

Solar Safety Interior Films

Attractive, Sustainable 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 films combine the reinforced protection of security laminates with superb heat rejection, UV block, daytime privacy and sophisticated appearance. A choice of film thicknesses provides a solution for different security threats. R Silver 20 safety interior window film is available in 4 mil and 9 mil thicknesses.

NT PerLite Ceramic™

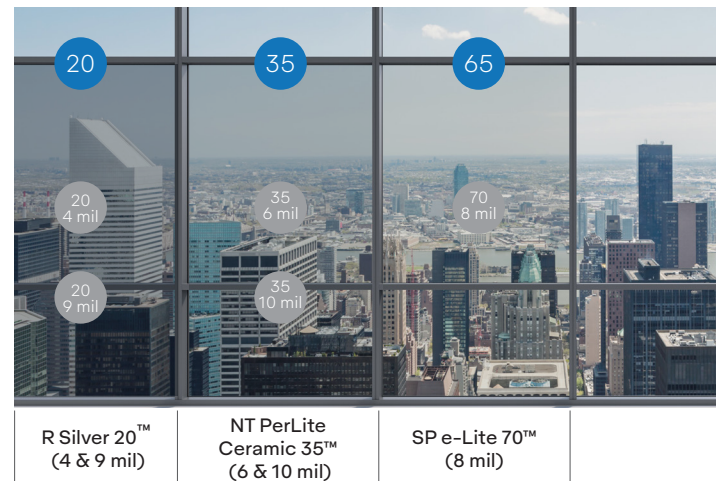
NT PerLite Ceramic solar safety interior films are neutral grey in color that provide daytime privacy and have excellent solar energy rejection that delivers a comfortable, sustainable building solution that cuts heat gain and glare, reducing the need for cooling and lowering carbon footprint. The film's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

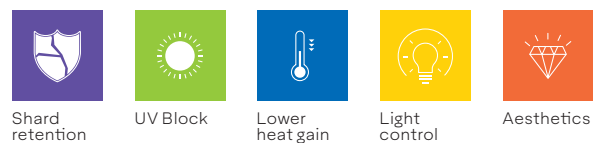
SP e-Lite is a great solution for store front windows that combines shard protection with sputtered optical filter and nanotechnology to selectively block infrared radiation and solar heat. This improves a building's environmental impact, while allowing natural light to pass through installed glass.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

This image has been simulated and is not actual product comparison



Features and Benefits

- ▶ 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 Properties*	R Silver 20 4 mil™		R Silver 20 9 mil™		NT PerLite Ceramic35 6 mil™		NT PerLite Ceramic 35 10 mil™		SP e-Lite 70 8 mil™	
Item Number	R12122T		R24603T		R170L5T		R270L5T		R219IS7	
Pane	Single	Double	Single	Double	Single	Double	Single	Double	Single	Double
Visible Light Transmitted	19%	18%	20%	19%	40%	36%	40%	37%	65%	60%
Visible Light Reflected (Interior)	61%	61%	61%	61%	16%	18%	17%	18%	18%	21%
Visible Light Reflected (Exterior)	60%	60%	57%	56%	18%	24%	17%	23%	18%	23%
Ultra Violet Block	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Total Solar Energy Reflected	53%	48%	50%	46%	19%	22%	18%	21%	25%	25%
Total Solar Energy Transmitted	14%	12%	15%	13%	29%	25%	30%	26%	38%	33%
Total Solar Energy Absorbed	33%	40%	35%	41%	52%	53%	52%	53%	37%	42%
Emissivity (Room Side)	0.74	0.74	0.91	0.91	0.90	0.90	0.91	0.91	0.73	0.73
Glare Reduction	79%	78%	78%	77%	56%	55%	55%	55%	27%	26%
Selective InfraRed Reduction (SIRR)**	65%	65%	92%	92%	86%	86%	33%	33%	-	-
InfraRed Energy Rejection (IRER)***	49%	49%	80%	80%	69%	69%	26%	26%	-	-
Shading Coefficient	0.27	0.36	0.30	0.40	0.52	0.63	0.53	0.64	0.56	0.63
Solar Heat Gain Coeff. (G-Value)	0.23	0.31	0.25	0.34	0.44	0.54	0.46	0.55	0.49	0.54
U-Value Winter (IP)	0.99	0.47	1.08	0.49	1.07	0.49	1.08	0.49	1.03	0.48
U-Value Winter (SI)	5.62	2.65	6.13	2.78	6.08	2.78	6.13	2.78	5.85	2.71
Luminous Efficacy	0.70	0.49	0.67	0.48	0.77	0.58	0.76	0.58	1.16	0.95
Total Solar Energy Rejected (%)	77%	69%	75%	66%	56%	46%	54%	45%	51%	46%

Mechanical Properties	R Silver 20 4 mil	R Silver 20 9 mil	NT PerLite Ceramic 35 6 mil	NT PerLite Ceramic 35 10 mil	SP e-Lite 70 8 mil
Thickness	4 mil	9 mil	6 mil	10 mil	8 mil
Tensile Strength at Break	28,500 PSI	28,500 PSI	28,500 PSI	28,500 PSI	28,500 PSI
Break Strength	112 lb/ inch	245 lb/ inch	145 lb/ inch	270 lb/ inch	220 lb/ inch
Elongation at Break	125%	125%	125%	125%	125%
Peel Strength	7 lb/ inch	7 lb/ inch	7 lb/ inch	7 lb/ inch	7 lb/ inch

Safety Testing

Impact				
AS/NZS 2208			✓	✓
EN 12600 Class 2B2	✓			

*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.
 **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).
 ***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).

