



# SUNGUARD

WINDOW FILMS

# SPECIFICATION.

WINDOW FILM TYPE: EMI SHIELDING

### EMI SHIELDING.

Sunguard EMI Window Film range are optically clear and virtually undetectable, with advanced nano-ceramic infrared reducing technology. Helps shield against electromagnetic interference (EMI), protecting sensitive electronic devices from damage, safeguarding privacy, and free from electronic eavesdropping. Rejects up to 54% of solar energy, helping reduce heat build-up, and energy costs, increasing occupant comfort. Shields 99% of UV radiation, helping to reduce fading of valuables, fabrics and furnishings. High level of visible light transmittance. Constructed with a durable scratch resistant coating for easy cleaning.

### PHYSICAL PROPERTIES NOMINAL.

Nom. Thickness: 50 microns  
Tensile strength: 2,100 kg/cm<sup>2</sup>  
Melting point: 260 – 265 °C

\*Infrared rejection = 1 - average unweighted transmittance using ASTM E 903.

\*\*Tdw-ISO is the percentage of transmitted light that causes fading. A lower number means more protection against fading.

All window films meet classification B-S1,d0 (tests acc to SBI EN13823) and class M1 (tests acc.to NF P 92-501).

SOLAR ENERGY REJECTED. UP TO:	GLARE REDUCTION. UP TO:	UV REJECTED. UP TO
<b>54%</b>	<b>20%</b>	<b>99%</b>

### PERFORMANCE PARAMETERS FOR DIFFERENT WINDOW TYPES

	4MM SINGLE CLEAR		4/12/4MM DOUBLE CLEAR	
	NO FILM	WITH FILM	NO FILM	WITH FILM
<b>SOLAR ENERGY.</b>				
Solar heat gain coefficient (G-value)	.87	.46	.77	.52
Solar heat gain reduction %	0	47	0	33
Total solar energy rejected %	13	54	23	48
Infrared rejection @780 - 2500 nm %*	17	81	17	72
Light to solar heat gain ratio (VLT/SHGC)	1.04	1.56	1.05	1.27
Transmittance %	85	39	73	35
Absorptance %	7	31	14	36
Reflectance %	8	30	13	29
<b>VISIBLE LIGHT.</b>				
Transmittance %	90	72	82	65
Reflectance exterior %	8	9	15	15
Reflectance interior %	8	9	15	13
Glare reduction %	0	20	0	20
<b>THERMAL ENERGY.</b>				
Emissivity	.84	.77	.84	.77
Winter U-factor (W/m <sup>2</sup> °C)	5.8	5.6	2.8	2.8
Winter heat loss reduction %	0	3	0	2
<b>ULTRAVIOLET LIGHT.</b>				
Blocked @300 to 380 nm %	36	>99	51	>99
<b>FADE CONTROL.</b>				
Fade control UV Tdw-ISO @300 - 700 nm %**	85	47	74	43
Fade reduction %	0	45	0	42

### FILM PERFORMANCE. (4MM SINGLE CLEAR)

