

XTRM[™] Exterior Window Film

A whole new class of durable and sustainable solar control

Avery Dennison® XTRM™ sustainable solar control window films are a new generation of long life exterior window films. XTRM™ has exceptional durability and delivers energy-efficient solar performance, reducing carbon footprint, year after year. XTRM™ films are backed by a limited warranty of up to 15 years*. Developed for commercial projects with a long-term service period, Avery Dennison XTRM[™] window films deliver outstanding levels of heat rejection and UV block that reduce cooling output and environmental impact. XTRM[™] films are compatible with many types of glazing.



New! SkyLite 20 XTRM PRO and SkyLite 20 XTRM PRO Poly

Our Skylight films are specifically engineered to withstand demanding horizontal and sloped exterior roof applications. SkyLite 20 XTRM PRO has a neutral appearance with high optical quality. SkyLite 20 XTRM PRO has an adhesive system for exterior application on glass, while SkyLite 20 XTRM PRO Poly was developed for exterior adhesion to rigid plastics such as Polycarbonate and PMMA. The advanced design enables application without the need to edge seal*.



R Silver 20 XTRM™

Our XTRM silver film for vertical glazing application delivers the exceptional heat rejection that improve a building's green profile with the limited lifetime durability you'd expect from an interior film. Tested under extreme lab weathering conditions and demonstrated in the field, R Silver 20 XTRM[™] film have proven endurance and performance, year after year.

DR Grey 20 XTRM™

DR Grey 20 XTRM[™] dual reflective film, based on metallized polymeric combined with nanotechnology, delivers excellent heat rejection performance. The film's dual reflective structure is a combination of a reflective outer layer for privacy and a neutral inner layer with nanotechnology that maintains views outside.

New! SS Natural 70 XTRM™

SS natural 70 XTRM[™], the spectrally selective is based on unique combination of sputtering technology along with nanotechnology to achieve an excellent heat rejection for an enhanced comfort in a sustainable way.

* Edge sealing is only required for any applications where water is pooling on edges.





FEATURES AND BENEFITS

- Outstanding solar control reduces the need for air conditioning and carbon footprint
- Aesthetic upgrade for building's design renovation
- Excellent heat rejection for improved interior comfort and green profile
- Suitable for installation on many glazing systems
- Exceptional longevity up to 15 years warranty*
- Exceptional UV protection: 99.9%, protecting your health
- and interior!

Product specifications

Optical and Solar Properties**	SkyLite 20 PRC		SkyLite 20 XTRM PRO Poly	R Silver 20	XTRM™	DR Grey 20	XTRM™	SS Natural 7	0 XTRM™
Pane	Single	Double	Single	Single	Double	Single	Double	Single	Double
Visible Light Transmitted	23%	21%	23%	15%	14%	20%	18%	66%	60%
Visible Light Reflected (Interior)	31%	35%	31%	63%	65%	17%	23%	16%	22%
Visible Light Reflected (Exterior)	26%	27%	26%	63%	65%	40%	41%	17%	21%
Ultra Violet Block	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Glare Reduction	74%	74%	74%	84%	83%	78%	78%	26%	33%
Total Solar Energy Rejected	63%	73%	63%	83%	86%	71%	78%	54%	62%

Correct installation procedures are vital for maximum longevity. We offer complete, professional training for certification of window film experts qualified to install XTRM exterior films.

XTRM films require edge sealing

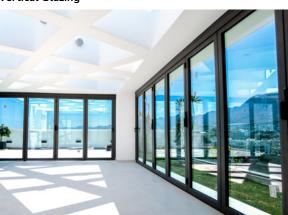
- * Speak with your Avery Dennison window film sales representative for complete warranty details.
- ** Performance results are calculated on 1/8" glass using NFRC methodology and LBNL Window 5.2 software, and are subject to variations in process conditions within industry standards. Performance calculations should only be used for estimating purposes.

Horizontal & Sloped Glazing



SkyLite 20 XTRM PRO

Vertical Glazing



SS Natural 70 XTRM™

graphics.averydennison.eu/architectural-window

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Avery Dennison[®] XTRM Exterior Reflective Solar Films

Issued: 04/2023

Introduction

Avery Dennison® R Silver XTRM[™] and the Avery Dennison® R SkvLite XTRM[™] series is a new generation of extended life exterior window films. It's exceptional durability ensures long-term energy efficient performance. The films provide maximum energy efficiency and value. By rejecting excess solar radiation, Avery Dennison® R Silver XTRM[™] and the Avery Dennison® R SkyLite XTRM[™] films cut heat buildup through the glazing. The films are particularly energy efficient on insulated glass (IGU), rejecting solar energy on the outer pane, keeping the inner pane cool. Avery Dennison® R SkyLite 20 XTRM[™] Poly is engineered with an adhesive formulation to ensure compatibility with plastic substrates.

Conversion

These products are available for certified installers only.

Recommendations

Avery Dennison® R Silver XTRM[™] films are developed

to tackle commercial projects, where a long-term service period is critical to payback. Additionally, the Avery Dennison® R SkyLite XTRM[™] films are further developed to be applied on horizontal glazing systems.

Features

- » Warranted durability: Increased lifetime for the best long-term service period
- Highest level of energy efficiency >>>
- Excellent solar heat and glare rejection \gg
- Upgraded building appearance >>
- 99+% UV block >>

Fire Certification:

B-s1, d0 (DIN EN 13501-1)

Warranted Durability ¹⁾ :	R Silver	R Silver	R SkyLite	R SkyLite
Durability .	20 XTRM™	35 XTRM™	20 XTRM™	20 XTRM™ Poly
Vertical	up to 15 years	10 years	-	-
Horizontal/Sloped	5 years	5 years	up to 10 years	10 years

¹⁾ Warranted Durability





Face Film

R Silver 20 XTRM[™]; R Silver 35 XTRM[™]; R SkyLite 20 XTRM[™] + Removable protective masking layer; R SkyLite 20 XTRM[™] Poly + Removable protective masking layer

Adhesive

Pressure sensitive Permanent - Solvent based acrylic



Durability See below

Shelf Life

When stored in original packaging upon arrival at the customer: 2 years. Recommended Storage conditions are 20 °C (± 2 °C) with 50 %RH (± 5%).

> FU graphics.averydennison.eu



The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased. With regard to Avery Dennison Architectural Window Film Products, the durability shall not differ between the climatic zones, but the same durability shall apply to all climatic zones.



Optical & Solar Properties:

	R Silver		R Silver		R SkyLite		R SkyLite
	20 XTRM™		35 XTRM™		20 XTRM™		20 XTRM™ Poly
	Single Pane	Double Pane	Single Pane	Double Pane	Single Pane	Double Pane	Single Pane
Visible Light Transmitted %	15	14	33	31	15	14	15
Visible Light Reflected (Int) %	63	65	42	44	63	65	63
Visible Light Reflected (Ext) %	63	65	42	43	66	66	66
U V Block %	99,9	99,9	99,9	99,9	99,9	99,9	99,9
Total Solar Energy Reflected %	64	66	45	46	64	66	64
Total Solar Energy Transmitted %	11	10	25	22	10	10	10
Total Solar Energy Absorbed %	25	24	30	32	26	24	26
Emissivity (Room side)	0,84	0,84	0,84	0,84	0,84	0,84	0,84
Glare Reduction %	84	83	63	62	84	83	84
Shading Coefficient	0,2	0,16	0,39	0,32	0,20	0,16	0,20
Solar Heat Gain Coefficient	0,17	014	0,34	0,28	0,17	0,14	0,17
U-Value Winter	1,04	0,48	1,04	0,48	1,03	0,48	1,03
K-Value Winter	5,91	2,73	5,91	2,73	5,85	2,71	5,85
Luminous Efficacy	0,75	0,88	0,84	0,96	0,72	0,89	0,72
Total Solar Energy Rejected %	83	86	66	72	83	86	83

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Avery Dennison[®] SkyLite 20 XTRM Pro Series

Issued: 05/2024

Introduction

XTRM PRO is our new durable exterior product line, where the SkyLite 20 XTRM PRO is designed for sloped/horizontal applications (typically roofing glazing systems). It is based on a new UV-durable surface coating, extending the product's longevity in harsh outdoor conditions, combined with a unique metal alloy that provides outstanding corrosion resistance. Product is designed without a scratch resistant topcoat, however installation is done with a protective sheet for scratchfree application (removed after installation).

Conversion

Advanced design of the Avery Dennison SkyLite 20 XTRM PRO series enables application without the need to edge seal.*

For conversion information please contact your regional Sales Team.

Recommendations

Avery Dennison® SkyLite 20 XTRM PRO films is developed to tackle commercial projects.

XTRM PRO's long service life exterior films offer the ideal solution for reducing heat build-up – and energy bills – over the long term. With a prolonged service life, you gain greater savings for longer.

Features

- Enhanced durability long-term warranty (including hot & humid areas) supported by exceptional anticorrosion metal alloy and UV-durable coating.
- » Advanced design enables application without the need to edge seal*
- Sustainable solution cutting energy cooling costs with short ROI, designed and processed in a way to minimize carbon footprint impact.
- » Appealing aesthetics neutral appearance with high optical quality.
- » Solutions available for roofing applications on both glass or plastics substrates.
- » Compatible with clear glass (monolithic and laminated), tinted single panes, and clear IGUs**
- » SkyLite 20 XTRM PRO Poly line compatibility according to Poly installation guidelines.

*Edge sealing is required for any applications where water is pooling on edges.

** Application on other advanced glazing systems requires the outer pane to be tempered/heat strengthened. Details information can be found on the "Avery Dennison - Film to Glass Application Chart"





Face Film

SkyLite 20 XTRM PRO + Removable protective masking layer; SkyLite 20 XTRM Poly PRO + Removable protective masking layer



Adhesive

Pressure sensitive Permanent – Solvent based acrylic



Durability See below

Shelf Life

When stored in original packaging upon arrival at the customer: 2 years. Recommended Storage conditions are 20 °C (± 2 °C) with 50 %RH (± 5%).

Warranted Durability ¹⁾	SkyLite XTRM PRO	SkyLite XTRM PRO Poly			
Vertical	-	-			
Horizontal/Sloped	10	10			
More information can be found in the ICS Performance Guarantee documentation.					

¹⁾ Warranted Durability

The warranty mentioned above is limited to installation locations of latitude Above 40°N. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased. With regard to Avery Dennison Architectural Window Film Products, the durability shall not differ between the climatic zones, but the same durability shall apply to all climatic zones.



Optical & Solar Properties:		
Product	SkyLite 20 XTRM PRO and SkyLite XTRM PRO Poly	SkyLite 20 XTRM PRO
Glazing	Single Pane	Double Pane
Visible Light Transmitted %	23	21
Visible Light Reflected (Int) %	31	35
Visible Light Reflected (Ext) %	26	27
UV Block %	99,9	99,9
Total Solar Energy Reflected %	26	26
Total Solar Energy Transmitted %	20	17
Total Solar Energy Absorbed %	54	57
Emissivity (Room side)	0,84	0,84
Glare Reduction %	74	74
Shading Coefficient	0,42	0,34
Solar Heat Gain Coefficient	0,37	0,27
U-Value Winter	1,04	0,48
K-Value Winter	5,91	2,75
Luminous Efficacy	0,55	0,68
Total Solar Energy Rejected %	63	73

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Avery Dennison[®] Exterior Spectrally Selective Solar Film XTRM

Issued: 05/2023

Introduction

Avery Dennison® XTRM[™] series offers an exceptional durability ensuring long-term energy efficient performance. Avery Dennison® SS Natural 70 XTRM[™] window film effectively reduces solar heat gain while retaining high level of daylight and preserving the natural appearance of the glass.

Conversion

For conversion information please review the Technical Bulletin "Avery Dennison® XTRM[™] Film Series Installation Guide".

Recommendations

Avery Dennison® SS Natural 70 XTRM[™] film is developed to tackle projects, where a long-term service period is required. This film offers an excellent heat rejection upgrade, preserving the natural appearance of a building's interior and exterior, and is often used for historical buildings.

Face Film

Exterior durable SR hard coat sputtered optical filter + Nanotechnology

SS Natural 70 XTRM

Adhesive

Pressure sensitive **Permanent** – Solvent based acrylic



Backing PET

Durability 12 years vertical (6 years horizontal/sloped)¹⁾

Shelf Life

When stored in original packaging upon arrival at the customer: 2 years. Recommended Storage conditions are 20 °C (\pm 2 °C) with 50 %RH (\pm 5%).

Features

- » Warranted durability: Increased lifetime for the best long-term service period
- » High visible light transmission that is barely discernible on glass; high levels of natural daylight
- » High heat rejection for enhanced comfort and reduced cooling cost
- » Low reflectivity preserves view night and day
- » Warranted durability: Increased lifetime for the best long-term service period
- » 99.99% UV Block cuts fading and sun damage

Fire Certification: B-s1, d0 (DIN EN 13501-1)

1) Warranted Durability

The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased. With regard to Avery Dennison Architectural Window Film Products, the durability shall not differ between the climatic zones, but the same durability shall apply to all climatic zones.







Optical & Solar Properties

SS Natural 70 XTRM

	Single Pane	Double Pane
Visible Light Transmitted %	66	60
Visible Light Reflected (Int) %	16	22
Visible Light Reflected (Ext) %	17	21
U V Block %	99,9	99,9
Total Solar Energy Reflected %	29	31
Total Solar Energy Transmitted %	35	31
Total Solar Energy Absorbed %	36	38
Shading Coefficient	0,53	0,44
Total Solar Energy Rejected %	54	62
Solar Heat Gain Coefficient	0,46	0,38
Emissivity (Room side)	0,84	0,84
U-Value Winter	1,24	1,36
K-Value Winter	5,91	2,73
Glare Reduction %	26	33
Luminous Efficacy	1,24	1,36
SIRR %	84	84
IRER %	69	69



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Avery Dennison[®] Exterior Spectrally Selective Solar Film XTRM

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Introduction

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Conversion

For conversion information please review the Technical Bulletin "Avery Dennison® XTRM[™] Film Series Installation Guide".

Recommendations

Avery Dennison® SS Natural 70 XTRM[™] film is developed to tackle projects, where a long-term service period is required. This film offers an excellent heat rejection upgrade, preserving the natural appearance of a building's interior and exterior, and is often used for historical buildings.

Face Film

Exterior durable SR hard coat sputtered optical filter + Nanotechnology

SS Natural 70 XTRM

Adhesive

Pressure sensitive **Permanent** – Solvent based acrylic



Backing PET

Durability 12 years vertical (6 years horizontal/sloped)¹⁾

Shelf Life

When stored in original packaging upon arrival at the customer: 2 years. Recommended Storage conditions are 20 °C (\pm 2 °C) with 50 %RH (\pm 5%).

Features

- » Warranted durability: Increased lifetime for the best long-term service period
- » High visible light transmission that is barely discernible on glass; high levels of natural daylight
- » High heat rejection for enhanced comfort and reduced cooling cost
- » Low reflectivity preserves view night and day
- » Warranted durability: Increased lifetime for the best long-term service period
- » 99.99% UV Block cuts fading and sun damage

Fire Certification: B-s1, d0 (DIN EN 13501-1)

1) Warranted Durability

The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased. With regard to Avery Dennison Architectural Window Film Products, the durability shall not differ between the climatic zones, but the same durability shall apply to all climatic zones.







Optical & Solar Properties

SS Natural 70 XTRM

	Single Pane	Double Pane
Visible Light Transmitted %	66	60
Visible Light Reflected (Int) %	16	22
Visible Light Reflected (Ext) %	17	21
U V Block %	99,9	99,9
Total Solar Energy Reflected %	29	31
Total Solar Energy Transmitted %	35	31
Total Solar Energy Absorbed %	36	38
Shading Coefficient	0,53	0,44
Total Solar Energy Rejected %	54	62
Solar Heat Gain Coefficient	0,46	0,38
Emissivity (Room side)	0,84	0,84
U-Value Winter	1,24	1,36
K-Value Winter	5,91	2,73
Glare Reduction %	26	33
Luminous Efficacy	1,24	1,36
SIRR %	84	84
IRER %	69	69



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