FSV Adhesive

Flexible Sheet Veneer Adhesive

Description

F.S.V. is a high quality synthetic resin dispersion cold setting adhesive. It is specially formulated for use with a wide range of flexible sheet veneers. Particleboard, MDF, and other wood component cores can be used in a nip roll or hand roll application process where fast tack and quick set with minimum pressure is required. This product is also suitable for use with high pressure laminates.

Type:
Synthetic resin dispersion

Technical Data:

Viscosity Cps	**7500-8500**
Solids %	**52-58**
Freeze Thaw Stable	**No**
Storage Life @ 70(F	**6 months**

Color Light pink

Advantages:
* Environmentally friendly - no voc, non-polluting
* Quick tack, fast set
* Minimal pressure requirements
* Light pink for ease of visibility
* Good gap filling properties
* Good heat resistance
* Enables wrapping around many tight radii

Applications:
*Application of flexible sheet veneer to a wide range of substrates
* Lamination of HPL to flat wood based composite cores
* Cold press

Features and Benefits

Rigid Glue Line
FSV is a modified polyvinyl acetate emulsion. Unlike rubber based contact cements, when cured, FSV provides a more rigid glue line that resists movement due to moisture changes.

Impervious To Solvents
Solvents contained in many finishes can attack traditional contact cements resulting in bubbles, checks or delamination. FSV is not affected by solvents.

Water Resistant
While not “water proof”, FSV is naturally water resistant and is unaffected by occasional exposure to moisture.

Higher Heat Resistance
PVA type adhesives such as FSV have higher heat resistance than contact cement. They won’t start to soften until at least 180 F.

Water Clean-Up
FSV is a water-based product that requires only warm water and a little soap for clean up.

No Flammability Issues
FSV is water-based and Non-Flammable.

No Health Issues
There are no known health risks associated with FSV. As with any chemical, you should consult the MSDS before use.

One Sided Application
Many applications require only applying FSV to the substrate.

Greater Coverage
Under ideal conditions, FSV can cover as much as 400 square feet of glue line per gallon based on wet mil thickness.

Can Be Applied With Roller Or Spray System
FSV is versatile. It works well when applied with a foam rubber roller or an industrial spreader. For more precise coverage FSV sprays well using a 68 pb cap and a 68 ss nozzle on a Binks 2001 spray gun.

Available In Sizes Ranging From Pints To Totes.
FSV is available in pints, quarts, gallons, 5-gallon pails, 55 gallon drums and 275 gallon totes.

Available Through Veneer and/or Laminate Distributors
Many quality distributors of both veneer and laminate sell FSV across the USA and Canada.

Works Well On All Backed Veneers And All Laminates
FSV has been tested and approved for use by a number of major sheet veneer companies as well as the larger laminate manufacturers.

Significantly Decreases Press Time In Vacuum Bags
Tests in vacuum bag presses show press times of as little as four minutes.

Long Term Pressure Not Necessary
If sufficient pressure has been applied with a scraper, additional pressing is not necessary. FSV works well with laminate when “dead stacked” for about 2 hours.

Can Be Used “on site” Without Additional Air Or Press Equipment.
A scraper and a roller is all that’s needed. Ideal for on site repairs

No Annoying Odor
Unlike contact cements, FSV has little or no odor and fumes are not dangerous

FSV Is Repositionable
Contact cement cannot be repositioned. Once the substrate has been mated with the overlay it is permanent. Any movement will destroy the overlay. FSV allows for repositioning or removal for up to 10 minutes.

Directions For Use:
* All wood substrates should be conditioned at room temperature at 6-9% moisture content
* A 20-35 lbs/msgl or 4-7 mil spread is adequate applied by roller
* Sheet veneer is then applied to substrate allowing a maximum open assembly time of 5 minutes but is dependent on porosity of the substrates, room temperature, and quantity applied
* Allow a maximum closed assembly time of 10-15 minutes prior to running through the nip roller.
* While the glue is still wet the panel is then passed through a nip roller. Glue should be "wet" when the assembly is passed through the nip roller. Another effective application of pressure involves the use of a wooden scraper or block. Be sure to use consistent even pressure across the entire panel.
* Note: Nip rolling can be accomplished with effectively no open/closed assembly time. However, the best initial tack and final bond occurs through the use of maximum open and closed assembly times.
* Panels may be dead stacked allowing a cure time of about 45 minutes to 1 hour. A 24-hour cure time is recommended before machining. No additional pressure is required.

Cleanup:
If the adhesive is still liquid, use warm water. Dried adhesive can be removed with hot water.
For waste disposal, compliance with all applicable federal, state and local regulation must be observed.

Storage:
F.S.V. can be stored in factory sealed containers for 6 months at 77 F. Protect from frost.

Guide to Using F.S.V Adhesive

Laminating Sheet Veneer Products to Board Substrates with F.S.V. Adhesive

Preparation:
Clean both surfaces of all foreign matter such as; forklift grease, oils, dust etc. Dust only can be removed with air pressure. All other matter requires a cleaning agent such as denatured alcohol. Denatured alcohol will not leave an oily residue that can cause glue failure. Many backed veneers have a slight coating on them that can easily be removed by lightly scuff sanding.

Substrates:
The most popular substrates are: Medium Density Fiberboard (MDF), Lightweight MDF board, Particle Board and plywood panels. Substrates differ in their absorption rate as well as their "wetability" (the ease in applying a film of adhesive). You should be aware of the nature of your substrate and adjust your spread rate accordingly. Maple plywood is not recommended as a substrate because surface checking and splits can occur.

Backer Sheets or Balance Sheets:
As with all glued panels, to avoid warping you must make a balanced panel. Ideally, the backer should be the same material used on the face of the panel. At the very least, it should be the same weight/ thickness.

Appling Adhesive:
You can apply FSV Adhesive one of two ways:

First: The best way to apply FSV Adhesive is to use an automatic glue spreader. This will assure even, complete coverage in the fastest way for production. The amount of adhesive to be used can easily be determined. Glue spreaders can apply adhesive to one side or both sides of the substrate.

Second: The next way to apply FSV adhesive is by using a hand applicator. A sponge roll applicator or a short nap roller is the best choice. You should have 100% coverage. The mil thickness is to be determined by two factors; 1 = your choice of substrate and 2 = your choice of backer on the face veneer.

Amount of Adhesive:
Different substrates require different amounts of adhesive based on the amount of voids and the absorption factor of the board chosen. Different veneers also require different spread rates depending on their weight.

Following are guidelines for some of the available sheet veneers:

10 mil paperback, SanPly 3 & 4 (other thin paperbacked sheet veneers)
apply about 3mils to the substrate only

20 mil paperback, 30 mil paperback, WOW, NBL, BFV, Ply-Tec, 2-ply and phenolic backed sheet veneers apply 4-6 mils on both substrate and veneer backer

A good glue line should have a slight bead of squeeze out around all sides.

Pressure

There are basically two types of presses used for laying up full boards. The two types are: Hot Press and Cold Press. There are other presses such as a membrane press and a vacuum bag press, which are used more often in the lamination of parts.

FSV Adhesive is designed to minimize the time required under pressure. It can be used in any of the presses mentioned above but is designed to be used with pressure from a scraper as well. Once the sheet veneer has been adequately adhered to the substrate it should be dead stacked for at least an hour (more depending on the situation).

Clean-Up

FSV Adhesive cleans up easily with warm water.

Safety

Always read and understand the MSDS (Material Safety Data Sheet) before using any product you are unfamiliar with.