



# SUNGUARD

WINDOW FILMS

## SPECIFICATION.

### WINDOW FILM TYPE: DUAL REFLECTIVE - SILVER & GREY 20 - HIGH

#### SILVER REFLECTIVE.

Sunguard Dual-Reflective Window Film range consists of solar control and privacy window films with a reflective exterior, and a grey neutral interior appearance.

Provides our highest level of daytime privacy with optical transparency. Used where both high levels of heat and glare reduction are essential. Rejects up to 81% of solar energy, helping reduce heat build-up, and energy costs, increasing occupant comfort. Rejects up to 87% of glare. Reduction of hot spots helps increase HVAC efficiency and lower energy costs. Shields 99% of UV radiation, helping to reduce fading of valuables, fabrics and furnishings. 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.

\*\*T<sub>dw</sub>-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:  
**81%**

GLARE  
REDUCTION. UP TO:  
**87%**

UV  
REJECTED. UP TO:  
**99%**

#### 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	.19	.77	.32
Solar heat gain reduction %	0	78	0	58
Total solar energy rejected %	13	81	23	68
Infrared rejection @780 - 2500 nm %*	17	85	17	74
Light to solar heat gain ratio (VLT/SHGC)	1.04	.63	1.05	.35
Transmittance %	85	9	73	8
Absorptance %	7	44	14	49
Reflectance %	8	47	13	43
<b>VISIBLE LIGHT.</b>				
Transmittance %	90	20	82	20
Reflectance exterior %	8	45	15	46
Reflectance interior %	8	23	15	23
Glare reduction %	0	87	0	86
<b>THERMAL ENERGY.</b>				
Emissivity	.84	.75	.84	.75
Winter U-factor (W/m <sup>2</sup> °C)	5.8	5.5	2.8	2.8
Winter heat loss reduction %	0	4	0	2
<b>ULTRAVIOLET LIGHT.</b>				
Blocked @300 to 380 nm %	36	>99	51	>99
<b>FADE CONTROL.</b>				
Fade control UV T <sub>dw</sub> -ISO @300 - 700 nm %**	85	10	74	9
Fade reduction %	0	88	0	88

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

