

Avery Dennison  
Graphics Solutions  
Product Overview

Asia Pacific - ANZ  
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# Safety & Security Interior Films

Optically clear glazing  
protection



We have over three decades of experience in developing and manufacturing multi-laminate safety and security window films, designed to protect people and property against flying glass shards from a wide variety of hazards and threats.

Avery Dennison® safety and security films are suitable for building codes and insurance policies that often demand glazing that meets certain safety standards such as impact-resistant glass in schools, break-ins or blast protection for retail locations.

Our safety and security interior films have outstanding transparency - the result of top grade polyester, our proprietary transparent adhesive, and tight adherence to demanding ISO 9001 quality-assurance standards.

All of our exterior window films provide excellent UV block, protecting people and property from damaging ultraviolet rays.

## SF Clear i

SF Clear safety and security interior window films feature exceptional clarity, low reflectance and high levels of UV protection.

A full range of film thicknesses include 4, 7, 12 and 15 mil to provide the appropriate protection solution.

## SF Matte i

SF Matte i safety and security decorative interior window film is white matte in appearance and is available in thicknesses 5 and 12 mil to provide privacy and personal safety in retail, bathroom and office applications. SF Matte i film combine anti-fragmentation security with an attractive sandblasted effect, delivering a safe and cost-effective alternative to privacy glass or partitions.

## Features and Benefits



**Shard retention**



**UV Block**



**Aesthetics**

- Increased protection from glass shattered by impact, blast, crime or natural disaster
- Up to 99% UV block to reduce fading and sun damage

### **SF Clear i features:**

- Superb optical clarity for no compromise vision

### **SF Matte i features:**

- Privacy with aesthetic appeal - sandblasted white effect

## Optical and Solar Properties<sup>1</sup>

	SF Clear 4 mil i™	SF Clear 7 mil i™	SF Clear 8 mil i™	SF Clear 5 mil i™	SF Matte 5 mil i™	SF Matte 15 mil i™
Item Number	R12306T	R19801T	R22301T	R39803T	R22301T	R32311C
Pane	Single	Single	Single	Single	Single	Single
Visible Light Transmitted	89%	88%	88%	87%	58%	55%
Visible Light Reflected (Interior)	10%	11%	11%	11%	%	%
Visible Light Reflected (Exterior)	10%	11%	11%	11%	25%	28%
Ultra Violet Block	97%	99%	99%	99%	98%	99%
Total Solar Energy Reflected	9%	9%	9%	11%	20%	23%
Total Solar Energy Transmitted	81%	80%	80%	77%	55%	51%
Total Solar Energy Absorbed	10%	11%	11%	12%	25%	26%
Glare Reduction	1%	2%	2%	3%	36%	38%
Selective InfraRed Reduction (SIRR) <sup>2</sup>	-	-	-	-	-	46%
InfraRed Energy Rejection (IRER) <sup>3</sup>	-	-	-	-	-	37%
Shading Coefficient	0.96	0.95	0.95	0.94	0.72	0.69
Solar Heat Gain Coeff. (G-Value)	0.84	0.83	0.83	0.82	0.62	0.60
U-Value Winter (IP)	1.07	1.07	1.07	1.07	1.07	1.07
U-Value Winter (SI)	6.07	6.07	6.07	6.07	6.05	6.08
Total Solar Energy Rejected (TSER)	16%	17%	17%	18%	38%	40%

<sup>1</sup> 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.

<sup>2</sup> 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).

<sup>3</sup> 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).

## Mechanical Properties

	SF Clear 4 mil i™	SF Clear 7 mil i™	SF Clear 8 mil i™	SF Clear 5 mil i™	SF Matte 5 mil i™	SF Matte 15 mil i™
Thickness	4 mil	7 mil	8 mil	15 mil	5 mil	12 mil
Tensile Strength at Break	28,500 PSI	26,000 PSI	28,500 PSI	28,500 PSI	25,000 PSI	28,500 PSI
Break Strength	112 lb/ inch	180 lb/ inch	224 lb/ inch	420 lb/ inch	140 lb/ inch	336 lb/ inch
Elongation at Break	125 %	140 %	125 %	140 %	140 %	125%
Peel Strength	7 lb/ inch	7 lb/ inch	7 lb/ inch	8 lb/ inch	5-7 lb/ inch	7 lb/ inch




### Safety Testing

Fire	BS 476 Fire Propagation		✓			
	ASTM D1929 Ignition	✓	✓			
	ASTM E84 Surface Burn	✓				
Impact	AS/NZS 2208	✓	✓	✓		✓
	ANSI Z97.1 18" pendulum fall	✓				
	ANSI Z97.1 48" pendulum fall		✓	✓		
	CPSC 1201 Cat 1 18" pendulum fall	✓				
	CPSC 1201 Title 16 48" pendulum fall	✓	✓	✓		
	BS 6206 B	✓				
	EN 12600 2B2	✓	✓	✓		✓
	EN 12600 1B1		✓	✓		
	EN 356 P4A					
	DIN 52290 Part 4, A1					
Bomb Blast	Siach Gefen IDF Testing (x2 + No Bar)					
	Bomb Blast GSA Level D (10.2 psi, 90.6 psi/msec)					
Shock Tube	GSA: 3A, ISO: C, ASTM: Minimal Hazard			✓		
Test <sup>4</sup>	GSA: 2C, ISO: B, ASTM: No Hazard					

<sup>4</sup> Complies with Shock Tube Test Standards: GSA+TS01-2003, ISO 16934 & ASTM F 1642-12

<sup>5</sup> 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](http://graphicsap.averydennison.com)

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