

TECHNICAL BULLETIN

Avery Dennison® Interior Solar Films and thin Avery Dennison® Interior Safety Films Installation Guide

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Introduction

The following illustrated instructions are a generic guide to the internal installation of Safety and Security Films.

PRODUCT DESCRIPTION

Avery Dennison® Interior Solar Films are polyester based with a removable clear PET release liner, available with Pressure Sensitive (PS) adhesive for glass substrates. Films are available in a range of light transmissions and performance levels, and as security laminates under the Avery Dennison® Interior Safety Films . Films deliver 99% UV block, and have exceptional clarity and levels of cleanliness.

Avery Dennison® Interior Solar Films are recommended for internal use on vertical, sloped or horizontal architectural glass, for residential and commercial projects.

Safety and Handling

The use of any chemicals for cleaning should be done with caution. Refer to the manufacturers Material Safety Data Sheet and follow all instructions and guidelines.

Glass Preparation

- Use wetting solution based on water and detergent-free soap
- 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 particle

Wetting Solution

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

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

Installation



Recommended Tools:

- 0,5 liter spray bottle with distilled water and 3 drops of detergent-free soap, small rubber squeegee; Stainless steel knife; ruler; two pieces of adhesive tape; scraper, lint-free paper towels.



Step 2:

- Open the window film, place it on the wet window and cut the film to the size of the window, leaving 2 cm overlapping edge all around.
- Alternatively, measure the window and cut film to dimensions + 2 cm each side.
- Remove the film from the window, and thoroughly clean window once more. Re-wet the window, using lots of water.



Step 4:

- Place wet adhesive side of the film on to the glass.



Step 6:

- Trim the edges of the film adjacent to the window frame, using the ruler and

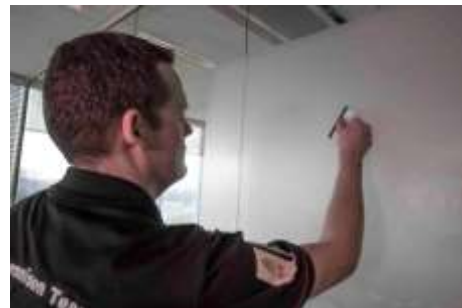
Step 1 :

- Clean the window and frame thoroughly with soapy water (slip solution) and scraper.



Step 3:

- Thoroughly wet the film on both sides (get some help from another person at this stage).
- Rewet the glass surface.
- Using two pieces of adhesive tape, separate the backing liner from the film and spray the exposed adhesive with plenty of water.



Step 5:

- Using the squeegee, wipe out from the center with firm downward and outward movements, removing water and air bubbles trapped between the film and the glass.



Step 7:

- Wet the film surface again, and pressing hard with the squeegee,

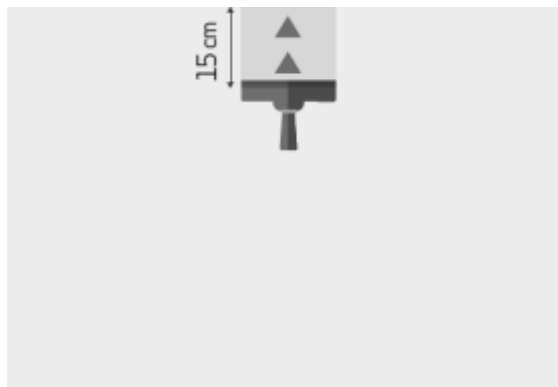
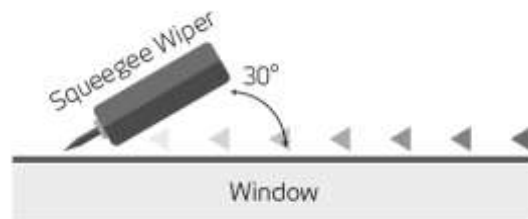
Cutter.

wipe out from the center until all the air bubbles and remaining water have been removed from the edges.

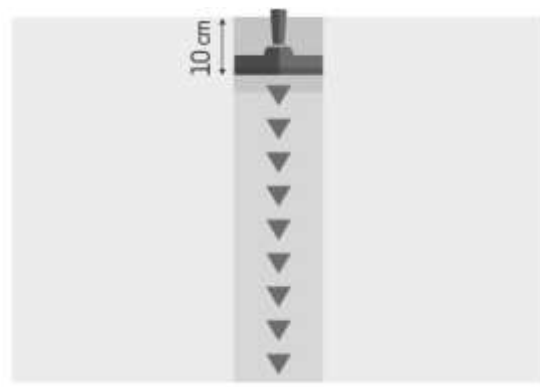
- Wipe dry the edges of the film and the window using the paper towels.

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

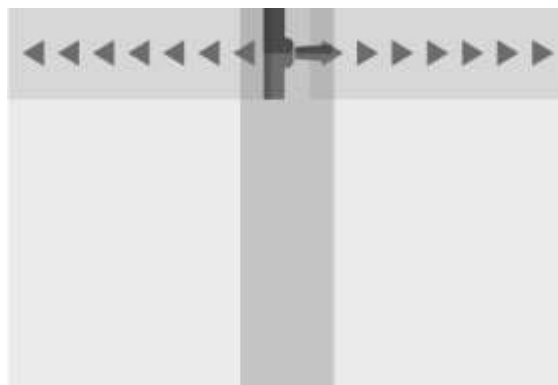
Recommended Squeegee Technique



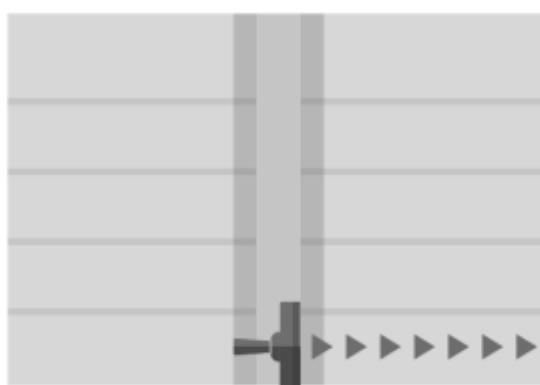
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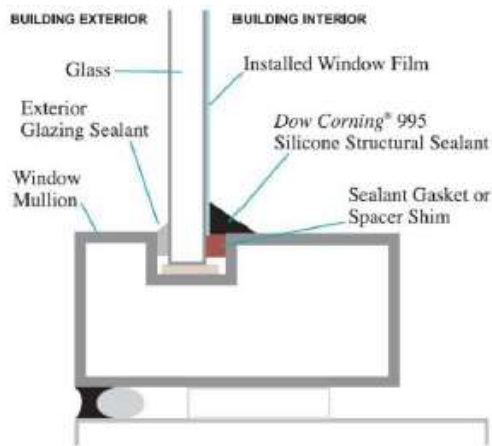
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Edge Sealing

Some specific products (eg within a distance of 10 miles/16km from the sea) and applications (eg. horizontal) may require edge sealing, In such cases, use Dow Corning 795, 995 or 1199 (clear) or an equivalent neutral silicone sealing agent on all four sides of the film.



©Dow Corning

1. Adhere 2,5 cm wide strip of low-tack painters' masking tape to both filmed glass and frame 1,25 cm in from the edge of the film to all four sides of the window to form a sealant channel.
2. Using a standard caulking gun, and Dow Corning 995 or similar silicone sealant, and following manufacturer's instructions, apply sealant bead into the channel formed by the masking tape. Make sure a minimum 1,25 cm of adhesive is in contact with the film and 1,25 cm of adhesive is in contact the window frame.
3. Smooth sealant band with plastic putty knife.
4. Carefully remove masking tape.

After Installation

BE PATIENT while your new film dries. Although most Avery Dennison 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 glass windows 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.

Maintanance

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 customer 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.

Cleaning Instructions

- Although all Avery Dennison® films have excellent scratch resistance, it is preferable not to use abrasive products.
- Use 10% washing up liquid diluted in water to clean windows. Do not use 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 client to inform window cleaners that film is installed, and to make sure they follow the above instructions. Use of a vapor cleaner is not recommended.

Removal of window film

1. Carefully and gently 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.

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