## High Gloss Surface Protection Film Application Guide





# Shadowline Produces Custom Engineered, Precision Extruded Urethane Films for Durable High-Gloss Surface Protection

Why do more adhesive coaters & design engineers specify Shadowline surface protection films? Shadowline offers high-performance, aliphatic polyurethane paint and metal protection films with the consistent optical clarity, lay-flat, UV resistance, durability and Class-A gloss finish they require for their products.

Recognized as the leading extruder of uncoated urethane paint protection films for the global automotive aftermarket, Shadowline utilizes proprietary polyurethane formulations that, for the last decade, have provided outstanding processability for the adhesive coater. AFFIX™ paint and metal protection films are also highly printable, expanding the application of these long-lasting films to automotive graphics.

AFFIX™ films are ideal for protecting vulnerable surfaces on:

- · Cars, trucks, motorcycles, boats, recreational vehicles & toy haulers
- · Wind mill & aircraft propeller blades
- Painted equipment & appliances
- Athletic gear & sports equipment such as helmets & boards
- Gloss and high touch surfaces on computers, cell phones, tablets, monitors and other electronic devices
- Any other surface needing protection from abrasion, scrapes, scouring or other types of erosive damage

# AFFIX™ Surface <u>Protection Film</u>

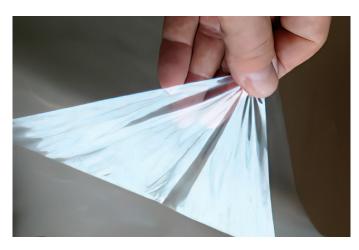


## Features & Benefits of AFFIX™ Graphic Film

Standard AFFIX<sup>TM</sup> AM-1550 is now available in thicknesses of 5.5 - 8.0 mils (138-200 microns) and widths up to 62 inches (1.57 meters).

AFFIX™ films possess the following characteristics:

- · Ultraviolet resistance, non-yellowing
- Proprietary extrusion techniques that produce the flattest films in the industry
- Paint-like gloss finish
- Virtually gel-free optical clarity
- Consistent processability in the adhesive coater's production operation
- A wide range of hardnesses
- Tough, durable, abrasion and chip resistant
- Resistant to bugs and road chemicals
- · Longest splice-free rolls available anywhere



AFFIX™ Films are manufactured exclusively with lubricant free, polyurethane resin for outstanding processability.

Add these benefits to our ability to custom engineer just the right film to meet the specific needs of your application and the result is a product line that contributes to a consistency of value unequaled in the urethane film industry.

#### **Industry Leading Technical Support**

Shadowline stand ready to interact with process engineers at the customer's location to ensure that all AFFIX<sup>TM</sup> films perform properly in their production processes. They are also available to test the newest resins, engineer distinct formulations, and to troubleshoot both new and existing applications.



Durable AFFIX™ films are also used to protect the leading edges of aircraft propellers, wind turbine blades and marine vessels from damaging abrasion.





Uncoated AFFIX™ paint protection films are cast on paper, polyethylene or polyester carriers that can be removed during processing or left on until final installation



## AFFIX™

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### Why Use TPU Film instead of PVC for Graphics?

Thermoplastic Polyurethane (TPU) film has a proven record of superior outdoor performance compared to PolyVinyl Chloride (PVC) film. TPU films have long been used for paint protection in the automotive market. Millions of square yards of TPU film worldwide protect the exterior finish of cars, trucks, vans and recreational vehicles from UV radiation, abrasion, road chemicals and other damaging elements.

The inherent protective qualities that make TPU film so successful in the paint protection market are now available in white TPU printing films and clear, protective TPU overlaminate films for the exterior graphics industry.



#### **TPU Graphic Film Outperforms PVC as it's:**

- Ultraviolet resistant & non-yellowing
- Plasticizer free & will not embrittle due to plasticizer migration
- Tough, durable, abrasion and chip resistant for long lasting protection
- Resistant to bugs and road chemicals, doesn't degrade in automotive applications
- Halogen free, phthalate free, environmentally friendly and considered a "green" product
- Printable via solvent, ecosolvent and latex ink systems
- Virtually gel free, providing outstanding optical clarity
- Has excellent hot and cold temperature resistance, doesn't crack or degrade over time

#### **Additional Benefits of TPU versus PVC:**

- Highly conformable
- Retains printed colors when stretched around three dimensional surfaces
- Does not haze or lose its gloss on flat/horizontal surfaces
- Noted for its ease and speed of installation
- Easy to remove when changing graphics

