

**Andersen® NFRC Certified Total Unit Performance**  
A-Series Windows

Notes on the next page also apply to this page.

Andersen® Product		Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>A-Series Casement Windows</b> AND-N-86	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.30	0.26	0.45
			Simulated Divided Light Grilles	0.31	0.24	0.40
			Finelight™ Light Grilles	0.30	0.24	0.40
		Low-E4* Sun	Without Grilles	0.30	0.17	0.24
			Simulated Divided Light Grilles	0.30	0.15	0.22
			Finelight Light Grilles	0.31	0.15	0.22
	Low-E4* SmartSun™	Without Grilles	0.29	0.18	0.40	
		Simulated Divided Light Grilles	0.29	0.17	0.36	
		Finelight Light Grilles	0.30	0.17	0.36	
		Without Grilles	0.29	0.18	0.40	
		Simulated Divided Light Grilles	0.29	0.16	0.35	
		Finelight Light Grilles	0.30	0.16	0.35	
<b>A-Series Awning Windows</b> AND-N-87	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.30	0.26	0.43
			Simulated Divided Light Grilles	0.30	0.23	0.39
			Finelight™ Light Grilles	0.30	0.23	0.39
		Low-E4* Sun	Without Grilles	0.30	0.16	0.24
			Simulated Divided Light Grilles	0.30	0.15	0.21
			Finelight Light Grilles	0.31	0.15	0.21
	Low-E4* SmartSun™	Without Grilles	0.29	0.18	0.39	
		Simulated Divided Light Grilles	0.29	0.16	0.35	
		Finelight Light Grilles	0.30	0.16	0.35	
		Without Grilles	0.29	0.18	0.39	
		Simulated Divided Light Grilles	0.29	0.16	0.35	
		Finelight Light Grilles	0.30	0.16	0.35	
<b>A-Series Double-Hung Windows</b> AND-N-91	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.31	0.30	0.51
			Simulated Divided Light Grilles	0.31	0.27	0.45
			Finelight™ Light Grilles	0.32	0.27	0.45
		Low-E4* Sun	Without Grilles	0.32	0.19	0.28
			Simulated Divided Light Grilles	0.32	0.17	0.25
			Finelight Light Grilles	0.32	0.17	0.25
	Low-E4* SmartSun™	Without Grilles	0.31	0.20	0.46	
		Simulated Divided Light Grilles	0.31	0.18	0.41	
		Finelight Light Grilles	0.32	0.18	0.41	
		Without Grilles	0.31	0.20	0.46	
		Simulated Divided Light Grilles	0.31	0.18	0.41	
		Finelight Light Grilles	0.32	0.18	0.41	
<b>A-Series Picture Windows</b> AND-N-88	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.29	0.31	0.53
			Simulated Divided Light Grilles	0.29	0.28	0.47
			Finelight™ Light Grilles	0.30	0.28	0.47
		Low-E4* Sun	Without Grilles	0.30	0.19	0.29
			Simulated Divided Light Grilles	0.30	0.17	0.25
			Finelight Light Grilles	0.31	0.17	0.25
	Low-E4* SmartSun™	Without Grilles	0.29	0.21	0.47	
		Simulated Divided Light Grilles	0.29	0.19	0.42	
		Finelight Light Grilles	0.30	0.19	0.42	
		Without Grilles	0.29	0.21	0.47	
		Simulated Divided Light Grilles	0.29	0.19	0.42	
		Finelight Light Grilles	0.30	0.19	0.42	
<b>A-Series Stationary Transom Windows</b> AND-N-89	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.30	0.31	0.53
			Simulated Divided Light Grilles	0.30	0.28	0.47
			Finelight™ Light Grilles	0.30	0.28	0.47
		Low-E4* Sun	Without Grilles	0.30	0.20	0.29
			Simulated Divided Light Grilles	0.30	0.18	0.26
			Finelight Light Grilles	0.31	0.18	0.26
	Low-E4* SmartSun™	Without Grilles	0.29	0.21	0.48	
		Simulated Divided Light Grilles	0.29	0.19	0.43	
		Finelight Light Grilles	0.30	0.19	0.43	
		Without Grilles	0.29	0.21	0.48	
		Simulated Divided Light Grilles	0.29	0.19	0.43	
		Finelight Light Grilles	0.30	0.19	0.43	
<b>A-Series Venting Transom Windows</b> AND-N-90	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.30	0.27	0.45
			Simulated Divided Light Grilles	0.30	0.24	0.41
			Finelight™ Light Grilles	0.30	0.24	0.41
		Low-E4* Sun	Without Grilles	0.30	0.17	0.25
			Simulated Divided Light Grilles	0.30	0.15	0.22
			Finelight Light Grilles	0.31	0.15	0.22
	Low-E4* SmartSun™	Without Grilles	0.29	0.18	0.41	
		Simulated Divided Light Grilles	0.29	0.17	0.37	
		Finelight Light Grilles	0.30	0.17	0.37	
		Without Grilles	0.29	0.18	0.41	
		Simulated Divided Light Grilles	0.29	0.17	0.37	
		Finelight Light Grilles	0.30	0.17	0.37	

Andersen® Product		Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>A-Series Direct-Set Specialty Windows</b> ( > 36 sq.ft. to 50 sq.ft. or 3.34 m <sup>2</sup> to 4.65 m <sup>2</sup> ) AND-N-126	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.28	0.34	0.56
			Simulated Divided Light Grilles	0.28	0.31	0.51
			Finelight™ Light Grilles	0.30	0.31	0.51
		Low-E4* Sun	Without Grilles	0.29	0.21	0.30
			Simulated Divided Light Grilles	0.29	0.19	0.27
			Finelight Light Grilles	0.29	0.19	0.27
	Low-E4* SmartSun™	Without Grilles	0.28	0.23	0.51	
		Simulated Divided Light Grilles	0.28	0.21	0.45	
		Finelight Light Grilles	0.28	0.21	0.45	
		Without Grilles	0.28	0.23	0.51	
		Simulated Divided Light Grilles	0.28	0.21	0.45	
		Finelight Light Grilles	0.28	0.21	0.45	
<b>A-Series Sash-Set Specialty Windows</b> ( > 36 sq.ft. to 50 sq.ft. or 3.34 m <sup>2</sup> to 4.65 m <sup>2</sup> ) AND-N-128	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.35	0.31	0.51
			Simulated Divided Light Grilles	0.35	0.28	0.45
			Finelight™ Light Grilles	0.36	0.28	0.45
		Low-E4* Sun	Without Grilles	0.35	0.20	0.27
			Simulated Divided Light Grilles	0.35	0.18	0.24
			Finelight Light Grilles	0.36	0.18	0.24
	Low-E4* SmartSun™	Without Grilles	0.34	0.22	0.46	
		Simulated Divided Light Grilles	0.34	0.20	0.41	
		Finelight Light Grilles	0.36	0.20	0.41	
		Without Grilles	0.35	0.31	0.51	
		Simulated Divided Light Grilles	0.35	0.28	0.45	
		Finelight Light Grilles	0.36	0.28	0.45	

**Andersen® NFRC Certified Total Unit Performance**  
400 Series Windows

Andersen® Product		Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>400 Series Casement Windows</b> AND-N-1	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.33	0.31	0.53
			Simulated Divided Light Grilles	0.33	0.29	0.48
			Finelight™ Light Grilles	0.34	0.29	0.48
		Low-E4* Sun	Without Grilles	0.33	0.20	0.29
			Simulated Divided Light Grilles	0.33	0.18	0.27
			Finelight Light Grilles	0.34	0.18	0.27
	Low-E4* SmartSun™	Without Grilles	0.33	0.21	0.48	
		Simulated Divided Light Grilles	0.33	0.20	0.43	
		Finelight Light Grilles	0.34	0.20	0.43	
		Monolithic GRAY CLEAR	Without Grilles	0.79	0.58	0.66
			Simulated Divided Light Grilles	0.79	0.53	0.60
			Without Grilles	0.79	0.45	0.39
<b>400 Series Awning Windows</b> AND-N-2	IMPACT-RESISTANT	Low-E4*	Without Grilles	0.33	0.31	0.52
			Simulated Divided Light Grilles	0.33	0.28	0.47
			Finelight™ Light Grilles	0.34	0.28	0.47
		Low-E4* Sun	Without Grilles	0.34	0.20	0.29
			Simulated Divided Light Grilles	0.34	0.18	0.26
			Finelight Light Grilles	0.34	0.18	0.26
	Low-E4* SmartSun™	Without Grilles	0.33	0.21	0.47	
		Simulated Divided Light Grilles	0.33	0.19	0.42	
		Finelight Light Grilles	0.33	0.19	0.42	
		Monolithic GRAY CLEAR	Without Grilles	0.83	0.57	0.65
			Simulated Divided Light Grilles	0.83	0.52	0.59
			Without Grilles	0.83	0.44	0.39
Simulated Divided Light Grilles	0.83	0.40	0.35			

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**Andersen® NFRC Certified Total Unit Performance** (continued)  
400 Series Windows

Andersen® Product	Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>400 Series Casement/Awning Picture Windows</b> AND-N-54	IMPACT-RESISTANT Low-E4® Sun	Without Grilles	0.26	0.34	0.57
		Simulated Divided Light Grilles	0.26	0.31	0.51
		Finelight™ Light Grilles	0.26	0.31	0.51
		Full Divided Light Grilles	0.27	0.31	0.51
		Without Grilles	0.26	0.21	0.32
		Simulated Divided Light Grilles	0.26	0.19	0.28
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.25	0.23	0.51
		Simulated Divided Light Grilles	0.25	0.21	0.46
		Finelight Light Grilles	0.25	0.21	0.46
		Full Divided Light Grilles	0.26	0.21	0.46
		Without Grilles	0.82	0.59	0.71
		Simulated Divided Light Grilles	0.82	0.53	0.64
<b>400 Series Tilt-Wash Double-Hung Windows</b> AND-N-24	IMPACT-RESISTANT Low-E4® Sun	Without Grilles	0.34	0.31	0.53
		Simulated Divided Light Grilles	0.34	0.28	0.47
		Finelight™ Light Grilles	0.36	0.28	0.47
		Full Divided Light Grilles	0.35	0.28	0.47
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.35	0.20	0.29
		Simulated Divided Light Grilles	0.35	0.18	0.26
		Finelight Light Grilles	0.36	0.18	0.26
		Full Divided Light Grilles	0.35	0.18	0.26
	IMPACT-RESISTANT Monolithic GRAY CLEAR	Without Grilles	0.34	0.21	0.47
		Simulated Divided Light Grilles	0.34	0.19	0.42
		Finelight Light Grilles	0.35	0.19	0.42
		Full Divided Light Grilles	0.35	0.19	0.42
IMPACT-RESISTANT Monolithic GRAY CLEAR	Without Grilles	0.81	0.57	0.65	
	Simulated Divided Light Grilles	n/a	n/a	n/a	
	Without Grilles	0.81	0.44	0.39	
	Simulated Divided Light Grilles	n/a	n/a	n/a	
<b>400 Series Tilt-Wash Transom Windows</b> AND-N-76	IMPACT-RESISTANT Low-E4® Sun	Without Grilles	0.26	0.31	0.54
		Simulated Divided Light Grilles	0.26	0.28	0.48
		Finelight™ Light Grilles	0.26	0.28	0.48
		Full Divided Light Grilles	0.27	0.28	0.48
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.27	0.19	0.30
		Simulated Divided Light Grilles	0.27	0.17	0.26
		Finelight Light Grilles	0.27	0.17	0.26
		Full Divided Light Grilles	0.28	0.17	0.26
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.26	0.21	0.49
		Simulated Divided Light Grilles	0.26	0.19	0.44
		Finelight Light Grilles	0.26	0.19	0.44
		Full Divided Light Grilles	0.27	0.19	0.44
IMPACT-RESISTANT Monolithic GRAY CLEAR	Without Grilles	0.79	0.58	0.67	
	Simulated Divided Light Grilles	0.79	0.52	0.60	
	Without Grilles	0.79	0.46	0.34	
	Simulated Divided Light Grilles	0.79	0.42	0.31	
<b>400 Series Tilt-Wash Picture Windows</b> AND-N-27	IMPACT-RESISTANT Low-E4® Sun	Without Grilles	0.32	0.33	0.55
		Simulated Divided Light Grilles	0.32	0.29	0.49
		Finelight™ Light Grilles	0.33	0.29	0.49
		Full Divided Light Grilles	0.32	0.29	0.49
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.32	0.20	0.30
		Simulated Divided Light Grilles	0.32	0.18	0.27
		Finelight Light Grilles	0.34	0.18	0.27
		Full Divided Light Grilles	0.32	0.18	0.27
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.31	0.22	0.49
		Simulated Divided Light Grilles	0.31	0.20	0.44
		Finelight Light Grilles	0.33	0.20	0.44
		Full Divided Light Grilles	0.32	0.20	0.44
IMPACT-RESISTANT Monolithic GRAY CLEAR	Without Grilles	n/a	n/a	n/a	
	Simulated Divided Light Grilles	n/a	n/a	n/a	
	Without Grilles	n/a	n/a	n/a	
	Simulated Divided Light Grilles	n/a	n/a	n/a	

Andersen® Product	Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>400 Series Half Circle - Casement/Awning, Circle &amp; Oval Windows</b> AND-N-54	IMPACT-RESISTANT Low-E4® Sun	Without Grilles	0.26	0.34	0.57
		Simulated Divided Light Grilles	0.26	0.31	0.51
		Finelight™ Light Grilles	0.26	0.31	0.51
		Full Divided Light Grilles	0.27	0.31	0.51
		Without Grilles	0.26	0.21	0.32
		Simulated Divided Light Grilles	0.26	0.19	0.28
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.25	0.23	0.51
		Simulated Divided Light Grilles	0.25	0.21	0.46
		Finelight Light Grilles	0.25	0.21	0.46
		Full Divided Light Grilles	0.26	0.21	0.46
		Without Grilles	0.82	0.59	0.71
		Simulated Divided Light Grilles	0.82	0.53	0.64
<b>400 Series Half Circle - Double-Hung Windows</b> AND-N-7	IMPACT-RESISTANT Low-E4® Sun	Without Grilles	0.27	0.33	0.56
		Simulated Divided Light Grilles	0.27	0.30	0.50
		Finelight™ Light Grilles	0.28	0.30	0.50
		Full Divided Light Grilles	0.28	0.30	0.50
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.27	0.21	0.31
		Simulated Divided Light Grilles	0.27	0.19	0.28
		Finelight Light Grilles	0.28	0.19	0.28
		Full Divided Light Grilles	0.28	0.19	0.28
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.26	0.22	0.50
		Simulated Divided Light Grilles	0.26	0.20	0.45
		Finelight Light Grilles	0.27	0.20	0.45
		Full Divided Light Grilles	0.27	0.20	0.45
IMPACT-RESISTANT Monolithic GRAY CLEAR	Without Grilles	0.81	0.58	0.70	
	Simulated Divided Light Grilles	n/a	n/a	n/a	
	Without Grilles	0.81	0.47	0.36	
	Simulated Divided Light Grilles	n/a	n/a	n/a	
<b>400 Series Arch Windows</b> AND-N-18	IMPACT-RESISTANT Low-E4® Sun	Without Grilles	0.27	0.33	0.56
		Simulated Divided Light Grilles	0.27	0.30	0.50
		Finelight™ Light Grilles	0.29	0.30	0.50
		Full Divided Light Grilles	0.29	0.30	0.50
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.28	0.20	0.30
		Simulated Divided Light Grilles	0.28	0.18	0.27
		Finelight Light Grilles	0.29	0.18	0.27
		Full Divided Light Grilles	0.29	0.18	0.27
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.27	0.23	0.50
		Simulated Divided Light Grilles	0.27	0.20	0.45
		Finelight Light Grilles	0.28	0.20	0.45
		Full Divided Light Grilles	0.28	0.20	0.45
IMPACT-RESISTANT Monolithic GRAY CLEAR	Without Grilles	0.83	0.59	0.71	
	Simulated Divided Light Grilles	0.83	0.53	0.64	
	Without Grilles	0.83	0.48	0.36	
	Simulated Divided Light Grilles	0.83	0.43	0.32	
<b>400 Series Springline™ Windows</b> AND-N-25	IMPACT-RESISTANT Low-E4® Sun	Without Grilles	0.30	0.33	0.56
		Simulated Divided Light Grilles	0.30	0.30	0.50
		Finelight™ Light Grilles	0.32	0.30	0.50
		Full Divided Light Grilles	0.32	0.30	0.50
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.31	0.20	0.30
		Simulated Divided Light Grilles	0.31	0.18	0.27
		Finelight Light Grilles	0.32	0.18	0.27
		Full Divided Light Grilles	0.32	0.18	0.27
	IMPACT-RESISTANT Low-E4® SmartSun™	Without Grilles	0.30	0.23	0.50
		Simulated Divided Light Grilles	0.30	0.21	0.45
		Finelight Light Grilles	0.31	0.21	0.45
		Full Divided Light Grilles	0.31	0.21	0.45
IMPACT-RESISTANT Monolithic GRAY CLEAR	Without Grilles	0.85	0.59	0.71	
	Simulated Divided Light Grilles	0.85	0.54	0.64	
	Without Grilles	0.85	0.48	0.36	
	Simulated Divided Light Grilles	0.85	0.43	0.32	

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• "Low-E4" SmartSun™, "Low-E4" and "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/ft²·°F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 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 as validated by an independent test lab in compliance with NFRC program and procedural requirements.  
 • This data is accurate as of October, 2013. 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.

**Andersen® NFRC Certified Total Unit Performance** (continued)  
400 Series Windows

Andersen® Product		Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>400 Series Flexiframe® Windows</b> AND-N-17	IMPACT-RESISTANT	Low-E4®	Without Grilles	0.27	0.33	0.56
			Simulated Divided Light Grilles	0.27	0.30	0.50
			Finelight™ Light Grilles	0.28	0.30	0.50
			Full Divided Light Grilles	0.28	0.30	0.50
		Low-E4® Sun	Without Grilles	0.27	0.20	0.30
			Simulated Divided Light Grilles	0.27	0.18	0.27
			Finelight Light Grilles	0.28	0.18	0.27
			Full Divided Light Grilles	0.28	0.18	0.27
		Low-E4® SmartSun™	Without Grilles	0.26	0.22	0.50
			Simulated Divided Light Grilles	0.26	0.20	0.45
			Finelight Light Grilles	0.27	0.20	0.45
			Full Divided Light Grilles	0.27	0.20	0.45
	Monolithic GRAY CLEAR	Without Grilles	0.82	0.59	0.71	
		Simulated Divided Light Grilles	0.82	0.53	0.63	
		Without Grilles	0.82	0.48	0.36	
		Simulated Divided Light Grilles	0.82	0.43	0.32	

Andersen® Product		Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		
<b>A-Series Frenchwood® Patio Door Sash-Set Transoms &amp; Sidelight Transoms</b> AND-N-95	IMPACT-RESISTANT	Low-E4®	Without Grilles	0.31	0.25	0.42	
			Simulated Divided Light Grilles	0.31	0.23	0.38	
			Finelight™ Light Grilles	0.32	0.23	0.38	
			Full Divided Light Grilles	0.32	0.23	0.38	
		Low-E4® Sun	Without Grilles	0.31	0.16	0.23	
			Simulated Divided Light Grilles	0.31	0.14	0.21	
			Finelight Light Grilles	0.32	0.14	0.21	
			Full Divided Light Grilles	0.32	0.14	0.21	
		Low-E4® SmartSun™	Without Grilles	0.31	0.17	0.38	
			Simulated Divided Light Grilles	0.31	0.16	0.34	
			Finelight Light Grilles	0.32	0.16	0.34	
			Full Divided Light Grilles	0.31	0.16	0.34	
	Monolithic GRAY CLEAR	Without Grilles	0.70	0.42	0.49		
		Simulated Divided Light Grilles	0.70	0.38	0.44		
		Without Grilles	0.70	0.31	0.25		
		Simulated Divided Light Grilles	0.70	0.28	0.22		
	<b>A-Series Frenchwood® Patio Door Direct-Set Transoms &amp; Sidelight Transoms</b> AND-N-96	IMPACT-RESISTANT	Low-E4®	Without Grilles	0.30	0.33	0.57
				Simulated Divided Light Grilles	0.30	0.30	0.51
				Finelight™ Light Grilles	0.30	0.30	0.51
				Full Divided Light Grilles	0.31	0.30	0.51
			Low-E4® Sun	Without Grilles	0.30	0.21	0.31
				Simulated Divided Light Grilles	0.30	0.19	0.28
				Finelight Light Grilles	0.31	0.19	0.28
				Full Divided Light Grilles	0.31	0.19	0.28
Low-E4® SmartSun™			Without Grilles	0.29	0.23	0.51	
			Simulated Divided Light Grilles	0.29	0.21	0.46	
			Finelight Light Grilles	0.30	0.21	0.46	
			Full Divided Light Grilles	0.30	0.21	0.46	
Monolithic GRAY CLEAR	Without Grilles	0.84	0.58	0.69			
	Simulated Divided Light Grilles	0.84	0.53	0.63			
	Without Grilles	0.84	0.43	0.35			
	Simulated Divided Light Grilles	0.84	0.39	0.31			
<b>A-Series Frenchwood® Patio Door Sidelights</b> AND-N-94	IMPACT-RESISTANT	Low-E4®	Without Grilles	0.31	0.23	0.37	
			Simulated Divided Light Grilles	0.31	0.20	0.33	
			Finelight™ Light Grilles	0.33	0.20	0.33	
			Full Divided Light Grilles	0.32	0.20	0.33	
		Low-E4® Sun	Without Grilles	0.32	0.14	0.20	
			Simulated Divided Light Grilles	0.32	0.13	0.18	
			Finelight Light Grilles	0.33	0.13	0.18	
			Full Divided Light Grilles	0.32	0.13	0.18	
		Low-E4® SmartSun™	Without Grilles	0.31	0.16	0.34	
			Simulated Divided Light Grilles	0.31	0.14	0.30	
			Finelight Light Grilles	0.32	0.14	0.30	
			Full Divided Light Grilles	0.32	0.14	0.30	
Monolithic GRAY CLEAR	Without Grilles	0.65	0.39	0.46			
	Simulated Divided Light Grilles	n/a	n/a	n/a			
	Without Grilles	0.65	0.32	0.23			
	Simulated Divided Light Grilles	n/a	n/a	n/a			

**Andersen® NFRC Certified Total Unit Performance**  
A-Series Patio Doors

Andersen® Product		Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		
<b>A-Series Frenchwood® Gliding Patio Doors</b> AND-N-99	IMPACT-RESISTANT	Low-E4®	Without Grilles	0.32	0.26	0.44	
			Simulated Divided Light Grilles	0.32	0.23	0.38	
			Finelight™ Light Grilles	0.33	0.23	0.38	
			Full Divided Light Grilles	0.33	0.23	0.38	
		Low-E4® Sun	Without Grilles	0.32	0.16	0.24	
			Simulated Divided Light Grilles	0.32	0.15	0.21	
			Finelight Light Grilles	0.34	0.15	0.21	
			Full Divided Light Grilles	0.33	0.15	0.21	
		Low-E4® SmartSun™	Without Grilles	0.31	0.18	0.40	
			Simulated Divided Light Grilles	0.31	0.16	0.34	
			Finelight Light Grilles	0.33	0.16	0.34	
			Full Divided Light Grilles	0.32	0.16	0.34	
	Monolithic GRAY CLEAR	Without Grilles	0.70	0.46	0.54		
		SmartSun™	0.70	0.40	0.46		
		Without Grilles	0.70	0.34	0.27		
		Simulated Divided Light Grilles	0.70	0.29	0.23		
	<b>A-Series Frenchwood® Hinged Inswing Patio Doors</b> AND-N-92	IMPACT-RESISTANT	Low-E4®	Without Grilles	0.32	0.24	0.40
				Simulated Divided Light Grilles	0.32	0.21	0.34
				Finelight™ Light Grilles	0.33	0.21	0.34
				Full Divided Light Grilles	0.33	0.21	0.34
			Low-E4® Sun	Without Grilles	0.32	0.15	0.22
				Simulated Divided Light Grilles	0.32	0.13	0.19
				Finelight Light Grilles	0.34	0.13	0.19
				Full Divided Light Grilles	0.33	0.13	0.19
Low-E4® SmartSun™			Without Grilles	0.31	0.16	0.36	
			Simulated Divided Light Grilles	0.31	0.14	0.31	
			Finelight Light Grilles	0.33	0.14	0.31	
			Full Divided Light Grilles	0.32	0.14	0.31	
Monolithic GRAY CLEAR	Without Grilles	0.67	0.41	0.49			
	Simulated Divided Light Grilles	n/a	n/a	n/a			
	Without Grilles	0.67	0.34	0.25			
	Simulated Divided Light Grilles	n/a	n/a	n/a			
<b>A-Series Frenchwood® Hinged Outswing Patio Doors</b> AND-N-93	IMPACT-RESISTANT	Low-E4®	Without Grilles	0.31	0.24	0.40	
			Simulated Divided Light Grilles	0.31	0.21	0.34	
			Finelight™ Light Grilles	0.33	0.21	0.34	
			Full Divided Light Grilles	0.32	0.21	0.34	
		Low-E4® Sun	Without Grilles	0.32	0.15	0.22	
			Simulated Divided Light Grilles	0.32	0.13	0.19	
			Finelight Light Grilles	0.33	0.13	0.19	
			Full Divided Light Grilles	0.33	0.13	0.19	
		Low-E4® SmartSun™	Without Grilles	0.31	0.17	0.36	
			Simulated Divided Light Grilles	0.31	0.15	0.31	
			Finelight Light Grilles	0.33	0.15	0.31	
			Full Divided Light Grilles	0.32	0.15	0.31	
	Monolithic GRAY CLEAR	Without Grilles	0.67	0.42	0.49		
		Simulated Divided Light Grilles	n/a	n/a	n/a		
		Without Grilles	0.67	0.34	0.25		
		Simulated Divided Light Grilles	n/a	n/a	n/a		

• "Low-E4" SmartSun™, "Low-E4"™ and "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/ft². °F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See [andersenwindows.com/nfrc](http://andersenwindows.com/nfrc) for specific performance values. Door values represent tempered glass. 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 as validated by an independent test lab in compliance with NFRC program and procedural requirements.  
 • This data is accurate as of October, 2013. 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.

**About the NFRC**

The National Fenestration Rating Council (NFRC) is a nonpartisan coalition of professionals whose purpose is to provide fair, accurate and credible energy performance ratings for fenestration products. NFRC's membership includes manufacturers, suppliers, designers, specifiers, utility companies, government agencies and other building industry representatives.

Andersen Corporation is a founding member of the NFRC and continues to support its work by providing fair, accurate and credible energy performance ratings to consumers and the building industry. If you have any questions about the NFRC, its program or energy performance ratings, write them at: NFRC, 6305 Ivy Lane, Suite 140, Greenbelt, MD 20770, Tel: (301) 589-1776 Website: www.nfrc.org

**About the Label**

Look for this certification label on every window and patio door you buy. The NFRC section was designed by the National Fenestration Rating Council to provide accurate information that helps you promote the energy efficiency of the homes you build. These ratings allow you - and your customers - to measure and compare the energy performance of similar products. If the product does not have this label, the NFRC has not verified its claims.

**Energy Rating (ER)** represents "Energy Rating" and is a rating used in Canada for product comparison purposes (the higher the ER number, the more energy saved during the heating season).

**U-Factor** indicates how well a product prevents heat from escaping (the lower the number, the better).





**Visible Transmittance** refers to how much visible light comes through a product (the closer to 1.0, the more light is transmitted).

**WDMA Hallmark Certification** verifies the performance ratings of this product were tested by a third party testing laboratory.

**Test Standards**

**Florida Product Approval Number, Miami-Dade County Notice of Acceptance (NOA) Number or Texas Department of Insurance (TDI) Number**

Do not remove until final code inspection. Save label for future reference.

<b>18</b> CSA A440.2 Energy Rating Rendement Énergétique	<b>Qualified for highlighted area.</b> <b>Répond aux exigences pour les régions indiquées.</b>	
	Canada 1 800 387-2000 energystar.gc.ca  <b>ENERGY STAR</b> U.S. / É.U. 1 888 782-7937 energystar.gov	 = Qualified/Admissible
 National Fenestration Rating Council® <b>CERTIFIED</b>	<b>Andersen</b> WINDOWS • DOORS AW Casement Picture Window AND-N-54 01190-00001 Vinyl-Clad Wood Frame, Dual-Pane Low-E Impact Resistant Glazing with Argon Product Type: Fixed	
<b>ENERGY PERFORMANCE RATINGS</b>		
U-Factor <b>0.26</b> (U.S./I-P)	<b>1.5</b> (Metric/SI)	Solar Heat Gain Coefficient <b>0.34</b>
<b>ADDITIONAL PERFORMANCE RATINGS</b>		
Visible Transmittance <b>0.57</b>	-	
<small>Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any product and does not warrant the suitability of any product for specific use. Consult manufacturer's literature for other product performance information. www.nfrc.org</small>		
<b>WDMA HALLMARK CERTIFIED</b> WINDOW AND DOOR MANUFACTURERS ASSOCIATION www.wdma.com		
CCL# 129-H-774 ANDERSEN CORPORATION: 400 SERIES CASEMENT PICTURE WINDOW Manufacturer Stipulates Conformance to the following standards.		
<b>STANDARD</b> AAMA/WDMA/CSA 101/1.S.2/A440-08 AAMA/WDMA/CSA 101/1.S.2/A440-05 ASTM E1886-02 & E1996-02 FL 1092	<b>RATING</b> CLASS 1C-P650 SIZE TESTED 60" x 72" DP=50/-65 FW-C50 SIZE TESTED 60" x 72" DP=50/-65 Windzone 4, Missile Level D Cycle Pressure +50/-65	
Glazing: 4.0mm AN outer/11.7mm LG (4.7mm AN/4.7mm AN) inner Laminator: Cardinal Interlayer: Dupont SentryGlasPlus (0.090 M)		
 This product meets Green Seal's environmental standards governing energy efficiency, heavy metals in the frame and sash materials, packaging, and consumer education materials.	Complies with HUD UM Bulletin 111 701608063PKU-1	
<small>Meets or exceeds M.E.C., C.E.C., &amp; I.E.C.C. Air Infiltration Requirements WDMA Hallmark Certification Program</small>		

**ENERGY STAR Climate Zone Map**

is based on U-factor and solar heat gain coefficient criteria for specific ENERGY STAR climate zones within the United States and Canada. The shading of the map shows which climate zone(s) a particular product and glass type is ENERGY STAR qualified in.

**Solar Heat Gain Coefficient**

measures how well a product blocks heat caused by sunlight (the lower the number, the more it will help reduce the use of air conditioning and as a result reduce electrical bills and energy use).

**Performance Grade (PG) and Design Pressure (DP) Ratings**

**Impact-Resistant Glass Construction**

• 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.