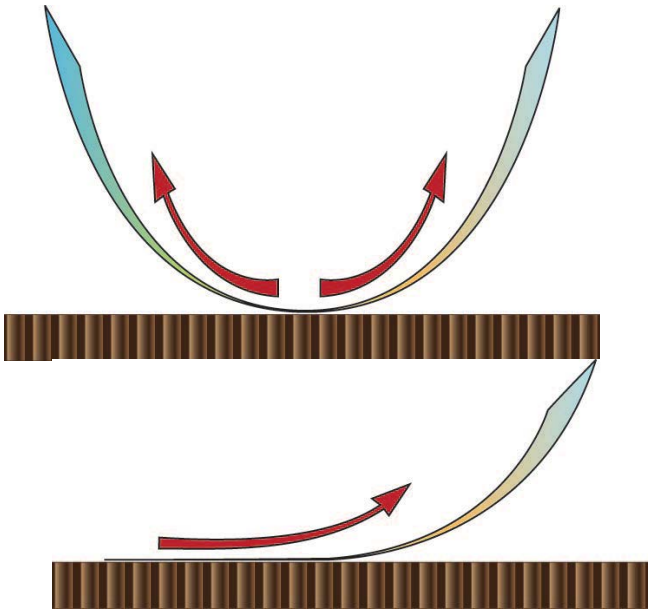
AerFilm LHR®, AerTrim™ LW, AerTrim™ LHR & AerGlas™ LHR

Contact adhesives have been used successfully with Schneller's AerFilm LHR®, AerTrim™ LW, AerTrim™ LHR and AerGlas™ LHR decorative materials. Common contact adhesives include Fastbond 5, 10 and 30 and 1357; all manufactured by 3M. These adhesive systems exhibit excellent adhesion to a variety of substrates, including aluminum, vinyl, epoxy, phenolic glass honeycomb and gel coated FRP. However, by using a contact adhesive, it is important to follow the adhesive manufacturer's recommended application procedures and guidelines.

1. Application procedures require at least 2 or more people (depending upon the size of panel to recover) to apply and support the AerFilm LHR®, AerTrim™ LW, AerTrim™ LHR and AerGlas™ LHR. The use of a template to cut the decorative to size is very useful.
2. The surface of the panel to be covered must be cleaned and free of all dirt, grease, oil, or other contaminants. For best results, aluminum, epoxy, phenolic, or a FRP panel should be dry and wiped clean with Isopropyl alcohol, Acetone, or Methyl Ethyl Ketone (MEK).
3. Spray or brush/roll a thin coat of the selected contact adhesive to the surface of the panel to be covered and to the back-side of the material. Both techniques are acceptable, and each has their benefits and disadvantages. The spray gun works well for thin even coats, but requires specific air equipment and ventilation systems; while the brushes/rollers are inexpensive and easy to use, but require patients and skill to apply the adhesive evenly.

4. It is important to apply the contact adhesive uniformly and evenly since “heavy” application areas will take longer to dry and may cause delamination if material is applied while parts of adhesive are still wet. Allow the adhesive to dry so that it becomes tack-free per the manufacturer’s instructions. If using a water-based adhesive, drying time will be longer than using a solvent-based adhesive.

5. Once adhesive is dry, apply decorative to the panel to be covered. For large parts, it is recommended to start in the middle of the panel and work either up or down to assure alignment of the material to the part. For smaller panels (e.g. Bin doors), start with the largest and flattest surface area to be covered and work the material to the smaller and perhaps more difficult areas to be covered. Do not rush the application. Force all the air from between the adhesive and panel surface by using short overlapping strokes with the application squeegee.



6. During the application process, it is important to “suspend” the material away from the panel when using a contact adhesive system. Typically, it is not possible to reposition the decorative laminate after the bond has set.

7. When applying a decorative laminate, use a soft plastic rubber squeegee (nylon or Teflon) or roller to exert uniform pressure across the material to help the material adhere to the panel.
8. The use of heat is optional. It should be used only if it is not possible to achieve a good bond at room temperature and to help, wrap the material around edges or soft curves. A heat gun may be used for a heat source. Excessive temperature may cause the material to lose texture. When possible, it is advantageous to apply the majority of heat to the backside of the decorative material.

9. If air bubbles do occur, a pin, needle or other sharp instrument may be used to vent the air. Squeegee or finger-press the air progressively around the bubble to remove the entrapped air.

10. Edge trimming may be done with a razor knife or similar cutting device.

Tools & Materials Needed

Isopropyl Alcohol
and/or
Acetone
Clean Towel
Masking Tape
MEK
Razor Knife
Template
Contact Adhesive
Heat Gun
Squeegee
Tape Measure