

Avery Dennison
Graphics Solutions
Product Overview

Asia Pacific - ANZ
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Dual Reflective Exterior Films

Combining sustainable, cooling
performance, style & comfort

Avery Dennison® 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 is based on nanotechnology for improved performance and color stability while preserving the view outside.

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.

DR Grey X

DR Grey X reduces glare by up to 91% and combines daytime privacy with excellent interior visibility both day and night. 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.

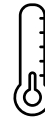
DR Grey XTRM

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

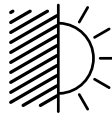
Features and Benefits



UV Block



Lower heat gain



Light control



Aesthetics

- 99+% UV block reduces fading and damage from the sun
- Excellent level of heat rejection saves costs and associated building cooling emissions
- 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
- Exceptional longevity due to XTRM technology combined with nanotechnology



This image has been simulated and is not actual product comparison

Optical and Solar Properties¹

| Item Number | DR Grey 10X | | DR Grey 20X | | DR Grey 35X | | DR Grey 10 XTRM | | DR Grey 20 XTRM | | DR Grey 35 XTRM | |
|--|----------------|---------|----------------|---------|----------------|---------|--------------------|--------|--------------------|--------|--------------------|--------|
| | R070W0X | R070W6X | R070W5X | R122W0X | R122W6X | R122W5X | Single | Double | Single | Double | Single | Double |
| Pane | Single | Double | Single | Double | Single | Double | Single | Double | Single | Double | Single | Double |
| Visible Light Transmitted | 8% | 7% | 19% | 18% | 36% | 32% | 7% | 7% | 20% | 18% | 36% | 32% |
| Visible Light Reflected (Interior) | 17% | 23% | 14% | 21% | 14% | 21% | 20% | 26% | 17% | 23% | 14% | 21% |
| Visible Light Reflected (Exterior) | 55% | 55% | 34% | 35% | 22% | 23% | 66% | 66% | 40% | 41% | 22% | 23% |
| Ultra Violet Block | 99% | 99% | 99% | 99% | 99% | 99% | 99.9% | 99.9% | 99.9% | 99.9% | 99.9% | 99.9% |
| Total Solar Energy Reflected | 58% | 58% | 38% | 38% | 25% | 27% | 66% | 66% | 44% | 44% | 25% | 27% |
| Total Solar Energy Transmitted | 7% | 6% | 17% | 15% | 31% | 26% | 7% | 6% | 17% | 15% | 31% | 26% |
| Total Solar Energy Absorbed | 35% | 36% | 45% | 47% | 44% | 47% | 27% | 28% | 39% | 41% | 44% | 47% |
| Emissivity (Room Side) | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Glare Reduction | 91% | 91% | 79% | 78% | 61% | 61% | 92% | 92% | 78% | 78% | 61% | 61% |
| Selective InfraRed Reduction (SIRR) ² | 93% | 93% | 82% | 82% | 71% | 71% | 94% | 94% | 83% | 83% | 70% | 70% |
| InfraRed Energy Rejection (IRER) ³ | 83% | 83% | 70% | 70% | 58% | 58% | 87% | 87% | 73% | 73% | 58% | 58% |
| Shading Coefficient | 0.20 | 0.14 | 0.36 | 0.27 | 0.50 | 0.40 | 0.17 | 0.12 | 0.33 | 0.25 | 0.50 | 0.40 |
| Solar Heat Gain Coeff. (G-Value) | 0.17 | 0.12 | 0.31 | 0.23 | 0.43 | 0.35 | 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 | 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 | 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 | 0.41 | 0.58 | 0.60 | 0.72 | 0.70 | 0.80 |
| Total Solar Energy Rejected (TSER) | 83% | 88% | 69% | 77% | 57% | 65% | 85% | 90% | 71% | 78% | 57% | 65% |




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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