

Covalence Adhesives

Procedures for Applying Cargo Compartment Seam Tape

Covalence Adhesives manufactures flame-retardant aircraft cargo compartment tape in both self-wound and lined varieties. Self-wound tapes are constructed of a backing material that has been treated with a release coating to allow the tape to be wound onto itself without the adhesive bonding to the back of the roll. Lined tapes do not have a release coat, and are therefore manufactured with a release liner attached to the adhesive side of the tape. This release liner must be removed before application to the cargo panels.

Tip: An easy way to get the release liner started is to attempt to tear the tape. The stress on the liner will cause the liner to stress and pry away from the tape. Some mechanics also use a razor knife to pick at the corners of the tape to get the liner started. Once you are finished with the roll, it's always a good idea to cut the liner back 1" shorter than the end of the tape to let the tape bond to the backing of the remaining roll. This keeps the tape from unraveling and creates an easy tab to start removing the liner on the next application.



Depending on the condition and the age of the cargo panels, they may need to be cleaned before the tape is applied. New cargo panels do not require any surface preparation.

Procedures for Removing Adhesive Residue

Covalence Adhesives has had positive experiences with the following procedure for removing the residue sometimes left by adhesive tapes. The effectiveness of the procedure will vary from surface to surface and from different cargo panel manufacturers. ALWAYS test the procedure in advance on a scrap piece of cargo panel to minimize damage in the event the procedure has negative effects. Users of the procedure do so at their own risk. Due to differences in cargo panel manufacturers construction materials, Covalence Adhesives recommends contacting your specific manufacturer obtain an approved list of cleaners that may be safely used on their panels.

The following general-purpose procedures have been proven effective at removing adhesive residue.

1. Mineral spirits or citrus cleaners work best for most surfaces. Covalence Adhesives sells Polyken 41 Citrus Cleaner (re-order number 601106) specifically for this purpose.
2. Some sensitive surfaces (gel coats, etc) may be damaged by the above. Always test the surface on small samples with the solvent of choice before full-scale application.
3. If the surface material prohibits the use of mineral spirits or citrus cleaners, try the following:
 - * Commercial residue remover like "Goo gone" (www.googone.com)

- * Rubbing alcohol (IPA)
- * Car wax remover
- * Acetone
- * Ethanol
- * MEK is also effective, but should only be used in a well-ventilated area with an absence of any ignition sources
- * Commercial ammonia based cleaners like Windex® have also had positive results

4. Apply the residue remover in cool temperatures when possible.

5. For sensitive surfaces, first apply the remover on a cloth towel, then dab it on the residue. Allow to penetrate, then carefully rub until the residue is gone.

Once the cargo panels are clean and ready, the tape can be applied by hand to initially bond the tape to the panel and to assure that the tape is centered and aligned with the seam. Make sure that there are not any creases or air pockets in the tape. Firmly smooth the tape onto the cargo panel seam, then trim the tape with a razor knife.



Most adhesive tapes are Pressure Sensitive Tapes (PSA's). The key word is "pressure." The bond between tape and substrate that you are adhering it onto greatly improves with the amount of pressure applied to it. A hand does a good job of applying initial pressure to a PSA, but it also acts as a cushion between the tape and the hard surface of a cargo panel. When pressure can be concentrated into a central focal point, the adhesive bond is substantially increased. Therefore, we recommend the use of a plastic spreader or squeegee to "wet out" the adhesive and force it into the pits and grooves on the surface of the cargo panel.



Hand applied



Squeegee applied

Even though a cargo panel feels relatively smooth to the touch, under a microscope, you can actually see grooves, pits, and valleys in the surface. A squeegee compresses the adhesive into the pores of the cargo panel creating an optimum bond.

The information presented herein was prepared at COVALENCE ADHESIVES (25 Forge Parkway Franklin, MA 02038), by qualified technical personnel. To our knowledge it is true and accurate. The information and recommendations are furnished for these products with the understanding that the purchaser will independently determine the suitability of the product for his purposes. The data do not constitute a warranty, expressed or implied, statutory or otherwise, nor are they a representation for which COVALENCE ADHESIVES assumes legal responsibility. The data are submitted for the user's information and consideration only. Any use of these products must be determined by the user to be in accordance with the applicable federal, state and local laws and regulations.