

# 2009/2010 Federal Tax Credit Qualifying Products



As part of the American Recovery and Reinvestment Act of 2009, a Federal Tax Credit of up to 30% of the purchase price with a maximum credit of \$1,500 is offered for qualifying improvements (windows, doors, insulation, furnace, etc) to non-business properties (homes). The credit is combined over 2009 and 2010 for eligible and qualifying products purchased and installed from January 1, 2009 thru December 31, 2010.

Windows and doors meeting the following criteria are eligible:

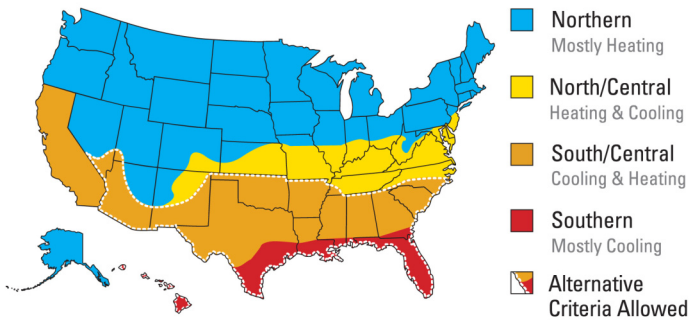
- 1) a U-Factor of less than or equal to 0.30  
and
- 2) a Solar Heat Gain Coefficient (SHGC) of less than or equal to 0.30.



These products rated, certified, and labeled by National Fenestration Rating Council® (NFRC) - a non-profit organization that provides fair, accurate and credible energy performance ratings for windows and doors.



These products meet stringent energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. These guidelines are based on the heat gain and loss of each product in various regions of the country.



For NFRC certified total unit performance for units with capillary breather tubes, please refer to the High Altitude information on page 8.

"High-Performance Low-E4" (HP Low-E4) and "High-Performance Low-E4 Sun" (HP Low-E4 Sun) are Andersen trademarks for "Low-E" glass.

1 U-Factor defines the amount of heat loss through the total unit in BTU/hr sq. ft.°F. The lower the value, the less heat is lost through the entire product.

2 Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass both directly transmitted and absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product.













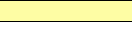




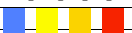

3 Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

NFRC ratings are based on modeling by a third party agency and validated by an independent test lab in compliance with NFRC program and procedural requirements.

This data is accurate as of February 18, 2009. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass for high altitudes, etc.


The National Fenestration Rating Council logo is a registered trademark of the National Fenestration Rating Council. All rights reserved.


**Product Performance and ENERGY STAR® qualification for products.**  
(See separate product listing for coastal products or products used in high altitude regions)

Andersen® Product Line	Product Type (NFRC Size)	Glass Type Grilles = Finelight™ (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.	
200 Series	Casement Window (24" x 59")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.45	0.60	0.62	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.45	0.54	0.57	- - - -	NO	
		Tempered Glass						
		Clear Dual Pane Tempered	0.46	0.59	0.62	- - - -	NO	
Clear Dual Pane Tempered with Finelight™ Grilles	0.46	0.53	0.56	- - - -	NO			
200 Series	Awning Window (59" x 24")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.45	0.59	0.61	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.45	0.53	0.55	- - - -	NO	
		Tempered Glass						
		Clear Dual Pane Tempered	0.46	0.57	0.60	- - - -	NO	
Clear Dual Pane Tempered with Finelight™ Grilles	0.46	0.52	0.55	- - - -	NO			
200 Series	Tilt-Wash Double-Hung Window (47" x 59")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.47	0.60	0.63	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.47	0.54	0.56	- - - -	NO	
		Low-E	0.30	0.32	0.55		NO	
		Low-E with Finelight™ Grilles	0.30	0.29	0.49		YES	
		Tempered Glass						
		Clear Dual Pane Tempered	0.48	0.59	0.62	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.48	0.53	0.55	- - - -	NO	
		Low-E Tempered	0.31	0.32	0.54		NO	
Low-E Tempered with Finelight™ Grilles	0.32	0.29	0.48		NO			
200 Series	Narroline® Double-Hung Window (47" x 59")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.47	0.61	0.64	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.47	0.54	0.57	- - - -	NO	
		Low-E	0.30	0.32	0.56		NO	
		Low-E with Finelight™ Grilles	0.31	0.29	0.50		NO	
		Tempered Glass						
		Clear Dual Pane Tempered	0.48	0.60	0.63	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.48	0.53	0.56	- - - -	NO	
Low-E Tempered	0.31	0.32	0.55		NO			
Low-E Tempered with Finelight™ Grilles	0.32	0.29	0.49		NO			
200 Series	Narroline® Transom Window (47" x 59")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.46	0.63	0.66	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.46	0.57	0.59	- - - -	NO	
		Low-E	0.28	0.34	0.58		NO	
		Low-E with Finelight™ Grilles	0.28	0.30	0.52		YES	
		Tempered Glass						
		Clear Dual Pane Tempered	0.47	0.62	0.65	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.47	0.56	0.58	- - - -	NO	
Low-E Tempered	0.29	0.33	0.57		NO			
Low-E Tempered with Finelight™ Grilles	0.30	0.30	0.51		YES			
200 Series	Gliding Window (59" x 47")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.47	0.60	0.63	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.47	0.54	0.56	- - - -	NO	
		Low-E	0.30	0.32	0.55		NO	
		Low-E with Finelight™ Grilles	0.30	0.29	0.49		YES	
		Tempered Glass						
		Clear Dual Pane Tempered	0.48	0.59	0.62	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.49	0.53	0.55	- - - -	NO	
Low-E Tempered	0.31	0.32	0.54		NO			
Low-E Tempered with Finelight™ Grilles	0.32	0.29	0.48		NO			
200 Series	Fixed, Transom, Circle Top™ Window (47" x 59")	Clear Dual Pane	0.45	0.61	0.65	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.45	0.55	0.58	- - - -	NO	
		Low-E	0.28	0.33	0.56		NO	
		Low-E with Finelight™ Grilles	0.28	0.30	0.50		YES	

\*ENERGY STAR® is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09


**Product Performance and ENERGY STAR® qualification for products.**  
(See separate product listing for coastal products or products used in high altitude regions)

Andersen® Product Line	Product Type (NFRC Size)	Glass Type Grilles = Finelight™ (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
200 Series	Narroline® Gliding Patio Door (79" x 79")	Clear Dual Pane	0.46	0.59	0.63	- - - -	NO
		Clear Dual Pane with Finelight™ Grilles	0.47	0.52	0.55	- - - -	NO
		Low-E	0.29	0.32	0.55	■ ■ ■ ■	NO
		Low-E with Finelight™ Grilles	0.31	0.28	0.48	■ ■ ■ ■	NO
		Low-E Sun	0.30	0.20	0.30	■ ■ ■ ■	YES
		Low-E Sun with Finelight™ Grilles	0.31	0.28	0.48	■ ■ ■ ■	NO
		Low-E SmartSun™	0.29	0.22	0.50	■ ■ ■ ■	YES
Low-E SmartSun™ with Finelight™ Grilles	0.30	0.19	0.44	■ ■ ■ ■	YES		
200 Series	Perma-Shield® Gliding Patio Door (79" x 79")	Clear Dual Pane	0.45	0.61	0.64	- - - -	NO
		Clear Dual Pane with Finelight™ Grilles	0.45	0.54	0.56	- - - -	NO
		Low-E	0.29	0.32	0.56	■ ■ ■ ■	NO
		Low-E with Finelight™ Grilles	0.30	0.29	0.49	■ ■ ■ ■	YES
		Low-E Sun	0.29	0.20	0.30	■ ■ ■ ■	YES
		Low-E Sun with Finelight™ Grilles	0.31	0.17	0.27	■ ■ ■ ■	NO
		Low-E SmartSun™	0.28	0.22	0.50	■ ■ ■ ■	YES
Low-E SmartSun™ with Finelight™ Grilles	0.30	0.19	0.44	■ ■ ■ ■	YES		
200 Series	Hinged Patio Door (39" x 79")	Clear Dual Pane	0.45	0.44	0.46	- - - -	NO
		Clear Dual Pane with Finelight™ Grilles	0.46	0.38	0.40	- - - -	NO
		Low-E	0.32	0.24	0.41	■ ■ ■ ■	NO
		Low-E with Finelight™ Grilles	0.33	0.21	0.35	■ ■ ■ ■	NO
		Low-E Sun	0.32	0.15	0.23	■ ■ ■ ■	NO
		Low-E Sun with Finelight™ Grilles	0.34	0.13	0.19	■ ■ ■ ■	NO
		Low-E SmartSun™	0.31	0.16	0.37	■ ■ ■ ■	NO
Low-E SmartSun™ with Finelight™ Grilles	0.33	0.14	0.31	■ ■ ■ ■	NO		

Andersen® Product Line	Product Type (NFRC Size)	Glass Type Grilles = Full Divided Light (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.	
400 Series	Casement Window (24" x 59")	Non-Tempered Glass (Standard)						
		HP Low-E4®	0.28	0.32	0.54	■ ■ ■ ■	NO	
		HP Low-E4® with Grilles	0.29	0.29	0.49	■ ■ ■ ■	YES	
		HP Low-E4® Sun	0.29	0.20	0.30	■ ■ ■ ■	YES	
		HP Low-E4® Sun with Grilles	0.30	0.18	0.27	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™	0.28	0.21	0.49	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™ w/Grilles	0.29	0.19	0.45	■ ■ ■ ■	YES	
		Tempered Glass						
		HP Low-E4® Tempered	0.29	0.32	0.54	■ ■ ■ ■	NO	
		HP Low-E4® Tempered with Grilles	0.30	0.29	0.49	■ ■ ■ ■	YES	
		HP Low-E4® Sun Tempered	0.30	0.20	0.30	■ ■ ■ ■	YES	
		HP Low-E4® Sun Tempered with Grilles	0.30	0.18	0.27	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™ Tempered	0.29	0.21	0.48	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™ Tempered w/Grilles	0.29	0.19	0.44	■ ■ ■ ■	YES	
400 Series	Awning Window (59" x 24")	Non-Tempered Glass (Standard)						
		HP Low-E4®	0.28	0.31	0.53	■ ■ ■ ■	NO	
		HP Low-E4® with Grilles	0.29	0.29	0.49	■ ■ ■ ■	YES	
		HP Low-E4® Sun	0.29	0.19	0.30	■ ■ ■ ■	YES	
		HP Low-E4® Sun with Grilles	0.29	0.18	0.27	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™	0.28	0.21	0.48	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™ w/Grilles	0.28	0.19	0.44	■ ■ ■ ■	YES	
		Tempered Glass						
		HP Low-E4® Tempered	0.29	0.31	0.53	■ ■ ■ ■	NO	
		HP Low-E4® Tempered with Grilles	0.30	0.28	0.48	■ ■ ■ ■	YES	
		HP Low-E4® Sun Tempered	0.30	0.19	0.29	■ ■ ■ ■	YES	
		HP Low-E4® Sun Tempered with Grilles	0.30	0.18	0.27	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™ Tempered	0.29	0.21	0.48	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™ Tempered w/Grilles	0.29	0.19	0.43	■ ■ ■ ■	YES	
400 Series	Casement/Awning Picture Window (47" x 59")	HP Low-E4®	0.27	0.34	0.60	■ ■ ■ ■	NO	
		HP Low-E4® with Grilles	0.28	0.31	0.53	■ ■ ■ ■	NO	
		HP Low-E4® Sun	0.27	0.21	0.33	■ ■ ■ ■	YES	
		HP Low-E4® Sun with Grilles	0.29	0.19	0.30	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™	0.26	0.23	0.54	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™ w/Grilles	0.28	0.21	0.48	■ ■ ■ ■	YES	






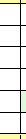
"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09

**Product Performance and ENERGY STAR® qualification for products.**  
(See separate product listing for coastal products or products used in high altitude regions)

Andersen® Product Line	Product Type (NFRC Size)	Glass Type Grilles = Full Divided Light (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
400 Series	Woodwright® Full-Frame Double-Hung Window (47" x 59")	HP Low-E4®	0.30	0.31	0.53		NO
		HP Low-E4® with Grilles	0.31	0.28	0.47		NO
		HP Low-E4® Sun	0.30	0.19	0.29		YES
		HP Low-E4® Sun with Grilles	0.31	0.17	0.26		NO
		HP Low-E4® SmartSun™	0.29	0.20	0.47		YES
		HP Low-E4® SmartSun™ w/Grilles	0.30	0.18	0.42		YES
400 Series	Woodwright® Full-Frame Picture Window (47" x 59")	HP Low-E4®	0.28	0.32	0.55		NO
		HP Low-E4® with Grilles	0.29	0.29	0.49		YES
		HP Low-E4® Sun	0.28	0.19	0.31		YES
		HP Low-E4® Sun with Grilles	0.29	0.18	0.27		YES
		HP Low-E4® SmartSun™	0.27	0.21	0.50		YES
		HP Low-E4® SmartSun™ w/Grilles	0.29	0.19	0.44		YES
400 Series	Woodwright® Full-Frame Transom Window (47" x 59")	HP Low-E4®	0.28	0.33	0.57		NO
		HP Low-E4® with Grilles	0.29	0.30	0.51		YES
		HP Low-E4® Sun	0.28	0.20	0.32		YES
		HP Low-E4® Sun with Grilles	0.30	0.18	0.29		YES
		HP Low-E4® SmartSun™	0.27	0.22	0.52		YES
		HP Low-E4® SmartSun™ w/Grilles	0.29	0.20	0.46		YES
400 Series	Woodwright® Insert Double-Hung Window (47" x 59")	HP Low-E4®	0.30	0.31	0.53		NO
		HP Low-E4® with Grilles	0.31	0.28	0.47		NO
		HP Low-E4® Sun	0.31	0.19	0.30		NO
		HP Low-E4® Sun with Grilles	0.32	0.17	0.26		NO
		HP Low-E4® SmartSun™	0.30	0.21	0.48		YES
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.19	0.43		NO
400 Series	Woodwright® Insert Picture Window (47" x 59")	HP Low-E4®	0.29	0.32	0.55		NO
		HP Low-E4® with Grilles	0.30	0.29	0.49		YES
		HP Low-E4® Sun	0.29	0.20	0.31		YES
		HP Low-E4® Sun with Grilles	0.30	0.18	0.27		YES
		HP Low-E4® SmartSun™	0.28	0.21	0.50		YES
		HP Low-E4® SmartSun™ w/Grilles	0.29	0.19	0.44		YES
400 Series	Woodwright® Insert Transom Window (47" x 59")	HP Low-E4®	0.29	0.33	0.56		NO
		HP Low-E4® with Grilles	0.30	0.30	0.50		YES
		HP Low-E4® Sun	0.30	0.20	0.31		YES
		HP Low-E4® Sun with Grilles	0.31	0.18	0.28		NO
		HP Low-E4® SmartSun™	0.29	0.22	0.51		YES
		HP Low-E4® SmartSun™ w/Grilles	0.30	0.20	0.45		YES
400 Series	Tilt-Wash Double-Hung Window (47" x 59")	HP Low-E4®	0.31	0.31	0.53		NO
		HP Low-E4® with Grilles	0.32	0.28	0.47		NO
		HP Low-E4® Sun	0.31	0.19	0.30		NO
		HP Low-E4® Sun with Grilles	0.32	0.17	0.26		NO
		HP Low-E4® SmartSun™	0.30	0.21	0.48		YES
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.19	0.42		NO
400 Series	Tilt-Wash Double-Hung Picture Window (47" x 59")	HP Low-E4®	0.30	0.33	0.57		NO
		HP Low-E4® with Grilles	0.32	0.30	0.51		NO
		HP Low-E4® Sun	0.30	0.20	0.32		YES
		HP Low-E4® Sun with Grilles	0.32	0.18	0.28		NO
		HP Low-E4® SmartSun™	0.29	0.22	0.51		YES
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.20	0.46		NO
400 Series	Tilt-Wash Transom Window (24" x 79")	HP Low-E4®	0.26	0.32	0.55		NO
		HP Low-E4® with Grilles	0.28	0.29	0.49		YES
		HP Low-E4® Sun	0.27	0.19	0.31		YES
		HP Low-E4® Sun with Grilles	0.28	0.18	0.27		YES
		HP Low-E4® SmartSun™	0.26	0.21	0.49		YES
		HP Low-E4® SmartSun™ w/Grilles	0.27	0.19	0.44		YES



"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09



**Product Performance and ENERGY STAR® qualification for products.**  
(See separate product listing for coastal products or products used in high altitude regions)

Andersen® Product Line	Product Type (NFRS Size)	Glass Type Grilles = Full Divided Light (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.									
400 Series	Gliding Window (59" x 47")	Non-Tempered Glass (Standard)										HP Low-E4®	0.31	0.29	0.50	NO
		HP Low-E4® with Grilles	0.32	0.26	0.44	NO										
		HP Low-E4® Sun	0.31	0.18	0.27	NO										
		HP Low-E4® Sun with Grilles	0.32	0.17	0.24	NO										
		HP Low-E4® SmartSun™	0.30	0.20	0.45	YES										
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.18	0.40	NO										
		Tempered Glass										HP Low-E4® Tempered	0.31	0.29	0.49	NO
		HP Low-E4® Tempered with Grilles	0.31	0.26	0.43	NO										
		HP Low-E4® Sun Tempered	0.31	0.18	0.27	NO										
		HP Low-E4® Sun Tempered with Grilles	0.32	0.16	0.24	NO										
		HP Low-E4® SmartSun™ Tempered	0.30	0.20	0.44	YES										
		HP Low-E4® SmartSun™ Tempered w/Grilles	0.31	0.18	0.39	NO										
		400 Series	Elliptical Window (47" x 59")	HP Low-E4®	0.28	0.34						0.59	NO			
				HP Low-E4® with Grilles	0.29	0.31						0.53	NO			
HP Low-E4® Sun	0.28			0.21	0.33	YES										
HP Low-E4® Sun with Grilles	0.30			0.19	0.29	YES										
HP Low-E4® SmartSun™	0.27			0.23	0.53	YES										
HP Low-E4® SmartSun™ w/Grilles	0.29			0.20	0.48	YES										
400 Series	Circle Top™ Casement Window (47" x 59")	HP Low-E4®	0.27	0.34	0.60	NO										
		HP Low-E4® with Grilles	0.28	0.31	0.53	NO										
		HP Low-E4® Sun	0.27	0.21	0.33	YES										
		HP Low-E4® Sun with Grilles	0.29	0.19	0.30	YES										
		HP Low-E4® SmartSun™	0.26	0.23	0.54	YES										
		HP Low-E4® SmartSun™ w/Grilles	0.28	0.21	0.48	YES										
400 Series	Circle/Oval Window (47" x 59")	HP Low-E4®	0.27	0.34	0.60	NO										
		HP Low-E4® with Grilles	0.28	0.31	0.53	NO										
		HP Low-E4® Sun	0.27	0.21	0.33	YES										
		HP Low-E4® Sun with Grilles	0.29	0.19	0.30	YES										
		HP Low-E4® SmartSun™	0.26	0.23	0.54	YES										
		HP Low-E4® SmartSun™ w/Grilles	0.28	0.21	0.48	YES										
400 Series	Arch Window (47" x 59")	HP Low-E4®	0.28	0.33	0.58	NO										
		HP Low-E4® with Grilles	0.30	0.30	0.52	YES										
		HP Low-E4® Sun	0.29	0.20	0.31	YES										
		HP Low-E4® Sun with Grilles	0.30	0.18	0.28	YES										
		HP Low-E4® SmartSun™	0.28	0.23	0.52	YES										
		HP Low-E4® SmartSun™ w/Grilles	0.29	0.21	0.46	YES										
400 Series	Flexiframe® Window (47" x 59")	HP Low-E4®	0.28	0.33	0.58	NO										
		HP Low-E4® with Grilles	0.29	0.30	0.52	YES										
		HP Low-E4® Sun	0.28	0.20	0.31	YES										
		HP Low-E4® Sun with Grilles	0.29	0.18	0.28	YES										
		HP Low-E4® SmartSun™	0.27	0.23	0.52	YES										
		HP Low-E4® SmartSun™ w/Grilles	0.28	0.21	0.46	YES										
400 Series	Springline™ Window (47" x 59")	HP Low-E4®	0.31	0.33	0.58	NO										
		HP Low-E4® with Grilles	0.32	0.30	0.52	NO										
		HP Low-E4® Sun	0.31	0.20	0.31	NO										
		HP Low-E4® Sun with Grilles	0.33	0.18	0.28	NO										
		HP Low-E4® SmartSun™	0.30	0.23	0.52	YES										
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.21	0.46	NO										

"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09


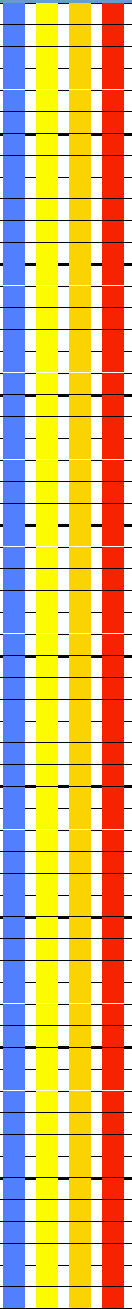
**Product Performance and ENERGY STAR® qualification for products.**  
(See separate product listing for coastal products or products used in high altitude regions)

Andersen® Product Line	Product Type (NFRC Size)	Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
400 Series	Skylight (47" x 47")	HP Low-E4® Tempered	0.52	0.39	0.68		NO
		HP Low-E4® Tempered Lami.	0.52	0.38	0.66		NO
		HP Low-E4® Sun Tempered	0.53	0.24	0.38		NO
		HP Low-E4® Sun Tempered Lami.	0.53	0.24	0.37		NO
		HP Low-E4® SmartSun™ Tempered	0.52	0.26	0.61		NO
		HP Low-E4® SmartSun™ Tempered Lami.	0.52	0.26	0.59		NO
400 Series	Venting Roof Window (47" x 47")	HP Low-E4® Tempered	0.50	0.36	0.62	NO	
		HP Low-E4® Tempered Lami.	0.50	0.36	0.60	NO	
		HP Low-E4® Sun Tempered	0.50	0.23	0.34	NO	
		HP Low-E4® Sun Tempered Lami.	0.50	0.22	0.33	NO	
		HP Low-E4® SmartSun™ Tempered	0.49	0.24	0.56	NO	
		HP Low-E4® SmartSun™ Tempered Lami.	0.50	0.24	0.54	NO	
400 Series	Stationary Roof Window (47" x 47")	HP Low-E4® Tempered	0.50	0.37	0.63	NO	
		HP Low-E4® Tempered Lami.	0.50	0.36	0.62	NO	
		HP Low-E4® Sun Tempered	0.50	0.23	0.35	NO	
		HP Low-E4® Sun Tempered Lami.	0.50	0.23	0.34	NO	
		HP Low-E4® SmartSun™ Tempered	0.49	0.25	0.57	NO	
		HP Low-E4® SmartSun™ Tempered Lami.	0.49	0.24	0.56	NO	

Andersen® Product Line	Product Type (NFRC Size)	Glass Type Tempered Glass Grilles = Full Divided Light	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
400 Series	Frenchwood® Gliding Patio Door (79" x 79")	HP Low-E4®	0.30	0.27	0.45		YES
		HP Low-E4® with Grilles	0.31	0.23	0.39		NO
		HP Low-E4® Sun	0.31	0.16	0.25		NO
		HP Low-E4® Sun with Grilles	0.32	0.14	0.22		NO
		HP Low-E4® SmartSun™	0.30	0.18	0.41		YES
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.16	0.35		NO
400 Series	Frenchwood® Hinged Patio Door-Inswing (39" x 79")	HP Low-E4®	0.31	0.24	0.41	NO	
		HP Low-E4® with Grilles	0.31	0.21	0.35	NO	
		HP Low-E4® Sun	0.31	0.15	0.23	NO	
		HP Low-E4® Sun with Grilles	0.32	0.13	0.19	NO	
		HP Low-E4® SmartSun™	0.30	0.16	0.37	YES	
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.14	0.31	NO	
400 Series	Frenchwood® Hinged Patio Door-Outswing (39" x 79")	HP Low-E4®	0.31	0.25	0.41	NO	
		HP Low-E4® with Grilles	0.32	0.21	0.35	NO	
		HP Low-E4® Sun	0.31	0.15	0.23	NO	
		HP Low-E4® Sun with Grilles	0.32	0.13	0.19	NO	
		HP Low-E4® SmartSun™	0.30	0.17	0.37	YES	
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.15	0.31	NO	
400 Series	Frenchwood® Patio Door Sidelight (24" x 79")	HP Low-E4®	0.31	0.22	0.37	NO	
		HP Low-E4® with Grilles	0.32	0.20	0.33	NO	
		HP Low-E4® Sun	0.32	0.14	0.21	NO	
		HP Low-E4® Sun with Grilles	0.32	0.13	0.18	NO	
		HP Low-E4® SmartSun™	0.31	0.15	0.33	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.14	0.29	NO	
400 Series	Frenchwood® Patio Door Transom (79" x 24")	HP Low-E4®	0.30	0.24	0.40	YES	
		HP Low-E4® with Grilles	0.30	0.21	0.35	YES	
		HP Low-E4® Sun	0.30	0.15	0.22	YES	
		HP Low-E4® Sun with Grilles	0.31	0.13	0.20	NO	
		HP Low-E4® SmartSun™	0.29	0.16	0.36	YES	
		HP Low-E4® SmartSun™ w/Grilles	0.30	0.14	0.32	YES	





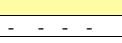

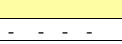



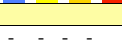








"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09

**Product Performance and ENERGY STAR® qualification for products.**  
(See separate product listing for coastal products or products used in high altitude regions)

Andersen® Product Line	Product Type	Glass Type Grilles = Finelight™ or Full Divided Light	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
Architectural	Casement Window (24 1/8" x 48")	HP Low-E4®	0.32	0.28	0.47		NO
		HP Low-E4® with Grilles	0.32	0.25	0.42		NO
		HP Low-E4® Sun	0.32	0.17	0.26		NO
		HP Low-E4® Sun with Grilles	0.32	0.16	0.23		NO
		HP Low-E4® SmartSun™	0.31	0.18	0.42		NO
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.17	0.38		NO
Architectural	French Casement Window (56 1/2" x 71 7/8")	HP Low-E4®	0.32	0.28	0.47	NO	
		HP Low-E4® with Grilles	0.32	0.25	0.42	NO	
		HP Low-E4® Sun	0.32	0.17	0.26	NO	
		HP Low-E4® Sun with Grilles	0.32	0.16	0.23	NO	
		HP Low-E4® SmartSun™	0.31	0.18	0.42	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.17	0.38	NO	
Architectural	Awning Window (48" x 24 1/8")	HP Low-E4®	0.31	0.27	0.47	NO	
		HP Low-E4® with Grilles	0.31	0.25	0.42	NO	
		HP Low-E4® Sun	0.32	0.17	0.26	NO	
		HP Low-E4® Sun with Grilles	0.32	0.16	0.23	NO	
		HP Low-E4® SmartSun™	0.31	0.18	0.42	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.17	0.38	NO	
Architectural	Casement/Awning Picture Window (up to 17 Sq. Ft.)	HP Low-E4®	0.31	0.32	0.55	NO	
		HP Low-E4® with Grilles	0.31	0.29	0.49	NO	
		HP Low-E4® Sun	0.31	0.20	0.31	NO	
		HP Low-E4® Sun with Grilles	0.31	0.18	0.28	NO	
		HP Low-E4® SmartSun™	0.31	0.21	0.50	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.19	0.44	NO	
Architectural	Specialty Window (up to 17 Sq. Ft.)	HP Low-E4®	0.30	0.37	0.64	NO	
		HP Low-E4® with Grilles	0.30	0.33	0.57	NO	
		HP Low-E4® Sun	0.31	0.22	0.36	NO	
		HP Low-E4® Sun with Grilles	0.31	0.20	0.32	NO	
		HP Low-E4® SmartSun™	0.30	0.24	0.58	YES	
		HP Low-E4® SmartSun™ w/Grilles	0.30	0.22	0.52	YES	
Architectural	Hinged French Door-Inswing (37 5/8" x 82")	HP Low-E4®	0.32	0.22	0.37	NO	
		HP Low-E4® with Grilles	0.33	0.20	0.33	NO	
		HP Low-E4® Sun	0.33	0.14	0.21	NO	
		HP Low-E4® Sun with Grilles	0.34	0.13	0.18	NO	
		HP Low-E4® SmartSun™	0.32	0.15	0.33	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.33	0.14	0.30	NO	
Architectural	Hinged French Door-Outswing (37 5/8" x 82")	HP Low-E4®	0.32	0.22	0.37	NO	
		HP Low-E4® with Grilles	0.33	0.20	0.33	NO	
		HP Low-E4® Sun	0.32	0.14	0.21	NO	
		HP Low-E4® Sun with Grilles	0.33	0.13	0.18	NO	
		HP Low-E4® SmartSun™	0.32	0.15	0.33	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.35	0.14	0.30	NO	
Architectural	Fixed French Inswing Door & Sidelight (37 5/8" x 82")	HP Low-E4®	0.35	0.15	0.24	NO	
		HP Low-E4® with Grilles	0.35	0.16	0.25	NO	
		HP Low-E4® Sun	0.35	0.10	0.14	NO	
		HP Low-E4® Sun with Grilles	0.35	0.10	0.14	NO	
		HP Low-E4® SmartSun™	0.35	0.11	0.22	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.35	0.10	0.20	NO	
Architectural	Fixed French Outswing Door & Sidelight (37 5/8" x 82")	HP Low-E4®	0.34	0.15	0.18	NO	
		HP Low-E4® with Grilles	0.34	0.16	0.25	NO	
		HP Low-E4® Sun	0.34	0.10	0.14	NO	
		HP Low-E4® Sun with Grilles	0.34	0.10	0.14	NO	
		HP Low-E4® SmartSun™	0.34	0.10	0.22	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.10	0.21	NO	
Architectural	Commercial Outswing Door (37 5/8" x 82")	HP Low-E4®	0.32	0.22	0.37	NO	
		HP Low-E4® with Grilles	0.33	0.20	0.33	NO	
		HP Low-E4® Sun	0.32	0.14	0.21	NO	
		HP Low-E4® Sun with Grilles	0.33	0.13	0.18	NO	
		HP Low-E4® SmartSun™	0.32	0.15	0.33	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.35	0.14	0.30	NO	


"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09


**Product performance values and ENERGY STAR® qualification designations  
for glass products ordered with capillary breather tubes for high altitude applications**

Andersen® Product Line	Product Type (NFRC Size)	Glass Type Grilles = Finelight™ (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.	
200 Series	Casement Window (24" x 59")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.45	0.60	0.62	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.45	0.54	0.57	- - - -	NO	
		Tempered Glass						
		Clear Dual Pane Tempered	0.46	0.59	0.62	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.46	0.53	0.56	- - - -	NO	
200 Series	Awning Window (59" x 24")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.45	0.59	0.61	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.45	0.53	0.55	- - - -	NO	
		Tempered Glass						
		Clear Dual Pane Tempered	0.46	0.57	0.60	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.46	0.52	0.55	- - - -	NO	
200 Series	Tilt-Wash Double-Hung Window (47" x 59")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.47	0.60	0.63	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.47	0.54	0.56	- - - -	NO	
		Low-E	0.34	0.32	0.55		NO	
		Low-E with Finelight™ Grilles	0.34	0.29	0.49		NO	
		Tempered Glass						
		Clear Dual Pane Tempered	0.48	0.59	0.62	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.48	0.53	0.55	- - - -	NO	
		Low-E Tempered	0.35	0.32	0.54		NO	
		Low-E Tempered with Finelight™ Grilles	0.36	0.29	0.48		NO	
200 Series	Narroline® Double-Hung Window (47" x 59")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.47	0.61	0.64	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.47	0.54	0.57	- - - -	NO	
		Low-E	0.34	0.32	0.56		NO	
		Low-E with Finelight™ Grilles	0.34	0.29	0.50		NO	
		Tempered Glass						
		Clear Dual Pane Tempered	0.48	0.60	0.63	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.48	0.53	0.56	- - - -	NO	
		Low-E Tempered	0.35	0.32	0.55		NO	
		Low-E Tempered with Finelight™ Grilles	0.36	0.29	0.49		NO	
200 Series	Narroline® Transom Window (47" x 59")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.46	0.63	0.66	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.46	0.57	0.59	- - - -	NO	
		Low-E	0.32	0.34	0.58		NO	
		Low-E with Finelight™ Grilles	0.32	0.31	0.52		NO	
		Tempered Glass						
		Clear Dual Pane Tempered	0.47	0.62	0.65	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.47	0.56	0.58	- - - -	NO	
		Low-E Tempered	0.33	0.34	0.57		NO	
		Low-E Tempered with Finelight™ Grilles	0.34	0.30	0.51		NO	
200 Series	Gliding Window (59" x 47")	Non-Tempered Glass (Standard)						
		Clear Dual Pane	0.47	0.60	0.63	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.47	0.54	0.56	- - - -	NO	
		Low-E	0.34	0.32	0.55		NO	
		Low-E with Finelight™ Grilles	0.34	0.29	0.49		NO	
		Tempered Glass						
		Clear Dual Pane Tempered	0.48	0.59	0.62	- - - -	NO	
		Clear Dual Pane Tempered with Finelight™ Grilles	0.49	0.53	0.55	- - - -	NO	
		Low-E Tempered	0.35	0.32	0.54		NO	
		Low-E Tempered with Finelight™ Grilles	0.36	0.29	0.48		NO	
200 Series	Fixed, Transom, Circle Top™ Window (47" x 59")	Clear Dual Pane	0.45	0.61	0.65	- - - -	NO	
		Clear Dual Pane with Finelight™ Grilles	0.45	0.55	0.58	- - - -	NO	
		Low-E	0.32	0.33	0.56		NO	
		Low-E with Finelight™ Grilles	0.32	0.30	0.50		NO	

\*ENERGY STAR® is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09


**Product performance values and ENERGY STAR® qualification designations  
for glass products ordered with capillary breather tubes for high altitude applications**

Andersen® Product Line	Product Type (NFRC Size)	Glass Type Grilles = Finelight™ (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
200 Series	Narroline® Gliding Patio Door (79" x 79")	Clear Dual Pane	0.46	0.59	0.63	- - - -	NO
		Clear Dual Pane with Finelight™ Grilles	0.47	0.52	0.55	- - - -	NO
		Low-E	0.32	0.32	0.55	■ ■ ■ ■	NO
		Low-E with Finelight™ Grilles	0.34	0.29	0.48	■ ■ ■ ■	NO
		Low-E Sun	0.33	0.20	0.30	■ ■ ■ ■	NO
		Low-E Sun with Finelight™ Grilles	0.35	0.18	0.26	■ ■ ■ ■	NO
		Low-E SmartSun™	0.32	0.22	0.50	■ ■ ■ ■	NO
Low-E SmartSun™ with Finelight™ Grilles	0.34	0.20	0.44	■ ■ ■ ■	NO		
200 Series	Perma-Shield® Gliding Patio Door (79" x 79")	Clear Dual Pane	0.45	0.61	0.64	- - - -	NO
		Clear Dual Pane with Finelight™ Grilles	0.45	0.54	0.56	- - - -	NO
		Low-E	0.32	0.32	0.56	■ ■ ■ ■	NO
		Low-E with Finelight™ Grilles	0.34	0.29	0.49	■ ■ ■ ■	NO
		Low-E Sun	0.32	0.20	0.30	■ ■ ■ ■	NO
		Low-E Sun with Finelight™ Grilles	0.34	0.18	0.27	■ ■ ■ ■	NO
		Low-E SmartSun™	0.31	0.22	0.50	■ ■ ■ ■	NO
Low-E SmartSun™ with Finelight™ Grilles	0.33	0.20	0.44	■ ■ ■ ■	NO		
200 Series	Hinged Patio Door (39" x 79")	Clear Dual Pane	0.45	0.44	0.46	- - - -	NO
		Clear Dual Pane with Finelight™ Grilles	0.46	0.38	0.40	- - - -	NO
		Low-E	0.34	0.24	0.41	■ ■ ■ ■	NO
		Low-E with Finelight™ Grilles	0.36	0.21	0.35	■ ■ ■ ■	NO
		Low-E Sun	0.35	0.15	0.23	■ ■ ■ ■	NO
		Low-E Sun with Finelight™ Grilles	0.36	0.14	0.19	■ ■ ■ ■	NO
		Low-E SmartSun™	0.34	0.17	0.37	■ ■ ■ ■	NO
Low-E SmartSun™ with Finelight™ Grilles	0.36	0.15	0.31	■ ■ ■ ■	NO		

Andersen® Product Line	Product Type (NFRC Size)	Glass Type Grilles = Full Divided Light (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.	
400 Series	Casement Window (24" x 59")	<b>Non-Tempered Glass (Standard)</b>						
		HP Low-E4®	0.32	0.32	0.54	■ ■ ■ ■	NO	
		HP Low-E4® with Grilles	0.33	0.29	0.49	■ ■ ■ ■	NO	
		HP Low-E4® Sun	0.32	0.20	0.30	■ ■ ■ ■	NO	
		HP Low-E4® Sun with Grilles	0.33	0.19	0.27	■ ■ ■ ■	NO	
		HP Low-E4® SmartSun™	0.31	0.21	0.49	■ ■ ■ ■	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.20	0.45	■ ■ ■ ■	NO	
		<b>Tempered Glass</b>						
		HP Low-E4® Tempered	0.33	0.32	0.54	■ ■ ■ ■	NO	
		HP Low-E4® Tempered with Grilles	0.34	0.29	0.49	■ ■ ■ ■	NO	
		HP Low-E4® Sun Tempered	0.34	0.20	0.30	■ ■ ■ ■	NO	
		HP Low-E4® Sun Tempered with Grilles	0.34	0.19	0.27	■ ■ ■ ■	NO	
		HP Low-E4® SmartSun™ Tempered	0.33	0.21	0.48	■ ■ ■ ■	NO	
		HP Low-E4® SmartSun™ Tempered w/Grilles	0.34	0.20	0.44	■ ■ ■ ■	NO	
400 Series	Awning Window (59" x 24")	<b>Non-Tempered Glass (Standard)</b>						
		HP Low-E4®	0.32	0.31	0.53	■ ■ ■ ■	NO	
		HP Low-E4® with Grilles	0.33	0.29	0.49	■ ■ ■ ■	NO	
		HP Low-E4® Sun	0.32	0.20	0.30	■ ■ ■ ■	NO	
		HP Low-E4® Sun with Grilles	0.33	0.18	0.27	■ ■ ■ ■	NO	
		HP Low-E4® SmartSun™	0.31	0.21	0.48	■ ■ ■ ■	NO	
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.19	0.44	■ ■ ■ ■	NO	
		<b>Tempered Glass</b>						
		HP Low-E4® Tempered	0.33	0.31	0.53	■ ■ ■ ■	NO	
		HP Low-E4® Tempered with Grilles	0.34	0.29	0.48	■ ■ ■ ■	NO	
		HP Low-E4® Sun Tempered	0.34	0.20	0.29	■ ■ ■ ■	NO	
		HP Low-E4® Sun Tempered with Grilles	0.34	0.18	0.27	■ ■ ■ ■	NO	
		HP Low-E4® SmartSun™ Tempered	0.33	0.21	0.48	■ ■ ■ ■	NO	
		HP Low-E4® SmartSun™ Tempered w/Grilles	0.33	0.19	0.43	■ ■ ■ ■	NO	
400 Series	Casement/Awning Picture Window (47" x 59")	HP Low-E4®	0.31	0.35	0.60	■ ■ ■ ■	NO	
		HP Low-E4® with Grilles	0.32	0.31	0.53	■ ■ ■ ■	NO	
		HP Low-E4® Sun	0.31	0.21	0.33	■ ■ ■ ■	NO	
		HP Low-E4® Sun with Grilles	0.33	0.19	0.30	■ ■ ■ ■	NO	
		HP Low-E4® SmartSun™	0.30	0.23	0.54	■ ■ ■ ■	YES	
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.21	0.48	■ ■ ■ ■	NO	


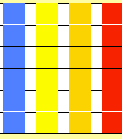
"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09

**Product performance values and ENERGY STAR® qualification designations  
for glass products ordered with capillary breather tubes for high altitude applications**

Andersen® Product Line	Product Type (NFRS Size)	Glass Type (Grilles = Full Divided Light) (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
400 Series	Woodwright® Full-Frame Double-Hung Window (47" x 59")	HP Low-E4®	0.33	0.31	0.53		NO
		HP Low-E4® with Grilles	0.35	0.28	0.47		NO
		HP Low-E4® Sun	0.34	0.19	0.29		NO
		HP Low-E4® Sun with Grilles	0.36	0.17	0.26	-	NO
		HP Low-E4® SmartSun™	0.33	0.21	0.47		NO
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.19	0.42		NO
400 Series	Woodwright® Full-Frame Picture Window (47" x 59")	HP Low-E4®	0.31	0.32	0.55		NO
		HP Low-E4® with Grilles	0.33	0.29	0.49		NO
		HP Low-E4® Sun	0.31	0.20	0.31		NO
		HP Low-E4® Sun with Grilles	0.33	0.18	0.27		NO
		HP Low-E4® SmartSun™	0.30	0.21	0.50		YES
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.19	0.44		NO
400 Series	Woodwright® Full-Frame Transom Window (47" x 59")	HP Low-E4®	0.31	0.33	0.57		NO
		HP Low-E4® with Grilles	0.33	0.30	0.51		NO
		HP Low-E4® Sun	0.31	0.21	0.32		NO
		HP Low-E4® Sun with Grilles	0.33	0.19	0.29		NO
		HP Low-E4® SmartSun™	0.31	0.22	0.52		NO
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.20	0.46		NO
400 Series	Woodwright® Insert Double-Hung Window (47" x 59")	HP Low-E4®	0.34	0.31	0.53		NO
		HP Low-E4® with Grilles	0.35	0.28	0.47		NO
		HP Low-E4® Sun	0.34	0.20	0.30		NO
		HP Low-E4® Sun with Grilles	0.36	0.18	0.26	-	NO
		HP Low-E4® SmartSun™	0.33	0.21	0.48		NO
		HP Low-E4® SmartSun™ w/Grilles	0.35	0.19	0.43		NO
400 Series	Woodwright® Insert Picture Window (47" x 59")	HP Low-E4®	0.32	0.32	0.55		NO
		HP Low-E4® with Grilles	0.33	0.29	0.49		NO
		HP Low-E4® Sun	0.33	0.20	0.31		NO
		HP Low-E4® Sun with Grilles	0.34	0.18	0.27		NO
		HP Low-E4® SmartSun™	0.32	0.22	0.50		NO
		HP Low-E4® SmartSun™ w/Grilles	0.33	0.20	0.44		NO
400 Series	Woodwright® Insert Transom Window (47" x 59")	HP Low-E4®	0.33	0.33	0.56		NO
		HP Low-E4® with Grilles	0.34	0.30	0.50		NO
		HP Low-E4® Sun	0.33	0.20	0.31		NO
		HP Low-E4® Sun with Grilles	0.34	0.19	0.28		NO
		HP Low-E4® SmartSun™	0.32	0.22	0.51		NO
		HP Low-E4® SmartSun™ w/Grilles	0.33	0.20	0.45		NO
400 Series	Tilt-Wash Double-Hung Window (47" x 59")	HP Low-E4®	0.35	0.31	0.53		NO
		HP Low-E4® with Grilles	0.36	0.28	0.47	-	NO
		HP Low-E4® Sun	0.35	0.20	0.30		NO
		HP Low-E4® Sun with Grilles	0.36	0.18	0.26	-	NO
		HP Low-E4® SmartSun™	0.34	0.21	0.48		NO
		HP Low-E4® SmartSun™ w/Grilles	0.35	0.19	0.42		NO
400 Series	Tilt-Wash Double-Hung Picture Window (47" x 59")	HP Low-E4®	0.33	0.33	0.57		NO
		HP Low-E4® with Grilles	0.35	0.30	0.51		NO
		HP Low-E4® Sun	0.34	0.21	0.32		NO
		HP Low-E4® Sun with Grilles	0.35	0.19	0.28		NO
		HP Low-E4® SmartSun™	0.33	0.22	0.51		NO
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.20	0.46		NO
400 Series	Tilt-Wash Transom Window (24" x 79")	HP Low-E4®	0.30	0.32	0.55		NO
		HP Low-E4® with Grilles	0.32	0.29	0.49		NO
		HP Low-E4® Sun	0.30	0.20	0.31		YES
		HP Low-E4® Sun with Grilles	0.32	0.18	0.27		NO
		HP Low-E4® SmartSun™	0.29	0.21	0.49		YES
		HP Low-E4® SmartSun™ w/Grilles	0.31	0.19	0.44		NO





"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09







**Product performance values and ENERGY STAR® qualification designations  
for glass products ordered with capillary breather tubes for high altitude applications**

Andersen® Product Line	Product Type (NFRS Size)	Glass Type (Grilles = Full Divided Light) (Includes Tempered Glass unless otherwise specified)	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.	
400 Series	Gliding Window (59" x 47")	Non-Tempered Glass (Standard)						
		HP Low-E4®	0.34	0.30	0.50	NO		
		HP Low-E4® with Grilles	0.35	0.27	0.44	NO		
		HP Low-E4® Sun	0.34	0.19	0.27	NO		
		HP Low-E4® Sun with Grilles	0.35	0.17	0.24	NO		
		HP Low-E4® SmartSun™	0.33	0.20	0.45	NO		
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.18	0.40	NO		
		Tempered Glass						
		HP Low-E4® Tempered	0.34	0.29	0.49	NO		
		HP Low-E4® Tempered with Grilles	0.35	0.26	0.43	NO		
		HP Low-E4® Sun Tempered	0.34	0.19	0.27	NO		
		HP Low-E4® Sun Tempered with Grilles	0.35	0.17	0.24	NO		
		HP Low-E4® SmartSun™ Tempered	0.33	0.20	0.44	NO		
		HP Low-E4® SmartSun™ Tempered w/Grilles	0.34	0.18	0.39	NO		
400 Series	Elliptical Window (47" x 59")	HP Low-E4®	0.31	0.34	0.59	NO		
		HP Low-E4® with Grilles	0.33	0.31	0.53	NO		
		HP Low-E4® Sun	0.31	0.21	0.33	NO		
		HP Low-E4® Sun with Grilles	0.33	0.19	0.29	NO		
		HP Low-E4® SmartSun™	0.31	0.23	0.53	NO		
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.21	0.48	NO		
400 Series	Circle Top™ Casement Window (47" x 59")	HP Low-E4®	0.31	0.35	0.60	NO		
		HP Low-E4® with Grilles	0.32	0.31	0.53	NO		
		HP Low-E4® Sun	0.31	0.21	0.33	NO		
		HP Low-E4® Sun with Grilles	0.33	0.19	0.30	NO		
		HP Low-E4® SmartSun™	0.30	0.23	0.54	YES		
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.21	0.48	NO		
400 Series	Circle/Oval Window (47" x 59")	HP Low-E4®	0.31	0.35	0.60	NO		
		HP Low-E4® with Grilles	0.32	0.31	0.53	NO		
		HP Low-E4® Sun	0.31	0.21	0.33	NO		
		HP Low-E4® Sun with Grilles	0.33	0.19	0.30	NO		
		HP Low-E4® SmartSun™	0.30	0.23	0.54	YES		
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.21	0.48	NO		
400 Series	Arch Window (47" x 59")	HP Low-E4®	0.32	0.34	0.58	NO		
		HP Low-E4® with Grilles	0.33	0.30	0.52	NO		
		HP Low-E4® Sun	0.32	0.21	0.31	NO		
		HP Low-E4® Sun with Grilles	0.33	0.19	0.28	NO		
		HP Low-E4® SmartSun™	0.31	0.23	0.52	NO		
		HP Low-E4® SmartSun™ w/Grilles	0.33	0.21	0.46	NO		
400 Series	Flexiframe® Window (47" x 59")	HP Low-E4®	0.31	0.34	0.58	NO		
		HP Low-E4® with Grilles	0.32	0.30	0.52	NO		
		HP Low-E4® Sun	0.31	0.21	0.31	NO		
		HP Low-E4® Sun with Grilles	0.33	0.19	0.28	NO		
		HP Low-E4® SmartSun™	0.30	0.23	0.52	YES		
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.21	0.46	NO		
400 Series	Springline™ Window (47" x 59")	HP Low-E4®	0.34	0.34	0.58	NO		
		HP Low-E4® with Grilles	0.36	0.30	0.52	NO		
		HP Low-E4® Sun	0.35	0.21	0.31	NO		
		HP Low-E4® Sun with Grilles	0.36	0.19	0.28	NO		
		HP Low-E4® SmartSun™	0.34	0.23	0.52	NO		
		HP Low-E4® SmartSun™ w/Grilles	0.36	0.21	0.46	NO		

"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09


**Product performance values and ENERGY STAR® qualification designations  
for glass products ordered with capillary breather tubes for high altitude applications**

Andersen® Product Line	Product Type (NFRC Size)	Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
400 Series	Skylight (47" x 47")	HP Low-E4® Tempered	0.59	0.39	0.68		NO
		HP Low-E4® Tempered Lami.	0.58	0.39	0.66		NO
		HP Low-E4® Sun Tempered	0.59	0.25	0.38		NO
		HP Low-E4® Sun Tempered Lami.	0.58	0.24	0.37		NO
		HP Low-E4® SmartSun™ Tempered	0.58	0.26	0.61		NO
		HP Low-E4® SmartSun™ Tempered Lami.	0.57	0.26	0.59		NO
400 Series	Venting Roof Window (47" x 47")	HP Low-E4® Tempered	0.56	0.36	0.62		NO
		HP Low-E4® Tempered Lami.	0.55	0.36	0.60		NO
		HP Low-E4® Sun Tempered	0.56	0.23	0.34		NO
		HP Low-E4® Sun Tempered Lami.	0.55	0.22	0.33		NO
		HP Low-E4® SmartSun™ Tempered	0.55	0.24	0.56		NO
		HP Low-E4® SmartSun™ Tempered Lami.	0.55	0.24	0.54		NO
400 Series	Stationary Roof Window (47" x 47")	HP Low-E4® Tempered	0.55	0.37	0.63		NO
		HP Low-E4® Tempered Lami.	0.55	0.37	0.62		NO
		HP Low-E4® Sun Tempered	0.56	0.24	0.35		NO
		HP Low-E4® Sun Tempered Lami.	0.55	0.23	0.34		NO
		HP Low-E4® SmartSun™ Tempered	0.55	0.25	0.57		NO
		HP Low-E4® SmartSun™ Tempered Lami.	0.54	0.25	0.56		NO

Andersen® Product Line	Product Type (NFRC Size)	Glass Type Tempered Glass Grilles = Full Divided Light	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
400 Series	Frenchwood® Gliding Patio Door (79" x 79")	HP Low-E4®	0.33	0.27	0.45		NO
		HP Low-E4® with Grilles	0.34	0.23	0.39		NO
		HP Low-E4® Sun	0.33	0.17	0.25		NO
		HP Low-E4® Sun with Grilles	0.35	0.15	0.22		NO
		HP Low-E4® SmartSun™	0.33	0.18	0.41		NO
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.16	0.35		NO
400 Series	Frenchwood® Hinged Patio Door-Inswing (39" x 79")	HP Low-E4®	0.33	0.24	0.41		NO
		HP Low-E4® with Grilles	0.34	0.21	0.35		NO
		HP Low-E4® Sun	0.33	0.15	0.23		NO
		HP Low-E4® Sun with Grilles	0.34	0.13	0.19		NO
		HP Low-E4® SmartSun™	0.33	0.16	0.37		NO
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.14	0.31		NO
400 Series	Frenchwood® Hinged Patio Door-Outswing (39" x 79")	HP Low-E4®	0.33	0.25	0.41		NO
		HP Low-E4® with Grilles	0.34	0.22	0.35		NO
		HP Low-E4® Sun	0.33	0.16	0.23		NO
		HP Low-E4® Sun with Grilles	0.34	0.14	0.19		NO
		HP Low-E4® SmartSun™	0.33	0.17	0.37		NO
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.15	0.31		NO
400 Series	Frenchwood® Patio Door Sidelight (24" x 79")	HP Low-E4®	0.34	0.22	0.37		NO
		HP Low-E4® with Grilles	0.34	0.20	0.33		NO
		HP Low-E4® Sun	0.34	0.14	0.21		NO
		HP Low-E4® Sun with Grilles	0.34	0.13	0.18		NO
		HP Low-E4® SmartSun™	0.33	0.15	0.33		NO
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.14	0.29		NO
400 Series	Frenchwood® Patio Door Transom (79" x 24")	HP Low-E4®	0.32	0.24	0.40		NO
		HP Low-E4® with Grilles	0.33	0.22	0.35		NO
		HP Low-E4® Sun	0.33	0.15	0.22		NO
		HP Low-E4® Sun with Grilles	0.33	0.14	0.20		NO
		HP Low-E4® SmartSun™	0.32	0.16	0.36		NO
		HP Low-E4® SmartSun™ w/Grilles	0.32	0.15	0.32		NO

"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09

**Product performance values and ENERGY STAR® qualification designations  
for glass products ordered with capillary breather tubes for high altitude applications**

Andersen® Product Line	Product Type	Glass Type Grilles = Finelight™ or Full Divided Light	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		Meets Both U-Factor of 0.30 or lower and SHGC of 0.30 or lower.
Architectural	Casement Window (24 1/8" x 48")	HP Low-E4®	0.35	0.28	0.47		NO
		HP Low-E4® with Grilles	0.35	0.25	0.42		NO
		HP Low-E4® Sun	0.35	0.17	0.26		NO
		HP Low-E4® Sun with Grilles	0.35	0.16	0.23		NO
		HP Low-E4® SmartSun™	0.35	0.19	0.42		NO
		HP Low-E4® SmartSun™ w/Grilles	0.35	0.17	0.38		NO
Architectural	French Casement Window (56 1/2" x 71 7/8")	HP Low-E4®	0.35	0.28	0.47		NO
		HP Low-E4® with Grilles	0.35	0.25	0.42		NO
		HP Low-E4® Sun	0.35	0.17	0.26		NO
		HP Low-E4® Sun with Grilles	0.35	0.16	0.23		NO
		HP Low-E4® SmartSun™	0.35	0.19	0.42		NO
		HP Low-E4® SmartSun™ w/Grilles	0.35	0.17	0.38		NO
Architectural	Awning Window (48" x 24 1/8")	HP Low-E4®	0.35	0.28	0.47		NO
		HP Low-E4® with Grilles	0.35	0.25	0.42		NO
		HP Low-E4® Sun	0.35	0.17	0.26		NO
		HP Low-E4® Sun with Grilles	0.35	0.16	0.23		NO
		HP Low-E4® SmartSun™	0.34	0.19	0.42		NO
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.17	0.38		NO
Architectural	Casement/Awning Picture Window (up to 17 Sq. Ft.)	HP Low-E4®	0.34	0.33	0.55		NO
		HP Low-E4® with Grilles	0.34	0.29	0.49		NO
		HP Low-E4® Sun	0.35	0.20	0.31		NO
		HP Low-E4® Sun with Grilles	0.35	0.18	0.28		NO
		HP Low-E4® SmartSun™	0.34	0.22	0.50		NO
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.20	0.44		NO
Architectural	Specialty Window (up to 17 Sq. Ft.)	HP Low-E4®	0.34	0.37	0.64		NO
		HP Low-E4® with Grilles	0.34	0.34	0.57		NO
		HP Low-E4® Sun	0.35	0.23	0.36		NO
		HP Low-E4® Sun with Grilles	0.35	0.21	0.32		NO
		HP Low-E4® SmartSun™	0.34	0.25	0.58		NO
		HP Low-E4® SmartSun™ w/Grilles	0.34	0.23	0.52		NO
Architectural	Hinged French Door-Inswing (37 5/8" x 82")	HP Low-E4®	0.35	0.22	0.37		NO
		HP Low-E4® with Grilles	0.36	0.19	0.31	-	NO
		HP Low-E4® Sun	0.35	0.14	0.21		NO
		HP Low-E4® Sun with Grilles	0.36	0.12	0.17		NO
		HP Low-E4® SmartSun™	0.35	0.15	0.33		NO
		HP Low-E4® SmartSun™ w/Grilles	0.36	0.13	0.28	-	NO
Architectural	Hinged French Door-Outswing (37 5/8" x 82")	HP Low-E4®	0.34	0.22	0.37		NO
		HP Low-E4® with Grilles	0.35	0.19	0.31		NO
		HP Low-E4® Sun	0.34	0.14	0.21		NO
		HP Low-E4® Sun with Grilles	0.35	0.12	0.17		NO
		HP Low-E4® SmartSun™	0.34	0.15	0.33		NO
		HP Low-E4® SmartSun™ w/Grilles	0.35	0.13	0.28		NO
Architectural	Fixed French Inswing Door & Sidelight (37 5/8" x 82")	HP Low-E4®	0.37	0.15	0.24	-	NO
		HP Low-E4® with Grilles	0.37	0.15	0.23	-	NO
		HP Low-E4® Sun	0.37	0.10	0.14	-	NO
		HP Low-E4® Sun with Grilles	0.37	0.10	0.13	-	NO
		HP Low-E4® SmartSun™	0.37	0.11	0.22	-	NO
		HP Low-E4® SmartSun™ w/Grilles	0.37	0.10	0.21	-	NO
Architectural	Fixed French Outswing Door & Sidelight (37 5/8" x 82")	HP Low-E4®	0.35	0.15	0.24		NO
		HP Low-E4® with Grilles	0.36	0.15	0.23	-	NO
		HP Low-E4® Sun	0.36	0.10	0.14	-	NO
		HP Low-E4® Sun with Grilles	0.36	0.10	0.13	-	NO
		HP Low-E4® SmartSun™	0.35	0.11	0.22		NO
		HP Low-E4® SmartSun™ w/Grilles	0.36	0.10	0.21	-	NO
Architectural	Commercial Outswing Door (37 5/8" x 82")	HP Low-E4®	0.34	0.22	0.37		NO
		HP Low-E4® with Grilles	0.35	0.19	0.31		NO
		HP Low-E4® Sun	0.34	0.14	0.21		NO
		HP Low-E4® Sun with Grilles	0.35	0.12	0.17		NO
		HP Low-E4® SmartSun™	0.34	0.15	0.33		NO
		HP Low-E4® SmartSun™ w/Grilles	0.35	0.13	0.28		NO

"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency. "Andersen" and all marks where denoted are trademarks of Andersen Corporation. © 2009 Andersen Corporation. All rights reserved. Rev. 02/09