

PSA Application Presentation

Federal Foam Technologies



Content

I. Introduction

II. PSA Purpose and Function

III. Preparing the Surface

IV. Preparing the Part

V. Application and Methods

VI. Conclusions

Introduction

Federal Foam Technologies: PSA Application Presentation

What is a PSA?

- **PSA (Pressure Sensitive Adhesive)** is often a misunderstood element in the manufacturing process. The product needs to have pressure applied to activate the adhesive material. This **does not** mean to simply peel and stick.

Purpose of Presentation:

- Educate the users about PSA and its function to help ensure the features and benefits of PSA can be realized.



Example of PSA



Purpose and Function

Federal Foam Technologies: PSA Application Presentation

- Economical means to bond materials together in the manufacturing process.
- May improve assembly times.
- Minimize exposure to potential health hazards.
- Clean processing compared to spray adhesives.
- May limit visual damage to parts.
- Create bonds in places welding or other mechanical attachment methods cannot.



Example of a PSA applied on die cut parts



Surface Preparation

Federal Foam Technologies: PSA Application Presentation

Surface that will be bonded to should be clean of any foreign matter, such as:

- Water, snow, ice (moisture)
- Dust, dirt, and/or grease
- Residue from any cleaners
- Mold release/powder

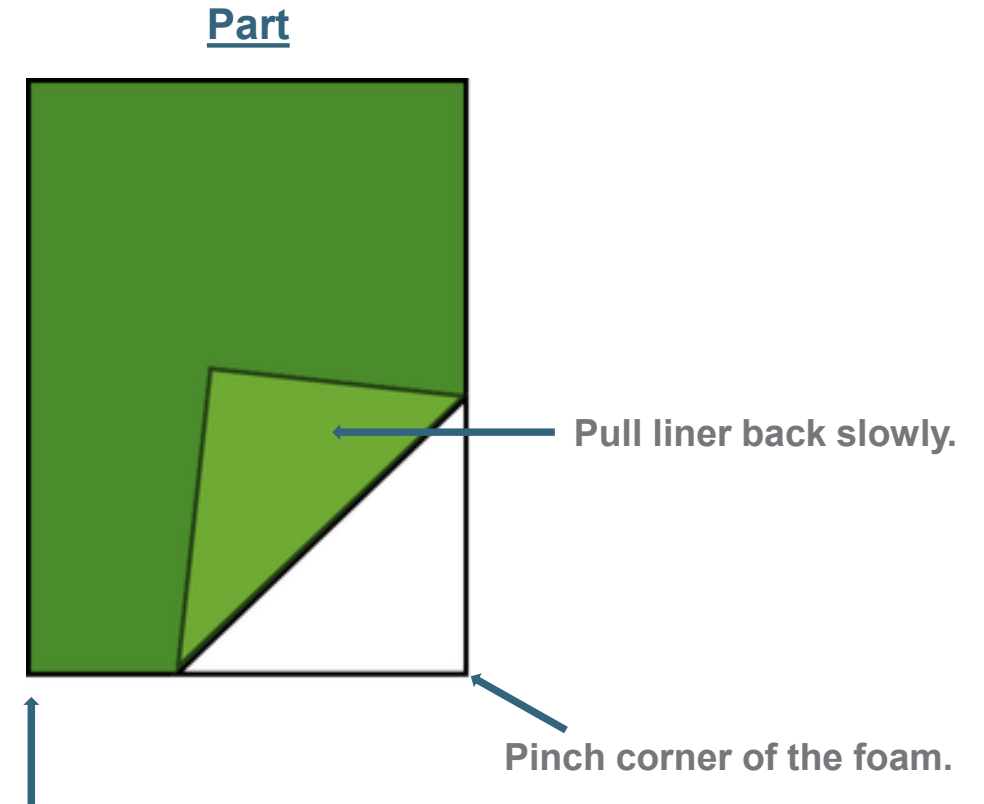
This may require use of isopropyl alcohol or some other cleaning agent.



Preparation of the Part

Federal Foam Technologies: PSA Application Presentation

- Avoid folding or creasing of the part.
- Keep the part dry.
- Avoid tearing or puncturing the liner protecting the PSA.
- Do not pull the liner off and let the part sit for long periods of time. Parts should be applied immediately after removing the liner.
- Do not fold the material upon itself.
- Make sure the adhesive material is covering the entire surface of part.
- Make sure the adhesive does not pull away from the foam when pulling the liner back.



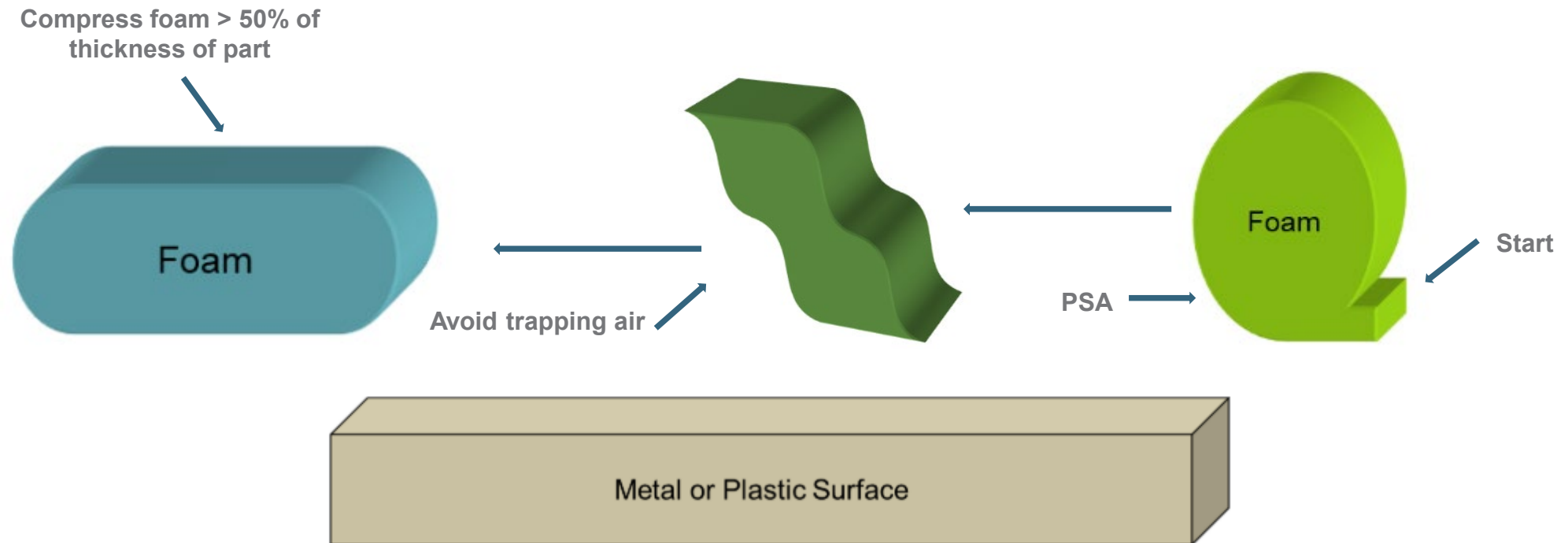
Start from opposite side with the same principles to avoid tearing of the liner material.



Application Methods

Federal Foam Technologies: PSA Application Presentation

- Ensure the surface the part will be applied to is $>50^{\circ}\text{F}$ to achieve best bond.
- Start from a corner or edge of the part and press it into place.
- Move (left to right, up or down) in a direction that is conducive to apply pressure to the part.
- Roll the part to avoid trapping air underneath the part.
- After the part is installed, compress the foam over 100% of surface $>$ than 50% of the parts thickness with a tool, roller or hand.



In Summary

Federal Foam Technologies: PSA Application Presentation

- Make sure your surface is clean.
- Make sure you don't trap air.
- Make sure adhesive is bonded to foam.
- Make sure adhesive is covering entire part.
- Make sure you compress insulation > 50%.

