

TECHNICAL BULLETIN

Avery Dennison® SkyLite XTRM PRO Film Series Installation Guide

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Introduction

SkyLite 20 XTRM PRO for horizontal/slope application is based on a new metal alloy with excellent corrosion resistance and UV-durable XP surface coating, extending the product's longevity in harsh outdoor conditions.

SkyLite 20 XTRM Pro Poly is engineered with an adhesive formulation to ensure compatibility with plastic substrates.

Both are designed without an SR topcoat; however, installation is done with a protective cap for scratch-free installation (removed after installation).

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:

- Avery Dennison SkyLite 20 XTRM PRO and Avery Dennison SkyLite 20 XTRM PRO Poly - total product thickness is 5 Mil, including a protective layer and release liner; net film thickness on glass - 2 mil.
- Removable protective masking layer to ensure a scratch-free professional installation.
- Pressure-sensitive adhesive for glass substrates.
- Protective masking layer wound out, PS adhesive release liner wound in.
- Removable protective masking layer to ensure scratch-free professional installation. Needs to be removed after installation
- **No edge sealing required for most installations***
- High performance Avery Dennison SkyLite 20 XTRM PRO and Avery Dennison SkyLite 20 XTRM PRO Poly film for exterior roofing installations, rejects 65% solar energy.
- Exceptional 99.9% UV block.
- **Enhanced durability** - long-term warranty of up to 10 years** (including hot & humid areas), supported by exceptional anti-corrosion metal alloy and a UV-durable coating.
- **Appealing aesthetics** - neutral appearance with high optical quality.

* Edge sealing is required for applications where water is pooling on edges. Protective sheets need to be removed before applying.

** Please refer to Avery Dennison warranty document for more details

Application

Avery Dennison SkyLite 20 XTRM Pro is only suitable for installation on glass skylights.

Avery Dennison SkyLite 20 XTRM Pro Poly is only compatible with plastic substrate-based skylights.

Instructions for Installation and Maintenance

Tools

Spray bottle; Detergent-free Soap; Non-abrasive cloth and soft squeegees; Scraper; Knife; 6" heavy-duty safety film squeegee; Paper towels and a non-abrasive scrub pad.

Glass Preparation

Surrounding air temperature during installation should be between 10-40°C.

- Do not install in windy or rainy weather!
- Use wetting solution based on water with detergent-free soap (such as 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.

The installation process for SkyLite 20 XTRM Pro Poly on rigid plastic glazing is similar to the installation of standard exterior solar films on glass. However,

- Great care must be taken not to scratch the plastic surface when preparing the substrate for installation.
- The wetting solution requires a slightly different composition.
- Particular attention must be paid to removing all moisture between the film and substrate.
- An edge sealant must be used on all four edges for the exterior application of metalized films.
- Special care must be taken when installing multi-wall sheets to ensure even adhesion of the film to the substrate, paying attention to the complete removal of water from the light parallel grooves on the surface.

In any uncertain situation, please refer to the Installation and Maintenance of Poly Films for Rigid Plastic Glazing.

Wetting Solution

SkyLite 20 XTRM PRO

The wetting solution should contain water with detergent-free soap (e.g. baby shampoo).

- Use 4cc (or 4 milliliters) soap-free soap per liter of water.

SkyLite 20 XTRM Pro Poly

- SkyLite 20 XTRM Pro Poly needs an increase in detergent-free soap concentration to 8 ccs (or 8 milliliters).

Film Installation

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

- Spray the protective masking layer of film with the wetting solution (see above), 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!

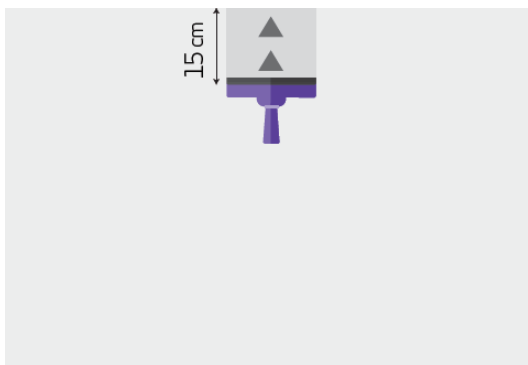
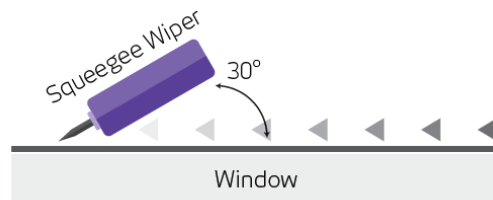
Take care - the protective layer is clear; **remember to remove it post-installation!**

- Repeat the above steps to ensure complete removal of moisture.

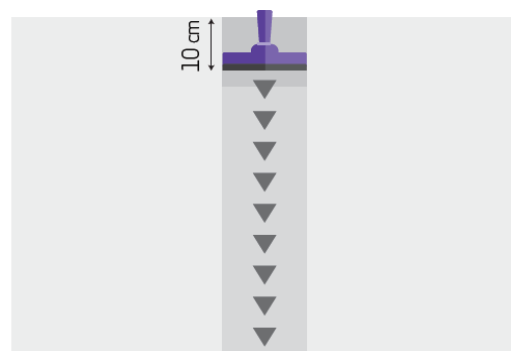
- Make sure to wipe dry excess water from the edges.
- Pay particular attention to thorough removal of water to assure even adhesion of the film over the uneven surface.
- Carefully remove the protective layer after installation and recheck the removal of excess water.
- Protective masking layer must be removed before applying edge sealant.*

* Sealing is required only on edges where water is pooling.

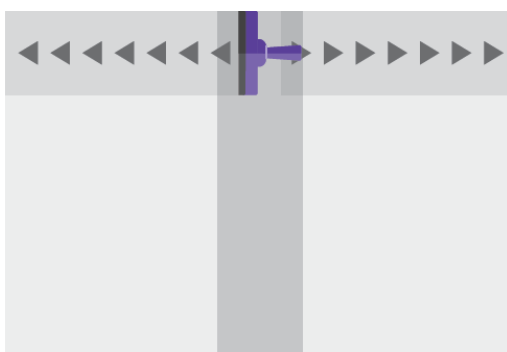
Recommended Squeegee Technique



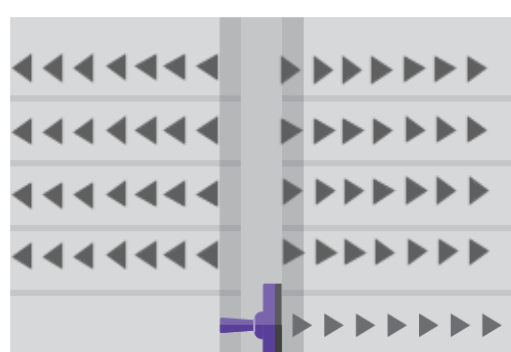
1. From the middle directly up



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

SkyLite 20 XTRM Pro has a 1 PLY construction which does not require any edge sealing for most cases.

Edge sealant must be applied on any edge that water may pool on.

In the event of edge sealing Skylight XTRM Pro, please allow at least 24 hours after installation (to allow the film to dry), but complete within 3-4 days of installation.

External application of SkyLite 20 XTRM Pro and SkyLite 20 XTRM Pro Poly requires a neutral silicone edge sealant. The 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 the product within 24 hours.

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

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).

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.

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

DISCLAIMER

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Customer Declaration :

Avery Dennison SkyLite XTRM PRO Series Maintenance Recommendations

Outdoor films should be cleaned frequently (min three times per 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.

Installations in areas with heavy atmospheric pollution (such as in dense industrial zones) may require more frequent cleaning.

Films should be hosed off first so that as much dirt is removed prior to mechanical cleaning.

Film should then be cleaned with a liquid, non-abrasive cleaner that contains neither solvents nor alcohol, and has a pH value between 5 to 9 (neither strongly acidic nor strongly alkaline).

Recommended cleaning solution: water with a few drops of tearless baby shampoo.

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.

Special care of surfaces applied with Avery Dennison SkyLite XTRM PRO

Clean by spraying with soapy water under moderate to low pressure, followed by rinsing the roof with purified water using a low pressure hose. If additional cleaning is required, use soapy water and a soft cloth or paint roller with a foam sleeve.

Take care!

- Skylite 20 XTRM PRO does not have a scratch resistant hard coat! Don't use abrasive cleaning materials!
- 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.

We have received and accepted the maintenance instructions and know this is a condition of warranty.

Building Owner/Customer:

Location, Date:

Signature