

RESIDENTIAL & COMMERCIAL FILM SPECIFICATIONS on 3mm Clear Glass

Johnson Window Films' solar control flat glass films on clear glass reject 99% or more of harmful UV rays.

FILM TYPE	COLOR	VISIBLE LIGHT TRANSMISSION	SOLAR ENERGY REJECTION	VISIBLE LIGHT REFLECTANCE (EXT/INT)	SHADING COEFFICIENT	SOLAR HEAT GAIN COEFFICIENT	U-FACTOR NFRC	SOLAR ABSORPTION	GLARE REDUCTION	FADING REDUCTION	IRER 1 SRR REJECTION	HEAT LOAD REDUCTION RATING
TYPE DE FILM	COULEUR	TRANSMISSION DE LUMIERE VISIBLE	ENERGIE SOLAIRE REJETEE	LUMIERE REFLECTEE (Extérieur/Intérieur)	COEFFICIENT D'OMBRAGE	COEFFICIENT DE GAIN D'ENERGIE SOLAIRE	FACTEUR U NFRC	ABSORPTION SOLAIRE	REDUCTION DE L'ÉCLAIREMENT	VERBODEN VAN VERBLEKEN	IRER 1 SRR REJET	REDUCTION DE LA CHARGE DE CHALEUR
FOUNTYP	FARBE	TRANSMISSIONE DELLA LUCE VISIBLE	SOMMENERGIEAFWEISING	REFLECTIE VAN ZICHTBAAR LICHT (Extern/Intern)	SCHATTINGSKOEFFICIENT	COEFFICIENTE DE SOMBERADO	U-FACTOR NFRC	SOLARASORPTION	REDUZIONE DELLA BRAGLIA	VERBLEKINGS REDUCTIE	IRER 1 SRR REJECTIO	WARMTE REDUCTIE RATING
TIPO DI PELLICOLA	KLEUREN	TRASMISSIONE DELLA LUCE VISIBLE	ENERGIA SOLARE RIFLESSA	REFLECTIE VAN ZICHTBAAR LICHT (Extern/Intern)	SCHADUWFACTOR	COEFFICIENTE DI GUADAGNO SOLARE	U-FACTOR NFRC	ENERGIA SOLARE ASSORBITA	GEANSORBERDE ZONNE-ENERGIE	VERBLEKINGSREDUCTIE	IRER 1 SRR REJECTIO	WARMTE REDUCTIE RATING

CLEAR GLASS	clear	89%	14%	8%	8%	0.99	1.04	10%	0%	—	N/A	N/A	not rated
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SUN 70	natural	67%	50%	19%	17%	0.58	0.50	0.99	34%	25%	60%	66%	79%	★★★★☆
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NS 35	neutral	36%	50%	17%	11%	0.57	1.01	43%	60%	68%	49%	60%	★★★★☆
NS 25	neutral	24%	65%	33%	16%	0.40	0.95	44%	73%	75%	66%	77%	★★★★☆
NS 15	neutral	14%	72%	40%	11%	0.33	0.95	45%	84%	79%	70%	81%	★★★★☆
NS 07	neutral	8%	73%	39%	7%	0.31	0.95	48%	91%	81%	70%	80%	★★★★☆
NS 05	neutral	6%	69%	12%	12%	0.36	0.98	61%	94%	80%	68%	79%	★★★★☆

SV 50	neutral	50%	44%	16%	12%	0.65	1.05	40%	44%	63%	46%	58%	not rated
SV 35	neutral	38%	56%	24%	17%	0.50	1.02	46%	57%	70%	62%	77%	★★★★☆
SV 25	neutral	27%	67%	38%	25%	0.38	1.00	42%	70%	75%	70%	84%	★★★★☆
SV 10	neutral	8%	82%	58%	25%	0.21	1.01	41%	91%	83%	83%	95%	★★★★☆
SV 50 EXT*	neutral	45%	50%	19%	13%	0.57	1.04	44%	49%	66%	55%	69%	★★★★☆
SV 25 EXT*	neutral	29%	66%	36%	23%	0.39	1.04	39%	67%	74%	70%	82%	★★★★☆
SV 10 EXT*	neutral	9%	82%	56%	24%	0.21	1.04	36%	90%	83%	84%	94%	★★★★☆

*Designed for exterior (EXT) use only.

DN 60	neutral	63%	30%	11%	9%	0.81	1.07	29%	30%	56%	27%	36%	not rated
DN 50	neutral	49%	39%	14%	11%	0.70	1.07	39%	45%	62%	37%	49%	not rated
DN 35	neutral	37%	45%	18%	16%	0.63	1.06	43%	58%	67%	41%	53%	not rated
DN 20	neutral	22%	60%	26%	26%	0.46	1.06	52%	75%	74%	58%	74%	★★★★☆
DN 15	neutral	18%	62%	19%	16%	0.44	1.06	64%	80%	76%	60%	81%	★★★★☆
DN 35 EXT*	neutral	37%	49%	16%	18%	0.60	1.04	48%	59%	68%	41%	53%	not rated
DN 20 EXT*	neutral	22%	63%	26%	26%	0.43	1.04	54%	75%	75%	59%	74%	★★★★☆

*Designed for exterior (EXT) use only.

SB 30	bronze	33%	66%	27%	24%	0.39	0.34	.98	36%	63%	73%	72%	81%	★★★★☆
SB 20	bronze	20%	77%	37%	34%	0.26	0.23	.97	35%	77%	79%	83%	91%	★★★★☆

SS 35	silver	35%	65%	40%	39%	0.41	0.35	.96	35%	61%	72%	69%	80%	★★★★☆
SS 20	silver	19%	77%	57%	57%	0.26	0.23	.95	34%	79%	79%	79%	89%	★★★★☆
SS 35 EXT*	silver	35%	64%	40%	38%	0.41	0.36	1.04	30%	61%	72%	70%	80%	★★★★☆
SS 20 EXT*	silver	20%	75%	52%	49%	0.28	0.25	1.04	31%	78%	78%	79%	88%	★★★★☆

*Designed for exterior (EXT) use only.

MBL 35	blue silver	35%	50%	11%	18%	0.57	0.50	1.02	46%	61%	68%	49%	60%	★★★★☆
MBL 20	blue silver	19%	68%	21%	42%	0.37	0.32	.96	50%	78%	77%	72%	58%	★★★★☆
MGN 35	green silver	35%	48%	9%	15%	0.59	0.52	1.03	48%	61%	68%	45%	56%	not rated
MGN 20	green silver	19%	68%	18%	41%	0.37	0.32	.96	53%	79%	77%	70%	81%	★★★★☆
MGD 35	gold silver	32%	65%	35%	39%	0.40	0.35	.97	38%	64%	73%	69%	80%	★★★★☆
MGD 20	gold silver	17%	77%	50%	57%	0.26	0.23	.95	38%	81%	80%	80%	89%	★★★★☆

UV CLR	clear	91%	12%	8%	8%	1.01	0.88	1.10	6%	0%	45%	N/A	N/A	not rated
WHTFST*	white	75%	24%	18%	19%	0.88	0.76	1.10	11%	16%	49%	N/A	N/A	not rated
WHTOUT	white	DUE TO LIGHT SCATTERING - NFRC MEASUREMENTS ARE NOT MEANINGFUL												
BLKOUT	black	0%	70%	6%	6%	0.36	0.30	1.10	93%	100%	82%	N/A	N/A	★★★★☆
SS20AB	silver	19%	77%	57%	57%	0.26	0.23	.95	33%	78%	79%	N/A	N/A	★★★★☆
SS20AB EXT	silver	20%	75%	52%	49%	0.28	0.25	1.04	31%	77%	78%	N/A	N/A	★★★★☆
PRT2CLR	clear	89%	15%	10%	10%	0.98	0.85	1.07	9%	0%	N/A	N/A	N/A	not rated
PRT2WOUT	white	14%	71%	60%	79%	0.34	0.29	1.10	43%	84%	N/A	N/A	N/A	not rated

*White Frost does not have a recommendation from the Skin Cancer Foundation.

Solar specifications represent film mounted to 3mm (1/8") clear glass. Tests, equipment and methods according to ASTM, ANSI and NFRC standards. Calculations performed using Lawrence Berkeley Lab's Optics/Window 6. Values expressed hereof are typical and provided for comparative purposes only.

On clear glass Johnson Window Films' solar control flat glass films reject 99% or more of harmful UV rays.

Posés sur un verre transparent, les films de contrôle solaire pour vitrages Johnson Window Films rejettent au moins 99% des rayons UV nocifs.

Johnson Window Films' Sonnenschutzfolien für Gebäude weisen auf Klärglas mind. 99% der schädlichen UV-Strahlung ab.

En vidrio transparente las láminas para vidrio plano de Johnson Window Films rechazan el 99% o más de los dañinos rayos UV.

Installate su un vetro trasparente, le pellicole di controllo solare per edilizia Johnson Window Films respingono almeno il 99% dei dannosi raggi UV.

Alle zuwendende vlakglas folies van Johnson Window Films houden op heldere glas 99% of meer van de schadelijke UV-stralen tegen.

All Johnson Window Films are protected by CST™ scratch resistant hardcoat.

Tous les films de Johnson Window Films sont protégés par un revêtement durable et résistant aux rayures CST™.

Alle Folien von Johnson Window Films werden durch eine CST™ kratzbeständige Schicht geschützt.

Todas las láminas de Johnson Window Films están protegidas con una capa CST™ resistente a rayones.

Tutte le pellicole della Johnson Window Films sono protette da un rivestimento durevole e resistente ai graffi CST™.

Alle folies van Johnson Window Films worden beschermd door een CST™ kratzbestendige toplaag.

Only the user is aware of the conditions in which the product will be used. It is the user's responsibility to determine if the product is suitable for use.

Seulement l'utilisateur est au courant des conditions dans lesquelles sera utilisé le produit. Il est de sa responsabilité de déterminer si le produit est approprié pour utilisation.

Nur der Benutzer kennt die Bedingungen, unter denen das Produkt verwendet wird. Es liegt in der Verantwortung des Benutzers, zu bestimmen.

Solo el usuario conoce las condiciones en que se utilizará el producto. Es responsabilidad del usuario determinar si el producto es adecuado para su uso.

Solo l'utente è a conoscenza delle condizioni in cui verrà utilizzato il prodotto. È responsabilità dell'utente determinare se il prodotto è idoneo all'uso.

Alleen de gebruiker is op de hoogte van de omstandigheden waarin het product zal worden gebruikt. Het is de verantwoordelijkheid van de gebruiker om te bepalen of het product geschikt is voor gebruik.



RESIDENTIAL & COMMERCIAL FILMS SPECIFICATIONS

TERMS & DEFINITIONS

VISIBLE LIGHT TRANSMISSION

Visible Light Transmission is the percentage of solar visible light (daylight) that passes through a glazing system.

SOLAR ENERGY REJECTED

Solar Energy Rejected is the percentage of total solar energy (heat) that is rejected away from a glazing system. This equals solar heat reflectance plus the amount of solar heat absorbed that is then re-radiated outwards.

EXTERIOR REFLECTANCE

Exterior Reflectance is the percentage of reflectivity (mirror effect) that occurs on the outside of a glazing system. The higher the value, the more reflective the exterior, providing a more mirror-like appearance.

INTERIOR REFLECTANCE

Interior Reflectance is the percentage of reflectivity (mirror effect) that occurs on the inside of a glazing system. The higher the value, the more reflective the interior, providing a more mirror-like appearance.

SHADING COEFFICIENT

Shading Coefficient is the ratio of solar heat gain passing through a glazing system to the solar heat gain that occurs under the same conditions if the window were made of clear, un-shaded double strength window glass (lower SC equals better solar shading performance).

SOLAR HEAT GAIN COEFFICIENT

Solar Heat Gain Coefficient is the percentage of total solar heat that enters a glazing system. This includes heat directly transmitted as well as heat that is absorbed by the glass and then transmitted inwards (lower SHGC means less heat transfer from the exterior to the interior).

U-FACTOR NFRC

U-Factor (or U-Value) is a measurement of solar heat transfer due to outdoor/indoor temperature differences. This represents the amount of heat passing through one square foot of glass in one hour for each 1 degree Fahrenheit temperature difference between the indoor and outdoor. The lower the U-Factor the less solar heat passes through a window of interest for keeping heat inside a building in colder climates.

SOLAR ABSORPTION

Solar Absorption is the percentage of total solar heat that is neither transmitted through nor rejected away from a glazing system (i.e. the percentage of total solar heat absorbed by the glazing system).

GLARE REDUCTION

The ratio of the difference in visible transmission of the glass before and after installing film to the visible transmission of the glass with no film. It is expressed as a percentage and is determined by the respective visible transmission values of the glass with and without film.

FADE REDUCTION

Combined fading percentages are determined by applying rejection percentages on each cause of fading to determine the overall reduction in fade that a specific product can return.
Using the IWFA fading explanation found at www.iwfa.com

INFRARED ENERGY REJECTION (IRER)

The measurement of heat experienced from solar infrared radiation (780 - 2,500 nm), which includes both re-radiated and absorbed energy.

SELECTIVE IR REJECTION (SIRR)

Solar infrared radiation (780 - 2,500 nm) not directly transmitted through the glass.

HEAT LOAD REDUCTION RATING

Heat load reduction rating is based on the Solar Heat Gain Coefficient to determine which products offer the most in energy savings.



The Skin Cancer Foundation recommends Johnson Window Films products as effective UV protectants.



Johnson Window Films

Manufactured by Johnson Laminating & Coating, Inc.
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www.johnsonwindowfilms.com