

Avery Dennison
Graphics Solutions
Product Overview

Asia Pacific - ANZ
June 2023

Solar Safety Interior Films

Attractive, Efficient and Secure



Avery Dennison® Solar Safety interior films combine the shard protection of safety security films with excellent levels of energy efficiency for comfort, reduction in energy output in cooling and an improved carbon footprint.

These attractive solar safety films provide ROI that pays for itself. Building codes and insurance policies often demand glazing that meets certain safety standards such as impact-resistant glass in schools, break-ins or blast protection for retail locations.

Avery Dennison Solar Safety interior films deliver sustainable solar and security solutions for the needs of industry, businesses and institutions.

R Silver™

R Silver safety interior window film combines the reinforced protection of security laminates with superb heat rejection, UV block, daytime privacy and sophisticated appearance. R Silver 20 safety interior window film is available in 4 mil thickness.

NT PerLite Ceramic™

NT PerLite Ceramic solar safety interior films are neutral grey in color that provide daytime privacy and have excellent solar energy rejection that delivers a comfortable, sustainable building solution that cuts heat gain and glare, reducing the need for cooling and lowering carbon footprint. The film's safety and security characteristics provide protection from shattered glass.

NT PerLite Ceramic 35 solar safety interior window film is available in thicknesses of 6 and 10 mil for varying hazard protection.

SP e-Lite™

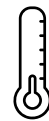
SP e-Lite is a great solution for store front windows that combines shard protection with sputtered optical filter and nanotechnology to selectively block infrared radiation and solar heat. This improves a building's environmental impact, while allowing natural light to pass through installed glass. SP e-Lite 70 is available for large projects in 8 mil thickness.



Features and Benefits



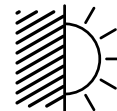
Shard retention



Lower heat gain



UV Block



Light control



Aesthetics

- Excellent solar heat and glare rejection for enhanced comfort and improved building environmental profile
- Increased protection from glass shattering by impact, blast, crime or natural disaster
- High levels of energy efficiency for reduced energy consumption and carbon footprint
- 99% UV block to reduce fading and sun damage
- Bold appearance upgrades building exterior and maintains daytime privacy (R Silver and NT PerLite Ceramic films)

Optical and Solar Properties¹

Item Number	R Silver 20 4 Mil™		NT PerLite Ceramic 35 6 mil™		NT PerLite Ceramic 35 10 mil™		SP e-Lite 70 8 mil™
	R12122T		R170L5T		R270L5T		R219IS7
Pane	Single	Double	Single	Double	Single	Double	Single
Visible Light Transmitted	19%	18%	40%	36%	40%	37%	65%
Visible Light Reflected (Interior)	61%	61%	16%	18%	17%	18%	18%
Visible Light Reflected (Exterior)	60%	60%	18%	24%	17%	23%	18%
Ultra Violet Block	99%	99%	99%	99%	99%	99%	99%
Total Solar Energy Reflected	53%	48%	19%	22%	18%	21%	25%
Total Solar Energy Transmitted	14%	12%	29%	25%	30%	26%	38%
Total Solar Energy Absorbed	33%	40%	52%	53%	52%	53%	37%
Emissivity (Room Side)	0.74	0.74	0.90	0.90	0.91	0.91	0.73
Glare Reduction	79%	78%	56%	55%	55%	55%	27%
Selective InfraRed Reduction (SIRR) ²	65%	65%	86%	86%	33%	33%	-
InfraRed Energy Rejection (IRER) ³	49%	49%	69%	69%	26%	26%	-
Shading Coefficient	0.27	0.36	0.52	0.63	0.53	0.64	0.56
Solar Heat Gain Coeff. (G-Value)	0.23	0.31	0.44	0.54	0.46	0.55	0.49
U-Value Winter (IP)	0.99	0.47	1.07	0.49	1.08	0.49	1.03
U-Value Winter (SI)	5.62	2.65	6.08	2.78	6.13	2.78	5.85
Luminous Efficacy	0.70	0.49	0.77	0.58	0.76	0.58	1.16
Total Solar Energy Rejected (TSER)	77%	69%	56%	46%	54%	45%	51%

Optical and Solar Properties¹

	R Silver 20 4 Mil™	NT PerLite Ceramic 35 6 mil™	NT PerLite Ceramic 35 10 mil™	SP e-Lite 70 8 mil™
Mechanical Properties				
Thickness	4 mil	6 mil	10 mil	8 mil
Tensile Strength at Break	28,500 PSI	28,500 PSI	28,500 PSI	28,500 PSI
Break Strength	112 lb/ inch	145 lb/ inch	270 lb/ inch	220 lb/ inch
Elongation at Break	125%	125%	125%	125%
Peel Strength	7 lb/ inch	7 lb/ inch	7 lb/ inch	7 lb/ inch
Safety Testing				
Impact - AS/NZS 2208		✓		✓
Impact - EN 12600 Class 2B2	✓			




¹ Performance results are calculated on 1/8" (3mm) 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.

² Selective InfraRed Rejection (SIRR) - The percentage of IR radiation that is not directly transmitted through a glazing system. Calculated as %SIRR = 100% - % Transmission (@780-2500nm).

³ InfraRed Energy Rejection (IRER) - The percentage of Near Infrared Energy Rejection as measured between 780-2500 nm. Calculated as the TSER over 780-2500 nm: %IRER = 100% - 100*SHGC (@ 780-2500 nm).

⁴ Shelf Life: 2 years, stored in original packaging at 22° ±3°C / 50-55% RH

For more information, contact Avery Dennison customer service or your sales representative, or visit graphicsap.averydennison.com

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