

TECHNICAL BULLETIN

Avery Dennison® SkyLite XTRM™ Film Series Installation Guide

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Introduction

R SkyLite 20 XTRM™ film for glass substrates is a metallized, polymeric-based solar control film specifically engineered to weather demanding horizontal and sloped exterior roofing applications. **R SkyLite 20 XTRM™ Poly** is engineered with an adhesive formulation to ensure compatibility with plastic substrates. Exterior Silver films provide high rejection of solar energy, enhancing interior comfort, reducing glare, and lowering expenditure on cooling costs.

Product description

It is recommended to clean the application surface with Avery Dennison Surface Cleaner. Many other commercially available cleaning/degreasing products may be suitable for cleaning and degreasing, but should be tested prior to use. In addition, the following factors should be included in the preparation before application:

- R SkyLite 20 XTRM™ and R SkyLite 20 XTRM™ Poly - total product thickness is 6 Mil, including hazy protective layer and glossy release liner: net thickness on glass - 4 Mil.
- Removable protective masking layer to ensure scratch-free professional installation.
- Pressure sensitive adhesive for glass substrates.
- Extremely durable polymeric base film laminate.
- High performance SkyLite 20 XTRM™ and R SkyLite 20 XTRM™ Poly film for exterior roofing installations, rejects 83% solar energy.
- Exceptional 99.9% UV block.
- Up to 10 year warranty*.

Application

SkyLite 20 XTRM™ is only suitable for installation on glass skylights. R SkyLite 20 XTRM™ Poly is only compatible with plastic substrates.



Instructions for Installation and Maintenance

Tools



Spray bottle; Ethanol 90%; Detergent-free Soap; Non-abrasive cloth and soft squeegees; Scraper; Knife; 6" heavy-duty safety film squeegee; Paper towels.

Glass Preparation

Surrounding air temperature during installation should be between 5-40°C.

- Do not install in windy or rainy weather!
- Use wetting solution based on water with Ethanol 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.

Product identification

- SkyLite 20 XTRM™ and R SkyLite 20 XTRM™ Poly - total product thickness is 6 Mil, including hazy protective layer and glossy release liner; net thickness on glass - 4 Mil. Protective masking layer wound out, PS adhesive release liner wound in. The protective masking layer has to remain in place during the installation process, and to be removed before the final stage of applying edge sealant. Surrounding air temperature during installation should be between 5-40°C. Do not install in windy or rainy weather!

Wetting Solution

SkyLite 20 XTRM™

The wetting solution should contain water with alcohol (Ethanol) and detergent-free soap (such as Johnson's Baby Shampoo).

- Use 20cc (4 teaspoons) of Ethanol and 2cc (1/2 teaspoon) soap-free soap per liter of water.
- Wetting solution should be prepared immediately before use (within 12 hours), due to evaporation of the alcohol.

Attention! Ensure that the proportion of alcohol in the wetting solution is exactly as recommended; overuse of alcohol could cause undesired effects.

R SkyLite 20 XTRM™ Poly

- No need for Ethanol with R SkyLite 20 XTRM™ Poly but increase soap-free soap concentration to 4 cc (1 teaspoon)

Film Installation

Follow standard installation procedures, but pay particular attention to the following:

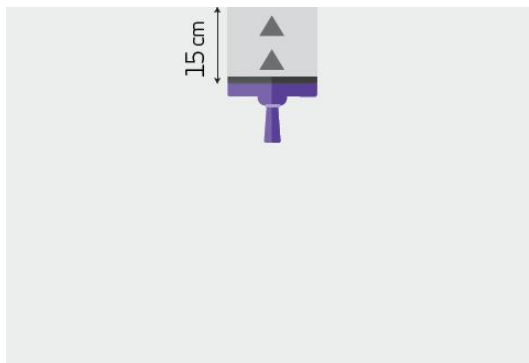
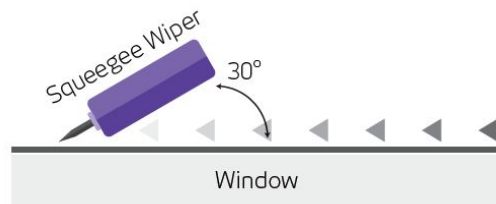
- Spray the protective masking layer of film (hazy side) with the wetting solution (see below), so that the squeegee will move smoothly and uniformly across the surface.
- Use a good cutter blade to cut the film edges without hesitation. Any "edge" you leave on the film may cause the film to start to separate.
- The Edge Tool is recommended for an accurate cut of the edges with a gap of 2-3mm from window frame.
- Use a 6" heavy-duty safety film squeegee, applying firm pressure – similar to the installation of SF Clear 12 mil Safety film – to work out the water from top to bottom, center to outside.

Removal of all the water is critical to the success of the installation!

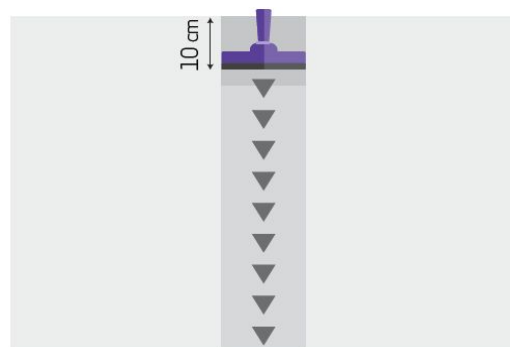
Take care - the protective layer is hazy, making it difficult to see if all water has been completely removed.

- Repeat the above steps to ensure complete removal of moisture.
- Make sure to wipe dry excess water from the edges.
- Pay particular attention to thorough removal of water to assure even adhesion of the film over the uneven surface.
- Remove protective layer after installation and recheck removal of excess water.
- Protective masking layer must be removed before applying edge sealant.
- Edge sealant must be used on all four edges, applied at least 24 hours after installation (to allow the film to dry), but completed within 3-4 days of installation.

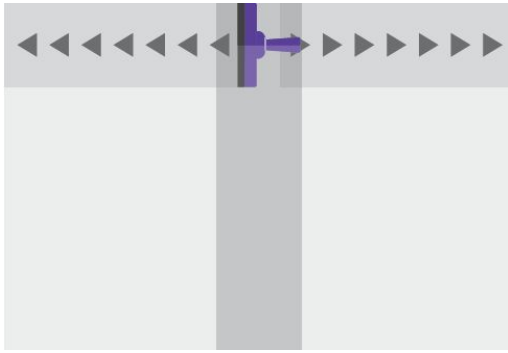
Recommended Squeegee Technique



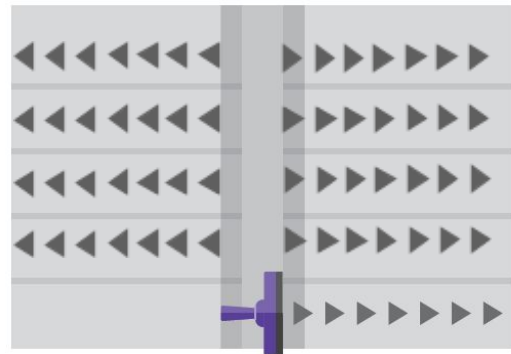
1. From the middle directly up



2. From the middle with overlap directly down



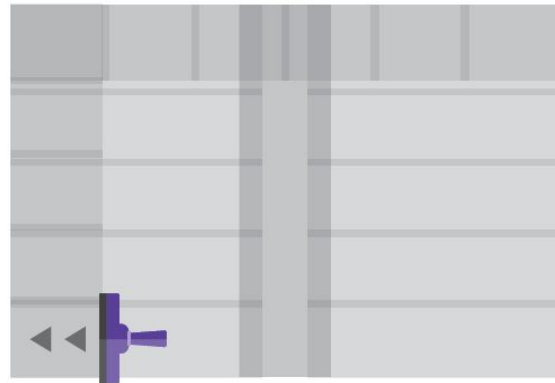
3. Directly from the center to each side (Top only)
2 cm overlap



4. To each side at 20° angle.
Horizontal movement. 2 cm overlap



5. Total width directly up. 2 cm overlap



6. Total height directly left. 2 cm overlap



7. Total height directly right. 2 cm overlap



8. Total width directly down. 2 cm overlap

Edge Sealing

External application of SkyLite 20 XTRM™ and R SkyLite 20 XTRM™ Poly metallized Exterior film requires a neutral silicone edge sealant for external use on all four sides of the film. Recommended sealant is Dow Corning 791 or 995, or an equivalent neutral silicone sealing agent for external application that was checked to give good adhesion to product within 24 hours.

- It is important that profiles be clean of paint, emulsions, etc prior to installation.
- Do not forget to remove masking layer before sealing the film.
- Wherever joint seaming is required, please use neutral edge sealant Dow Corning 1199.

Maintenance

Outdoor films should be cleaned three times a year in order to maintain the appearance and clarity of the film. This is particularly important on all sloped or horizontal installations, since the accumulation of dirt and precipitation can cause problems. Clean by spraying with soapy water under moderate pressure, followed by rinsing the roof with purified water using a moderate- pressure hose. In case additional cleaning is required, use a paint roller with a foam sleeve and soapy water. Installations in areas with heavy atmospheric pollution (such as in dense industrial zones) may require more frequent cleaning.

Warning: Do not use cleaning solutions that contain ketones such as MEK or acetone. Avoid use of brushes and squeegees used in standard window washing.

Removal

Film removal will be easier and more effective if the surrounding air temperature is between 15-30C. We recommend removing the film by delicately scoring the film (without touching the glass!) into strips of ~5 cm width with a Stanley knife, and carefully starting removal of the film at the edge using a window film scraper. Remove the film strip from the surface by peeling slowly and smoothly at a 90° angle, in a continuous movement. Some adhesive residue may remain on the glass after removing the film, and can be removed by gently wiping the adhesive traces (not the entire surface) with a non-abrasive cloth or pad dipped in IPA (iso-propanol) or denatured alcohol (ethanol).

A signed declaration by the building owners/ customers that they have received and accepted the maintenance instructions is a condition of warranty.

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