

Grey/Silver/Grey 10

Performance Results

	1/8" (3mm)	1/4" (6mm)	1/8" + 1/8" (3mm+3mm)
Solar energy			
% Transmittance	12	10	9
% Absorptance	64	69	67
% Reflectance	25	21	24
Visible light			
% Transmittance	6	5	5
% Reflectance exterior	10	10	17
% Reflectance interior	10	10	10
Emissivity	.79	.79	.79
Winter U-Factor (BTU hr/ft ² °F)	1.01	1.06	.47
Shading coefficient	.35	.34	.53
Solar heat gain coefficient	.30	.30	.45
Solar selectivity index – luminous efficacy (VLT/SC)	.16	.14	.10
Light to solar heat gain factor (VLT/SHGC)	.19	.17	.11
% Ultraviolet light blocked @ 300 to 380 nm	>99	>99	>99
% Total solar energy rejected	70	70	55
% Summer solar heat gain reduction	65	63	40
% Glare reduction	94	94	94

Physical Properties Nominal

Gauge	2.0 mil (50 micron)
Tensile strength	30,000 lbs/in ² (2,110 kg/cm ²)



For information on the calculation method of listed results, as well as a glossary of terms, please refer to the final pages of this booklet.

Solar Energy Technical Definitions

Solar transmittance The percent of incident solar radiation that is transmitted through the window film/glass system. The lower the number, the less solar radiation transmitted.

Solar absorptance The percent of incident solar radiation that is absorbed by the window film/glass system. The lower the number, the less solar radiation absorbed.

Solar reflectance The percent of incident solar radiation that is reflected by the window film/glass system. The lower the number, the less solar radiation reflected.

Visible light transmittance The percent of total visible light that is transmitted through the window film/glass system. The lower the number, the less visible light transmitted.

Visible light reflectance The percent of total visible light that is reflected by the window film/glass system. The lower the number, the less visible light reflected.

Emissivity The measure of a surface's ability to absorb or reflect far-infrared radiation. The lower the emissivity rating, the better the insulating qualities of the window film/glass system.

Winter U-Factor The ability for heat to transfer through 1 square foot of window film for each 1°F difference in temperature. It is dependent upon the local climate or environment that the window is located in effects the level of heat transfer and the rate; in winter, heat transfers from the indoor air to outdoor air. The lower the U-value, the better insulating qualities of the window film/glass system.

Shading coefficient The ratio of solar heat passing through window film to the solar heat gain that occurs under the same conditions if the window were made of clear, unshaded double strength window glass. The lower the number, the better solar shading qualities of the window film/glass system.

Solar heat gain coefficient The ratio of the total solar heat passing through a given window product relative to the solar heat incident on the projected window surface at normal solar incidence (i.e. perpendicular to the glazing surface). The lower the coefficient number for a particular window film/glass system, the better it is able to reduce heat.

Solar selectivity index – luminous efficacy Ratio of visible light transmittance to the Shading Coefficient (VLT/SC). The higher this number is, the more efficient a film is at transmitting visible light without transmitting excessive heat. The more over 1.00, the greater a film's spectral selectivity.

Solar Energy Technical Definitions

Light to solar heat gain factor Ratio of visible light transmittance to Solar Heat Gain Coefficient (VLT/SHGC). The higher this number is, the more efficient a film is at transmitting visible light without transmitting excessive heat. The more over 1.25, the greater a film's spectral selectivity.

Ultraviolet light blocked The percent rejection of invisible, high energy wavelengths emitted by the sun which is the primary cause of fading and discoloration of furnishings and materials.

Total solar energy rejected The percent of total solar energy (heat) rejected by the window film/glass system. The higher the number, the more total solar energy (heat) is rejected.

Summer solar heat gain reduction The percent reduction in transmitted solar heat gain by the addition of window film compared to that of the same window without film.

Glare reduction The percent reduction of visible light by the addition of window film compared to that of the same window without film.

Performance Notes

1. Solar Gard® is a participating member of AIMCAL (the Association of Industrial Metallizers, Coaters and Laminators), IWFA, and EWFA. Performance results are calculated using NFRC methodology and LBNL Window 5.2 software, and are subject to variations within industry standards and only intended for estimating purposes.
2. These test data contain only results arrived at after employing specific test procedures and standards. The included data do not constitute a recommendation for, endorsement of, or certification of the product or material tested. These data are provided for informational purposes only and are not to be considered part of the basis representation or warranty, expressed or implied, including the implied warranties of merchantability or fitness for a particular purpose, that its products will conform to these test data. Solar Gard's limited warranty should be carefully reviewed prior to purchasing any Solar Gard product. Extrapolation of data from the sample or samples relation to the batch or lot from which data were obtained may not correlate and should be interpreted accordingly with caution. Solar Gard shall not be responsible for variations in quality, composition, appearance, performance, or other feature of similar subject matter produced by persons or under conditions over which Solar Gard has no control.
3. Performance results for summer solar heat gain reduction and glare reduction are calculated by comparing filmed glass to that of untreated glazing.



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International



ISO 9001
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Certification



NAESCO



National Association of
Energy Service Companies