

Popular Opacifying Options for 2nd, 3rd, or 4th Glass Surfaces of Spandrels

MONOLITHIC			
GLASS SURFACE (When Viewed From Exterior)	Versalux Tinted	Versalux R	Versalux T
SECOND (2) Uncoated Surface Reflective Coated Surface	CF or SC N/A	CF, SC or PF CF, SC or PF	CF, SC or PF SC

INSULATED GLASS (Interior Lite Clear)			
GLASS SURFACE (When Viewed From Exterior)	EXTERIOR LITE		
	Versalux Tinted	Versalux R	Versalux T
SECOND (2) Uncoated Surface Reflective Coated Surface	CF or SC* N/A	CF or SC* CF or SC*	CF or SC* SC*
THIRD (3) Clear Glass	CF or SC*	CF or SC*	CF or SC*
FOURTH (4) Clear Glass	CF or SC	CF, SC or PF	CF, SC or PF

CF = Ceramic Frit SC = Water-Based Silicone Coating PF = Polyester Film

* Edge deletion of silicone coating required, contact manufacturer for additional information.

Footnotes Apply to Tinted and Reflective Versalux® Monolithic, Insulated with Clear and Insulated with Low-E

∇ Federal Technology alert DOE/EE-0173 Spectrally Selective glazings dated August 1998 states: Light to Solar Gain Ratio (LSG) is Visible Light Transmittance ÷ Solar Heat Gain Coefficient. (Spectrally Selective Glazing has a high Tv and low SHGC. The ratio of these parameters, or the light to solar gain ratio LSG=Tv/SHGC, is typically between 1.25 - 2.0". This FTA defines spectrally selective glazings as those that sharply cut off or reduce solar transmission beyond the visible range with a total solar transmission of no less than 0.40 in the visible range.)

@ Air Space Filling: Light Bands Air Filled – Dark Bands Argon Filled.

- † It is recommended these products be heat treated (heat strengthened or fully tempered) to withstand solar induced thermal stresses.
- ** These products may require heat treating to withstand solar induced thermal stresses when the reflective coating is glazed towards the building's interior. (See pages 11-15).
- a The Winter Nighttime U/R Values (K Values) are based on an outdoor temperature of 0°F (-17.8°C), an indoor temperature of 70°F (21°C), 15 mph (24km/h) outdoor air speed and no sun. The Summer Daytime U/R Values (K Value) are based on an outdoor temperature of 89°F (32°C), an indoor temperature of 75°F (24°C), a 7.5 mph (12km/h) outdoor air speed and a solar intensity of 248 BTU/Hr. per Ft² (790 w/m²).
- b Shading Coefficient is the ratio of solar heat gain through a glass or glass and shading combination compared to that of unshaded 1/8" (3.0mm) clear float glass at normal incidence. The shading coefficient of 1/8" (3.0mm) clear float glass is 1.00.
- c Solar Heat Gain Coefficient is the solar heat gain through glass relative to the incident solar radiation. SHGC is equal to approximately 86% of the shading coefficient.
- d Relative Heat Gain is the combination of solar heat gain (transmitted and that amount of absorbed energy that is conducted or convected to the interior) and heat transfer due to the indoor/outdoor temperature differential. (Based on an ASHRAE solar heat gain factor of 200 BTU/Hr. per Ft². (637 w/m²) and outdoor air 14°F (7.8°C) warmer than indoor air with no shading devices.)
- e From LBNL WINDOW 5.2 V5.2.17 COMPUTER ANALYSIS (300-380 nanometers.) Environmental conditions assumed: NFRC 100-2001 Summer and NFRC 100-2001 winter.

Performance data represents center of glass values calculated under the guidelines of LBNL WINDOW 5.2 V5.2.17 COMPUTER ANALYSIS, assuming an air mass of 1.5.