

# Installation Instructions

**Product:** Paperbacked Veneer Sheets

Note: Read the entire Installation Instructions before beginning.

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## **Materials required:**

- ✓ A fiber knife or stiff scraper tool. Do not use a J-roller or hammer blocks. Fiber knives are available from CraftWood.
- ✓ Solvent-based or water-based contact adhesive. 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(s). Required between the coated substrate and the coated paperback sheet. The separator sheet (or two separator half-sheets) should be larger than the paperback sheet.

## **Preparing the substrate:**

A smooth flat surface is essential for lamination. All dust, dirt, oil, previous finishes, and any other foreign material must be removed. CraftWood does not recommend the application of paperbacked veneer to sheet rock, plaster, concrete, or cement.

All open-pore surfaces will require two coats of contact adhesive. Even particleboard should be considered for two coats of adhesive. Tight surfaces like MDF and hardboard may only require one coat of the contact adhesive.

Contact adhesives supplying high shear strength values are best. Coat both surfaces. If you spray the contact adhesive, never apply in a dry, scant, open pattern. You must have 100% coverage so no voids are present. Make sure to track the time of application accurately and follow the adhesive manufacturer's instructions as to open time. We recommend contact adhesive applications to be slightly above the adhesive manufacturer's 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.

Wood expands across its grain in the presence of humidity. Paperbacked sheets left unmounted may take on moisture creating complications making application difficult.

**Installation using manual pressing with contact adhesive:**

To ensure proper alignment, lay separator sheets between the substrate and the paperbacked sheet. Make initial contact between the paperbacked sheet and the substrate starting in the middle of the sheet, with a separator sheet on each side of the initial contact line. After making initial contact in the middle of the sheet, grasp one edge of the paperbacked sheet and pull it taut. As an assistant pulls out the separator sheet from underneath, apply hard pressure to exposed area with a fiber knife in the direction of the grain to bond the two glue lines. Continue this process until the assistant completely removes the separator sheet from underneath the paperbacked sheet. Repeat this process for the remaining half.

The entire sheet must be fiber knifed again in the direction of the grain. 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 because these tools do not supply adequate pressure.

**Installation using cold pressing with PVA adhesive:**

If you apply paperbacked sheets using a cold press method in combination with PVA adhesives, you must scuff sand the back of the paperbacked sheet prior to use. The backer material contains a water-based acrylic resin, which can repel PVA adhesives. Weights and pressing times supplied from the adhesive manufacturer should be followed.

**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 raised grain 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 are poorly bonded due to insufficient adhesive or pressure applied. Large swings in humidity or the introduction of moisture will cause poorly bonded areas to weaken and separate from the substrate, causing bubbles on the surface.

Making a small incision in the direction of the grain to allow the trapped air to escape can repair bubbles. The use of a warm iron set between cotton and wool may reactivate the contact adhesive and the bubble will stay down. Make sure you place a protective material (craft paper) between the iron and the sheet before proceeding. If the area of the bubble will not stay down once the air has been released, it may require an injection of additional contact adhesives into the area.

*Raised grain:* Additional sanding can correct this issue. Proper monitoring of the relative humidity conditions in the area should take place.

**Sanding:**

Special care must be applied when sanding paperbacked sheets. We strongly recommend that no coarser grit paper than 150 grit should be used. It is best to use a single layer of paper by hand so you can feel the surface underneath.

**Preparing to finish:**

A test panel using the all the intended materials should be completed prior to final finishing, confirming the compatibility of all components.

Finishing should occur 24 hours after the initial lamination. You must be satisfied with the inspection of the surface prior to the application of finishing materials.

A finish sanding application by hand using 180 or 220 grit sandpaper may be required.

If you encounter any open seams in the panel face, a color-matched wood filler or wood patch putty can be applied. Do not over-apply wood filler to reduce the chance of sand through.

**Finishing:**

Water-based finishes must be tested before use to confirm suitability. Water will act to expand the wood, causing weak or poorly-executed fabrication to delaminate.

*Oil or stain:* Must be applied sparingly and wiped off immediately.

*Finish:* Apply abiding by the instructions provided by the finish manufacturer. CraftWood recommends the use of a sanding sealer followed by a UV inhibited polyurethane finish compatible with the seal coat. Allow the seal coat to dry completely before applying finish.

*Lacquer:* The surface coating should be selected on the basis of flexibility. Highly catalyzed lacquers cure rapidly and become extremely hard and inflexible. Apply two or three thin coats (less than 2 dry mils). Heavy single coats of lacquer may result in cracking.

Do not use linseed oil as a finish option for any CraftWood products.

CraftWood strongly recommends testing of all materials prior to final application.