

Flame Treatment Surface Conditioning Impact Recovery Systems Products

General

Most Impact Recovery Systems products are made from either High Density Polyethylene or Polypropylene plastics. These plastics have low surface energy after primary processing (molding, extruding, etc.) which means that inks, laminates, and coatings do not readily adhere to the surface of the material. Prior to applying retro-reflective pressure tape to Impact Recovery Systems' products, the surface of the plastic must be conditioned in order for there to be acceptable adhesion. If this is done properly, there are no issues with long term adhesion.

Flame Treatment

The easiest method of increasing surface energy and preparing the plastic for adhesion is through flame treatment. Flame treatment works when the plasma of a flame comes in contact with plastic. It is important to know that it is not heating the plastic or burning away of contaminants that is doing the work. A cool flame quickly passed over the area to be covered by adhesive is all that is necessary. A propane torch or pear burner can be used to perform the treatment. Be sure not to over-heat and warp the plastic.



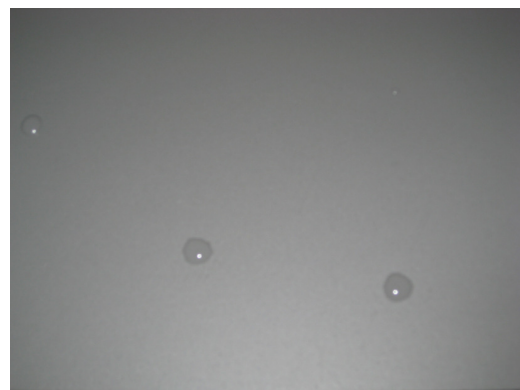
Flame Treating – Pear Burner

Testing

To test to see if your flame treatment has been adequate, place a drop or two of clean water on the plastic surface. If the plastic surface is adequately prepared, the water will flatten out on the surface. If the water beads up, much like rain on a freshly waxed car, then the surface needs to be flame treated again.



Good - Wetted



No Good - Beaded