

Installation of noise control material with pressure sensitive adhesive (PSA)

Long handle paint rollers with a short nap roller work best for applying reasonable pressure to acoustical foam with a pressure sensitive adhesive (PSA) backing. Roll over 100% of the foam after installation to assure good bonding of the PSA with the metal or plastic panel.

These rollers are available at any hardware store or Wal-Mart in the paint section.

Here are 7 steps we recommend when applying PSA:

1. Clean application surface of all dirt and residue.
 - Cleaners and degreasers will remove any unwanted residue such as overspray, oils, dirt etc.... from the substrate.
2. Thoroughly remove any cleaning solutions used with a 50/50 mixture of isopropyl alcohol and water.
 - Some harsh cleaners can leave behind a residue that can breakdown the PSA bond.
3. Wipe surface dry with a clean cloth after cleaning. Surface must be dry before application.
 - A dry surface is important. Any moisture left behind can create bonding issues.
4. Make sure installation temperature is above 50 degrees F
 - Temperatures below this threshold will cause initial tack problems.
5. Ideal temperature of installation would be from 60 to 80 degrees F.
 - Temperatures too low or too high will not allow the adhesive to set up properly.
6. Firm pressure must be applied to the entire part to ensure proper adhesion. Pressure rollers, jigs, fixtures or pressure plates recommended.
 - Laminate rollers are a great example of a way to apply proper pressure across the part. They can be found at industrial supply companies or home improvement stores.
7. Let adhesive cure for 24 hours before subjecting to major handling or outside environment.
 - This allows the adhesive to completely set up and bond to the substrate.

If all of the steps above are completed properly, your pressure sensitive adhesive will have a long-lasting bond to the substrate. When applying pressure sensitive adhesives, factors such as operating temperature, surface energy, plasticisers, etc. are important to ensure proper adhesion.

