

# 400 SERIES PRODUCT PERFORMANCE



## Andersen® NFRC Certified Total Unit Performance

For current performance information, please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	High-Performance Dual-Pane Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>400 Series Casement Windows</b> AND-N-1	Low-E4*	Without Grilles	0.29	0.32	0.54
		Simulated Divided Light Grilles	0.29	0.29	0.49
		Finelight™ Grilles	0.30	0.29	0.49
		Full Divided Light Grilles	0.29	0.29	0.49
	Low-E4 w/HeatLock®	Without Grilles	0.25	0.31	0.53
		Simulated Divided Light Grilles	0.25	0.28	0.48
		Finelight Grilles	0.26	0.28	0.48
		Full Divided Light Grilles	0.26	0.28	0.48
	Low-E4 Sun	Without Grilles	0.29	0.20	0.30
		Simulated Divided Light Grilles	0.29	0.18	0.27
		Finelight Grilles	0.30	0.18	0.27
	Low-E4 SmartSun™	Without Grilles	0.28	0.21	0.49
Simulated Divided Light Grilles		0.28	0.20	0.44	
Finelight Grilles		0.29	0.20	0.44	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.25	0.21	0.47	
	Simulated Divided Light Grilles	0.25	0.19	0.43	
	Finelight Grilles	0.25	0.19	0.43	
	Full Divided Light Grilles	0.26	0.19	0.43	
<b>400 Series Complementary Casement Windows</b> AND-N-107	Low-E4*	Without Grilles	0.30	0.28	0.47
		Simulated Divided Light Grilles	0.30	0.25	0.42
		Finelight™ Grilles	0.31	0.25	0.42
		Full Divided Light Grilles	0.31	0.25	0.42
	Low-E4 w/HeatLock®	Without Grilles	0.27	0.27	0.46
		Simulated Divided Light Grilles	0.27	0.25	0.41
		Finelight Grilles	0.27	0.25	0.41
		Full Divided Light Grilles	0.28	0.25	0.41
	Low-E4 Sun	Without Grilles	0.30	0.17	0.26
		Simulated Divided Light Grilles	0.30	0.16	0.23
		Finelight Grilles	0.31	0.16	0.23
	Low-E4 SmartSun™	Without Grilles	0.30	0.18	0.23
Simulated Divided Light Grilles		0.30	0.17	0.38	
Finelight Grilles		0.30	0.17	0.38	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.30	0.17	0.38	
	Simulated Divided Light Grilles	0.30	0.17	0.38	
	Finelight Grilles	0.30	0.17	0.38	
	Full Divided Light Grilles	0.30	0.17	0.38	
<b>400 Series Awning Windows</b> AND-N-2	Low-E4*	Without Grilles	0.29	0.31	0.53
		Simulated Divided Light Grilles	0.29	0.29	0.48
		Finelight™ Grilles	0.29	0.29	0.48
		Full Divided Light Grilles	0.29	0.29	0.48
	Low-E4 w/HeatLock®	Without Grilles	0.26	0.30	0.52
		Simulated Divided Light Grilles	0.26	0.28	0.47
		Finelight Grilles	0.26	0.28	0.47
		Full Divided Light Grilles	0.27	0.28	0.47
	Low-E4 Sun	Without Grilles	0.29	0.19	0.29
		Simulated Divided Light Grilles	0.29	0.18	0.27
		Finelight Grilles	0.30	0.18	0.27
	Low-E4 SmartSun™	Without Grilles	0.30	0.18	0.27
Simulated Divided Light Grilles		0.28	0.21	0.48	
Finelight Grilles		0.28	0.19	0.43	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.29	0.19	0.43	
	Simulated Divided Light Grilles	0.29	0.19	0.43	
	Finelight Grilles	0.25	0.20	0.47	
	Full Divided Light Grilles	0.25	0.19	0.42	

Andersen® Product	High-Performance Dual-Pane Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>400 Series Casement/Awning Picture and Transom Windows</b> AND-N-54	Low-E4*	Without Grilles	0.27	0.34	0.60
		Simulated Divided Light Grilles	0.27	0.31	0.53
		Finelight™ Grilles	0.27	0.31	0.53
		Full Divided Light Grilles	0.28	0.31	0.53
	Low-E4 w/HeatLock®	Without Grilles	0.22	0.34	0.58
		Simulated Divided Light Grilles	0.22	0.31	0.52
		Finelight Grilles	0.22	0.31	0.52
		Full Divided Light Grilles	0.25	0.31	0.52
	Low-E4 Sun	Without Grilles	0.27	0.21	0.33
		Simulated Divided Light Grilles	0.27	0.19	0.30
		Finelight Grilles	0.27	0.19	0.30
	Low-E4 SmartSun™	Without Grilles	0.26	0.23	0.54
Simulated Divided Light Grilles		0.26	0.21	0.48	
Finelight Grilles		0.26	0.21	0.48	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.28	0.21	0.48	
	Without Grilles	0.22	0.22	0.52	
	Simulated Divided Light Grilles	0.22	0.20	0.47	
	Finelight Grilles	0.22	0.20	0.47	
<b>400 Series Woodwright® Double-Hung Full-Frame Windows</b> AND-N-66	Low-E4*	Without Grilles	0.30	0.30	0.52
		Simulated Divided Light Grilles	0.30	0.27	0.46
		Finelight™ Grilles	0.31	0.27	0.46
		Full Divided Light Grilles	0.31	0.27	0.46
	Low-E4 w/HeatLock®	Without Grilles	0.26	0.30	0.51
		Simulated Divided Light Grilles	0.26	0.27	0.45
		Finelight Grilles	0.27	0.27	0.45
		Full Divided Light Grilles	0.28	0.27	0.45
	Low-E4 Sun	Without Grilles	0.30	0.19	0.28
		Simulated Divided Light Grilles	0.30	0.17	0.25
		Finelight Grilles	0.31	0.17	0.25
	Low-E4 SmartSun™	Without Grilles	0.31	0.17	0.25
Simulated Divided Light Grilles		0.31	0.17	0.25	
Finelight Grilles		0.31	0.17	0.25	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.29	0.21	0.47	
	Simulated Divided Light Grilles	0.29	0.19	0.42	
	Finelight Grilles	0.30	0.19	0.42	
	Full Divided Light Grilles	0.30	0.19	0.42	
<b>400 Series Woodwright® Picture Full-Frame Windows</b> AND-N-67	Low-E4*	Without Grilles	0.26	0.20	0.46
		Simulated Divided Light Grilles	0.26	0.18	0.41
		Finelight Grilles	0.26	0.18	0.41
		Full Divided Light Grilles	0.27	0.18	0.41
	Low-E4 w/HeatLock®	Without Grilles	0.27	0.32	0.55
		Simulated Divided Light Grilles	0.27	0.29	0.49
		Finelight™ Grilles	0.27	0.29	0.49
		Full Divided Light Grilles	0.28	0.29	0.49
	Low-E4 Sun	Without Grilles	0.23	0.31	0.54
		Simulated Divided Light Grilles	0.23	0.28	0.48
		Finelight Grilles	0.23	0.28	0.48
	Low-E4 SmartSun™	Without Grilles	0.25	0.28	0.48
Simulated Divided Light Grilles		0.25	0.28	0.48	
Finelight Grilles		0.25	0.28	0.48	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.27	0.20	0.31	
	Simulated Divided Light Grilles	0.27	0.18	0.27	
	Finelight Grilles	0.27	0.18	0.27	
	Full Divided Light Grilles	0.29	0.18	0.27	
<b>400 Series Woodwright® Transom Full-Frame Windows</b> AND-N-68	Low-E4*	Without Grilles	0.26	0.21	0.50
		Simulated Divided Light Grilles	0.26	0.19	0.44
		Finelight Grilles	0.26	0.19	0.44
		Full Divided Light Grilles	0.28	0.19	0.44
	Low-E4 w/HeatLock®	Without Grilles	0.22	0.21	0.48
		Simulated Divided Light Grilles	0.22	0.19	0.43
		Finelight Grilles	0.22	0.19	0.43
		Full Divided Light Grilles	0.25	0.19	0.43
	Low-E4 Sun	Without Grilles	0.27	0.33	0.57
		Simulated Divided Light Grilles	0.27	0.30	0.51
		Finelight™ Grilles	0.27	0.30	0.51
	Low-E4 SmartSun™	Without Grilles	0.29	0.30	0.51
Simulated Divided Light Grilles		0.23	0.33	0.56	
Finelight Grilles		0.23	0.29	0.50	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.23	0.29	0.50	
	Simulated Divided Light Grilles	0.23	0.29	0.50	
	Finelight Grilles	0.23	0.29	0.50	
	Full Divided Light Grilles	0.25	0.29	0.50	
Low-E4 Sun	Without Grilles	0.28	0.20	0.32	
	Simulated Divided Light Grilles	0.28	0.18	0.29	
	Finelight Grilles	0.28	0.18	0.29	
Low-E4 SmartSun™	Without Grilles	0.28	0.18	0.29	
	Simulated Divided Light Grilles	0.29	0.18	0.29	
	Finelight Grilles	0.29	0.18	0.29	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.27	0.22	0.52	
	Simulated Divided Light Grilles	0.27	0.20	0.46	
	Finelight Grilles	0.27	0.20	0.46	
	Full Divided Light Grilles	0.28	0.20	0.46	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.22	0.22	0.50	
	Simulated Divided Light Grilles	0.22	0.20	0.45	
	Finelight Grilles	0.22	0.20	0.45	
Low-E4 SmartSun w/HeatLock	Full Divided Light Grilles	0.25	0.20	0.45	

### Important information on NFRC Certified Total Unit Performance:

- \* "Low-E4;" "Low-E4 SmartSun;" "Low-E4 Sun" and "HeatLock" are Andersen trademarks for "Low-E" glass.
- 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft<sup>2</sup>-°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 directly transmitted, as well as absorbed and subsequently re-emitted 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 Light 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 May 2021. 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 with capillary breather tubes for high altitudes, etc.

# 400 SERIES PRODUCT PERFORMANCE



## Andersen® NFRC Certified Total Unit Performance (continued)

For current performance information, please visit [andersenwindows.com](http://andersenwindows.com).

Refer to notes on page 1 for important information on performance data.

Andersen® Product	High-Performance Dual-Pane Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		
<b>400 Series Woodwright® Double-Hung Insert Windows</b> AND-N-74	Low-E4*	Without Grilles	0.30	0.31	0.53	
		Simulated Divided Light Grilles	0.30	0.28	0.47	
		Finelight™ Grilles	0.30	0.28	0.47	
		Full Divided Light Grilles	0.31	0.28	0.47	
	Low-E4 w/HeatLock®	Without Grilles	0.26	0.30	0.52	
		Simulated Divided Light Grilles	0.26	0.27	0.46	
		Finelight™ Grilles	0.26	0.27	0.46	
		Full Divided Light Grilles	0.28	0.27	0.46	
	Low-E4 Sun	Without Grilles	0.30	0.19	0.30	
		Simulated Divided Light Grilles	0.30	0.17	0.26	
		Finelight™ Grilles	0.30	0.17	0.26	
	Low-E4 SmartSun™	Without Grilles	0.29	0.21	0.48	
		Simulated Divided Light Grilles	0.29	0.19	0.43	
		Finelight™ Grilles	0.29	0.19	0.43	
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.26	0.20	0.47	
		Simulated Divided Light Grilles	0.26	0.18	0.42	
		Finelight™ Grilles	0.26	0.18	0.42	
		Full Divided Light Grilles	0.27	0.18	0.42	
	<b>400 Series Woodwright® Picture Insert Windows</b> AND-N-77	Low-E4*	Without Grilles	0.29	0.32	0.55
			Simulated Divided Light Grilles	0.29	0.29	0.49
			Finelight™ Grilles	0.29	0.29	0.49
			Full Divided Light Grilles	0.30	0.29	0.49
		Low-E4 w/HeatLock	Without Grilles	0.24	0.32	0.54
			Simulated Divided Light Grilles	0.24	0.29	0.48
Finelight™ Grilles			0.24	0.29	0.48	
Low-E4 Sun		Without Grilles	0.29	0.20	0.31	
		Simulated Divided Light Grilles	0.29	0.18	0.27	
		Finelight™ Grilles	0.29	0.18	0.27	
Low-E4 SmartSun		Without Grilles	0.28	0.21	0.50	
		Simulated Divided Light Grilles	0.28	0.19	0.44	
		Finelight™ Grilles	0.28	0.19	0.44	
Low-E4 SmartSun w/HeatLock		Without Grilles	0.24	0.21	0.49	
		Simulated Divided Light Grilles	0.24	0.19	0.43	
		Finelight™ Grilles	0.24	0.19	0.43	
		Full Divided Light Grilles	0.26	0.19	0.43	
<b>400 Series Woodwright® Transom Insert Windows</b> AND-N-78		Low-E4*	Without Grilles	0.29	0.33	0.56
			Simulated Divided Light Grilles	0.29	0.30	0.50
			Finelight™ Grilles	0.29	0.30	0.50
			Full Divided Light Grilles	0.30	0.30	0.50
		Low-E4 w/HeatLock	Without Grilles	0.24	0.32	0.55
			Simulated Divided Light Grilles	0.24	0.29	0.49
			Finelight™ Grilles	0.24	0.29	0.49
	Low-E4 Sun	Without Grilles	0.29	0.20	0.31	
		Simulated Divided Light Grilles	0.29	0.18	0.28	
		Finelight™ Grilles	0.29	0.18	0.28	
	Low-E4 SmartSun	Without Grilles	0.28	0.22	0.51	
		Simulated Divided Light Grilles	0.28	0.20	0.45	
		Finelight™ Grilles	0.28	0.20	0.45	
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.24	0.21	0.50	
		Simulated Divided Light Grilles	0.24	0.19	0.44	
		Finelight™ Grilles	0.24	0.19	0.44	
		Full Divided Light Grilles	0.26	0.19	0.44	
	<b>400 Series Woodwright® Springline™ Single-Hung Arch Double-Hung Full-Frame Windows</b> AND-N-111	Low-E4*	Without Grilles	0.28	0.30	0.52
			Simulated Divided Light Grilles	0.28	0.27	0.46
			Finelight™ Grilles	0.29	0.27	0.46
			Full Divided Light Grilles	0.29	0.27	0.46
		Low-E4 w/HeatLock	Without Grilles	0.24	0.30	0.51
			Simulated Divided Light Grilles	0.25	0.27	0.45
			Finelight™ Grilles	0.25	0.27	0.45
Low-E4 Sun		Without Grilles	0.28	0.19	0.29	
		Simulated Divided Light Grilles	0.28	0.17	0.26	
		Finelight™ Grilles	0.29	0.17	0.26	
Low-E4 SmartSun		Without Grilles	0.28	0.20	0.47	
		Simulated Divided Light Grilles	0.27	0.18	0.42	
		Finelight™ Grilles	0.28	0.18	0.42	
		Full Divided Light Grilles	0.29	0.18	0.42	
Low-E4 SmartSun w/HeatLock		Without Grilles	0.24	0.20	0.46	
		Simulated Divided Light Grilles	0.24	0.18	0.41	
		Finelight™ Grilles	0.25	0.18	0.41	
		Full Divided Light Grilles	0.26	0.18	0.41	

Andersen® Product	High-Performance Dual-Pane Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		
<b>400 Series Tilt-Wash Double-Hung Full-Frame Windows</b> AND-N-24	Low-E4*	Without Grilles	0.30	0.31	0.53	
		Simulated Divided Light Grilles	0.30	0.28	0.47	
		Finelight™ Grilles	0.32	0.28	0.47	
		Full Divided Light Grilles	0.31	0.28	0.47	
	Low-E4 w/HeatLock	Without Grilles	0.27	0.30	0.52	
		Simulated Divided Light Grilles	0.27	0.27	0.46	
		Finelight™ Grilles	0.28	0.27	0.46	
		Full Divided Light Grilles	0.28	0.27	0.46	
	Low-E4 Sun	Without Grilles	0.31	0.19	0.29	
		Simulated Divided Light Grilles	0.31	0.17	0.26	
		Finelight™ Grilles	0.32	0.17	0.26	
	Low-E4 SmartSun	Without Grilles	0.30	0.21	0.48	
		Simulated Divided Light Grilles	0.29	0.19	0.42	
		Finelight™ Grilles	0.31	0.19	0.42	
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.26	0.20	0.47	
		Simulated Divided Light Grilles	0.26	0.18	0.41	
		Finelight™ Grilles	0.27	0.18	0.41	
		Full Divided Light Grilles	0.28	0.18	0.41	
	<b>400 Series Tilt-Wash Picture Full-Frame Windows</b> AND-N-27	Low-E4*	Without Grilles	0.29	0.33	0.57
			Simulated Divided Light Grilles	0.29	0.30	0.51
			Finelight™ Grilles	0.29	0.30	0.51
			Full Divided Light Grilles	0.31	0.30	0.51
		Low-E4 w/HeatLock	Without Grilles	0.25	0.32	0.56
			Simulated Divided Light Grilles	0.25	0.29	0.50
Finelight™ Grilles			0.25	0.29	0.50	
Low-E4 Sun		Without Grilles	0.30	0.20	0.32	
		Simulated Divided Light Grilles	0.30	0.18	0.28	
		Finelight™ Grilles	0.30	0.18	0.28	
Low-E4 SmartSun		Without Grilles	0.29	0.22	0.51	
		Simulated Divided Light Grilles	0.29	0.20	0.46	
		Finelight™ Grilles	0.29	0.20	0.46	
Low-E4 SmartSun w/HeatLock		Without Grilles	0.25	0.21	0.50	
		Simulated Divided Light Grilles	0.25	0.19	0.45	
		Finelight™ Grilles	0.25	0.19	0.45	
		Full Divided Light Grilles	0.27	0.19	0.45	
<b>400 Series Tilt-Wash Transom Full-Frame Windows</b> AND-N-76		Low-E4*	Without Grilles	0.27	0.32	0.55
			Simulated Divided Light Grilles	0.27	0.29	0.49
			Finelight™ Grilles	0.27	0.29	0.49
			Full Divided Light Grilles	0.28	0.29	0.49
		Low-E4 w/HeatLock	Without Grilles	0.22	0.31	0.54
			Simulated Divided Light Grilles	0.22	0.28	0.48
			Finelight™ Grilles	0.22	0.28	0.48
	Low-E4 Sun	Without Grilles	0.25	0.28	0.48	
		Simulated Divided Light Grilles	0.27	0.19	0.31	
		Finelight™ Grilles	0.27	0.18	0.27	
	Low-E4 SmartSun	Without Grilles	0.26	0.21	0.49	
		Simulated Divided Light Grilles	0.26	0.19	0.44	
		Finelight™ Grilles	0.26	0.19	0.44	
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.22	0.21	0.48	
		Simulated Divided Light Grilles	0.22	0.19	0.43	
		Finelight™ Grilles	0.22	0.19	0.43	
		Full Divided Light Grilles	0.24	0.19	0.43	
	<b>Narroline® Double-Hung Window Conversion Kit</b> AND-N-101	Low-E4*	Without Grilles	0.30	0.31	0.53
			Simulated Divided Light Grilles	0.32	0.28	0.47
			Finelight™ Grilles	0.30	0.28	0.47
			Full Divided Light Grilles	0.31	0.28	0.47
		Low-E4 w/HeatLock	Without Grilles	0.26	0.31	0.52
			Simulated Divided Light Grilles	0.29	0.27	0.46
			Finelight™ Grilles	0.26	0.27	0.46
Low-E4 Sun		Without Grilles	0.30	0.19	0.30	
		Simulated Divided Light Grilles	0.32	0.17	0.26	
		Finelight™ Grilles	0.30	0.17	0.26	
Low-E4 SmartSun		Without Grilles	0.29	0.21	0.48	
		Simulated Divided Light Grilles	0.31	0.19	0.43	
		Finelight™ Grilles	0.29	0.19	0.43	
		Full Divided Light Grilles	0.30	0.19	0.43	
Low-E4 SmartSun w/HeatLock		Without Grilles	0.26	0.20	0.47	
		Simulated Divided Light Grilles	0.28	0.18	0.42	
		Finelight™ Grilles	0.26	0.18	0.42	
		Full Divided Light Grilles	0.28	0.18	0.42	

\*This data is subject to change. 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.

# 400 SERIES PRODUCT PERFORMANCE



## Andersen® NFRC Certified Total Unit Performance (continued)

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Andersen® Product	High-Performance Dual-Pane Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		
400 Series Tilt-Wash Double-Hung Insert Windows AND-N-132	Low-E4*	Without Grilles	0.31	0.31	0.53	
		Simulated Divided Light Grilles	0.31	0.28	0.47	
		Finelight™ Grilles	0.32	0.28	0.47	
		Full Divided Light Grilles	0.32	0.28	0.47	
	Low-E4 w/HeatLock®	Without Grilles	0.27	0.31	0.52	
		Simulated Divided Light Grilles	0.27	0.28	0.46	
		Finelight™ Grilles	0.28	0.28	0.46	
		Full Divided Light Grilles	0.29	0.28	0.46	
	Low-E4 Sun	Without Grilles	0.31	0.19	0.30	
		Simulated Divided Light Grilles	0.31	0.18	0.26	
		Finelight™ Grilles	0.32	0.18	0.26	
		Full Divided Light Grilles	0.32	0.18	0.26	
	Low-E4 SmartSun™	Without Grilles	0.30	0.21	0.48	
		Simulated Divided Light Grilles	0.30	0.19	0.43	
		Finelight™ Grilles	0.31	0.19	0.43	
		Full Divided Light Grilles	0.31	0.19	0.43	
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.27	0.20	0.47	
		Simulated Divided Light Grilles	0.27	0.19	0.42	
		Finelight™ Grilles	0.28	0.19	0.42	
		Full Divided Light Grilles	0.29	0.19	0.42	
	400 Series Tilt-Wash Picture Insert Windows AND-N-133	Low-E4*	Without Grilles	0.29	0.32	0.55
			Simulated Divided Light Grilles	0.29	0.29	0.49
			Finelight™ Grilles	0.29	0.29	0.49
			Full Divided Light Grilles	0.30	0.29	0.49
Low-E4 w/HeatLock®		Without Grilles	0.24	0.32	0.54	
		Simulated Divided Light Grilles	0.24	0.29	0.48	
		Finelight™ Grilles	0.24	0.29	0.48	
		Full Divided Light Grilles	0.27	0.29	0.48	
Low-E4 Sun		Without Grilles	0.29	0.20	0.31	
		Simulated Divided Light Grilles	0.29	0.18	0.27	
		Finelight™ Grilles	0.29	0.18	0.27	
		Full Divided Light Grilles	0.30	0.18	0.27	
Low-E4 SmartSun™		Without Grilles	0.28	0.21	0.50	
		Simulated Divided Light Grilles	0.28	0.19	0.44	
		Finelight™ Grilles	0.28	0.19	0.44	
		Full Divided Light Grilles	0.29	0.19	0.44	
Low-E4 SmartSun w/HeatLock		Without Grilles	0.24	0.21	0.49	
		Simulated Divided Light Grilles	0.24	0.19	0.43	
		Finelight™ Grilles	0.24	0.19	0.43	
		Full Divided Light Grilles	0.26	0.19	0.43	
400 Series Tilt-Wash Transom Insert Windows AND-N-134		Low-E4*	Without Grilles	0.29	0.33	0.56
			Simulated Divided Light Grilles	0.29	0.30	0.50
			Finelight™ Grilles	0.29	0.30	0.50
			Full Divided Light Grilles	0.30	0.30	0.50
	Low-E4 w/HeatLock®	Without Grilles	0.24	0.32	0.55	
		Simulated Divided Light Grilles	0.24	0.29	0.49	
		Finelight™ Grilles	0.24	0.29	0.49	
		Full Divided Light Grilles	0.27	0.29	0.49	
	Low-E4 Sun	Without Grilles	0.29	0.20	0.31	
		Simulated Divided Light Grilles	0.29	0.18	0.28	
		Finelight™ Grilles	0.29	0.18	0.28	
		Full Divided Light Grilles	0.31	0.18	0.28	
	Low-E4 SmartSun™	Without Grilles	0.28	0.22	0.51	
		Simulated Divided Light Grilles	0.28	0.20	0.45	
		Finelight™ Grilles	0.28	0.20	0.45	
		Full Divided Light Grilles	0.30	0.20	0.45	
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.24	0.21	0.50	
		Simulated Divided Light Grilles	0.24	0.19	0.44	
		Finelight™ Grilles	0.24	0.19	0.44	
		Full Divided Light Grilles	0.26	0.19	0.44	
	400 Series Gliding Windows AND-N-19	Low-E4*	Without Grilles	0.30	0.29	0.50
			Simulated Divided Light Grilles	0.30	0.26	0.44
			Finelight™ Grilles	0.30	0.26	0.44
			Full Divided Light Grilles	0.31	0.26	0.44
Low-E4 w/HeatLock®		Without Grilles	0.27	0.28	0.48	
		Simulated Divided Light Grilles	0.27	0.25	0.43	
		Finelight™ Grilles	0.27	0.25	0.43	
		Full Divided Light Grilles	0.28	0.25	0.43	
Low-E4 Sun		Without Grilles	0.31	0.18	0.27	
		Simulated Divided Light Grilles	0.31	0.16	0.24	
		Finelight™ Grilles	0.31	0.16	0.24	
		Full Divided Light Grilles	0.32	0.16	0.24	
Low-E4 SmartSun™		Without Grilles	0.30	0.19	0.45	
		Simulated Divided Light Grilles	0.30	0.17	0.39	
		Finelight™ Grilles	0.30	0.17	0.39	
		Full Divided Light Grilles	0.31	0.17	0.39	
Low-E4 SmartSun w/HeatLock		Without Grilles	0.26	0.19	0.44	
		Simulated Divided Light Grilles	0.26	0.17	0.39	
		Finelight™ Grilles	0.26	0.17	0.39	
		Full Divided Light Grilles	0.28	0.17	0.39	

Andersen® Product	High-Performance Dual-Pane Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>		
400 Series Elliptical Windows AND-N-16	Low-E4*	Without Grilles	0.27	0.34	0.59	
		Simulated Divided Light Grilles	0.27	0.31	0.53	
		Finelight™ Grilles	0.27	0.31	0.53	
		Full Divided Light Grilles	0.29	0.31	0.53	
	Low-E4 w/HeatLock®	Without Grilles	0.23	0.34	0.58	
		Simulated Divided Light Grilles	0.23	0.30	0.52	
		Finelight™ Grilles	0.23	0.30	0.52	
		Full Divided Light Grilles	0.25	0.30	0.52	
	Low-E4 Sun	Without Grilles	0.28	0.21	0.33	
		Simulated Divided Light Grilles	0.28	0.19	0.29	
		Finelight™ Grilles	0.28	0.19	0.29	
		Full Divided Light Grilles	0.29	0.19	0.29	
	Low-E4 SmartSun™	Without Grilles	0.27	0.23	0.53	
		Simulated Divided Light Grilles	0.27	0.21	0.48	
		Finelight™ Grilles	0.27	0.21	0.48	
		Full Divided Light Grilles	0.28	0.21	0.48	
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.22	0.22	0.52	
		Simulated Divided Light Grilles	0.22	0.20	0.46	
		Finelight™ Grilles	0.22	0.20	0.46	
		Full Divided Light Grilles	0.25	0.20	0.46	
	400 Series Half Circle Windows Casement AND-N-147	Low-E4*	Without Grilles	0.27	0.35	0.60
			Simulated Divided Light Grilles	0.27	0.32	0.53
			Finelight™ Grilles	0.27	0.31	0.53
			Full Divided Light Grilles	0.28	0.31	0.53
Low-E4 w/HeatLock®		Without Grilles	0.22	0.34	0.58	
		Simulated Divided Light Grilles	0.22	0.31	0.52	
		Finelight™ Grilles	0.22	0.31	0.52	
		Full Divided Light Grilles	0.25	0.31	0.52	
Low-E4 Sun		Without Grilles	0.27	0.21	0.33	
		Simulated Divided Light Grilles	0.27	0.19	0.30	
		Finelight™ Grilles	0.27	0.19	0.30	
		Full Divided Light Grilles	0.29	0.19	0.30	
Low-E4 SmartSun™		Without Grilles	0.26	0.23	0.54	
		Simulated Divided Light Grilles	0.26	0.21	0.48	
		Finelight™ Grilles	0.26	0.21	0.48	
		Full Divided Light Grilles	0.27	0.21	0.48	
Low-E4 SmartSun w/HeatLock		Without Grilles	0.22	0.22	0.52	
		Simulated Divided Light Grilles	0.22	0.20	0.47	
		Finelight™ Grilles	0.22	0.20	0.47	
		Full Divided Light Grilles	0.24	0.20	0.47	
400 Series Circle and Oval Windows AND-N-148		Low-E4*	Without Grilles	0.27	0.35	0.60
			Simulated Divided Light Grilles	0.27	0.31	0.53
			Finelight™ Grilles	0.27	0.31	0.53
			Full Divided Light Grilles	0.28	0.31	0.53
	Low-E4 w/HeatLock®	Without Grilles	0.22	0.34	0.58	
		Simulated Divided Light Grilles	0.22	0.31	0.52	
		Finelight™ Grilles	0.22	0.31	0.52	
		Full Divided Light Grilles	0.25	0.31	0.52	
	Low-E4 Sun	Without Grilles	0.27	0.21	0.33	
		Simulated Divided Light Grilles	0.27	0.19	0.30	
		Finelight™ Grilles	0.27	0.19	0.30	
		Full Divided Light Grilles	0.29	0.19	0.30	
	Low-E4 SmartSun™	Without Grilles	0.26	0.23	0.54	
		Simulated Divided Light Grilles	0.26	0.21	0.48	
		Finelight™ Grilles	0.26	0.21	0.48	
		Full Divided Light Grilles	0.28	0.21	0.48	
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.22	0.22	0.52	
		Simulated Divided Light Grilles	0.22	0.20	0.47	
		Finelight™ Grilles	0.22	0.20	0.47	
		Full Divided Light Grilles	0.24	0.20	0.47	
	400 Series Arch Windows AND-N-18	Low-E4*	Without Grilles	0.27	0.33	0.56
			Simulated Divided Light Grilles	0.27	0.30	0.50
			Finelight™ Grilles	0.27	0.30	0.50
			Full Divided Light Grilles	0.28	0.30	0.50
Low-E4 w/HeatLock®		Without Grilles	0.22	0.34	0.58	
		Simulated Divided Light Grilles	0.22	0.31	0.52	
		Finelight™ Grilles	0.22	0.31	0.52	
		Full Divided Light Grilles	0.25	0.31	0.52	
Low-E4 Sun		Without Grilles	0.27	0.21	0.33	
		Simulated Divided Light Grilles	0.27	0.19	0.30	
		Finelight™ Grilles	0.27	0.19	0.30	
		Full Divided Light Grilles	0.29	0.19	0.30	
Low-E4 SmartSun™		Without Grilles	0.26	0.23	0.54	
		Simulated Divided Light Grilles	0.26	0.21	0.48	
		Finelight™ Grilles	0.26	0.21	0.48	
		Full Divided Light Grilles	0.28	0.21	0.48	
Low-E4 SmartSun w/HeatLock		Without Grilles	0.22	0.22	0.52	
		Simulated Divided Light Grilles	0.22	0.20	0.47	
		Finelight™ Grilles	0.22	0.20	0.47	
		Full Divided Light Grilles	0.24	0.20	0.47	

\*2021-2022 Low E4 Series Product 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.

# 400 SERIES PRODUCT PERFORMANCE



## Andersen® NFRC Certified Total Unit Performance (continued)

For current performance information, please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	High-Performance Dual-Pane Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>400 Series Springline™ Windows</b> AND-N-25	Low-E4*	Without Grilles	0.28	0.33	0.57
		Simulated Divided Light Grilles	0.28	0.30	0.51
		Finelight™ Grilles	0.28	0.30	0.51
	Low-E4 w/HeatLock*	Without Grilles	0.24	0.32	0.56
		Simulated Divided Light Grilles	0.24	0.29	0.50
		Finelight Grilles	0.24	0.29	0.50
	Low-E4 Sun	Without Grilles	0.28	0.20	0.31
		Simulated Divided Light Grilles	0.28	0.18	0.28
		Finelight Grilles	0.28	0.18	0.28
	Low-E4 SmartSun™	Without Grilles	0.27	0.23	0.52
		Simulated Divided Light Grilles	0.27	0.21	0.46
		Finelight Grilles	0.27	0.21	0.46
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.23	0.22	0.50
		Simulated Divided Light Grilles	0.23	0.20	0.45
		Finelight Grilles	0.23	0.20	0.45
<b>400 Series Flexiframe™ Windows</b> AND-N-17	Low-E4*	Without Grilles	0.27	0.33	0.58
		Simulated Divided Light Grilles	0.27	0.30	0.52
		Finelight™ Grilles	0.27	0.30	0.52
	Low-E4 w/HeatLock*	Without Grilles	0.22	0.32	0.56
		Simulated Divided Light Grilles	0.22	0.29	0.50
		Finelight Grilles	0.22	0.29	0.50
	Low-E4 Sun	Without Grilles	0.27	0.20	0.31
		Simulated Divided Light Grilles	0.27	0.18	0.28
		Finelight Grilles	0.27	0.18	0.28
	Low-E4 SmartSun™	Without Grilles	0.26	0.23	0.52
		Simulated Divided Light Grilles	0.26	0.21	0.46
		Finelight Grilles	0.26	0.21	0.46
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.22	0.22	0.51
		Simulated Divided Light Grilles	0.22	0.20	0.45
		Finelight Grilles	0.22	0.20	0.45
<b>400 Series Complementary Specialty Windows</b> 400 Series Casement, Awning and Picture Windows AND-N-105	Low-E4*	Without Grilles	0.29	0.35	0.61
		Simulated Divided Light Grilles	0.29	0.32	0.55
		Finelight™ Grilles	0.29	0.32	0.55
	Low-E4 w/HeatLock*	Without Grilles	0.24	0.35	0.60
		Simulated Divided Light Grilles	0.24	0.31	0.54
		Finelight Grilles	0.24	0.31	0.54
	Low-E4 Sun	Without Grilles	0.29	0.22	0.34
		Simulated Divided Light Grilles	0.29	0.20	0.30
		Finelight Grilles	0.29	0.20	0.30
	Low-E4 SmartSun™	Without Grilles	0.28	0.23	0.55
		Simulated Divided Light Grilles	0.28	0.21	0.49
		Finelight Grilles	0.28	0.21	0.49
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.24	0.23	0.54
		Simulated Divided Light Grilles	0.24	0.21	0.48
		Finelight Grilles	0.24	0.21	0.48
<b>400 Series Complementary Specialty Windows</b> 400 Series Double-Hung Windows and Patio Doors AND-N-105	Low-E4*	Without Grilles	0.28	0.37	0.64
		Simulated Divided Light Grilles	0.28	0.33	0.57
		Finelight™ Grilles	0.28	0.33	0.57
	Low-E4 w/HeatLock*	Without Grilles	0.23	0.36	0.62
		Simulated Divided Light Grilles	0.23	0.33	0.56
		Finelight Grilles	0.23	0.33	0.56
	Low-E4 Sun	Without Grilles	0.29	0.22	0.35
		Simulated Divided Light Grilles	0.29	0.20	0.32
		Finelight Grilles	0.29	0.20	0.32
	Low-E4 SmartSun™	Without Grilles	0.27	0.24	0.57
		Simulated Divided Light Grilles	0.27	0.22	0.51
		Finelight Grilles	0.27	0.22	0.51
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.23	0.24	0.56
		Simulated Divided Light Grilles	0.23	0.22	0.50
		Finelight Grilles	0.23	0.22	0.50

Andersen® Product	High-Performance Dual-Pane Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
<b>400 Series Frenchwood® Gliding Patio Doors</b> Two-Panel AND-N-6	Low-E4*	Without Grilles	0.30	0.26	0.45
		Blinds-Between-the-Glass*	0.36	0.24	0.40
		Simulated Divided Light Grilles	0.30	0.23	0.38
	Low-E4 w/HeatLock*	Without Grilles	0.27	0.26	0.44
		Simulated Divided Light Grilles	0.27	0.23	0.37
		Finelight Grilles	0.27	0.23	0.37
	Low-E4 Sun	Without Grilles	0.31	0.16	0.25
		Simulated Divided Light Grilles	0.31	0.14	0.21
		Finelight Grilles	0.31	0.14	0.21
	Low-E4 SmartSun™	Without Grilles	0.32	0.14	0.21
		Simulated Divided Light Grilles	0.30	0.18	0.40
		Finelight Grilles	0.30	0.16	0.35
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.31	0.16	0.35
		Simulated Divided Light Grilles	0.27	0.15	0.34
		Finelight Grilles	0.27	0.15	0.34
<b>400 Series Frenchwood® Hinged Inswing Patio Doors</b> AND-N-10	Low-E4*	Without Grilles	0.30	0.24	0.41
		Blinds-Between-the-Glass*	0.34	0.24	0.41
		Simulated Divided Light Grilles	0.30	0.21	0.35
	Low-E4 w/HeatLock*	Without Grilles	0.30	0.21	0.35
		Simulated Divided Light Grilles	0.32	0.21	0.35
		Finelight™ Grilles	0.32	0.21	0.35
	Low-E4 Sun	Without Grilles	0.27	0.24	0.40
		Simulated Divided Light Grilles	0.27	0.21	0.34
		Finelight Grilles	0.27	0.21	0.34
	Low-E4 SmartSun™	Without Grilles	0.31	0.15	0.23
		Simulated Divided Light Grilles	0.31	0.13	0.19
		Finelight Grilles	0.31	0.13	0.19
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.32	0.13	0.19
		Simulated Divided Light Grilles	0.30	0.16	0.37
		Finelight Grilles	0.30	0.14	0.31
<b>400 Series Frenchwood® Patio Door Sidelights</b> AND-N-64	Low-E4*	Without Grilles	0.27	0.16	0.36
		Simulated Divided Light Grilles	0.27	0.14	0.31
		Finelight™ Grilles	0.27	0.14	0.31
	Low-E4 w/HeatLock*	Without Grilles	0.29	0.14	0.31
		Simulated Divided Light Grilles	0.29	0.14	0.31
		Finelight Grilles	0.29	0.14	0.31
	Low-E4 Sun	Without Grilles	0.30	0.22	0.37
		Simulated Divided Light Grilles	0.30	0.20	0.32
		Finelight™ Grilles	0.30	0.20	0.32
	Low-E4 SmartSun™	Without Grilles	0.27	0.22	0.36
		Simulated Divided Light Grilles	0.27	0.20	0.32
		Finelight Grilles	0.27	0.20	0.32
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.29	0.20	0.32
		Simulated Divided Light Grilles	0.30	0.14	0.20
		Finelight Grilles	0.30	0.13	0.18
Low-E4 Sun	Without Grilles	0.29	0.15	0.18	
	Simulated Divided Light Grilles	0.29	0.15	0.18	
	Finelight Grilles	0.29	0.15	0.18	
Low-E4 SmartSun™	Without Grilles	0.29	0.15	0.33	
	Simulated Divided Light Grilles	0.29	0.14	0.29	
	Finelight Grilles	0.29	0.14	0.29	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.30	0.14	0.29	
	Simulated Divided Light Grilles	0.27	0.13	0.28	
	Finelight Grilles	0.27	0.13	0.28	
Low-E4 Sun	Without Grilles	0.28	0.13	0.28	
	Simulated Divided Light Grilles	0.27	0.13	0.28	
	Finelight Grilles	0.27	0.13	0.28	

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### Important information on NFRC Certified Total Unit Performance:

- \* "Low-E4;" "Low-E4" SmartSun;" "Low-E4" Sun" and "HeatLock;" are Andersen trademarks for "Low-E" glass.
- <sup>1</sup> U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft<sup>2</sup>-°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.
- <sup>2</sup> Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as 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 Light 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 May 2021. 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 with capillary breather tubes for high altitudes, etc.
- \* Available for select patio door sizes. Data based on blinds in full open position.

# 400 SERIES PRODUCT PERFORMANCE



## Andersen® NFRC Certified Total Unit Performance (continued)

For current performance information, please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	High-Performance Dual-Pane Glass Type	U-Factor <sup>1</sup>	SHGC <sup>2</sup>	VT <sup>3</sup>	
400 Series Frenchwood® Patio Door Transoms AND-N-65	Low-E4®	Without Grilles	0.29	0.24	0.40
		Simulated Divided Light Grilles	0.29	0.21	0.35
		Finelight™ Grilles	0.29	0.21	0.35
		Full Divided Light Grilles	0.30	0.21	0.35
	Low-E4 w/HeatLock®	Without Grilles	0.26	0.23	0.39
		Simulated Divided Light Grilles	0.26	0.21	0.34
		Finelight Grilles	0.26	0.21	0.34
		Full Divided Light Grilles	0.28	0.21	0.34
	Low-E4 Sun	Without Grilles	0.29	0.15	0.22
		Simulated Divided Light Grilles	0.29	0.13	0.20
		Finelight Grilles	0.29	0.13	0.20
	Low-E4 SmartSun™	Without Grilles	0.29	0.16	0.36
		Simulated Divided Light Grilles	0.29	0.14	0.32
		Finelight Grilles	0.29	0.14	0.32
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.26	0.16	0.35
		Simulated Divided Light Grilles	0.26	0.14	0.31
Finelight Grilles		0.26	0.14	0.31	
400 Series Complementary Springline™ and Arch Hinged Inswing Patio Doors AND-N-127	Low-E4®	Without Grilles	0.32	0.24	0.41
		Simulated Divided Light Grilles	0.32	0.21	0.35
		Finelight™ Grilles	0.32	0.21	0.35
		Full Divided Light Grilles	0.33	0.21	0.35
	Low-E4 w/HeatLock®	Without Grilles	0.29	0.24	0.40
		Simulated Divided Light Grilles	0.29	0.21	0.34
		Finelight Grilles	0.29	0.21	0.34
	Low-E4 Sun	Without Grilles	0.33	0.15	0.23
		Simulated Divided Light Grilles	0.33	0.13	0.20
		Finelight Grilles	0.33	0.13	0.20
	Low-E4 SmartSun™	Without Grilles	0.32	0.16	0.37
		Simulated Divided Light Grilles	0.32	0.14	0.32
		Finelight Grilles	0.32	0.14	0.32
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.29	0.16	0.36
		Simulated Divided Light Grilles	0.29	0.14	0.31
		Finelight Grilles	0.29	0.14	0.31
400 Series Complementary Springline™ and Arch Hinged Outswing Patio Doors AND-N-127	Low-E4®	Without Grilles	0.33	0.25	0.41
		Simulated Divided Light Grilles	0.33	0.22	0.35
		Finelight™ Grilles	0.33	0.22	0.35
		Full Divided Light Grilles	0.34	0.22	0.35
	Low-E4 w/HeatLock®	Without Grilles	0.30	0.24	0.40
		Simulated Divided Light Grilles	0.30	0.21	0.34
		Finelight Grilles	0.30	0.21	0.34
	Low-E4 Sun	Without Grilles	0.33	0.16	0.23
		Simulated Divided Light Grilles	0.33	0.14	0.20
		Finelight Grilles	0.33	0.14	0.20
	Low-E4 SmartSun™	Without Grilles	0.33	0.17	0.37
		Simulated Divided Light Grilles	0.33	0.15	0.32
		Finelight Grilles	0.33	0.15	0.32
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.28	0.16	0.36
		Simulated Divided Light Grilles	0.30	0.14	0.31
		Finelight Grilles	0.30	0.14	0.31
400 Series Complementary Arch Patio Door Sidelights AND-N-131	Low-E4®	Without Grilles	0.32	0.23	0.39
		Simulated Divided Light Grilles	0.32	0.21	0.34
		Finelight™ Grilles	0.32	0.21	0.34
		Full Divided Light Grilles	0.33	0.21	0.34
	Low-E4 w/HeatLock®	Without Grilles	0.29	0.23	0.38
		Simulated Divided Light Grilles	0.29	0.21	0.34
		Finelight Grilles	0.29	0.21	0.34
	Low-E4 Sun	Without Grilles	0.30	0.21	0.34
		Without Grilles	0.33	0.15	0.22
		Simulated Divided Light Grilles	0.33	0.13	0.19
	Low-E4 SmartSun™	Without Grilles	0.33	0.13	0.19
		Simulated Divided Light Grilles	0.34	0.13	0.19
		Finelight Grilles	0.34	0.13	0.19
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.32	0.16	0.35
		Simulated Divided Light Grilles	0.32	0.14	0.31
		Finelight Grilles	0.32	0.14	0.31
Low-E4 SmartSun w/HeatLock	Without Grilles	0.33	0.14	0.31	
	Without Grilles	0.29	0.15	0.34	
	Simulated Divided Light Grilles	0.29	0.14	0.30	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.29	0.14	0.30	
	Simulated Divided Light Grilles	0.29	0.14	0.30	
	Finelight Grilles	0.29	0.14	0.30	
Low-E4 SmartSun w/HeatLock	Without Grilles	0.30	0.14	0.30	
	Simulated Divided Light Grilles	0.30	0.14	0.30	
	Finelight Grilles	0.30	0.14	0.30	

• "Low-E4;" "Low-E4" SmartSun;" "Low-E4" Sun" and "HeatLock"™ 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 directly transmitted, as well as 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 Light 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 May 2021. 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 with capillary breather tubes 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. Phone: 301-589-1776 Website: [www.nfrc.org](http://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.

**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 an independent testing laboratory and verified by a third-party certification program.

**Test Standards**

**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).

**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 certified 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**

**Glass Construction** used with this product type.

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

**ENERGY STAR® Certified in Highlighted Regions**  
Certifié ENERGY STAR dans les régions en surbrillance

Canada  
energystar.gc.ca

ENERGY STAR

U.S. / É.U.  
energystar.gov

ER/RE 18

DO NOT REMOVE UNTIL FINAL INSPECTION/NE PAS RETIRER AVANT L'INSPECTION FINALE

**ANDERSEN**  
WINDOWS & DOORS

**400 Series Casement Window**  
AND-N-1-01592-00001  
Vinyl-Clad Wood Frame, Dual-Pane Low-E SmartSun  
Glazing with Argon  
Product Type: Casement

**ENERGY PERFORMANCE RATINGS**

U-Factor <b>0.27</b> (U.S./I-P)	Solar Heat Gain Coefficient <b>0.21</b>
Visible Transmittance <b>0.49</b>	

**ADDITIONAL PERFORMANCE RATINGS**

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 any specific use. Consult manufacturer's literature for other product performance information.  
[www.nfrc.org](http://www.nfrc.org)

**WDMA**  
Hallmark Certified  
[www.wdma.com](http://www.wdma.com)

License: 129-H-861  
**Andersen Corporation**  
400 Series Casement Window  
Manufacturer stipulates Hallmark Certification as indicated below.

STANDARD	RATING
AMA/WDMA/CSA 101/LS.2/A440-11	Class LC-PG50 Size Tested 56" x 71" DP=50-50
AMA/WDMA/CSA 101/LS.2/A440-08	Class LC-PG50 Size Tested 56" x 71" DP=50-50
AMA/WDMA/CSA 101/LS.2/A440-08 A440S1-09	Class LC-PG50 - 1435mm x 1622mm Positive/Negative Design Pressure (DP) = 2400 Pa/2400 Pa Water Penetration Resistance Test Pressure = 360 Pa Canadian Air Infiltration/Exfiltration = A3

FL 12496  
Glazing: 2.2mm AN outer/2.3mm HS inner

**WARNING**  
This product can expose you to chemicals including titanium dioxide, which is known in the state of California to cause cancer, and methanol, which is known to the state of California to cause birth defects or other reproductive harm.  
For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Meets or exceeds CEC & IECC Air Infiltration Requirements of 0.2 CFM/sq. ft. or lower.  
WDMA Hallmark Certification Program. Complies with HUD UM Bulletin No. 111.

\* 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.  
\* "ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.