



# AUTOMOTIVE FILM SPECIFICATIONS on 1/4" Clear Glass



All of Johnson Automotive Window Films reject 99% or more of harmful UV rays.

FILM TYPE	VISIBLE LIGHT TRANSMISSION	SOLAR ENERGY REJECTION	VISIBLE LIGHT REFLECTANCE	SHADING COEFFICIENT	SOLAR HEAT GAIN COEFFICIENT	GLARE REDUCTION
CLEAR GLASS	88%	18%	8%	0.94	0.82	0%

**InsulatIR®**  
SUPERIOR INFRARED REJECTION

IR 85	82%	31%	9%	0.78	0.69	7%
IR 80	76%	42%	8%	0.67	0.58	14%
IR 45	43%	46%	6%	0.61	0.54	53%
IR 35	33%	50%	6%	0.58	0.50	64%
IR 20	17%	54%	5%	0.52	0.46	81%

IR REJECTION	
56%	64%
84%	84%
67%	73%
67%	73%
68%	74%

NIR: 780-2500nm range  
900-1000nm range

**RENEGADE®**  
UNIVERSAL BLACK NON-REFLECTIVE FILMS

RN 50	51%	31%	7%	0.80	0.69	42%
RN 35	35%	35%	6%	0.76	0.65	60%
RN 20	21%	39%	5%	0.71	0.61	76%
RN 05	6%	43%	5%	0.66	0.56	93%

**MARATHON®**  
UNIVERSAL BLACK HIGH-PERFORMANCE FILMS

MN 45	46%	42%	8%	0.67	0.58	48%
MN 35	37%	43%	7%	0.66	0.57	58%
MN 30	30%	45%	6%	0.64	0.55	66%
MN 20	20%	49%	5%	0.58	0.50	77%
MN 15	12%	58%	5%	0.49	0.42	86%
MN 05	5%	60%	6%	0.47	0.40	94%

**RAGE®**  
DEFY THE SUN

RAGE 50	51%	30%	7%	0.80	0.70	42%
RAGE 43	42%	33%	6%	0.77	0.67	52%
RAGE 35	35%	35%	5%	0.75	0.65	60%
RAGE 20	20%	40%	5%	0.70	0.60	77%
RAGE 15	15%	41%	5%	0.68	0.59	83%
RAGE 05	6%	43%	5%	0.68	0.57	93%

**Ray Guard®**  
NON-REFLECTIVE WINDOW FILMS

CH 50	49%	32%	6%	0.79	0.68	44%
CH 35	35%	37%	6%	0.73	0.63	60%
CH 20	21%	40%	5%	0.69	0.60	76%
CH 15	15%	43%	5%	0.66	0.57	83%
CH 05	7%	45%	5%	0.64	0.55	92%

**Silhouette®**  
HIGH-PERFORMANCE WINDOW FILMS

SP 45	47%	43%	13%	0.66	0.57	47%
SP 40	40%	44%	8%	0.64	0.56	55%
SP 35	34%	52%	10%	0.56	0.48	61%
SP 25	25%	53%	8%	0.55	0.47	72%
SP 20	22%	55%	8%	0.53	0.45	75%
SP 15	16%	55%	6%	0.52	0.45	82%
SP 05	6%	58%	7%	0.49	0.42	93%



The Skin Cancer Foundation recommends this product as an effective UV protectant.

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

Laws governing automotive window tinting are strictly enforced. Please stay within legal boundaries.

Solar specifications represent film mounted to 1/4" (6mm) 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.



**Johnson® Window Films**

Manufactured by Johnson Laminating & Coating, Inc.  
Carson, California USA

[www.johnsonwindowfilms.com](http://www.johnsonwindowfilms.com)



# RESIDENTIAL & COMMERCIAL FILM SPECIFICATIONS on 1/8" 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		SHADING COEFFICIENT	SOLAR HEAT GAIN COEFFICIENT	U-FACTOR NFRC	SOLAR ABSORPTION	GLARE REDUCTION
				Exterior	Interior					
CLEAR GLASS	clear	89%	14%	8%	8%	0.99	0.86	1.04	10%	0%

**SUNLIGHT**  
SPECTRALLY-SELECT CLEAR SOLAR PROTECTION

SUN 70	natural	67%	50%	19%	17%	0.58	0.50	1.01	34%	25%
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IR REJECTION 88%  
NIR: 780-2500

**Palisade**  
PREMIUM CERAMIC SOLAR PROTECTION

PD 60	natural	59%	40%	11%	9%	0.69	0.60	1.09	39%	34%
PD 50	natural	50%	48%	13%	11%	0.60	0.52	1.08	44%	44%
PD 40	natural	42%	54%	16%	14%	0.52	0.46	1.07	48%	53%

**NightScape**  
DUAL REFLECTIVE, NON-SPUTTERED FILMS

NS 35	neutral	36%	50%	17%	11%	0.57	0.50	1.02	43%	60%
NS 25	neutral	24%	65%	33%	16%	0.40	0.35	.96	44%	73%
NS 15	neutral	14%	72%	40%	11%	0.33	0.28	.95	45%	84%
NS 07	neutral	8%	73%	39%	7%	0.31	0.27	.97	48%	91%
NS 05	neutral	6%	69%	12%	12%	0.36	0.31	.98	61%	94%

**ScenicView**  
DUAL REFLECTIVE, NON-FADING FILMS

SV 50	neutral	50%	44%	16%	12%	0.65	0.56	1.07	40%	44%
SV 25	neutral	27%	67%	38%	25%	0.38	0.33	1.01	42%	70%
SV 10	neutral	8%	82%	58%	25%	0.21	0.18	1.03	41%	91%
SV 50 EXT *	neutral	45%	50%	19%	13%	0.57	0.50	1.04	44%	49%
SV 25 EXT *	neutral	29%	66%	36%	23%	0.39	0.34	1.04	39%	67%
SV 10 EXT *	neutral	9%	82%	56%	24%	0.21	0.18	1.04	36%	90%

\* These films are designed for exterior (EXT) use only.

**DaylightNatural**  
NEUTRAL, NON-FADING SPUTTERED FILMS

DN 60	neutral	63%	30%	11%	9%	0.81	0.70	1.10	29%	29%
DN 50	neutral	49%	39%	14%	11%	0.70	0.61	1.10	39%	45%
DN 35	neutral	37%	45%	18%	16%	0.63	0.55	1.10	43%	58%
DN 20	neutral	22%	60%	26%	26%	0.46	0.40	1.08	52%	75%
DN 15	neutral	18%	62%	19%	16%	0.44	0.38	1.08	64%	80%
DN 35 EXT *	neutral	37%	49%	16%	18%	0.60	0.51	1.04	48%	59%
DN 20 EXT *	neutral	22%	63%	26%	26%	0.43	0.37	1.04	54%	75%

\* These films are designed for exterior (EXT) use only.

**Sunset Bronze**  
COPPER, NON-FADING SPUTTERED FILMS

SB 50	bronze	54%	47%	16%	14%	0.60	0.53	1.00	30%	39%
SB 30	bronze	33%	66%	27%	24%	0.39	0.34	.98	36%	63%
SB 20	bronze	20%	77%	37%	34%	0.26	0.23	.97	35%	77%

**Solar Silver**  
SILVER, NON-FADING METALLIZED FILMS

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

\* These films are designed for exterior (EXT) use only.

**Specialty Series**  
COLOR METALLIZED SOLAR CONTROL FILMS

MBL 35	blue silver	35%	50%	11%	18%	0.57	0.50	1.04	46%	61%
MBL 20	blue silver	19%	68%	21%	42%	0.37	0.32	.96	50%	78%
MGN 35	green silver	35%	48%	9%	15%	0.59	0.52	1.05	48%	61%
MGN 20	green silver	19%	68%	18%	41%	0.37	0.32	.96	53%	79%
MGD 35	gold silver	32%	65%	35%	39%	0.40	0.35	.97	38%	64%
MGD 20	gold silver	17%	77%	50%	57%	0.26	0.23	.95	38%	81%



The Skin Cancer Foundation recommends this product as an effective UV protectant.

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

**Solar specifications represent film mounted to 1/8" (3mm) 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. Johnson Window Films film specifications can be verified through the International Glazing Database (IGDB).

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