

Oakwood Veneer Company

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**Oakwood Veneer Company
offers technical advice anytime
to help with wood veneer selection
or installation.
Call (248) 542-9979
Monday-Friday, 9:00 am - 5:00 pm ET**

Tips for Veneering with Contact Cement

1. The use of a veneer press, either a vacuum, cold or hot press using white or yellow glue, is the preferred method of applying wood veneer. If press is not available, good contact cement may be used. Look for contact cement with the highest level of solids and follow the adhesive manufacturer instructions. (Flammable contact cement most often works better than nonflammable.)
2. It is critical to the application to thoroughly stir the adhesives before each use, just as in painting. The solids and solvents must be mixed to form the best contact. Most people overlook this very important step. It is also critical to dry thoroughly — lightly touch to check if it is dry. If even the least bit tacky, allow to dry thoroughly. Store cans of finishes and contact cement off the floor during winter months.
3. While paper-backed veneer is intended for interior use, it can be used on an exterior surface only if an epoxy application is used. Call for details.
4. Veneer must be bonded to a suitable substrate of a reliable quality. MDF (medium density fiberboard) is the most stable substrate, followed by industrial particleboard, veneer-core plywood, and the least stable substrate is hardwood.
5. We do not recommend direct application to drywall, plaster walls, concrete walls or cardboard products, as delamination may occur. Veneer should be applied to MDF substrate to cover these surfaces. Installation over substrates that have been treated with a fire-retardant agent is not recommended.
6. When veneering over bending plywood materials, we have found that

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laminating an 1/8" MDF over the surface makes it more stable (1/8" MDF can bend around a 2' - 3' radius).

7. Prior to installation, the veneer should be allowed to "climatize" with the substrate in the same environment for about 48 hours. Make sure that both the surface to be covered and the back of the veneer are free of dust, dirt, oil, grease or any foreign matter.
8. To avoid sealing in too much moisture, it is best to finish the veneer when the humidity is less than 51%, as it may shrink when placed in a climate-controlled environment.
9. Wood veneers rely 100% on the adhesive. Ask your supplier which contact cement contains the most solids. Even though it is more expensive, it goes much farther and will be less costly in the long run. Both the veneer back and the substrate require 100% contact cement coverage. Often, a second coat is needed on the substrate, as the first coat may be partially absorbed. The first coat is acting as a sealer, the second coat is the glue.
10. Allow the proper drying time ("flash time") between coats. Normally there is a generous window of time. Glues should be completely dry before applying the veneer. Anything less creates the risk of a weak bond between the two glue lines. Rushing can lead to solvent pockets appearing as bubbles.
11. When using contact cement, a pinch roller is preferred for pressing veneer on the substrate as the amount of pressure is very important to activate the glue. A flexible wood scraper may be used if a roller is not available. Do not use a J-roller, as it does not allow you to apply enough pressure directly onto the veneer. Also, to avoid bubbling when hand pressing your veneer on the boards, be sure to start in the middle of the board and work your way to the outer edges.

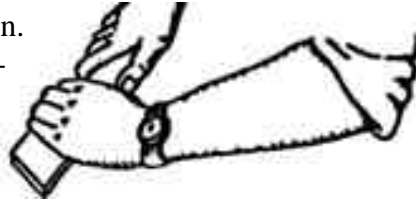
12. After applying veneer, allow adhesive to dry 24 hours before applying any finish. Apply the finish in light, even coats. Two thin coats are always better than one heavy coat. Allow 24 hours drying time between stain and sealer to let stain totally dry.
13. When finishing veneer with two-part catalyzed finishes, be careful not to make your finish too thick. Some finishes will crack or check when they are more than 4 mils thick. Check with a finish manufacturer. Vinyl sanding sealer is a good choice when sealing your furniture, as it has excellent moisture and vapor resistance.
14. Check finish instructions to make sure that you have the proper time and temperature for your veneer to dry. (Example: catalyst finish should dry at 68-75-degrees for six to eight hours.) It may be a good idea to take a short course on stains and finishes. Some companies offer these courses for little or no money. They can be most helpful. M.L. Campbell is one such company.
15. Water-born stains and finishes are not recommended for finishing veneer, unless you seal the veneer with a vinyl or acrylic sanding sealer first.
16. Do not apply veneer to a two-sided melamine coated board. Do not sand melamine from a two-sided melamine board to apply veneer, as bubbling could result. If board comes from a manufacturer with one side melamine and the other side raw, you may apply the veneer to the raw side of the board.

Disclaimer: Since Oakwood Veneer Company has no control over the use of the flexible wood products, no warranty is expressed or implied. Each sheet of veneer reacts differently in various conditions. Always test a small panel of veneer prior to the veneer installation to confirm your method of application. The procedures described herein are intended for use by persons having professional skills.

Helpful Application Hints

1. Bear down on scraper tool. Scrape hard and scrape tight in the grain direction.

A stiff scraper should be available at the start. Do not consider using J-rollers or hammer blocks, even though you might use them on high-pressure plastic-type laminates.

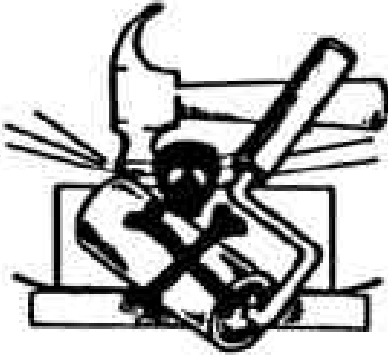


2. A warm iron (set between wool and cotton) may reactive the cement and put “bubbles” down tight if enough contact cement was applied in the first place. If cement is too scant, the bubble will pop

back up. When you put the iron down on the veneer, be sure to use a piece of grocery bag-type Kraft paper to keep the veneer face clean. Keep the iron in motion. Never keep it in one place or you might soften the factory adhesive and cause the veneer to loosen from the backer sheet. If veneer should come loose under heat then reheat and scrape hard until area cools down again.



3. Use the stiff scraper for maximum contact pressure. J-rollers and hammer blocks do not allow you to make the most of your body weight when you make contact by hand power.



4. Shine a light cross the grain and deal with any imperfections. Be satisfied all is okay before proceeding with finishing steps.



5. Coat both surfaces. If you spray, apply the contact cement, do not apply dry, scant, open web patten. Lay on 100% so that no voids are left.

Be sure to start the clock. Make certain to honor manufacturer's instructions as to open time.

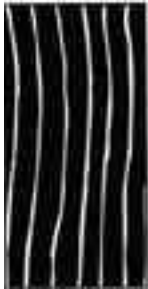
How Veneer is Cut from the Log

Rotary Cut



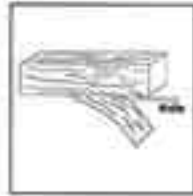
The log is centered in a lathe and turned against a broad cutting knife set into the log at a slight angle.

Quarter Slicing



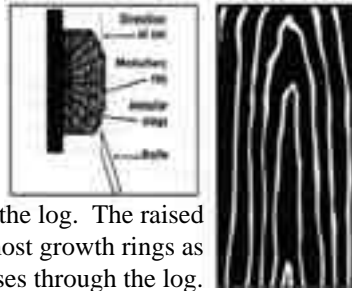
Quarter slicing slices perpendicular to the annual growth rings, creating a straight grain appearance.

Lengthwise Slicing



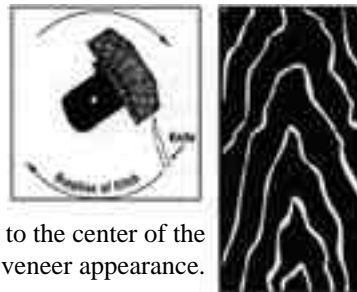
Lengthwise slicing is done from a board of flat sawn lumber, rather than from a log. As the knife passes through the bottom of the board, a sheet of veneer is sliced out, creating a variegated figure.

Plain Slicing



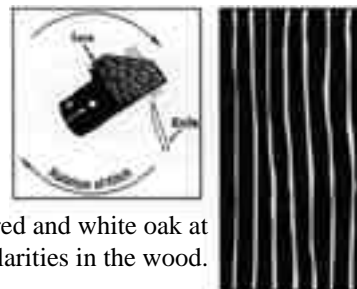
The veneer is sliced parallel to the center of the log. The raised 'cathedral effect' is formed by the innermost growth rings as the knife passes through the log.

Half-Round Slicing



Half-round slicing is cut on an arc parallel to the center of the log, achieving a flat-cut veneer appearance.

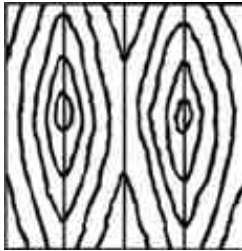
Rift Cut



This straight grain cut is derived by cutting red and white oak at a slight angle to minimize irregularities in the wood.

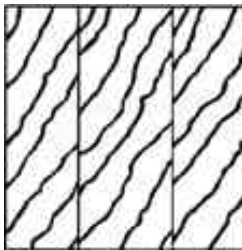
Common Veneer Matching Techniques

Book Matching



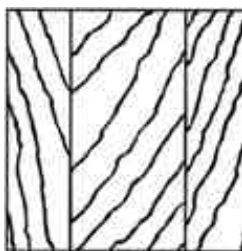
Alternating pieces of veneer are flipped over, so that they face each other as do pages within a book, creating a pleasing, symmetrical pattern.

Slip Matching



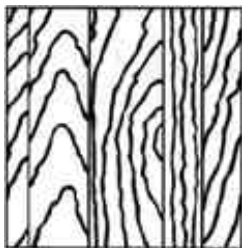
Veneer slices are joined in sequence, without flipping the pattern. If the grain is straight, the joint will not be obvious. If the grain is not vertical, a vertical slant may be apparent. The grain will not match at joints.

Pleasing Match



Veneer is matched by color, and not by grain characteristic.

Random Match



Random match is just what it sounds like. Usually done with lower grade veneers, the leaves may be of varying width, colors and grains.

Contact Cement Trouble Shooting Guide

A vacuum press, a hot pres or a cold press are the preferred methods of veneer installation. The following tips are for application with contact cement.

CONTACT ADHESIVE TROUBLE SHOOTING GUIDE

PROBLEM	CAUSE	POSSIBLE SOLUTIONS
1. Edge lifting	<ul style="list-style-type: none"> • insufficient adhesive • combining too soon (trapped solvent) • insufficient veneer or substrate compression. 	<ul style="list-style-type: none"> • Apply more adhesive to veneer and substrate. (Both should be covered.) • Increase drying time. • Increase nip pressure.
2. Bubbles in the veneer.	<ul style="list-style-type: none"> • trapped solvent (solvent odor noted) • edges bonded first • irregular adhesive coverage • irregular compression • ineffective glue 	<ul style="list-style-type: none"> • Increase drying time. • Apply pressure from center outward. • Check applying method and equipment. (Spraying is better than rolling; rolling is better than brushing.) • Check compression procedures. • Use glue with more solids.
3. Failure with adhesive on both substrates.	<ul style="list-style-type: none"> • insufficient compression • insufficient adhesive • adhesive surface contaminated • wrong substrate 	<ul style="list-style-type: none"> • Increase pressure. • Go over surface with iron at about 200-225 degrees. • Keep work area clean. • MDF is better than industrial particle board. Particle board is better than plywood. • Don't apply veneer over laminate.
4. Weak or no contact bond.	<ul style="list-style-type: none"> • exceeded contact bond life • trapped solvent • moisture contamination of adhesive surface 	<ul style="list-style-type: none"> • Check to see if glue is old or frozen. • Increase drying time. • Check spray equipment for water in air line and increase drying temperature during high humidity.
5. Adhesive release from one substrate.	<ul style="list-style-type: none"> • contamination of substrate surface • contact not dry 	<ul style="list-style-type: none"> • Clean substrate thoroughly. • Increase drying time.

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