fully backed by my personal promise that I will do whatever it takes to earn and keep your business.



Be sure to check out our website for even more species of paperbacked, 2 ply, and copper veneer. If you are looking for raw wood veneer, we stock over 4,000 lots of exotic veneer. Log on and view pictures of every lot in our extensive inventory.

Thanks again for ordering with VeneerSupplies.com!

Sincerely,

VeneerSupplies.com

The Internet Source for Exotic Veneer & Supplies

Need More? Check Us Out Online!

Check out the world's largest online inventory of exotic veneers and veneering supplies at VeneerSupplies.com. We have over 4,000 raw wood and paperbacked veneers in stock and ready for immediate shipment. Visit us online for detailed descriptions and crystal clear pictures of our entire inventory.

Current Stock List

Exotics	PaperBacked
Walnut Burl	Cherry
Makore	Red Oak
Maple Burl	White Oak
Oak Burl	Teak
Tamo Ash	Walnut
Quilted Maple	Mahogany
Elm Burl	Maple
Zebrawood	Birch
Koa	Lacewood
Redwood	Anigre
Sapele	Rosewood
Chestnut Burl	Butternut

Free Vacuum Press Plans!

Easy Online Ordering!

HEATLOCK™
Iron-On Veneer Adhesive
★ IN STOCK! ★

www.VeneerSupplies.com

Backed Veneer Guide

A Reference for Paperbacked and 2-Ply Veneer

What is paperbacked veneer?

Paperbacked veneer is exactly what the name implies. It's a real wood veneer permanently bonded to a paper backing. This backing is applied to keep intact the individual wood veneers used to make up the full width of the sheet. A four foot wide paperbacked veneer consists of multiple veneers glued together side by side. The backing also minimizes seasonal expansion and contraction of the wood caused by changes in ambient humidity.

The paper backing is generally available in a 10 and a 20 mil thickness. "Mil" or mil thickness is the common measurement of a coating. One mil equals 1/1000 of an inch. A quarter inch would be 250 mils. This backing is not removable.

A 10 mil backing is best for most projects. However, a 20 mil version is available for situations where the substrate is less than perfectly flat. In this case, the extra paper thickness allows the veneer maintain a more consistent look after application. Keep in mind that the 10 and 20 mil thickness is a reference to the thickness of the paper backing, not the veneer face.

What is wood-on-wood or 2-ply veneer?

Wood-on-wood, also known as "2-ply veneer" is two wood veneers permanently bonded together. The face veneer grain is perpendicular to the backer veneer which provides protection against bubbling which occurs when a veneer is improperly bonded to the substrate. This type of "crossband construction" allows the veneer to bend on moderate curves in the horizontal or vertical direction. The veneer used on the back side of a 2-ply veneer is often an imported hardwood of lesser value.

What is a PSA backed veneer?

Pressure sensitive adhesive (PSA) veneer is a type of paperbacked veneer that is a simple and easy alternative for applying veneer without the need for a liquid adhesive. Utilizing 3M™ adhesive, PSA veneer provides a permanent bond to any smooth substrate that is dry and free of dust and contaminants. PSA-backed veneer is the perfect choice for cabinet refacing, hi-fi speaker building, automotive dashboards and much more. It can be cut and trimmed with ordinary tools, such as scissors or a razor knife.

What is a "plank" veneer?

A typical paperbacked sheet is made from several sequential veneers. This creates a repetition of pattern across the full size sheet. Some users do not like the this look since it can make a panel look a bit fake. A plank matched paperbacked veneer solves this problem. It is made from individual veneers from different logs of the same species which creates a look of solid lumber more so than any other type of veneer lay up. This type of veneer can be difficult to find but they are available at VeneerSupplies.com in the "Paper-Backed Veneer" category.

Where do I find paperbacked veneer?

VeneerSupplies.com has 5,000 veneer related products in one convenient place. You'll find paper-backed veneer, 2-ply veneer and a wide array of exotic raw wood veneers.

What is the thickness of the sheet?

Wood-on-Wood or 2-Ply Veneer - .035" or just over 1/32"

10 Mil Paperbacked Veneer - .020" or 1/50"

20 Mil Paperbacked Veneer - .035" or just over 1/32"

Veneer Edgebanding - .030" or just under 1/32"

All thicknesses may vary by .005" and these dimensions are based on the veneer and edgebanding offered at VeneerSupplies.com.

What is the actual thickness of the veneer layer on the sheet?

Generally speaking, the actual wood part of a paperbacked veneer is .015" but the thickness can vary based on the amount of finish sanding done at the factory. The factory sands each veneer sheet until it is perfectly smooth.

Why would someone use a 20 mil veneer instead of a 10 mil veneer?

A 10 mil backed veneer is used when the substrate is smooth and flat. Some cabinetmakers will only use 10 mil veneer on vertical surfaces and 20 mil on horizontal parts such as desk and table tops.

Regardless of the substrate position, a 20 mil backed veneer or 2 ply veneer should be used if the substrate is not smooth since the thicker backer will help hide *some* substrate imperfections. Additionally, a 20 mil veneer is often used on curved projects.

Keep in mind that the wood veneer face is the same thickness regardless of the backer. The 10 or 20 mil specification refers only to the thickness of the paper backing.

How is a backed veneer measured?

The standard size for most backed veneer is 4' x 8'. The 4 foot measurement is the width of the sheet across the grain. The 8 foot measurement is the length of the sheet parallel to the grain. Most vendors cut the veneers oversized by 1/4" on both the length and the width.

What material can paperbacked veneers be applied to?

The part of the project that the veneer is applied to is called the substrate. Here is a list of substrates and adhesive information. Keep in mind that the substrate must be smooth, clean, dry, and acclimatized prior to application of the veneer.

Substrate	Contact Cement	Heat Lock™ Veneer Glue	Cold Press Veneer Glue	PSA
MDF	Excellent	Excellent (1)	Excellent (1)	Excellent
Particle Board	Excellent	Excellent (1)	Excellent (1)	Excellent
Plywood	Excellent	Excellent	Excellent	Excellent
Wood	Very Good	Excellent	Excellent	Poor
Masonite™	Poor	Poor	Poor	Acceptable
Melamine	Acceptable (2)	Poor	Poor	Acceptable (2)
Plastic Laminate	Poor	Poor	Poor	Good
Drywall	Excellent (3)	Excellent (3)	Excellent (3)	Excellent (3)

Notes:

1 - For cold press veneer glue and Heat Lock, sand the back side of the veneer and the face of the substrate with 150 grit sandpaper. This will make the surfaces more porous and allow the adhesive to bond the materials with exceptional durability.

2 - With adequate ventilation or a NIOSH approved respirator, melamine and plastic surfaces must be heavily sanded with 80 paper and wiped with a tack cloth. The surface must then be cleaned with denatured alcohol. The veneer should be applied within 45 minutes of cleaning and permanently "seated" using a veneer scraper.

3 - VeneerSupplies.com does not recommend application of paperbacked veneer directly to drywall. Instead, we recommend covering the drywall with ½" MDF using construction adhesive. The veneer can then be applied to the MDF.

Can I use paperbacked veneer on exterior projects?

Paperbacked veneer can be used with projects that will be exposed to weather. However, we have found that epoxy is the only adhesive and the only top coating that will withstand the outdoor environment.

How do I apply a backed veneer?

Before you begin, allow the veneer and substrate to acclimate in the same work area for 48 hours. This will ensure that the moisture content in the veneer and substrate has equalized.

Begin the acclimation process by unrolling the veneer and laying it flat. The ideal shop environment is relative humidity of 35% and a temperature of 70° to 80°F. It may be necessary to place weights on the ends of the veneer to keep it flat while it acclimates and losses its "rolled memory".

Contact Cement

One of the most overlooked aspects in contact cement veneering is adhesive coverage, yet it is the single most important part of this veneering method. It is critical that all areas of the veneer and substrate are coated with adhesive. Any areas left dry may result in the veneer bubbling after application. For solvent-based contact cement, it is a good idea to apply two coats (per side) with a glue roller. Water-based contact cement generally requires only one coat per side.

If you are using contact cement you'll only need a veneer scraper to apply the veneer. A handheld roller is not suitable for applying veneer. It simply does not concentrate enough pressure over the contact surface to create a durable bond. A veneer scraper is a must! Be sure to scrape the entire veneer surface (scraping with the grain) to achieve a maximum strength bond. Most manufacturers recommend scraping the surface twice. Always use the centerline technique (figure 2) when using the scraper tool.



Figure 1: Scraping the veneer is critical to success.

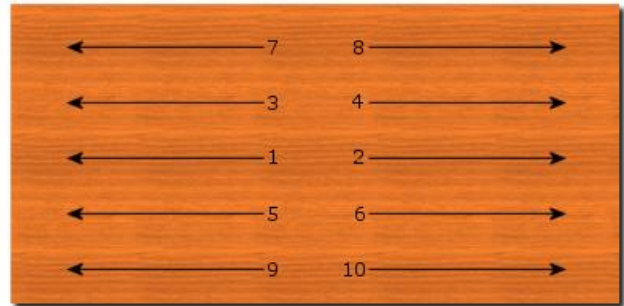


Figure 2: The centerline technique seats the veneer properly to the substrate. Follow this pattern with the scraper to avoid overstretching the veneer.

PSA Veneer

Veneers with a pressure sensitive adhesive backing require a veneer scraper to seat the adhesive and veneer firmly to the substrate. A handheld roller is not suitable for applying PSA veneer. It simply does not concentrate enough pressure over the contact surface to create a durable bond. A veneer scraper is a must! Be sure to scrape the entire surface of the veneer using the centerline technique to achieve a maximum strength bond. Most manufacturers recommend scraping the surface twice. Always use the centerline technique when using the scraper tool. Keep in mind that PSA adhesives bond instantly on contact. Be certain that you have the veneer positioned correctly before applying the veneer.

Iron-On Veneering with Heat Lock™ Glue

Heat Lock™ is an iron-on adhesive that can be successfully used with paperbacked veneer but is difficult to use with 2-ply veneer. Learn more about this superb adhesive on our website.

Cold Press Veneer Glue

If you have a vacuum press and want the ultimate bond strength, consider applying the backed veneer with Better Bond™ cold press veneer adhesive.

Inspecting and Troubleshooting

You can inspect the panel by shining a light across the grain. Any areas where the bond is insufficient will result in bubbles which will produce visible shadows. Bubbles that have occurred from insufficient pressure during application can be smoothed out with the appropriate tool (Heat Lock use clothes iron, contact cement or PSA use scraper tool, or cold press glue use vacuum press or clothes iron).

If the bubble is caused by a lack of adhesive, you can split the bubble open with a razor knife, inject more adhesive, and press the veneer again using the tool recommended for the adhesive.

Is the veneer sheet a single piece of wood?

No. Each sheet is made up of several veneers called 'components' which are placed side by side with opposite sides showing. This is called bookmatching. The individual veneers used to make sheet of backed veneer can range from 3" to 8" in width. With the exception of burls, the face veneers are 8 foot in length on a 4' x 8' sheet.

Are there visible lines in between each sheet in the backed veneer?

The veneers used to make a 4 x 8 sheet are laid up in the sequence from which they were sliced from the tree. This creates a visually pleasing result. If you look close enough you might be able to see the joint line. The quality of the seam between each veneer is what defines the visibility of the joint. Our veneers are jointed with state of the art machinery and are inspected by a trained QA staff member before shipping out. Only flawless veneers are shipped to customers.

Is the paper or wood backing visible at the edges of a backed veneer?

The backer is barely visible on most species after the veneer has been stained and finished. The picture below is my desktop with a paper-backed cherry veneer on top and edging in cherry hardwood. The line between the backing and the veneer is almost impossible to see.



How is the sheet measured?

In a 4x8 sheet, the 4 foot measurement is the cross-grain width and the 8 foot measurement is the long grain length.

Is a backed veneer better than raw wood veneer?

Advantages

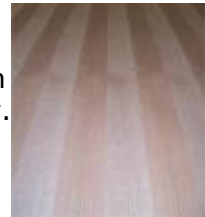
- If you have a large project to veneer, you'll find that a backed veneer is easier to work with because it is available in large sheets. From a production standpoint, a backed veneer is unbeatable.
- Backed veneers generally stay flat while being stored. They usually will not buckle unless the humidity levels are extreme. The only notable exception is maple which has a tendency to curl a bit in storage if it is not kept under a weighted board.
- Adhesive bleed-through in a backed veneer is highly unlikely.

Disadvantages

- Backed veneers are usually more expensive per square foot than raw wood veneers.
- Burl veneers with a paper or wood backing are shockingly expensive. A raw wood burl is often 1/4 of the price.
- The wood face on a backed veneer is thinner than standard raw wood veneer which makes it easier to sand through.

What is barber pole effect?

When veneer is sliced, a distortion of the grain occurs. The knife blade, as it hits the wood, creates a "loose" side where the cells have been opened up by the blade and a "tight" side. Because the "tight" and "loose" faces alternate in adjacent pieces of veneer in book matching, they may accept stain differently. This may result in a noticeable color variation called barber poling. Slip matching (all veneer faces are in the same direction) is often used in quartersawn and rift cut veneer to minimize the barber pole effect. This is an available option at VeneerSupplies.com.



SLIP MATCHING



Can a backed veneer be treated with veneer softener?

Super-Soft 2 can be lightly applied to paperbacked veneer. Dampen a soft cloth or paper towel with softener and pad it on to the veneer in light, over-lapping motion. Do not saturate the veneer to the point at which the backing is wet. Since the wood face of the paperback veneer is very thin, a light coat of softener is all that is needed to give the extra flexibility that is sometimes needed on tight curves.



What is sequence matching?

Sequence matching is the process in which the factory ships the customer sheets of veneer that reasonably match each other in terms of color and grain pattern. This option is great for large projects where consistency is critical to success.

What do I do with the edges of the substrate?

You can apply edgebanding to the sides of the substrate. Edgebanding is available in several species. If you can not find edgebanding in the species required, simply cut 1" wide strips from the veneer used for the main project and apply it to the edge of the substrate with Heat Lock veneer adhesive or contact cement.

Does a backed veneer require sanding?

The veneer is pre-sanded to 150 grit at the factory. However, many users find that they get a more even stain color if they sand the veneer one grit grade higher than the rest the project. So if you sanded the solid wood parts of a project with 150 grit sandpaper, you might consider sanding the veneered parts with 180 grit.

How do I cut and trim a backed veneer?

Paperbacked veneer can be cut to size with scissors or a razor knife. Two-ply veneer can be cut with a hand saw. Trimming a veneered panel is most commonly accomplished with a flush-trimming ball bearing piloted router bit. You can also trim the veneered panel on a table saw with an 80-tooth saw blade.

How is a backed veneer shipped?

It is rolled up in a box and shipped via UPS or USPS (depending on destination). The factory can usually ship 5 to 7 paperbacked veneers in a single box that is 10 " x 10" x 50". Two-ply veneers ship in a larger box because it can not be rolled as tightly as a paperbacked veneer. This box is usually 14" x 14" x 50" and is considered oversized by the carriers so the shipping rates are a bit higher.

Orders containing more than 4 sheets of paperbacked or 2 sheets of 2-ply veneer are occasionally calculated incorrectly by the website software when you checkout online. We refund any significant difference between what the website charges and the actual shipping charge after we are billed by the manufacturer for your order.

How do I stain and finish a veneered project?

Since it is a real wood product, it stains just like a piece of solid lumber. However, many users find that they get a more even stain color if they sand the veneer one grit grade higher than the rest the project. So if you sanded the solid wood parts of a project with 150 grit sandpaper, you might consider sanding the veneered parts with 180 grit sandpaper.

It is best to apply a protective finish to the veneer when the ambient humidity is 55% or less. Do not use heavy coats of finish. Instead build up multiple smaller coats which dry faster and trap less solvent under the finish. Additionally most catalyzed finishes will check or crack if applied too thick.

Water based stains and top coats are not considered ideal choices paperbacked veneer. If you must use this type of finish, be sure to apply a vinyl or acrylic sanding sealer to the veneered panel before staining and finishing. This information applies to all backed veneers... 2-ply, paperbacked, and PSA.

How do I test my veneer to make sure it is bonded properly?

Since there are many combinations of veneer, substrates, adhesives, finishes, and environmental conditions, we highly recommend testing a small piece of veneer with your application and finishing process before you begin the main veneer work.

Be certain to check for bubbles before applying your finish. If bubbles are present, this may be the only time to address these issues. The best way to check for bubbles is to place a powerful light (such as a halogen work lamp) beside the veneered panel and no more than 15 degrees above it. Look for peaks and shadows across the panel. Most bubbles can be easily repaired.

PSA and Contact cement: Place a piece of cotton or flannel cloth over the bubble and gently heat the bubble with a clothes iron. The heat will reactivate most contact cements. Keep the iron in motion to prevent overheating the veneer. Once the veneer is adequately heated, scrape the bubble again until the area cools down.

Heat Lock: Within 24 hours of application Heat Lock can be reactivated. Place a piece of cotton or flannel cloth over the bubble and gently heat the bubble with a clothes iron. Keep the iron in motion to prevent overheating the veneer. Once the veneer is adequately heated, scrape the bubble with a veneer scraper or block of softwood until the area cools down.

Cold Press Veneer Glue: When high quality cold press veneer glue is used with a vacuum press, bubbles are generally not a problem. In the event that a bubble does show, the ironing method described above will usually fix the issue.

Is backed veneer bendable?

Most paperbacked veneer species can take up to a 1" radius bend along the length of the grain and 5" radius bend across the grain. A light coat of veneer softener can increase the flexibility of the veneer and prevent splitting on tighter bends. In fact, I have achieved a 1/4" radius on the grain length when I treated the veneer with softener. Most 2-ply veneers can accept a bend up to 5" along the length of the grain and 8" across the grain. Veneer softener is generally not effective on 2-ply veneers.

If you choose to apply a paperbacked veneer over bendable plywood, we recommend first applying 1/8" MDF to the plywood to add strength and rigidity.