Veneer Application When Using Contact Cement

Applying veneer with contact cement is an acceptable method when other methods aren't available or practical. By following these established practices and recommendations you will have good success using contact cement with paperbacked, wood backed and phenolic resin backed veneer. Do not use contact cement to adhere raw or unbacked veneers.

Preparation

When you receive your veneer you must allow time for it to acclimate to your environment prior to use. To accomplish this it's necessary to remove the veneer from the packaging and lay it flat for a minimum of 48 hours up to 4 days. It may be necessary to apply some weight on the ends of the sheet to help retain flatness during this period. The ideal environment for this process is between 35% and 50% relative humidity and temperature levels between 65 to 80 degrees F. It is also important to allow your substrate material to acclimate in the same conditions for the same amount of time as the veneer. This will ensure that materials will be relatively equal in terms of relative moisture and temperature. It's best to plan ahead if possible and avoid veneering when conditions of high humidity or extreme dry conditions are expected.

Adhesives

Solvent based contact adhesives work best for veneering with our products. When it is necessary to use water based adhesives you may want to consider using a phenolic resin backed veneer. Before using any adhesive be sure it is at room temperature and properly mixed as the solids which create the bond strength tend to settle much like pigment in paint. Brush or roller grade adhesives are best to achieve 100% coverage on all surface areas. Spray grade adhesives can be used but you must be sure you get 100% surface coverage. It's necessary to coat both surfaces that are to be bonded. It's not always necessary but on some smooth glossy surfaces it will help bond strength if you scuff sand the surface with 120 grit sandpaper prior to glue application. If the substrate is "open" or "porous" it will require a second application of glue as the first coat will partially absorb into the surface. This is most likely to occur when using plywood as your substrate. All contact cements require time for the solvents to "flash off" before the two surfaces can be mated together. This period, referred to as "open time" will be specified by the manufacturer and should be adhered to. Extreme conditions such as high heat, high humidity, low temperatures etc., can effect the open time so some discretion must be used under these conditions. *It is important to understand and follow the adhesive* manufacturer's recommendations on application of their product.

Tools and Supplies

There are a few basic supplies and tools to have ready before you veneer. You will need a good quality contact cement, small roller or brush for glue application, a veneer scraper or smoothing tool and separator strips. Veneer scrapers can be purchased commercially and typically consist of a wooden handle and a stiff blade of polycarbonate or lexan about 4" wide. You can also make one by using a piece of hardwood approximately 4" wide by

12 to 16" in length. Make sure one end is cut nice and straight and use sandpaper to gently ease the corners and edge to eliminate any sharp lines. If you want you can also contour the upper portion of the handle to create a comfortable grip. With this smoothing blade you will generate excellent leverage and good pressure on the surface. The separator strips can be pieces of hardwood, MDF or hardboard or some people use wooden dowels. They should be long enough to span the width of the piece you are veneering. We don't advocate the use of any type of J-roller for veneer application. You will not generate enough pressure with any type of J-roller.

Veneer Application

Now you're ready to begin the actual veneering process. Make sure the back of the veneer sheet and your substrate surface are clean, smooth and free of any dust or debris. Apply your adhesive and follow all manufacturers directions regarding coverage and open times. When the solvents in the adhesive have properly "flashed off" and the adhesive is just tacky, not wet, lay down your separator strips 1"-2" apart. Position your veneer over your substrate where you want it. This may require someone to assist you if you are doing a large surface. Starting in the center, remove one separator strip and push the veneer down to make contact with the substrate. Now continue this same process with each separator working all the way to the left or right of the sheet, smoothing as you go. Once you have one half of the sheet secured then start back at the middle again and work out to the opposite edge of the sheet. Now that your veneer is attached it will not move. Take the veneer scraper and apply as much pressure as possible while smoothing down every square inch of the veneer in the same direction as the grain. You may want to go through this smoothing process twice to ensure maximum bond and also hit any small spots that may have been missed. Remember, the use of a veneer scraper or smoothing tool is absolutely necessary. J-rollers are not recommended for installation of wood veneer.

Inspect your work

You will want to inspect your veneer now prior to applying any finishes. At this point you still have time to correct any problems that might be present. Shine a light across the surface horizontally. By looking at it this way you will reveal any imperfections such as bubbles or areas that might require additional attention during sanding and surface preparation. If there are any bubbles they can normally be fixed at this point. If you can push down on the bubble and hear a click but it pops up again it may indicate trapped air or solvents. If you push it down and it stays down it may just indicate a weak bond that didn't get enough pressure. If this is the case take a warm iron set between cotton and wool and go over this area with downward pressure. In the more extreme case where there seems to be air trapped in the bubble you may have to make a small cut in the grain with a razor blade or exacto knife to relieve the pressure. You can then iron over the spot just as you would in the other scenario. *This is the best chance you have to permanently fix or repair any problems that are present*.

Finishing

It is recommended that you wait 24 hours before finishing your veneer. It is necessary to properly sand the veneer to achieve the best results. A typical sanding progression

starting with 120 grit paper, then 150 grit and ending with 180 grit is usually adequate. The preferred stains and finishes for veneer products are oil and solvent based. Water base stains and finishes can be used but should be done on a test piece first to gauge reactions with the veneer. It's important to remember that moisture causes wood to expand. If there are any flaws or weaknesses in your glue line this expansion could cause delamination or bubbled veneer. No matter what type of stain or finish you use it should be used sparingly and not allowed to sit on the surface too long. It's always preferable to use multiple light coats of stain or finish instead of heavy wet coats. Never saturate a veneered surface with stain or finish or allow it to sit or pool on the surface. Always wipe excess immediately.