

Solar Control Window Film

	% Total Solar Transmittance	% Total Solar Reflectance	% Total Solar Absorptance	% Visible Light Transmittance	% Visible Reflectance (exterior)	% Visible Reflectance (interior)	Winter U-value	Shading Coefficient	% Ultraviolet Ray Protection (wavelengths 300-380nm)	Emissivity	Solar Heat Gain Coefficient	% Total Solar Energy Rejected	Light-to-Solar Heat Gain Ratio (LSG)*	% Summer Solar Heat Gain Reduction*	% Winter Heat Loss Reduction*	% Glare Reduction*	% IR Energy Rejection (IPER)**	% Selective IR Rejection (SIRR)***	
Clear Glass	83	8	9	90	8	8	1.04	0.99	29	0.84	0.86	14	1.05	0	0	0	17%	21%	
Reflective Series	Reflective films feature reflectance on both interiors and exteriors for excellent reduction in summer cooling costs and heat retention in winter. Providing a high level of glare and heat control, they are scratch-resistant, shield 99% of ultraviolet rays, and provide excellent heat rejection.																		
RN07G SR CDF (One-Way Mirror)	7	57	36	6	61	14	0.88	0.19	>99	0.54	0.16	84	0.38	81	15	93	82	91	
R15B SR CDF (Bronze)	8	39	53	8	20	62	0.89	0.25	>99	0.62	0.22	78	0.36	74	14	91	83	92	
R15BL SR PS (Blue)	9	42	49	9	27	62	0.93	0.25	>99	0.63	0.22	78	0.41	74	11	90	82	91	
R15G SR CDF (Gray)	7	36	57	6	13	62	0.92	0.26	>99	0.62	0.23	77	0.26	73	12	93	82	91	
R15GO SR PS (Gold)	10	53	37	13	52	63	0.94	0.23	>99	0.66	0.20	80	0.65	77	10	86	82	91	
R20 SR CDF (Silver)	11	57	32	15	62	63	0.90	0.22	>99	0.58	0.20	80	0.75	77	13	83	83	91	
R35 SR CDF (Silver)	21	45	34	28	47	46	0.91	0.35	>99	0.61	0.30	70	0.93	65	13	69	73	83	
R50 SR CDF (Silver)	39	27	34	49	26	25	0.95	0.55	>99	0.67	0.47	53	1.04	45	9	46	61	72	
Dual-Reflective Series	Dual-Reflective films are highly reflective on the exterior; lower on the interior, which helps provide clear day and night views. Traditionally specified on commercial buildings, Dual-Reflective films are also popular for sunbelt residential applications. They are scratch-resistant, shield 99% of ultraviolet rays, and provide excellent heat rejection.																		
DR05 SR CDF (Warm Gray)	7	57	36	6	63	17	0.95	0.19	>99	0.67	0.17	83	0.35	80	9	93	83	92	
DR15 SR CDF (Warm Gray)	16	40	44	15	41	13	0.96	0.32	>99	0.69	0.29	71	0.52	66	8	83	70	81	
DRN25 SR CDF (Warm Gray)	21	33	46	21	33	12	0.97	0.40	>99	0.71	0.35	65	0.60	59	7	77	64	76	
DRN35 SR CDF (Warm Gray)	32	22	46	34	21	11	1.00	0.53	>99	0.76	0.46	54	0.74	47	4	62	55	67	
Deluxe Series	Deluxe films are specified for commercial buildings where high levels of heat rejection and glare reduction are needed. Deluxe films are ideal for privacy applications and exterior aesthetics. They are scratch-resistant, reduce 99% of ultraviolet rays, and come in gray and bronze.																		
DL05G SR CDF (Gray)	14	26	60	7	11	11	0.95	0.35	>99	0.68	0.31	69	0.23	64	9	92	69	80	
DL15B SR CDF (Bronze)	27	14	59	14	8	8	0.97	0.51	>99	0.72	0.44	56	0.32	49	7	84	50	62	
DL15G SR CDF (Gray)	27	14	59	16	9	8	0.97	0.51	>99	0.71	0.44	56	0.36	49	7	82	53	65	
DL30GN SR PS (Green)	32	18	50	33	14	14	0.99	0.53	>99	0.75	0.48	52	0.69	44	5	63	52	64	
Neutral Series	Neutral films reduce glare, provide moderate heat rejection, and are specified where a soft, neutral appearance is desired. These films are made with sputtered technology, creating a film that allows for very uniform visible light transmission. Neutral films are scratch-resistant and shield 99% of ultraviolet rays.																		
N1020 SR CDF (Neutral)	21	27	52	23	30	27	1.03	0.42	>99	0.82	0.37	63	0.62	57	1	74	64	81	
N1040 SR CDF (Neutral)	34	17	49	37	19	16	1.05	0.56	>99	0.85	0.49	51	0.76	43	-1	59	52	68	
N1050 SR CDF (Neutral)	46	12	42	50	14	11	1.07	0.68	>99	0.89	0.59	41	0.85	31	-3	44	44	58	
N1065 SR CDF (Neutral)	64	9	27	69	10	8	1.07	0.83	>99	0.90	0.72	28	0.96	16	-3	23	28	37	
N1020B SR CDF (Bronze)	13	49	38	21	37	35	0.90	0.27	>99	0.59	0.23	77	0.91	73	13	77	84	93	
N1035B SR CDF (Bronze)	26	37	37	37	26	23	0.92	0.41	>99	0.61	0.36	64	1.03	58	12	59	74	82	
Exterior Series	Exterior films are applied to the exterior face of the glazing and provide excellent heat rejection performance.																		
NHE20 ER HPR (Neutral)	21	29	50	23	30	26	1.04	0.42	>99	0.86	0.36	64	0.64	58	0	74	65	80	
NHE35 ER HPR (Neutral)	34	18	48	38	19	16	1.04	0.56	>99	0.86	0.49	51	0.78	43	0	58	53	68	
RHE20 ER HPR (Silver)	12	63	25	16	62	59	1.04	0.22	>99	0.71	0.20	80	0.80	77	0	82	85	91	
RHE35 ER HPR (Silver)	21	50	29	29	48	45	1.04	0.35	>99	0.72	0.30	70	0.97	65	0	68	76	84	
RHE50 ER HPR (Silver)	38	30	32	49	26	24	1.04	0.55	>99	0.79	0.48	52	1.02	44	0	46	60	70	
THE 80 BL ER (Clear)	41	6	53	78	9	9	1.04	0.66	>99	0.89	0.57	43	1.37	34	0	13	60	85	
SHE CL ER PS4 (Clear)	82	8	10	89	9	9	1.04	0.97	>99	0.90	0.85	15	1.05	1	0	1	16	20	
SHE CL ER PS7 (Clear)	81	8	11	89	9	9	1.04	0.97	>99	0.90	0.84	16	1.06	2	0	1	17	20	
Specialty Series	AU-85UV SR HPR is an ideal solution to help protect interior furnishings from sun damage. It provides a high level of protection against harmful UV rays without altering glass aesthetics. AIR-80BL SR HPR is used where a combination of extremely low visible reflectance, high light transmission, and substantial reduction in solar infrared transmission is needed.																		
AIR80 BL SR HPR (Clear)	43	7	50	79	9	9	1.07	0.67	>99	0.89	0.58	42	1.36	33	-3	12	58	83	
AIR90 CL SR HPR (Clear)	63	7	30	85	9	9	1.07	0.83	>99	0.89	0.72	28	1.18	16	-3	6	38	52	
AU85 UV SR HPR (UVCL-Clear)	82	9	9	89	10	10	1.07	0.97	>99	0.90	0.84	16	1.06	2	-3	1	15	18	
Low-E Series	Low-E (low emissivity) films provide an insulating barrier to windows that improves year-round energy efficiency by helping retain heat in winter and helping keep the heat out in summer. Low Emissivity films are perfect for residential and commercial applications where energy conservation is of primary importance.																		
LE35 SR CDF	17	45	38	26	39	41	0.74	0.29	>99	0.31	0.25	75	1.04	71	29	71	81	89	
LE50 SR CDF	37	30	33	51	22	24	0.81	0.51	>99	0.41	0.45	55	1.13	48	22	43	64	72	
Ceramic Series	Ceramic films feature neutral color and low reflectivity for minimal change to exterior appearance. Ceramic films improve the view from inside, especially at night. In daylight the film rejects 99% UV rays for heat, glare and fade reduction. The corrosion-resistant Ceramic films are ideal for coastal applications protecting against salt deposits and sea air.																		
Ceramic 35 SR PS (Neutral)	26	12	62	36	10	10	1.05	0.53	>99	0.88	0.45	55	0.80	48	-1	60	60	81	
Ceramic 45 SR PS (Neutral)	39	9	52	49	9	9	1.06	0.64	>99	0.90	0.55	45	0.89	36	-2	46	50	68	
Ceramic 55 SR PS (Neutral)	46	11	43	57	9	11	1.05	0.69	>99	0.88	0.59	41	0.97	31	-1	37	46	61	
Ceramic 65 SR PS (Neutral)	56	9	35	66	9	9	1.06	0.78	>99	0.89	0.67	33	0.99	22	-2	27	37	50	