



► Installing Fleet and Vehicle Wrap Films on Painted Tank Trailers

Tank trailers present a unique challenge to installers in that several elements of this application are not found in other fleet van or trailer units. The factor of spillage and weld lines in addition to the gradual change in exposure angle from vertical to horizontal demand specific care be taken to provide a long lasting graphic.

Tools:

• Cleaning Solution	• Rivet Brush or any rivet application tool
• Isopropyl Alcohol (diluted to at least 50% alcohol)	• Heat Gun or Propane Torch
• Heavyweight, medium tack application tape	• Needle Point Wheel (for air release)
• Edge Sealer	• 9mm Snap-Off 30° Blades
• Squeegee	

Methods:

- **Application tape lamination may be started when ink has fully dried (if screen or digitally printed) or upon weeding of graphic.**

For most large graphics, a mechanical laminator is the best method. Hand lamination of application tape may suffice for small batches or small graphics. Many methods of lamination are appropriate as long as stretch, bubbles and wrinkles are avoided. The best method for manual application is to unroll application tape adhesive side up, tape the front corners and laminate the graphics using uniform sweeping strokes from the center of the leading edge to either side of the web. Overlapping strokes, at least a half-inch (1cm), will assure that no air is trapped. When working single handed, the graphics can be loosely rolled and slide over one forearm while squeegeeing the lamination together with the other. This method has the advantage of keeping the contact of graphics to application tape to a minimum and maintaining close control over a large quantity of graphics in a compact space.

- **Registration marks or lines may be laid out on the application tape surface at this time, if needed.**

A pencil line at a specific point parallel to the centerline of the graphic makes achieving registration during installation far simpler, especially when several printed panels are to be lined up.

- **Trimming should achieve even edges with no application tape or graphics extending.**

If possible, the edge that is to be the registration and beginning point for installation should be straight. When the top of the graphic cannot be trimmed with a straight edge, registration should be along a side or bottom edge. If there are no straight edges, registration should be against a parallel registration mark made on the application paper over the widest section of the graphic.

- **The trailer side must be painted aluminum or steel.**

Surfaces should be clear of all old decals and graphics, dirt and grease. The final cleaning should be with a 50% solution of isopropyl alcohol and water.

- **Installation styles vary but certain rules of thumb apply for all graphic applications.**

For smooth walled installations, apply across all smooth sections first using strong squeegee pressure and smooth overlapping strokes. The squeegee should be held and swept in a motion that will avoid stretch and wrinkling of the graphic.

- **Finishing the graphic involves applying the film around surface irregularities.**

Panel seams, rivets, other fasteners and weld lines are final steps and may be done only when there is not significant amount of moisture between the graphic and trailer surface. If a wet application is used, this step should be delayed until later in the day or at the beginning of the next day. Any attempt to finish the installation around rivets when water is present between the rivet head and truck panel may lead to bubbling and lifting around rivet heads.

1. Finish areas around fasteners and along weld lines by punching air ventilation holes with a pointed tool.
2. First press film into place loosely with a rivet brush at ambient temperature. Once the vinyl is in place, use a heating device to soften once. Heat to 250°F (120°C), press the vinyl into place tightly to set over the fastener or weld line. If one attempts to use the heat and rivet brush without pressing the film down at room temperature first, it is easy to burn the film and/or cause unsightly wrinkles.
3. If there are any sections where trailer panels have been joined, it is important to slit the vinyl at the panel edges and use heat and the rivet brush to secure the material along the area. Failure to slit vinyl over panel seams will result in cracking and tears within a year of application.

- **Edge Sealing**

For top-load tanker trailers, it is crucial to apply edge seal on along the upper edge and vertical seams of the entire graphic. Edge sealing is used to avoid premature lifting and color loss along the top edge of the graphic in case of fumes or spillage..

- **Inspection before releasing the unit is critical**

All sections of the graphic should be inspected for bubbles, wrinkles, loose rivet or weld areas after removal of all masking.

- **The tanker should not be pressure washed within a week of installation**

Pressure washing should be in accordance with TIP #25 Pressure Washing of Vinyl.

August 2017