



PERFORMANCE UPGRADE TABLE BLINDED WINDOWS

Optimizing energy efficiency of building envelopes can contribute significantly toward LEED® certification. Windows and curtainwall play a vital role in overall envelope performance, as quantified by NFRC standardized thermal transmittance (U-Factor), Solar Heat Gain Coefficient (SHGC) and Visible Light Transmittance (VT). The following tables, organized by product family, present some leading-edge performers in Wausau’s standard product line, and a comparison with products typically employed.

 PRODUCT FAMILY: BLINDED WINDOWS  with dual and triple glazing			
LEED® Attribute	Best-Performing WAUSAU Product		Typical WAUSAU Product
	Climate Zones 3 and 4 Charlotte San Francisco	Climate Zones 5 and 6 Boston Chicago	
Overall U Factor (BTU/sqft-hr-°F per NFRC 102)	0.37	0.35	0.55
SHGC (Center of Glass)	<0.30	<0.30	<0.40
VT (Center of Glass %)	Varies Occupant-Controlled	Varies Occupant-Controlled	Varies Occupant Controlled
Approx. Installed Cost Premium	+17%	+18%	-
Product Description	2250i INvent™ Triple Glazed 3' x 5' PI Case w/ Blinds	2250i-XLT INvent™ Triple Glazed 3' x 5' PI Case w/ Blinds	2250 Flagship 3' x 5' Fixed/PO Awning
Glass Selection	Viracon VE1-2M IG Light 5/8" Blinds ¾" air space Clear HS	Viracon VE1-2M IG Light 1" Blinds 1-1/8" air space Clear HS	PPG Sungate 500 Light 1" Blinds 1-½" air space Clear HS

NOTES:

1. Estimated test results and costs are representative of a broad range of products, to help in identifying sustainable design targets. Note size assumption in product description. Consult Wausau for specific performance and cost attributes on your project.
2. The maximization of LEED® points is dependent on integrated design, involving all disciplines and design professionals. Please share design goals, preliminary product selection, and proposed performance levels with architects, HVAC, lighting, and structural engineers, as well as interior designers, for appropriate coordination.
3. While not specifically cited in the LEED® rating system, condensation resistance can be an important performance attribute of windows and curtainwall in cold climates and high-humidity applications. Similarly, excessive air infiltration can significantly affect energy efficiency.
4. Inherent trade-offs exist between SHGC and VT, even using high-end spectrally-selective glass coatings. Please consult Viracon Technical Services to determine the optimum combination for specific building types in your Climate Zone. Even visually clear and neutral glass can be used in southern Climate Zones if innovative shading is employed. Recommendations above are based on the Climate Zone Chart found on www.viracon.com.
5. NFRC labels for SHGC and VT are based on “whole window” results, which will always be lower than the more familiar center-of-glass values reported above, cited for ease of comparison.