



A FLEXcon Holdings Company

Alamotape
6110 Rittiman Road
San Antonio, TX 78218

210.798.1900
800.549.9860
alamotape.com

APPLICATION GUIDE

Alamotape® Pressure Sensitive Adhesives

ADHESIVE TYPE

Proper selection of the adhesive is important to consider in overall construction. Two different types of adhesives are available with different advantages and limitations including:

- **Rubber:** Offers aggressive bonds and good adhesion to a broad range of surfaces. Rubber oxidizes with age and exposure to ultraviolet (UV) light. It does not typically perform well at extreme temperatures.
- **Acrylic:** Offers good adhesion on higher surface energy materials like glass and metals but offers less adhesion on lower energy surfaces such as plastics. It is highly resistant to oxidation with age or exposure to UV light.

SURFACE PREPARATION

For the best performance, the surface to be bonded must be clean, dry, and free of contaminants such as oils, silicones, and waxes. Remove dust by wiping with a dry lint free cloth, tack cloth or blowing air on the surface. To remove other contaminants, wipe the surface with a solvent-soaked clean lint free cloth. Change cloth frequently to ensure the contaminant is not spread over the surface and is completely removed. Rubbing alcohol (isopropanol) is a mild solvent. If alcohol is ineffective, a more aggressive solvent such as Toluene or Methyl Ethyl Ketone (MEK) may be needed. First, use solvent on a small test spot to ensure no surface damage. Review and follow all health and disposal information supplied by the vendor when handling solvents.

SURFACE CONTACT

Good surface contact between the adhesive and surface is essential to forming a strong bond. More surface contact means better bond. Once the proper adhesive is chosen and the surface is prepared, bonding can be performed.

BONDING CONDITIONS

The final construction must maximize the surface contact between the adhesive and substrate. The following are three typical bonding conditions:

- **Rough & Irregular Surfaces:** Adhesive thickness must be great enough to flow into the valleys and crevices of the irregular surface to provide intimate contact for maximum bond. Apply sufficient pressure to cause the adhesive to flow into the surface. Often the proper conditions are determined by trial and error. If possible, warm the adhesive in conjunction with good pressure to improve adhesive flow into the low spots of the rough surface.
- **Non-Parallel Surfaces:** Thicker adhesives help fill the gap between the surfaces. If the gap between the surfaces is relatively small, a thick transfer tape could be used. Foam tapes might be recommended to provide better gap filling than a transfer tape. Firm bond pressure is needed to deform the adhesive to conform to the uneven surface and provide better adhesive contact. Achieving intimate contact between the adhesive and surface is essential since the surface will spring back a bit after application pressure is released.
- **Smooth Surfaces:** Adhesive flows well on smooth surfaces. Although these surfaces are smooth to the eye, they do have microscopic irregularities. Allow adhesive to settle for 24-48 hours so the adhesive can flow and cure to maximum strength. Some firmer adhesives may need 72 hours or longer to obtain optimum bond. Air entrapment may reduce adhesive contact. Squeeze out excess air while the bond is formed with lamination to ensure proper contact between the adhesive and bond surface. Pressure of 15-25 lb. per inch width of bond line are typical and higher pressures can be used if needed, provided they do not damage the materials.