

PLASKOLITE

OPTICAL-SOLAR ENERGY-THERMAL PROPERTIES

TUFFAK® SHEET AND HYGARD® LAMINATE PRODUCTS

Thickness inch	Light Transmission, Typical %	Shading Coefficient	Solar Heat Gain Coefficient	Total Solar %	Solar Absorption %	Solar Reflectance %	U-Factor Btu/h-ft ² ·°F	
							Summer	Winter
0.118	86	0.99	0.87	83	11	6	0.91	1.00
0.177	85	0.99	0.86	82	12	6	0.88	0.96
0.236	84	0.97	0.85	80	14	6	0.85	0.92
0.370	80	0.95	0.83	77	17	6	0.78	0.85
0.480	77	0.93	0.81	75	16	9	0.73	0.79
Tint	70	0.86	0.75	66	27	7	*	*
Tint	50	0.77	0.67	55	38	7	*	*
Tint	18	0.62	0.54	34	60	6	*	*
BR750	89	0.95	0.83	75	19	6	0.64	0.68
BR1000	66	0.88	0.76	65	30	5	0.56	0.60
BR1250	72	0.91	0.79	68	27	5	0.51	0.54
CG375	82	0.94	0.82	76	18	6	0.77	0.84
CG500	79	0.93	0.81	73	21	6	0.72	0.78
CG750	72	0.90	0.79	69	25	6	0.63	0.68
**WG 0.75	71	0.89	0.78	69	23	8	0.62	0.67
**WG 1.0	64	0.86	0.75	64	29	7	0.56	0.60
**WG 1.25	59	0.85	0.74	61	32	7	0.50	0.53
**WG 2.0	48	0.82	0.71	55	39	6	0.39	0.41

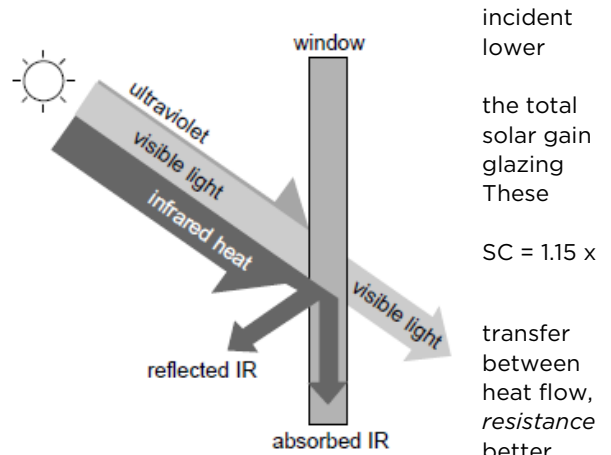
*Thickness dependent

**TUFFAK® WG products have limited weathering properties, for more information contact your Plaskolite representative

GLAZING TECHNOLOGY

Examine all glazing properties when choosing a product. Glazing selection should be a careful process of evaluating and weighing tradeoffs. A summary of the critical characteristics of TUFFAK® sheet are presented in the associated table. A brief explanation of these properties follows:

- Visible Transmission, or daylight transmission, is the percentage of visible light striking the glazing that will pass through. Visible transmittance values account for the eyes' relative sensitivity to different wavelengths of light.
- Solar Heat Gain Coefficient (SHGC) and Shading Coefficient (SC) are indicators of total solar heat gain. SHGC is the ratio of total transmitted solar heat to solar energy, typically ranging from 0.9 to 0.1, where values indicate lower solar gain. These indices are dimensionless numbers between 0 and 1 that indicate heat transfer of the sun's radiation. **SC** is the ratio of a particular glazing as compared to a benchmark (1/8" or 3mm clear glass) under identical conditions. properties are widely used in cooling load calculations. To convert between these properties, SHGC.
- U-Value ($W/m^2 \cdot K$, $Btu/h \cdot ft^2 \cdot ^\circ F$) is a measure of heat through the glazing due to a temperature difference the indoors and outdoors. U-Value is the rate of the therefore *lower* numbers are better. R-Value is the to heat flow ($R=1/U$), with *higher* numbers indicating insulation. U-values, which account for the effect of the frame and mullions. This property is important for reducing heating load in cold climates, for reducing cooling load in extremely hot climates, in any application where comfort near the windows is desired, and where condensation on the window must be avoided.



Source: Window 7: NFRC 100-200 Environmental Conditions

DISCLAIMER:

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.