

Avery Dennison
Graphics Solutions
Product Overview

Asia Pacific - ANZ
June 2023

Neutral Interior Films

Low reflectance,
High performance

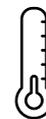
Sustainable, neutral interior window films by Avery Dennison® are based on advanced nano and ceramic technologies to deliver a subtle gray appearance to glazing that preserves the natural view through the glass while delivering an extremely effective reduction in heat gain and glare that reduces the need for cooling and lowers associated carbon emissions.

Incorporate subtle sophistication and comfort to residential and commercial projects with Avery Dennison neutral interior films.

Features and Benefits



UV Block



Lower heat gain



Light control



Aesthetics

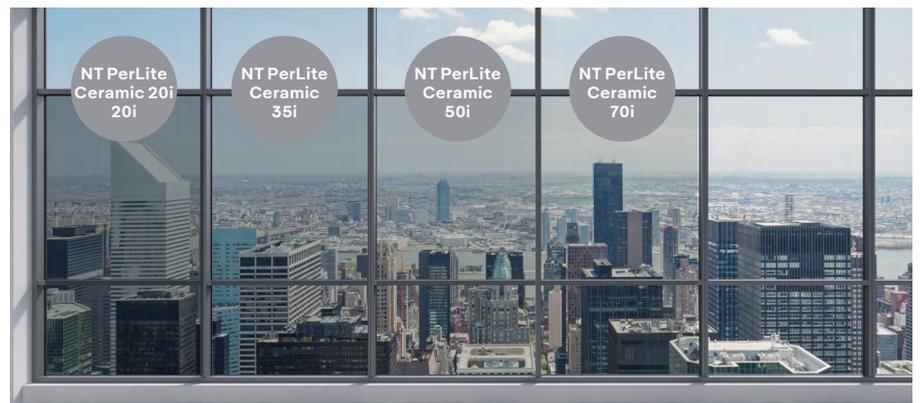
- High heat rejection for enhanced comfort and reduced cooling costs due to advanced nano and ceramic coating technologies
- High glare reduction - improves screen viewing, eases eye-strain and lowers associated carbon emissions
- Neutral color - provides natural gray appearance, inside and out
- 99% UV block limits fading and damage from the sun
- Protection for a variety of hazards (for NT PerLite Ceramic for safety)

NT PerLite Ceramic i

NT PerLite Ceramic i is a highly durable, ceramic-based interior solar window film. NT PerLite Ceramic i was developed using a proprietary patented advanced ceramic coating technology. As a result, its attractive neutral grey color delivers excellent solar energy rejection, with surprisingly low visible light reflectance. This makes NT PerLite Ceramic i an ideal solution for sustainable energy-saving projects when it's also important to preserve view and retain a natural window appearance - both inside and out. Available in different VLT's, NT PerLite Ceramic i is particularly popular in residential and commercial projects.

NT PerLite Ceramic for Safety

In addition to all of the benefits of our NT PerLite Ceramic i, neutral interior window films, NT PerLite Ceramic 35 for safety is available in thickness of 6 or 10 mil providing excellent protection from a variety of natural and man-made hazards.

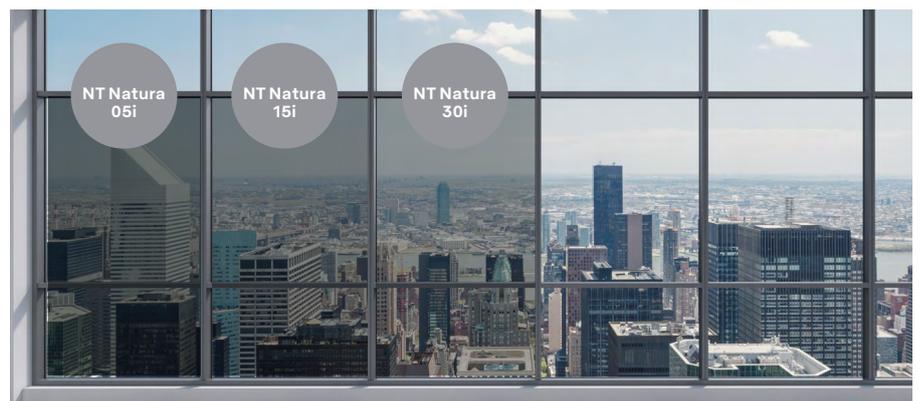


This image has been simulated and is not actual product comparison

NT Natura i

NT Natura i low reflectance neutral grey, sustainable, solar control films are based on advanced nanotechnology that provides highly effective heat rejection, glare reduction and privacy.

NT Natura i was developed for residential & commercial projects targeting effective energy control for improved green building profile; yet requiring a subtle appearance on glass. NT Natura i is ideal for installation on single pane windows: consult our film-to-glass application chart for additional options. NT Natura i is available in different VLT's.



This image has been simulated and is not actual product comparison

Optical and Solar Properties¹ - NT PerLite Ceramic

Item Number	NT PerLite Ceramic 20i		NT PerLite Ceramic 35i		NT PerLite Ceramic 35 6 mil		NT PerLite Ceramic 35 10 mil		NT PerLite Ceramic 50i		NT PerLite Ceramic 70i	
	R070L6W	R070L5W	R170L5T	R270L5T	R069L3W / R058L3S	R069L4W	Single	Double	Single	Double	Single	Double
Pane	Single	Double	Single	Double	Single	Double	Single	Double	Single	Double	Single	Double
Visible Light Transmitted	22%	20%	40%	37%	40%	36%	40%	37%	51%	47%	68%	61%
Visible Light Reflected (Interior)	24%	25%	15%	16%	16%	18%	17%	18%	16%	19%	9%	12%
Visible Light Reflected (Exterior)	25%	31%	17%	23%	18%	24%	17%	23%	18%	24%	10%	17%
Ultra Violet Block	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Total Solar Energy Reflected	29%	29%	17%	20%	19%	22%	18%	21%	20%	23%	10%	15%
Total Solar Energy Transmitted	14%	13%	29%	25%	29%	25%	30%	26%	40%	35%	59%	50%
Total Solar Energy Absorbed	57%	58%	54%	55%	52%	53%	52%	53%	40%	42%	31%	35%
Emissivity (Room Side)	0.76	0.76	0.82	0.82	0.90	0.90	0.91	0.91	0.84	0.84	0.91	0.91
Glare Reduction	76%	75%	56%	55%	56%	55%	55%	55%	43%	42%	25%	25%
Selective InfraRed Reduction (SIRR) ²	91%	91%	78%	78%	86%	86%	33%	33%	67%	67%	44%	44%
InfraRed Energy Rejection (IRER) ³	74%	74%	60%	60%	69%	69%	26%	26%	53%	53%	33%	33%
Shading Coefficient	0.36	0.51	0.52	0.64	0.52	0.63	0.53	0.54	0.60	0.66	0.79	0.79
Solar Heat Gain Coeff. (G-Value)	0.30	0.44	0.45	0.55	0.44	0.54	0.46	0.55	0.51	0.57	0.69	0.68
U-Value Winter (IP)	1.00	0.47	1.03	0.48	1.07	0.49	1.08	0.49	1.04	0.48	1.08	0.49
U-Value Winter (SI)	5.68	2.67	5.85	2.72	6.08	2.78	6.13	2.78	5.91	2.73	6.13	2.78
Luminous Efficacy	0.62	0.40	0.75	0.57	0.77	0.58	0.76	0.58	0.85	0.72	0.86	0.78
Total Solar Energy Rejected (TSER)	70%	56%	55%	45%	56%	46%	54%	45%	49%	43%	31%	32%

Mechanical Properties

Thickness	-	-	6 mil	10 mil	-	-
Tensile Strength at Break	-	-	28,500 PSI	28,500 PSI	-	-
Break Strength	-	-	145 lb/ inch	270 lb/ inch	-	-
Elongation at Break	-	-	125%	125%	-	-
Peel Strength	-	-	7 lb/ inch	7 lb/ inch	-	-

Safety Testing

Impact – AS/NZS 2208	✓
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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).

Optical and Solar Properties¹ - NT Natura i

	NT Natura 05i	NT Natura 15i	NT Natura 30i	
Item Number	R058L7W	R058L9W	R069L8W	
Pane	Single	Single	Single	Double
Visible Light Transmitted	7%	16%	31%	29%
Visible Light Reflected (Interior)	11%	11%	9%	10%
Visible Light Reflected (Exterior)	14%	9%	14%	21%
Ultra Violet Block	99%	99%	99%	99%
Total Solar Energy Reflected	20%	10%	15%	19%
Total Solar Energy Transmitted	12%	15%	33%	28%
Total Solar Energy Absorbed	68%	75%	52%	53%
Emissivity (Room Side)	0.78	0.86	0.87	0.87
Glare Reduction	92%	83%	65%	65%
Selective InfraRed Reduction (SIRR) ²	82%	85%	65%	65%
InfraRed Energy Rejection (IRER) ³	64%	63%	49%	49%
Shading Coefficient	0.35	0.44	0.56	0.66
Solar Heat Gain Coeff. (G-Value)	0.30	0.38	0.48	0.58
U-Value Winter (IP)	1.01	1.05	1.05	0.48
U-Value Winter (SI)	5.73	5.80	6.00	2.75
Luminous Efficacy	0.20	0.36	0.55	0.44
Total Solar Energy Rejected (TSER)	70%	62%	52%	42%

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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