

Avery Dennison[®] Instructional Bulletin 1.7

Application Instructions for Avery Dennison Edge Sealer

General Information

Avery Dennison[®] has developed a high performance Edge Sealer for sealing the edges of Avery Dennison[®] installed films which aids in preventing lifting due to water, chemical penetration and environmental conditions. The Edge Sealer applies easily and dries fast without dilution, to a transparent gloss finish. The long lasting UV stable and durable Edge Sealer can be applied to installations ranging from Marine to Automotive and Fleet graphics and wraps, protecting the edges of a finished graphic from edge lifting due to water, chemical penetration and environmental conditions.

This Instructional Bulletin outlines the process for using Avery Dennison[®] Edge Sealer, in conjunction with Avery Dennison[®] films.

General Considerations

Before commencing the application of Avery Dennison[®] Edge Sealer please consult the Material Safety Data Sheet (MSDS).

Please consult the relevant product data sheet of Avery Dennison[®] films before applying the products. This instructional bulletin will highlight the application of Avery Dennison[®] Edge Sealer to Marine, Automotive and Fleet graphics and wraps.

General Application

The following guidelines apply to Avery Dennison[®] films used in general applications ranging from: Marine, Automotive and Fleet graphics and wraps.

Typical Avery Dennison[®] films used are as listed:

Avery Dennison[®] Supreme Wrapping[™] Film
 Avery Dennison[®] MPI Digital Print films with matching DOL
 Avery Dennison[®] MPI Perforated Window films with matching DOL
 Avery Dennison[®] Signage and Reflective Films

1.0 Consult Product Data Sheet

Before applying the Avery Dennison[®] products, please read the relevant product data sheets and Avery Dennison[®] Instructional bulletins carefully for information regarding appropriate substrates, product performance and installation methods.

See below list of relevant Avery Dennison[®] Instructional Bulletins:

Instructional Bulletin 1.5 Application Instructions for Perforated Window Films
 Instructional Bulletin 1.19 Application Instructions for Avery Dennison Supreme Wrapping Films
 Instructional Bulletin 1.16 Application of MPI 1105 EA RS for Vehicle Applications
 Instructional Bulletin 1.14 Application Method for Pressure Adhesive Films

2.0 Application Tools

The following tools are recommended for the application of Avery Dennison® Edge Sealer.

- Tool belt – to hold all application tools
- Avery Dennison® Squeegee Pro or Pro Flexible
- Lint-free microfibre cleaning cloth
- Avery Dennison® Surface Cleaner
- Avery Dennison® Adhesive Remover
- Avery Dennison® Edge Sealer
- A thin brush 1cm in width
- Protective gloves and goggles

NOTE: Further list of tools are also available for the specific application of Avery Dennison® films in the relevant Avery Dennison® Instructional bulletins.

3.1 Re-Squeegeeing & Re-Heating

A critical step prior to the application of Avery Dennison® Edge Sealer is to ensure all edges and overlaps have been re-squeegeed and re-heated with firm pressure to ensure adequate adhesion to the substrate and avoid any premature failure due to edge lifting. The use of a heat gun during this process is important to ensure all edges are sealed properly, also proper post heating from 70-105°C (depending on the film type or combination) is also required for all 3D conforming applications.

3.2 Sealing The Film Edges

Before applying Avery Dennison® Edge Sealer, re-squeegee the edges of the film and verify that the application area for the Edge Sealer is clean, dry and free of contaminants. When applying Avery Dennison® Edge Sealer, please wear the required protective equipment (gloves and goggles), as indicated in the MSDS. As Avery Dennison® Edge sealer is flammable, always use away from any heat source or open flame, and in a space with sufficient ventilation. Make sure not to leave the can open and exposed to air, to avoid any contamination and loss of performance. To facilitate the application process, you can transfer needed quantity of Edge Sealer from original can to a separate container.

Apply Avery Dennison® Edge Sealer on an inconspicuous part of the substrate, to verify it doesn't affect the application surface. Using a thin 1cm clean brush, apply a thick coat of Avery Dennison® Edge Sealer directly from the can, by pulling the brush along the edge of the film with a firm and continuous movement. The Edge Sealer must be applied without thinning or diluting. The film edges need to be completely sealed with no gaps and the Edge Sealer needs to cover both the film and the substrate. Let the Edge Sealer dry for a minimum of 24 hours before putting into service, under dry ambient conditions of 22°C and 50% humidity, longer drying is required if conditions are colder or there is increased humidity.

TIP: Avoid applying multiple thin layers of Avery Dennison® Edge Sealer. Load the brush with plenty of Edge Sealer to apply one thick coating to the edge of the film, covering both the film surface and substrate for a complete seal.

3.2.1 Marine Application

For marine application of Avery Dennison® Films, it is mandatory to apply Avery Dennison® Edge Sealer on any edges or overlapped edges of the film. The application of Avery Dennison® Edge Sealer is required to prevent the film from edge lifting due to the pressure and ingress of water when the marine vehicle is operating. Any and all warranties, if granted, shall be void if Avery Dennison® Film has been applied in marine environment without edge sealer.

NOTE: Avery Dennison® Films listed for marine application are intended to be used exclusively above the mean water line.

3.2.2 Automotive and Fleet Application

For Automotive and Fleet application of Avery Dennison® Films, Avery Dennison® Edge Sealer can be applied on any exposed edges or overlapped edges subject to excessive water or environmental exposure, with increased likelihood of lifting. For example films such as Avery Dennison® Perforated Window Film, Avery Dennison® Digital MPI / DOL films, Supreme Wrapping Film or Signage films with exposed edges. The application of Avery Dennison® Edge Sealer can be used to prevent the film from edge lifting due to the ingress of water.

6.0 Confirm Adequate Adhesion and Inspect

Temperature and humidity is a key environmental factor affecting adhesion of pressure sensitive Avery Dennison® adhesive films. The warmer the ambient temperature is, the less time it will take the film to achieve adequate adhesion. Material applied in temperatures below the recommended minimum 10°C temperature may take significantly longer, even days, to achieve adequate adhesion.

A final inspection of the installation should be completed verifying all of the films edges have adequate adhesion to the substrate, all compound curves have been properly post heated, and the film has been applied and finished properly. Whenever possible, move the wrapped object outdoors in natural light or use a well lit interior area to ensure a high quality application has been achieved. It is recommended to wait a minimum of 24 hours before putting any marine vehicle back in the water. For all automotive or fleet wraps it is recommended to wait a minimum of 24 hrs before the vehicle is put into service. Longer dwell time post installation will be required if ambient temperatures are below our minimum recommended application temperature.

7.0 Cleaning Maintenance

Refer to Avery Dennison® Instructional bulletin 1.8 Vehicle Wrap and Graphics Maintenance for Avery Dennison® films for general guidelines.

Important Note: Hand Washing with a dedicated car detergent is the preferred cleaning method.

- It's important that the detergent is specifically designed to be used for vehicles;
- Free from abrasive components;
- Does not contain any additional waxes or polishes;
- Ideally PH Balanced, thus not highly acidic or alkaline (pH level between 5 and 9);
- Free from Alcohol, Acids, Ammonia, Chlorine, Glycol Ethers, Harmful Detergents, Petroleum Distillates and Phosphates
- Do not use common home dishwashing detergents, or any soaps not designed for vehicle washing

To clean your wrap and preserve the condition of the film, it is recommended to use Avery Dennison® Supreme Wrap care products, such as Supreme Wrap Cleaner, Supreme Wrap Power Cleaner and Supreme Wrap Sealant.

8.0 Removal

For instructions on removability of the film, please refer to Avery Dennison® Instructional Bulletin IB 1.07.

For removal of any excess Avery Dennison® Edge Sealer, use isopropyl alcohol (IPA), Avery Dennison® Surface Cleaner or Avery Dennison® Adhesive Remover. Before using any of the above products, it is important to test on an inconspicuous area of the substrate.

9.0 Durability and Warranty in Marine Environments

The use of Avery Dennison® Film with Avery Dennison® Edge Sealer in marine environments has reduced durability and warranty due to the harsh marine environment, exposure to higher UV, heat and saline conditions.

Please consult the relevant Avery Dennison® ICS Performance Guarantee Bulletin information on warranted outdoor life of Avery Dennison® Films when used in marine environments:

<https://graphicsap.averydennison.com/en/home/resource-center/durability-and-warranty.html>

Warranty and Limited Remedy

This instructional bulletin describes a technique. The information contained herein is believed to be reliable, but Avery Dennison makes no warranties, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. To the extent allowed by law, Avery Dennison shall not be liable for any loss or damages, whether direct, indirect, special, incidental or consequential, in any way related to the technique of making a graphic regardless of the legal theory asserted.

The above information provides basic information on how to apply pressure-sensitive graphics. The instructions are designed to help ensure success across a broad range of applications. Depending on the size and complexity of applications, a certain amount of expertise is needed.

Professional applicators can be hired to ensure proper application of finished graphics. When mounting graphics in remote geographic areas, professional applicators can offer the added benefit of local service.

Avery Dennison has a vast network of Specialist Installers who have been specially trained and certified in accordance with our recommended techniques.

You can review the Specialist Installer list here:

<https://graphicsap.averydennison.com/en/home/where-to-buy/graphics-installers.html>

Consider hiring a professional whenever the application requires:

- Multiple panels to be registered
- Complex surfaces, such as rivet and corrugated trucks
- Harsh environmental conditions (i.e. outdoor applications in high heat climates)
- Remote geographic locations

For further information, contact your local Avery Dennison® representative.