

Avery Dennison
Graphics Solutions
Product Overview

Asia Pacific - ANZ
June 2023

Dual Reflective Interior Films

Combining sustainable, cooling
performance with style



Sustainable dual reflective interior window film lines - DR OptiTune and DR OptiShade by Avery Dennison® are engineered with nano technology for long lasting color stability and exceptional solar protection.

The stylish reflective outer layer of dual reflective films reduce glare and solar heat from entering into the room and thus maintain indoor comfort, daytime privacy and reduce associated cooling and carbon footprint. The less reflective inner layer preserves views to the outside. All Dual Reflective films deliver excellent levels of solar rejection.

Dual Reflective interior films are ideal for commercial and residential retrofit glazing projects where increasing comfort, conserving resources and maintaining a neutral interior view to the outside are important.

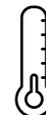
Dual reflective film versions with 10 VLT demonstrate outstanding solar protection and heat reducing performance for exceptional comfort and sustainable impact. All dual reflective films are sustainable building solutions by providing excellent levels of solar heat reduction that lowers cooling output and update the external appearance of windows, for a renewed and clean look.

Dual reflective exterior window films are a non-disruptive solution particularly attractive to commercial projects when customers are interested in a convenient, cost saving approach to modernizing a building's exterior appearance while maintaining a neutral interior and views outside.

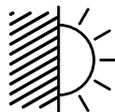
Features and Benefits



UV Block



Lower heat gain



Light control



Aesthetics

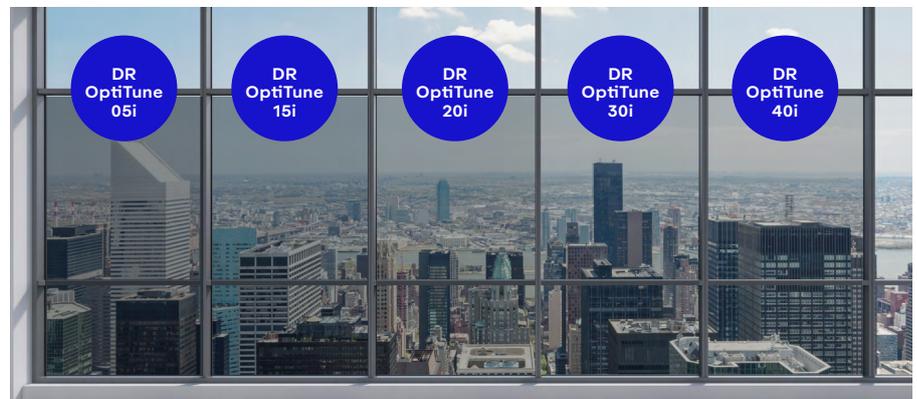
- 99+% UV block reduces fading and damage from the sun
- Based on nanotechnology which delivers excellent heat rejection which saves carbon emissions and costs associated with building cooling
- Outstanding glare control for enhanced comfort and carbon footprint
- Warm neutral interior with low reflectivity preserves ambiance and views
- Bold appearance upgrades building exterior and maintains daytime privacy

DR OptiTune i

DR OptiTune i sustainable dual reflective interior window film combines high solar heat rejection with low internal reflectance. Its attractive, warm neutral grey tone targets both residential and commercial use.

DR OptiTune 05i, the film group's darkest version, functions as a one-way mirror for outstanding daytime privacy.

DR OptiTune i is available in different VLT's.

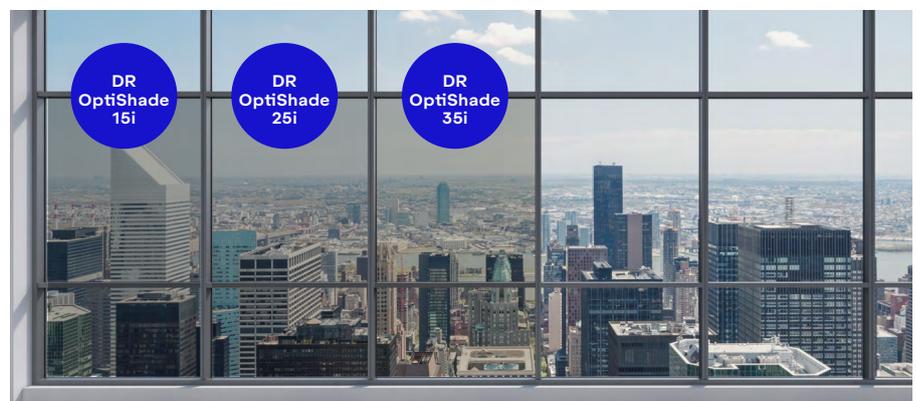


This image has been simulated and is not actual product comparison

DR OptiShade i

DR OptiShade i interior window film features a warm, neutral earth tone with low interior reflectance, and effective sustainable solar heat rejection. It is ideal for residential use, complementing wood floors and furnishings.

DR OptiShade i is available in different VLT's and is compatible with most glass glazing window systems.



This image has been simulated and is not actual product comparison

Optical and Solar Properties¹ - DR OptiTune i

Item Number	DR OptiTune 05i		DR OptiTune 15i		DR OptiTune 20i		DR OptiTune 30i		DR OptiTune 40i	
	R070R0W		R070R1W		R069R2W		R069R3W		R069R4W	
Pane	Single	Double								
Visible Light Transmitted	6%	6%	13%	13%	21%	19%	32%	30%	41%	38%
Visible Light Reflected (Interior)	15%	15%	25%	24%	15%	15%	26%	27%	18%	19%
Visible Light Reflected (Exterior)	63%	63%	56%	56%	32%	35%	32%	36%	21%	26%
Ultra Violet Block	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Total Solar Energy Reflected	56%	50%	51%	46%	31%	31%	32%	31%	22%	24%
Total Solar Energy Transmitted	6%	6%	12%	11%	18%	16%	25%	22%	33%	29%
Total Solar Energy Absorbed	38%	44%	37%	43%	51%	53%	43%	47%	45%	47%
Emissivity (Room Side)	0.75	0.75	0.76	0.76	0.80	0.80	0.81	0.81	0.83	0.83
Glare Reduction	93%	93%	85%	85%	77%	76%	63%	63%	54%	54%
Selective InfraRed Reduction (SIRR) ²	94%	94%	88%	88%	83%	83%	79%	79%	71%	79%
InfraRed Energy Rejection (IRER) ³	82%	82%	77%	77%	68%	68%	65%	65%	57%	65%
Shading Coefficient	0.19	0.31	0.26	0.37	0.38	0.51	0.44	0.53	0.54	0.62
Solar Heat Gain Coeff. (G-Value)	0.16	0.27	0.22	0.32	0.33	0.44	0.37	0.46	0.46	0.54
U-Value Winter (IP)	0.99	0.47	1.00	0.47	1.02	0.48	1.03	0.48	1.04	0.48
U-Value Winter (SI)	5.62	2.66	5.68	2.67	5.79	2.70	5.85	2.71	5.91	2.72
Luminous Efficacy	0.32	0.19	0.50	0.34	0.55	0.38	0.75	0.57	0.77	0.60
Total Solar Energy Rejected (TSER)	84%	73%	78%	68%	67%	56%	63%	54%	54%	46%

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

Optical and Solar Properties¹ - DR OptiShade i

Item Number	DR OptiShade 15i		DR OptiShade 25i		DR OptiShade 35i	
	R069O1W		R069O2W		R069O3W	
Pane	Single	Double	Single	Double	Single	Double
Visible Light Transmitted	16%	15%	27%	25%	35%	32%
Visible Light Reflected (Interior)	17%	17%	14%	14%	10%	11%
Visible Light Reflected (Exterior)	44%	46%	25%	30%	13%	20%
Ultra Violet Block	99%	99%	99%	99%	99%	99%
Total Solar Energy Reflected	42%	39%	26%	27%	14%	18%
Total Solar Energy Transmitted	13%	11%	23%	20%	34%	29%
Total Solar Energy Absorbed	45%	50%	51%	53%	53%	53%
Emissivity (Room Side)	0.79	0.79	0.84	0.84	0.86	0.86
Glare Reduction	82%	82%	70%	69%	61%	61%
Selective InfraRed Reduction (SIRR) ²	88%	88%	78%	78%	65%	65%
InfraRed Energy Rejection (IRER) ³	74%	74%	63%	63%	49%	49%
Shading Coefficient	0.31	0.43	0.44	0.56	0.58	0.67
Solar Heat Gain Coeff. (G-Value)	0.27	0.38	0.39	0.49	0.50	0.59
U-Value Winter (IP)	1.01	0.47	1.04	0.48	1.05	0.48
U-Value Winter (SI)	5.76	2.69	5.91	2.73	5.97	2.75
Luminous Efficacy	0.52	0.34	0.61	0.45	0.60	0.47
Total Solar Energy Rejected (TSER)	73%	62%	61%	51%	50%	41%

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

Connect with us on:   



DISCLAIMER - All Avery Dennison statements, technical information and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that purchaser has independently determined the suitability of such products for its purposes. All Avery Dennison's products are sold subject to Avery Dennison's general terms and conditions of sale, see <http://terms.averydennison.com>. © 2023 Avery Dennison Corporation. All rights reserved. Avery Dennison and all other Avery Dennison brands, this publication, its contents and product names and codes are owned by Avery Dennison Corporation. All other brands and product names are trademarks of their respective owners. This publication must not be used, copied or reproduced in whole or in part of purposes other than marketing by Avery Dennison.