



Dual Reflective Exterior Films

Combining cooling performance, style & comfort



Solar

Avery Dennison's Dual Reflective exterior film lines - **DR Grey X** and **DR Grey XTRM** - combine a silver reflective outer layer that improves comfort by reducing glare and solar heat from penetrating the window; with a stylish neutral grey, low reflective inner layer that preserves the view outside. Dual Reflective film 10 version demonstrates outstanding solar protection and heat reducing performance for exceptional comfort. All Dual Reflective films provide excellent levels of solar heat reduction and update the external appearance of windows, giving buildings 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, and cost saving approach to modernizing a building's exterior appearance while maintaining a neutral interior and views outside.

DR Grey X PS

Avery Dennison's **DR Grey X** combines privacy with excellent interior visibility both day and night, cutting glare by up to 92%. Available in a variety of VLT's, **DR Grey X** is suitable for exterior installation on sophisticated glass glazing systems. The attractive, neutral grey tone of exterior window film **DR Grey X** is perfect for residential and commercial application.

DR Grey XTRM PS

DR Grey XTRM for exterior installation on most glass glazing systems, enhances the energy efficiency performance of windows and updates a building's appearance. The film's clean, silver, reflective exterior and low reflective interior provide the ideal solution for energy efficiency, interior comfort and great looks. **DR Grey XTRM** is available in different VLT's.

This image has been simulated and is not actual product comparison



DR Grey 10X | DR Grey 10 XTRM | DR Grey 20X | DR Grey 20 XTRM | DR Grey 35X | DR Grey 35 XTRM

Features and Benefits

- > 99+% UV block reduces fading and damage from the sun
- > Excellent level of heat rejection saves costs associated with building cooling
- > Outstanding glare control for enhanced comfort
- > Warm neutral interior with low reflectivity preserves ambiance and views
- > Bold appearance updates building exterior and maintains daytime privacy



Graphics Solutions



UV Block



Lower heat gain



Light control



Aesthetics

Optical and Solar Properties**	DR Grey 10X		DR Grey 20X		DR Grey 35X	
Item Number	R070W0X		R070W6X		R070W5X	
Pane	Single	Double	Single	Double	Single	Double
Visible Light Transmitted	8%	7%	19%	18%	36%	32%
Visible Light Reflected (Interior)	17%	23%	14%	21%	14%	21%
Visible Light Reflected (Exterior)	55%	55%	34%	35%	22%	23%
Ultra Violet Block	99%	99%	99%	99%	99%	99%
Total Solar Energy Reflected	58%	58%	38%	38%	26%	27%
Total Solar Energy Transmitted	7%	6%	18%	15%	31%	26%
Total Solar Energy Absorbed	35%	36%	45%	47%	44%	47%
Emissivity (Room Side)	0.84	0.84	0.84	0.84	0.84	0.84
Glare Reduction	91%	91%	79%	78%	61%	61%
Selective InfraRed Reduction (SIRR)	93%	93%	82%	82%	71%	71%
InfraRed Energy Rejection (IRER)	83%	83%	70%	70%	58%	58%
Shading Coefficient	0.20	0.14	0.36	0.27	0.50	0.40
Solar Heat Gain Coeff. (G-Value)	0.17	0.12	0.31	0.23	0.43	0.35
U-Value Winter (IP)	1.04	0.48	1.04	0.48	1.04	0.48
U-Value Winter (SI)	5.91	2.73	5.91	2.73	5.91	2.73
Luminous Efficacy	0.40	0.50	0.54	0.66	0.70	0.80
Total Solar Energy Rejected (%)	83%	88%	69%	77%	57%	65%

Optical and Solar Properties**	DR Grey 10 XTRM		DR Grey 20 XTRM		DR Grey 35 XTRM	
Item Number	R122W0X		R122W6X		R122W5X	
Pane	Single	Double	Single	Double	Single	Double
Visible Light Transmitted	7%	7%	20%	18%	36%	32%
Visible Light Reflected (Interior)	20%	26%	17%	23%	14%	21%
Visible Light Reflected (Exterior)	66%	66%	40%	41%	22%	23%
Ultra Violet Block	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Total Solar Energy Reflected	66%	66%	44%	44%	25%	27%
Total Solar Energy Transmitted	7%	6%	17%	15%	31%	26%
Total Solar Energy Absorbed	27%	28%	39%	41%	44%	47%
Emissivity (Room Side)	0.84	0.84	0.84	0.84	0.84	0.84
Glare Reduction	92%	92%	78%	78%	61%	61%
Selective InfraRed Reduction (SIRR)	94%	94%	83%	83%	70%	70%
InfraRed Energy Rejection (IRER)	87%	87%	73%	73%	58%	58%
Shading Coefficient	0.17	0.12	0.33	0.25	0.50	0.40
Solar Heat Gain Coeff. (G-Value)	0.15	0.10	0.29	0.22	0.43	0.35
U-Value Winter (IP)	1.04	0.48	1.04	0.48	1.04	0.48
U-Value Winter (SI)	5.91	2.73	5.91	2.73	5.91	2.73
Luminous Efficacy	0.41	0.58	0.60	0.72	0.70	0.80
Total Solar Energy Rejected (%)	85%	90%	71%	78%	57%	65%

** Performance results are calculated on 3 mm glass using NFRC methodology and LBNL Window 5.2 software, and are subject to variations in process conditions within industry standards and are only intended for estimating purposes.

About Avery Dennison

Avery Dennison (NYSE: AVY) is a global materials science and manufacturing company specializing in the design and manufacture of a wide variety of labeling and functional materials. Headquartered in Glendale, California, the company employs approximately 30,000 employees in more than 50 countries. Reported sales in 2017 were \$ 6.6 billion. Learn more at www.averydennison.com