

Guide to Installation and Maintenance of Avery Dennison Interior Architectural Window Film for Glass

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1.0 General Introduction

All window film professionals have their own methods of installation, the result of experience, skill and familiarity with the films, techniques and tools that they use. The purpose of this document is not to educate in the art of installation, but to impart installation and maintenance advice concerning Avery Dennison Architectural Window Films. The following illustrated instructions are a generic guide to installation..

2.0 Product Description

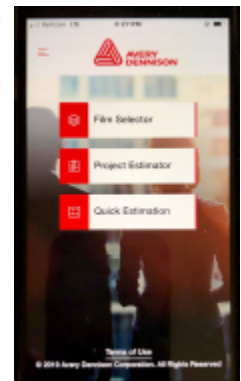
Avery Dennison interior films are polyester based with a removable clear PET release liner, available with Pressure Sensitive (PS) or Water Activated (WA) adhesives for glass substrates. Films are available in a wide range of light transmissions and performance levels, and as security laminates. Films deliver 99% UV block, and have exceptional clarity and levels of cleanliness.

3.0 Product Application

Avery Dennison interior films are recommended for internal use on vertical applications, sloped or horizontal architectural glass, for residential and commercial projects. Some applications do require pre-approval. See [Film-to-Glass](#) Recommendation sheet for details.

4.0 Installation Instructions

Tip: Use [Avery Dennison's Window Films App](#) by iPhone, iPad or iPod Touch to streamline the process of estimating film projects. By downloading Avery Dennison's Window Film App to your Apple hardware, and entering the details of the project, you can instantly and efficiently calculate the amount of film needed in each size for the project, even taking into account the widths of film you have in



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stock. Use the app's film-to-glass chart to check film compliance, and immediately email the measurements and summary of the project to your base, saving time, effort and film.

4.1 Glass Preparation

- Use a wetting solution based on water and detergent-free soap (such as Johnson's Baby Shampoo).
- Use only non-abrasive cloth and soft squeegees to clean the glass.
- Use a new scraper blade to clean the glass surface from dirt, dust or any other small particles.

4.2 Wetting Solution

The wetting solution should contain water with detergent-free soap (such as Johnson's Baby Shampoo). Use 4cc (~4 drops) per liter of water for the slip solution. Any slip agent used should not contain additives such as lanolin or silicone that may affect adhesive bond strength.

4.3 General Instructions

General Instructions for Installing PS adhesive based Solar Control & Thin Safety Films (up to 7 mil, interior installation only)

Step 1. Recommended tools: Spray bottle with tap water and 4cc of baby shampoo. (ie Johnson's Baby Shampoo); (4cc-8cc for more slip, in extremely hot situations you may use up to 10cc when the water dries out quickly. heavy-duty squeegee; Olfa knife; Straight-Edge; two pieces of adhesive tape; scraper, Lint-free paper towels.



Step 2. Clean the window thoroughly with Slip agent/water and scraper.



Step 3. Place an over-sized piece of film on the wet window.



Step 4. Cut the film to the size of the window, leaving 2 cm overlapping edges all around. Alternatively, measure the window and pre-cut film out of box or on a Film Handler.



Step 5. If you pre-cut the film on the window, remove the film from the window, and thoroughly clean the window once more.



Step 6. Re-wet the window, using plenty of slip solution.



Step 7. If you are located in an extremely dry area you may want to thoroughly wet the film on both sides (get some help from another person at this stage) to reduce static. Rewet the glass surface.



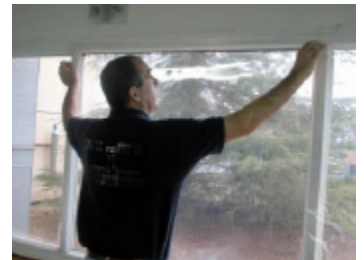
Step 8. Using two pieces of adhesive tape, separate the backing liner from the film.



Step 9. Spray the exposed adhesive with plenty of slip solution.



Step 10. Place the wet adhesive side of the film on to the glass.



Step 11. Using the squeegee, wipe out from the center with firm downward and outward movements leaving at least 2 inches squeegeed from the frame edge, removing water and air bubbles trapped between the film and the glass.



Step 12. Trim the edges of the film adjacent to the window frame, using the straight-edge and Olfa knife.



Step 13. Wet the film surface again, and pressing hard with the squeegee, wipe out from the center until all the air bubbles and remaining water have been removed from the edges.



Step 14. Wrap a lint-free paper towel around the edge of the squeegee and "bump" around the edge of the installed film. Wipe dry the edges of the film and the window using the paper towels.



Allow the film to dry for 24 hours before touching the window

4.4 Edge Sealing

Some specific products, (Spectrally Selective), and applications within a distance of 10 miles (16km) from the sea as well as horizontal applications may require edge sealing. In such cases, use Dow Corning 795, 995 or 1199 (clear) or an equivalent neutral silicone sealing agent authorized by Avery Dennison's Technical Support on all four sides of the film.

4.5 After Installing

BE PATIENT while your new film dries. Although most Avery Dennison Architectural Films dry within a few days, drying time can be increased due to ambient temperature, film thickness, and presence of sunlight. Do not clean windows for 30 days after installation to allow mounting adhesives to adhere properly. Do not try to "pop" bubbles and release retained water as this could void your warranty. CLEAN your installed film with a quality glass cleaner or a solution of one (1) tablespoon of liquid dish soap per quart of clean water. As with all window surfaces, use soft cloths to clean window film rather than paper towels which could scratch the surface over time.

4.6 Installation of Films with Water Activated Adhesive

Many Avery Dennison Architectural Window Films are available with a Water Activated Adhesive (WAA) instead of the pressure sensitive adhesive. WAA-based films are often considered more suitable for single-person installation, since they are dry and non-tacky until saturated with water. They also give exceptional clarity when viewed on glass, since the dry adhesive lowers static build-up when the liner is removed, thus reducing levels of airborne contamination that may be trapped under the applied film. Avery Dennison recommends saturating the adhesive with a wetting solution, and allowing the adhesive several minutes to react to the liquid; during this period, you may prepare the next film for installation, and then return to the initial film for squeegeeing. When installing WAA-based films, specific attention needs to be paid to:

- Thorough cleaning of edges
- Longer saturation time before water removal with squeegee
- Longer curing time
- Longer initial period without window cleaning (~3 weeks)
- Keeping rolls in a moisture-free environment (leave silica gel in box, and rolls wrapped in original packing)

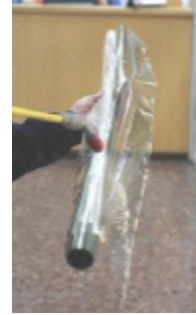
4.61 Installation Tips

Follow above step-by-step installation up to stage 7. For efficient and speedy one person installation, we recommend using the "Reverse Roll" method illustrated below.

Step 1. Carefully roll pre-cut film with release liner facing out, with a ~6 cm section remaining unrolled.



Step 2
Spray both sides of the exposed 6 cm with wetting solution



Step 3
Start separating the release liner, and roll the liner onto the roll itself.



Step 4
Spray the exposed adhesive layer with plenty of wetting solution, and on the clean glass.



Step 5
Hold the rolled film firmly in your fingertips, separating the liner edge from the film.



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Step 6. Firmly holding the film edge, gently throw the roll towards the ground. The release liner will peel itself off the film, and appear on the opposite side



Step 7
Complete film installation as described from Step 11 in Section 4.3



5.0 Care and Maintenance

5.1 General information and Drying Period

The installation procedure used a special solution of detergent and water, followed by squeegeeing to remove the excess water. However, the drying process is still continuing, and it will take several weeks to complete. In the meantime, there will be some bubbling and smearing, which is normal, but these blemishes will disappear after about four weeks. Within this time, the adhesive will complete its polymeric bonding process, and the moisture will disappear, leaving the windows perfectly clear.

Advise customers not to try to remove the bubbles by popping or pressing them; depending on the film type and local weather conditions; the bubbles will disappear by themselves within weeks. The warmer the weather, the shorter the drying period. Fogging and optical distortions may be present, but they too will disappear during the drying process.

5.2 Cleaning instructions

Although all Avery Dennison Architectural films have excellent scratch resistance, it is preferable not to use abrasive products.

- Use 10% liquid soap diluted in water to clean windows. Do not use an ammonia solution. Wipe with synthetic sponge, very soft cloth or chamois leather.
- Rinse with clean water, and wipe off with a squeegee. Final traces of water can be removed with absorbent paper.
- Remember: Always tell clients to inform window cleaners that film is installed, and to make sure they follow the above instructions. Use of a Steam cleaner is not recommended.

5.3 Removal of window film

1. Carefully cut vertical stripes 15 cm apart on the entire film surface, without touching the glass.
2. Slowly peel each section individually, from top to bottom,
3. Use a wide scraper or razor blade and plenty of soapy water to scrape any remaining adhesive from the window.