WonderWood™ and Genuine Wood Veneers
Installation and Maintenance Guidelines

Please review the guidelines below, which pertain to all wood veneer products. Specific instructions for each application and backing can be found on the following pages. Guidelines for Finishing and Maintenance appear on the last page of this document.

BEFORE YOU BEGIN

Examine the product carefully to ensure that the material, coloring, and quality are satisfactory and as ordered. Since our wood veneer products are made from real wood, you should expect to see variations in color, texture and grain. These characteristics are not defects and are, of course, an inherent quality of natural materials. Check that the quantity and dimensions match the required specifications, prior to cutting. *In the event that any discrepancies are found, STOP and contact Wolf-Gordon customer service at 800-347-0550, before proceeding.*

We recommend hiring an installer who has experience with installing wood veneer products. If one is not available, we suggest having an experienced wallcovering installer produce a mock-up, completing the entire procedure with a small sample.

ACCLIMATE THE MATERIAL

Wood veneer products are very susceptible to absorbing moisture from the atmosphere until installed and sealed. Exposure in an uncontrolled environment can cause dimensional change and warping. We recommend that the area to receive the wood veneer be environmentally controlled, ideally maintaining a temperature range of 65–85° F, with relative humidity at 50% or less, until the product is sealed and finished. **Note: Even relatively cold climates may have a high humidity level, so a dehumidifier may be needed to ensure humidity below 50%.** Allow the wood veneer to relax and acclimate to the installation area for 12-24 hours prior to installation. The wood should be laid perfectly flat on a raised table that will accommodate the largest sheet. It is very important to keep the wood veneer off the floor or concrete at all times. **If the wood veneer must be stored, keep it in a dry, clean and stable climate**—it is not designed for areas that experience high humidity (e.g., spas, saunas, pools, and outdoor areas).

For wallcovering applications, verify that the wall moisture content does not exceed 10% using a reputable moisture meter, and that active moisture infiltration, condensation, and/or accumulation—particularly in warm, humid climates—is not present. If walls show mold, mildew or visible moisture damage, or if moisture content exceeds recommendations, do not proceed with installation until the condition has been fully corrected under the direction of a qualified professional. *Wolf-Gordon will not be responsible for any performance or quality issues if moisture problems are not addressed before or following installation.*

HANGING/INSTALLATION GUIDELINES

Our wood veneer products are delivered in sheets in numerical order, and should be kept in sequence as they are cut. Sheets must be hung/installed in their numbered order to maintain the intended look. The desired appearance will dictate whether the sheet numbers should be placed at the top or bottom of the wall or other surface when installing. For wallcovering applications, a straight hang procedure is required to produce the most uniform appearance. Because sheets are shipped slightly oversized, and all wood has a tendency to expand and contract, the sheets will need to be table-cut on each side (at the job site) to guarantee a tight joint from sheet to sheet. Install the wood veneer under permanent lighting conditions to evaluate color and texture uniformity.

If any defect, color variation, or unacceptable pattern effect is noticeable after three panels are cut and installed, STOP and contact Wolf-Gordon immediately. Wolf-Gordon cannot accept any claims on labor or material after more than three lengths have been installed. Upon approval, returns will be subject to a 35% handling and restocking charge. Requests for return authorization must be made within 30 days of ship date.

CLOTH-BACKED WOOD VENEER—for Wallcovering applications on Drywall

Surface Preparation—Drywall must be free of dirt, dust, and defect, including voids or raises. A non-smooth surface may result in telegraphed imperfections, therefore the wall should be prepared to a Level 5 finish. Apply one coat of Wolf-Gordon *Wood Veneer Wallcovering Primer** to all areas, allowing a minimum of eight hours drying time. If an oil-based primer was used, apply our primer over it before hanging, to avoid trapping moisture or adhesion problems. *Starting the installation indicates acceptance of the drywall and jobsite conditions by the installer.*

Adhesive Application—Roll on a medium coat of Wolf-Gordon *Wood Veneer Wallcovering Adhesive** to drywall, making sure to maintain uniform, even, and thorough coverage. If any area is not covered with adhesive, the wallcovering will not adhere properly. Allow 12–24 hours for the adhesive on the wall to dry completely. **Do not continue if the adhesive is still moist.** Because the wallcovering is very susceptible to absorbing moisture from the atmosphere until it has been installed and sealed, it should be applied as soon as the adhesive is dry and ready. Any delays have the potential of being problematic.

Once the wall is dry, apply a thin, smooth, and even coat of adhesive to the back of the wallcovering sheet intended for the left corner of the wall, using a small or medium nap roller. Pay special attention to the edges of each sheet, achieving the required 100% coverage, and pre-paste only one sheet at a time. This product is not designed to "book" with adhesive, nor is it necessary. The sheet should be applied to the wall immediately.

Installation—With the back of the first sheet still wet, apply the wallcovering to the wall, butting the edge of the sheet directly against the adjoining edge. Do <u>not</u> overlap and double-cut or attempt to reposition the sheet as this can result in spots with little or no adhesive. Once the sheet is on the wall, use a rigid fiber knife (do not use sharp-edged tools) to press the sheet onto the wall firmly and drive out any air trapped underneath the sheet. Start at the left corner of the wall, applying even pressure to the entire sheet, working with the grain from the center toward the edges. Do not push across the grain (left to right), as this will only stretch the wallcovering and may cause open seams. Smooth out any air bubbles, using the same technique. Air bubbles must be removed and installation errors corrected before the adhesive dries. Areas not properly adhered can best be exposed by tapping fingers across the sheet and listening—improperly adhered areas of the sheet will feel and sound noticeably different.

Avoid getting any adhesive on the face of the wallcovering; if this occurs, adhesive should be removed immediately with a damp sponge or cloth, using only enough water to remove the adhesive. Trim at the ceiling and baseboard with a sharp razor blade. The second panel should be applied to the wall, edge-to-edge with the first panel. Press against the joint and remove any excess adhesive from the surface of the wood, wiping with a natural sponge and drying with a lint-free cloth. If excess adhesive is not removed, it may show up as a discoloration once the wood is finished. Before applying the next panel, trim the top and bottom as with the first panel.

Our wood wallcovering bends easily with the grain; bending across the grain at a sharp angle is not recommended. Take extra care in keeping adhesive off the face of the wood veneer—do not let it dry on the wood. Should any dry on the surface, sand to remove excess adhesive, especially if planning on staining.

Inspection—After installing the first three sheets, wait an additional 2–3 hours and inspect the sheets to see if any air bubbles exist. To do this, place a powerful light approximately 6" away from the last sheet installed so that it shines across the wall. If bubbles exist, they will show up as small shadows. Air bubbles can be flattened using a piece of kraft paper and a standard clothes iron. Place the kraft paper on the wood veneer and move the iron (set on "Cotton") in a circular motion to reactivate the adhesive under the bubbled area. Follow immediately by pressing the fiber knife on the affected area and holding until the area cools. If satisfied with the application, proceed in the same manner around the room. If not, stop work and contact Wolf-Gordon, as indicated above.

After installation, the walls and wallcovering should be monitored for potential moisture or vapor infiltration, which must be promptly eliminated.

* *If* Wolf-Gordon Wood Veneer Walcovering Primer *and* Adhesive *are not purchased with material, manufacturer's warranty will be void.*

PAPERBACKED WOOD VENEER—for MDF and Plywood in low-traffic applications

Surface Preparation—A smooth, flat surface is essential for lamination. All dust, dirt, oil, previous finishes, and other foreign material must be removed. Paperbacked veneer is not recommended for application to sheet rock, plaster, concrete, or cement.

Adhesive Application—Two coats of a solvent- or water-based contact adhesive that supply high shear strength are required for all open-pore surfaces, including particleboard. Tight surfaces like MDF/hardboard may only require one coat. Roller or brush grade contact adhesives are recommended, since spray grade adhesives generally do not contain sufficient solid content. Coat the back of the paperbacked veneer and the surface to be covered with the contact adhesive. If the contact adhesive is being sprayed, never apply in a dry, scant, open pattern; 100% coverage with no voids must be achieved.

Open time is a critical factor for contact adhesive. If the adhesive is not fully cured, water and/or solvent vapor will be trapped between the substrate and the veneer, weakening the bonding between them. Therefore, make sure to track the time of application accurately and follow the open time instructions provided by the adhesive manufacturer. We recommend contact adhesive applications to be slightly above the manufacturer's recommended rates.

Note: Since wood tends to expand across the grain in humid conditions, it is important that paperbacked sheets are not left unmounted for long. The sheets may take on moisture, creating complications that make application difficult.

Installation using manual pressing with contact adhesive—Separator sheets (or two separator half-sheets), which are larger than the wood veneer sheets, must be placed between the coated surface and the coated paperbacked veneer. An assistant is needed to ensure a successful installation. Use a fiber knife or stiff scraper tool for applying pressure to the veneer. Do not use a J-roller or hammer block, because these tools do not supply adequate pressure.

Make initial contact between the paperbacked wood veneer and the surface being covered, starting in the middle of the sheet, with a separator sheet on each side of the initial contact line. Then, grasp one edge of the veneer and pull it taut. As an assistant pulls out the separator sheet from underneath, apply hard pressure to the exposed area with the 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 under the veneer. Repeat this process for the remaining half. The entire wood veneer 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.

Installation using cold pressing with PVA adhesive—If applying the paperbacked veneer using a cold press method in combination with a PVA adhesive, the back of the wood veneer must be scuff sanded prior to use. This is due to a water-based acrylic resin contained in the backer material that can repel PVA adhesives. For weights and pressing times, follow the directions supplied by the adhesive manufacturer.

Inspection—Prior to applying any finishing materials, inspect the sheets to see if any imperfections exist as a result of the relative humidity the veneer may have encountered. To do this, shine a light across the grain of the wood veneer. Imperfections that may occur include:

Ridges: This occurs when the contact adhesive open time is rushed and the two surfaces have been combined too quickly. The adhesive still contains either water or solvents that cause expansion across the grain, resulting in ridges in the face of the veneer. To correct this, allow more time for the contact adhesive to dry. If the veneer laminate can be lifted off the surface, showing stringing or elasticity in the glue line, this indicates that the moisture contatined in the adhesive has not been removed.

Bubbles: When there are gaps or areas poorly bonded due to insufficient adhesive or pressure applied, bubbles may form. Large swings in humidity or the introduction of moisture will cause poorly bonded areas to weaken and separate from the surface. Making a small incision in the direction of the grain to allow trapped air to escape can repair bubbles. Air bubbles can also be flattened using a piece of kraft paper and a standard clothes iron. Place the kraft paper on the wood veneer and move the iron (set between "Cotton" and "Wool") in a circular motion to reactivate the adhesive under the bubbled area. If the area of the bubble will not stay down once the air is released, an injection of additional contact adhesive may be needed.

Raised grain: Additional sanding can correct this issue.

POST-FORMED LAMINATE—for MDF, Plywood, and Hardwood in high-traffic applications

Surface Preparation—A smooth, flat surface is essential for lamination. All dust, dirt, oil, previous finishes, and other foreign material must be removed. Post-formed Laminate is not recommended for application to sheet rock, plaster, concrete, or cement.

Adhesive Application—Two coats of a solvent- or water-based contact adhesive that supply high shear strength are required for all open-pore surfaces, including particleboard. Tight surfaces like MDF and hardboard may only require one coat. Roller or brush grade contact adhesives are recommended, since spray grade adhesives generally do not contain sufficient solid content. Coat the back of the Post-formed Laminate and the surface to be covered with the contact adhesive. If the contact adhesive is being sprayed, never apply in a dry, scant, open pattern; 100% coverage with no voids must be achieved.

Open time is a critical factor for contact adhesive. If the adhesive is not fully cured, water and/or solvent vapor will be trapped between the substrate and the laminate, weakening the bonding between them. Therefore, make sure to track the time of application accurately and follow the open time instructions provided by the adhesive manufacturer. We recommend contact adhesive applications to be slightly above the manufacturer's recommended rates.

Note: Since wood tends to expand across the grain in humid conditions, it is important that Post-formed Laminate sheets are not left unmounted for long. The sheets may take on moisture, creating complications that make application difficult.

Installation using manual pressing with contact adhesive—Separator sheets (or two separator half-sheets), which are larger than the laminate sheets, must be placed between the coated surface and the coated Post-formed Laminate. An assistant is needed to ensure a successful installation. Use a fiber knife or stiff scraper tool for applying pressure to the veneer sheets. Do <u>not</u> use a J-roller or hammer block, because these tools do not supply adequate pressure.

Make initial contact between the Post-formed Laminate and the surface being covered, starting in the middle of the sheet, with a separator sheet on each side of the initial contact line. Then, grasp one edge of the laminate and pull it taut. As an assistant pulls out the separator sheet from underneath, apply hard pressure to the exposed area with the 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 under the laminate. Repeat this process for the remaining half. The entire Post-formed Laminate 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.

Installation using cold pressing with PVA adhesive—Post-formed Laminate works well using a cold press method in combination with a PVA adhesive. For weights and pressing times, follow the directions supplied by the adhesive manufacturer.

Inspection—Prior to applying any finishing materials, inspect the sheets to see if any imperfections exist as a result of the relative humidity the Post-formed Laminate may have encountered. To do this, shine a light across the grain of the laminate. Imperfections that may occur include:

Poorly bonded areas: Large swings in humidity or the introduction of moisture will cause poorly bonded areas to weaken and separate from the surface, causing a low rise to appear. If a contact adhesive was used, using a warm iron (set between "Cotton" and "Wool"), move in a circular motion over a piece of kraft paper on the Post-formed Laminate to reactivate the adhesive and improve the bond.

Raised grain: Additional sanding can correct this issue.

PRESSURE SENSITIVE ADHESIVE (PSA)-BACKED WOOD VENEER—for metal, glass, and other smooth, non-porous surface applications

Before beginning—PSA-backed wood veneer sheets require special handling. We recommend that the area to receive the wood veneer be environmentally controlled, ideally maintaining a temperature range of 70–80° F, with relative humidity at 35%–50%, prior, during, and after installation. Allow the wood veneer to relax and acclimate to the installation area for 12-24 hours prior to installation. The wood should be laid perfectly flat on a raised table that will accommodate the largest sheet. If the sheets have curl, cover with plywood.

Surface Preparation—It is the sole responsibility of the installer to test each surface to determine if the PSA-backed wood veneer is suitable for each application*. Pressure sensitive adhesive adheres best to lacquered, enameled, or smooth, non-porous surfaces that are not peeling, cracking, or flaking. **Never attempt to use this product in direct contact with bare wood.** All dust, dirt, grime, wax, and grease must be removed using only denatured alcohol. Do not use soap, mineral spirits, or gasoline in preparation, as they will leave behind a film and cause decreased tact. Uniformly scuff sand the finished surface with 280–320 grit sandpaper. Wipe the surface with a tack-rag to remove dust, and re-wipe with denatured alcohol before applying the wood veneer.

Installation—To ensure proper coverage, trim the PSA-backed veneer sheet 1/2" larger than needed on all sides. Loose fit the sheet with the release liner in place to guarantee a correct fit. Slit the release liner along the center line of the sheet and peel back 1" on each side to reveal a 2" wide strip of adhesive. Crease the liner flat. Be careful not to allow the adhesive to pick up trash or dust, and keep fingers off the adhesive.

Align the sheet and lightly touch down to the surface. Do not press tightly to the surface until certain that the sheet is in the correct position. Pull the release liner from the back of the sheet and scrape the veneer to the surface as you pull the liner, using a fiber knife or veneer scraper. The sheet must be scraped down tightly. Do not use J-rollers or your fingers, as they will provide insufficient nip pressure—the major cause of delaminating after application. Since PSAs are very sensitive to lack of pressure, it is crucial to apply the greatest amount of pressure possible with a scraper tool.

Inspection— Prior to applying any finishing materials, inspect the sheets to see if any imperfections or bubbles exist as a result of the relative humidity the wood veneer may have encountered. To do this, shine a light across the grain of the laminate. If any air bubbles exist, place a piece of the release liner or kraft paper on the veneer surface and exert maximum pressure with the scraper tool.

PSA-backed wood veneers must be promptly finished once installed to guard against high humidity conditions.
Note: Pressure sensitive adhesive does not achieve ultimate adhesion until 72 hours after being applied.

* *If installing this product on kitchen cabinet end panels, do not jam fit the sheets tightly between the back of the face frame and the wall, since all wood tends to expand in the presence of high humidity. Allow at least 1/16" on each side for expansion.*

FINISHING FOR ALL WOOD VENEER PRODUCTS

Preparation—Once applied, the wood veneer should be clean, dry, and free of any adhesive, oil, grease, wax, or other foreign matter. Remove all traces of adhesive on the face of the wood. Sand the entire area to a smooth, uniform surface with sandpaper no coarser than 150 grit prior to finishing. It is best to use a single layer of paper by hand so the surface underneath can be felt.

Staining—If planning to stain the wood veneer, a piece of waste material from the order should be tested, because all wood species absorb stains differently. **With WonderWood, we do not recommend using a stain because it tends to mute the grain.** A wood filler or wood patch putty will help reduce the visibility of seams; always use filler that matches the stain. When applying a stain to Genuine Wood veneer, only use a wiping stain applied sparingly, since a deep penetrating stain may delaminate the wood from its backing and the wall.

Finishing—Because the wood veneer is a natural wood product, it will require a finish to bring out its inherent beauty. Finishing should only be done after installation, waiting at least 24 hours to allow adhesive to dry thoroughly. **Do not finish wood veneer prior to installation.** A test panel using all the intended materials should be completed prior to final finishing, confirming the compatibility of all components. A finish sanding application using 180 or 220 grit sandpaper may be necessary. If any open seams in the panel face exist, a color-matched wood filler or patch putty can be applied. Do not over-apply wood filler to reduce the chance of sand through. Vacuum or dust the surface clean.

Finishes should be applied according to the manufacturer's instructions. Waterbased finishes must be tested to confirm suitability, since water will act to expand wood and can cause weak or poorly-executed fabrication to delaminate. We recommend applying a light coat of a sanding sealer followed by a compatible UV inhibited polyurethane finish, to provide years of protection. Allow the seal coat to dry completely before apply finish. It may be necessary to re-sand the surface after it is sealed. **Products used in finishing must be 100% compatible, as using one brand sealer and another brand of topcoat can cause disastrous effects.**

The use of lacquers to seal or finish wood veneer wallcovering is not recommended, as the strong solvents cause grain lifting and cracking. Lacquers can be used for other applications with caution: since highly catalyzed lacquers cure rapidly and become extremenly hard and inflexible, they must be applied in two to three thin coats (less than 2 dry mils). Heavy coats of lacquer may result in cracking. **Linseed oil should not be used as a finish option.**

MAINTENANCE

Since these wood veneer products are genuine wood, they should be treated accordingly. Normal dirt and fingerprints can be cleaned using a damp cloth or natural sponge. More stubborn stains can be removed using a mild soap and a damp sponge.

The above is intended only as a guideline. Wood veneer installations must conform to instructions included with each shipment. The installer has final responsibility for proper installation and evaluation of jobsite conditions.