



Valley Custom Door

Application Instructions for Installation of Veneer Sheets

Step 1 Required Tools & Supplies

- A stiff scraper tool must be used when applying pressure during the lamination process. **Do not consider using any type of J roller or hammer blocks.**
- Solvent based and water based contact adhesives are acceptable. Roller or brush grades provide the best results. Spray grade contact adhesives generally do not contain sufficient solid content and are not recommended.
- A separator sheet will be required between the coated substrate and the coated sheet. The separator sheet should be 1/8" hardboard and be wide enough and long enough to completely cover the contact cement on the substrate.

Step 2 Veneer & Substrate Preparation

- A smooth flat surface is essential for lamination. All dust, dirt, oil, previous finishes or any other foreign material must be removed. It is **not recommended that the veneer be applied to sheet rock, plaster, metal or cement.**
- All open surfaces will require two coats of contact adhesive. Even particleboard should be considered for two coats of adhesive. Tight surfaces like M.D.F. and hardboard may allow one coat of the contact adhesive.
- Contact adhesives, which supply high shear strength values, are best. Coat both surfaces; if you spray the contact do not apply a, dry, scant, open pattern. You must have 100% coverage so no voids are present. Make sure you accurately keep track of the time of application and follow the adhesive manufacturer's instructions as to open time. We recommend contact adhesive applications to be slightly above the adhesive manufacturers recommended rates.
- **Open time for the contact adhesive is critical.** If the contact adhesive is not fully cured water and or solvent vapor will be trapped between the substrate and the veneer, weakening the bonding between the components will occur.
- Wood expands across its grain in the presence of humidity. Veneer sheets, which are left un-mounted, may take on moisture creating complications making application difficult. **Dense grain woods like Maple are the most susceptible and require close attention.**

Step 3 Veneer Laminate Application

- It is best to make initial contact between the sheet and substrate down the centerline of the panel. Grasp one edge of the sheet and pull it tight to remove the memory of the sheet.
- Lower the sheet onto the substrate as an assistant removes the separator strip away from the centerline.
- Using a scraper tool apply hard pressure to securely bond the two glue lines. Repeat this process until all the separator sheets have been removed from beneath the half sheet area you are laminating.
- Repeat this process to the remaining half sheet.
- The entire sheet must be scraped again in the direction of the grain or by the use of a pinch roller system. The key is to apply hard pressure to every square inch of the laminated surface.
- **Do not use J rollers or hammer blocks to apply pressure. These tools do not supply adequate pressure.**

Step 4 Inspection Prior to Finishing

- To inspect the sheet prior to applying any finishing materials, shine a light across the grain of the sheet to expose any imperfections. This may include ridges; bubbles or additional sanding requirements due to grain raise from relative humidity the veneer may have encountered.
- **Ridges-** this occurs when the contact adhesive open time is rushed and the two surfaces have been combined too early. The contact adhesive still contains either water or solvents causing expansion across the grain resulting in ridges in the face of the veneer. To correct this you must allow more time for the contact adhesive to dry. If you can lift the veneer laminate off the substrate showing stringing or elasticity in the glue line this indicates that the moisture contained in the adhesive has not been removed.
- **Bubbles-** this occurs when there are gaps or areas, which have not had sufficient pressure, applied. Use a scraper device to make the initial pressure even if you intend to use a pinch roller. Drastic changes in humidity or the introduction of moisture will cause poorly bonded areas to weaken and separate from the substrate causing bubbles.