

Andersen® Product Line / Product Type	Andersen Glass Type	Grilles Type	NFRC Certified Products Directory Number	U-Factor	U-Factor (Grilles)	SHGC	V <sub>t</sub>	Chamber	Infiltration	Condensation Resistance	US ENERGY STAR 2010				Canada ENERGY STAR 2010						
											Uplight	Midlight	Downlight	Other	Uplight	Midlight	Downlight	Other			
400 Series Woodwright® Double-Hung Window	3.1 Annealed, or 3.1 Tempered Glass - w/ No Grilles and Grilles Less Than 1"																				
	Low-E40	No Grilles	AND-N-66-00183-00001	0.29	1.65	0.31	0.53	20	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00183-00002	0.29	1.65	0.28	0.47	19	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Full Divided Lite (FDL)	AND-N-66-00190-00001	0.30	1.70	0.28	0.47	18	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Finelight™ (grilles-between-the-glass)	AND-N-66-00204-00001	0.29	1.65	0.28	0.47	19	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
	Low-E40 Sun	No Grilles	AND-N-66-00185-00001	0.30	1.70	0.19	0.29	12	0.14	56	N	NC	50	50	50	50	A	-	-	-	-
		Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00185-00002	0.30	1.70	0.17	0.26	11	0.14	56	N	NC	50	50	50	50	A	-	-	-	-
		Full Divided Lite (FDL)	AND-N-66-00192-00001	0.31	1.76	0.17	0.26	10	0.14	56	N	NC	50	50	50	50	A	-	-	-	-
		Finelight™ (grilles-between-the-glass)	AND-N-66-00205-00001	0.30	1.70	0.17	0.26	11	0.14	56	N	NC	50	50	50	50	A	-	-	-	-
	Low-E40 SmartSun™	No Grilles	AND-N-66-00188-00001	0.29	1.65	0.20	0.47	14	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00188-00002	0.29	1.65	0.18	0.42	13	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Full Divided Lite (FDL)	AND-N-66-00193-00001	0.30	1.70	0.18	0.42	12	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Finelight™ (grilles-between-the-glass)	AND-N-66-00207-00001	0.29	1.65	0.18	0.42	13	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
	Low-E40 PassiveSun™	No Grilles	AND-N-66-00182-00001	0.31	1.76	0.51	0.58	30	0.14	55	N	NC	50	50	50	50	A	-	-	-	-
		Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00182-00002	0.31	1.76	0.48	0.51	27	0.14	55	N	NC	50	50	50	50	A	-	-	-	-
		Full Divided Lite (FDL)	AND-N-66-00188-00001	0.32	1.82	0.48	0.51	25	0.14	55	N	NC	50	50	50	50	A	-	-	-	-
		Finelight™ (grilles-between-the-glass)	AND-N-66-00203-00001	0.31	1.76	0.48	0.51	27	0.14	55	N	NC	50	50	50	50	A	-	-	-	-
	3.1 Annealed, or 3.1 Tempered Glass - w/ Grilles 1" or Greater																				
	Low-E40	Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00183-00003	0.29	1.65	0.25	0.41	17	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Full Divided Lite (FDL)	AND-N-66-00197-00001	0.30	1.70	0.25	0.41	16	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Finelight™ (grilles-between-the-glass)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	-	-	-	-	-	-	-	-	-	-
	Low-E40 Sun	Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00185-00003	0.30	1.70	0.15	0.23	10	0.14	56	N	NC	50	50	50	50	A	-	-	-	-
		Full Divided Lite (FDL)	AND-N-66-00198-00001	0.30	1.70	0.15	0.23	10	0.14	56	N	NC	50	50	50	50	A	-	-	-	-
		Finelight™ (grilles-between-the-glass)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	-	-	-	-	-	-	-	-	-	-
	Low-E40 SmartSun™	Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00186-00003	0.29	1.65	0.17	0.37	12	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Full Divided Lite (FDL)	AND-N-66-00200-00001	0.29	1.65	0.17	0.37	12	0.14	57	N	NC	50	50	50	50	A	-	-	-	-
		Finelight™ (grilles-between-the-glass)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	-	-	-	-	-	-	-	-	-	-
	Low-E40 PassiveSun™	Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00182-00003	0.31	1.76	0.41	0.45	24	0.14	55	N	NC	50	50	50	50	A	-	-	-	-
Full Divided Lite (FDL)		AND-N-66-00198-00001	0.32	1.82	0.41	0.45	22	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
Finelight™ (grilles-between-the-glass)		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	-	-	-	-	-	-	-	-	-	-	
3.9 Annealed, or 3.9 Tempered Glass - w/ No Grilles and Grilles Less Than 1"																					
Low-E40	No Grilles	AND-N-66-00211-00001	0.30	1.70	0.30	0.52	18	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
	Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00211-00002	0.30	1.70	0.27	0.46	17	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
	Full Divided Lite (FDL)	AND-N-66-00218-00001	0.31	1.76	0.27	0.46	16	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
	Finelight™ (grilles-between-the-glass)	AND-N-66-00232-00001	0.31	1.76	0.27	0.46	16	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
Low-E40 Sun	No Grilles	AND-N-66-00213-00001	0.30	1.70	0.19	0.29	12	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
	Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00213-00002	0.30	1.70	0.17	0.25	11	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
	Full Divided Lite (FDL)	AND-N-66-00220-00001	0.31	1.78	0.17	0.25	10	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
	Finelight™ (grilles-between-the-glass)	AND-N-66-00234-00001	0.31	1.76	0.17	0.25	10	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
Low-E40 SmartSun™	No Grilles	AND-N-66-00214-00001	0.29	1.65	0.21	0.47	15	0.14	56	N	NC	50	50	50	50	A	-	-	-	-	
	Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00214-00002	0.29	1.65	0.19	0.42	13	0.14	56	N	NC	50	50	50	50	A	-	-	-	-	
	Full Divided Lite (FDL)	AND-N-66-00221-00001	0.30	1.70	0.19	0.42	12	0.14	56	N	NC	50	50	50	50	A	-	-	-	-	
	Finelight™ (grilles-between-the-glass)	AND-N-66-00235-00001	0.30	1.70	0.19	0.42	12	0.14	56	N	NC	50	50	50	50	A	-	-	-	-	
Low-E40 PassiveSun™	No Grilles	AND-N-66-00210-00001	0.32	1.82	0.50	0.57	28	0.14	54	N	NC	50	50	50	50	A	-	-	-	-	
	Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00210-00002	0.32	1.82	0.45	0.51	25	0.14	54	N	NC	50	50	50	50	A	-	-	-	-	
	Full Divided Lite (FDL)	AND-N-66-00217-00001	0.33	1.87	0.45	0.51	24	0.14	54	N	NC	50	50	50	50	A	-	-	-	-	
	Finelight™ (grilles-between-the-glass)	AND-N-66-00231-00001	0.33	1.87	0.45	0.51	24	0.14	54	N	NC	50	50	50	50	A	-	-	-	-	
3.9 Annealed, or 3.9 Tempered Glass - w/ Grilles 1" or Greater																					
Low-E40	Simulated Divided Lite (SDL) or Installed Interior Removable	AND-N-66-00211-00003	0.30	1.70	0.24	0.41	15	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
	Full Divided Lite (FDL)	AND-N-66-00225-00001	0.31	1.78	0.24	0.41	14	0.14	55	N	NC	50	50	50	50	A	-	-	-	-	
	Finelight™ (grilles-between-the-glass)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	-	-	-	-	-	-	-	-	-	-	

# ANDERSEN® 400 SERIES WINDOW AND DOOR NFRC/ENERGY STAR® INFORMATION

This document provides NFRC certified U-Factor, Solar Heat Gain Coefficient (SHGC) and Visible Transmittance (VT) values for Andersen® products along with the corresponding ENERGY STAR® Version 5.0 (2010) climate zones that the product and glass type meet.

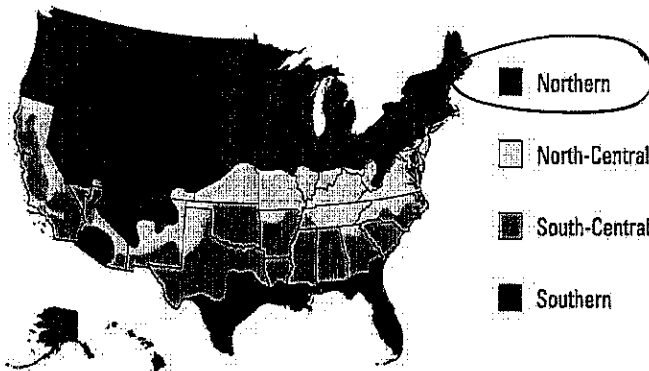


These products rated, certified and labeled by National Fenestration Rating Council® (NFRC) - a non-profit organization that provides fair, accurate and credible energy performance ratings for windows and doors.

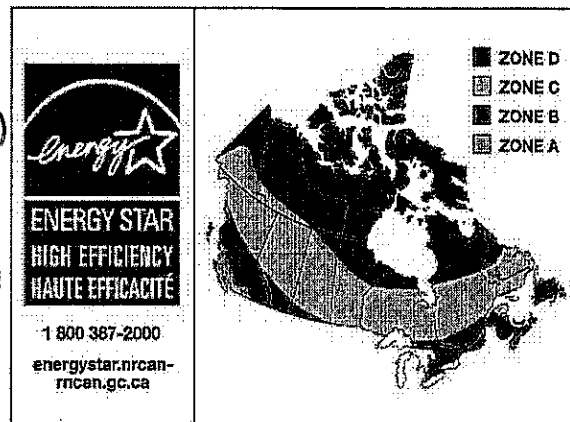


Many of our products meet the stringent energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. These guidelines are based on the heat gain and loss of each product in various regions of the country. Check the Andersen product performance available at [www.andersenwindows.com](http://www.andersenwindows.com) for specific ENERGY STAR qualifications.

## United States ENERGY STAR® Climate Zone Criteria



## Canada ENERGY STAR® Climate Zone Criteria



### ENERGY STAR® Qualification Criteria for Residential Windows and Doors

Climate Zone	U-Factor		SHGC	Prescriptive Equivalent Energy Performance
	U-Factor	SHGC		
Northern	≤ 0.30	Any	Any	Prescriptive
North-Central	≤ 0.41	≥ 0.35	Any	Equivalent Energy Performance
	≤ 0.38	≥ 0.40	Any	
South-Central	≤ 0.52	≤ 0.40	Any	Equivalent Energy Performance
Southern	≤ 0.35	≤ 0.30	Any	
Southern	≤ 0.60	≤ 0.27	Any	Equivalent Energy Performance

Zone	Heating Degree-Day Range	Compliance Paths		
		Energy Rating (ER)		U-Factor
		Minimum ER (Unitless)	Maximum U-Factor 2.00 W/m²·K (0.35 Btu/h·ft²·°F)	Minimum ER (Unitless)
A	≤ 3500	21	or 1.60 (0.32)	13
B	> 3500 to ≤ 5500	25	or 1.60 (0.28)	17
C	> 5500 to ≤ 8000	29	or 1.40 (0.25)	21
D	> 8000	34	or 1.20 (0.21)	25

Zone	Heating Degree-Day Range	Compliance Paths		
		Energy Rating (ER)		U-Factor
		Minimum ER (Unitless)	Maximum U-Factor 2.00 W/m²·K (0.35 Btu/h·ft²·°F)	Minimum ER (Unitless)
A	≤ 3500	21	or 1.80 (0.32)	N/A
B	> 3500 to ≤ 5500	25	or 1.60 (0.28)	N/A
C	> 5500 to ≤ 8000	29	or 1.40 (0.25)	N/A
D	> 8000	34	or 1.20 (0.21)	N/A

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

<sup>1</sup>U-Factor defines the amount of heat loss through the total unit in BTU/h·ft²·°F, metric in W/m²·K. The lower the value, the less the heat is lost through the entire product.

<sup>2</sup>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.

<sup>3</sup>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 as validated by an independent test lab in compliance with NFRC program and procedural requirements.

This data is accurate as of February 11, 2013. Due to ongoing product changes, updated test results or new industry standards or requirements, this data may change over time. Due to variations in dealer and distributor inventory levels, products that were manufactured before February 11, 2013 that were designed, tested and labeled with different NFRC values may still be available. Check the labels on the product packaging to confirm NFRC values. 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 altitude, etc.

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