

Thermal Performance Data

Signature 1-3/4" Outswing Side Hinge French Door (8610)

WEATHER SHIELD.

WINDOWS & DOORS

US Qualification Criteria		Climate Zone	U-Value	SHGC
		Northern	<=0.30	<=0.40
		North-Central		
		South-Central		
		Southern		<=0.25

As of January 2016

Canadian Qualification Criteria		Climate Zone	U-Value	or	Energy Rating
		Zone 1	<=1.60		>=25
		Zone 2	<=1.40		>=29
		Zone 3	<=1.20		>=34
Air Leakage <= 0.3 cfm/ft ²					

As of February 2015

U-Value

A measurement of how much energy a material conducts. The lower the U-Value, the greater the insulating effect.

Solar Heat Gain Coefficient (SHGC)

Measures how well a window or door prevents heat from passing through it.

The lower a window or door's SHGC, the less heat it allows to pass through it.

Visible Light Transmittance

The amount of light in the visible portion of the spectrum that passes through a glazing material.

Condensation Resistance Rating

Measures how well a window resists the formation of condensation on the inside surface.

The higher the number the better resistance to condensation.

Energy Rating

A value demonstrating the balance between U-Value, SHGC and air leakage.

The higher the number, the more efficient the product.

R-Value

A measurement of how much a material resists heat transfer.

A higher R-Value means a greater insulating effect and a lower rate of heat flow out of the home.

While **R-value** measures resistance to heat transfer, **U-value** measures the rate of heat transfer.

In simple terms, **U-value** is the mathematical reciprocal of **R-value**; that is, **U = 1/R and R = 1/U**.

^a Total Unit calculations are derived from computer simulations that are then verified by 3rd party testing in accordance with NFRC 100, NFRC 200, and NFRC 500.

^b Published values reflect 3mm/3mm glass lite thicknesses.

ENERGY PERFORMANCE DATA								CANADIAN ENERGY PEFORMANCE DATA				CANADA ENERGY STAR v 4.1						
Grille Option	Glazing thickness	^NFRC Total Unit Calculations ^Glazing Option	CPD #	U-Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Condensation Resistance Rating	US ENERGY STAR V 6.0				U-Value (metric)	Maximum Air Leakage L/s/m ²	Air Infiltration/Air Exfiltration Average	Energy Rating	1	2	3
								N	NC	SC	S					1	2	3
No GIA or SDL	3/4"	Clear Insul	WEA-N-297-02242-00001	0.46	0.44	0.45	44					2.61	0.6	0.05	8			
	3/4"	Insul Low-E	WEA-N-297-02243-00001	0.36	0.22	0.39	56					2.04	0.6	0.05	8			
	3/4"	Insul Low E w/Argon	WEA-N-297-02250-00001	0.33	0.22	0.39	57					1.87	0.6	0.05	12			
	3/4"	Passive Solar	WEA-N-297-01965-00001	0.37	0.39	0.44	55					2.10	0.6	0.05	16			
	3/4"	Passive Solar w/Argon	WEA-N-297-01973-00001	0.34	0.39	0.44	57					1.93	0.6	0.05	20			
	3/4"	Passive Solar Extreme	WEA-N-297-01969-00001	0.33	0.35	0.43	42					1.87	0.6	0.05	19			
	3/4"	Passive Solar Extreme w/Argon	WEA-N-297-01977-00001	0.31	0.35	0.43	45					1.76	0.6	0.05	22			
	3/4"	Zo-e-shield 5	WEA-N-297-02244-00001	0.36	0.17	0.34	56					2.04	0.6	0.05	5			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-297-02251-00001	0.33	0.16	0.34	57					1.87	0.6	0.05	8			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-297-01968-00001	0.32	0.16	0.35	43					1.82	0.6	0.05	9			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-297-01976-00001	0.30	0.16	0.35	47	Y	Y	Y	Y	1.70	0.6	0.05	12			
	3/4"	Zo-e-shield 6	WEA-N-297-02104-00001	0.36	0.16	0.35	56					2.04	0.6	0.05	4			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-297-02111-00001	0.33	0.16	0.35	58					1.87	0.6	0.05	8			
	3/4"	Zo-e SafeGuard Certified	WEA-N-297-02107-00001	0.36	0.16	0.35	57					2.04	0.6	0.05	4			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-297-02114-00001	0.33	0.16	0.35	58					1.87	0.6	0.05	8			
	3/4"	Zo-e-shield 7	WEA-N-297-02166-00001	0.31	0.15	0.29	59					1.76	0.6	0.05	10			
	3/4"	Zo-e-shield 7 w/ Argon	WEA-N-297-02168-00001	0.28	0.15	0.29	59	Y	Y	Y	Y	1.59	0.6	0.05	14			
	3/4"	Insul Low-E 240	WEA-N-297-01966-00001	0.36	0.15	0.22	55					2.04	0.6	0.05	4			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-297-01974-00001	0.34	0.15	0.22	57					1.93	0.6	0.05	6			
	3/4"	Insul Low-E 340	WEA-N-297-01967-00001	0.36	0.11	0.21	56					2.04	0.6	0.05	2			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-297-01975-00001	0.34	0.11	0.21	57					1.93	0.6	0.05	4			
	3/4"	Bronze Low E	WEA-N-297-01963-00011	0.36	0.23	0.30	56					2.04	0.6	0.05	9			
	3/4"	Bronze Low E w/Argon	WEA-N-297-01971-00011	0.34	0.23	0.30	57					1.93	0.6	0.05	11			
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-297-02242-00002	0.46	0.38	0.39	44					2.61	0.6	0.05	5			
	3/4"	Insul Low-E	WEA-N-297-02243-00002	0.36	0.20	0.33	56					2.04	0.6	0.05	7			
	3/4"	Insul Low E w/Argon	WEA-N-297-02250-00002	0.33	0.19	0.33	57					1.87	0.6	0.05	10			
	3/4"	Passive Solar	WEA-N-297-01965-00002	0.37	0.34	0.37	55					2.10	0.6	0.05	14			
	3/4"	Passive Solar w/Argon	WEA-N-297-01973-00002	0.34	0.34	0.37	57					1.93	0.6	0.05	17			
	3/4"	Passive Solar Extreme	WEA-N-297-01969-00002	0.33	0.31	0.36	42					1.87	0.6	0.05	17			
	3/4"	Passive Solar Extreme w/Argon	WEA-N-297-01977-00002	0.31	0.31	0.36	45					1.76	0.6	0.05	19			
	3/4"	Zo-e-shield 5	WEA-N-297-02244-00002	0.36	0.15	0.29	56					2.04	0.6	0.05	4			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-297-02251-00002	0.33	0.14	0.29	57					1.87	0.6	0.05	7			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-297-01968-00002	0.32	0.14	0.30	43					1.82	0.6	0.05	8			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-297-01976-00002	0.30	0.14	0.30	47	Y	Y	Y	Y	1.70	0.6	0.05	11			
	3/4"	Zo-e-shield 6	WEA-N-297-02104-00002	0.36	0.14	0.30	56					2.04	0.6	0.05	3			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-297-02111-00002	0.33	0.14	0.30	58					1.87	0.6	0.05	7			
	3/4"	Zo-e SafeGuard Certified	WEA-N-297-02107-00002	0.36	0.14	0.30	57					2.04	0.6	0.05	3			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-297-02114-00002	0.33	0.14	0.30	58					1.87	0.6	0.05	7			
	3/4"	Zo-e-shield 7	WEA-N-297-02178-00001	0.31	0.13	0.24	59					1.76	0.6	0.05	9			
	3/4"	Zo-e-shield 7 w/ Argon	WEA-N-297-02180-00001	0.29	0.13	0.24	59	Y	Y	Y	Y	1.65	0.6	0.05	11			
	3/4"	Insul Low-E 240	WEA-N-297-01966-00002	0.36	0.14	0.19	55					2.04	0.6	0.05	3			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-297-01974-00002	0.34	0.13	0.19	57					1.93	0.6	0.05	5			
	3/4"	Insul Low-E 340	WEA-N-297-01967-00002	0.36	0.10	0.18	56					2.04	0.6	0.05	1			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-297-01975-00002	0.34	0.10	0.18	57					1.93	0.6	0.05	3			
	3/4"	Bronze Low E	WEA-N-297-01963-00012	0.36	0.20	0.25	56					2.04	0.6	0.05	7			
	3/4"	Bronze Low E w/Argon	WEA-N-297-01971-00012	0.34	0.20	0.25	57					1.93	0.6	0.05	9			
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-297-02242-00003	0.46	0.33	0.32	44					2.61	0.6	0.05	2			
	3/4"	Insul Low-E	WEA-N-297-02243-00003	0.36	0.17	0.28	56					2.04	0.6	0.05	5			
	3/4"	Insul Low E w/Argon	WEA-N-297-02250-00003	0.33	0.17	0.28	57					1.87	0.6	0.05	9			
	3/4"	Passive Solar	WEA-N-297-01965-00003	0.37	0.29	0.31	55					2.10	0.6	0.05	11			
	3/4"	Passive Solar w/Argon	WEA-N-297-01973-00003	0.34	0.29	0.31	57					1.93	0.6	0.05	14			
	3/4"	Passive Solar Extreme	WEA-N-297-01969-00003	0.33	0.26	0.31	42					1.87	0.6	0.05	14			
	3/4"	Passive Solar Extreme w/Argon	WEA-N-297-01977-00003	0.31	0.26	0.31	45					1.76	0.6	0.05	16			
	3/4"	Zo-e-shield 5	WEA-N-297-02244-00003	0.36	0.13	0.24	56					2.04	0.6	0.05	3			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-297-02251-00003	0.33	0.13	0.24	57					1.87	0.6	0.05	6			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-297-01968-00003	0.32	0.12	0.25	43					1.82	0.6	0.05	7			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-297-01976-00003	0.30	0.12	0.25	47	Y	Y	Y	Y	1.70	0.6	0.05	10			
	3/4"	Zo-e-shield 6	WEA-N-297-02104-00003	0.36	0.12	0.25	56					2.04	0.6	0.05	2			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-297-02111-00003	0.33	0.12	0.25	58					1.87	0.6	0.05	6			
	3/4"	Zo-e SafeGuard Certified	WEA-N-297-02107-00003	0.36	0.12	0.25	57					2.04	0.6	0.05	2			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-297-02114-00003	0.33	0.12	0.25	58					1.87	0.6	0.05	6			
	3/4"	Zo-e-shield 7	WEA-N-297-02178-00002	0.31	0.12	0.20	59					1.76	0.6	0.05	8			
	3/4"	Zo-e-shield 7 w/ Argon	WEA-N-297-02180-00002	0.29	0.11	0.20	59	Y	Y	Y	Y	1.65	0.6	0.05	10			
	3/4"	Insul Low-E 240	WEA-N-297-01966-00003	0.36	0.12	0.16	55					2.04	0.6	0.05	2			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-297-01974-00003	0.34	0.12	0.16	57					1.93	0.6	0.05	5			
	3/4"	Insul Low-E 340	WEA-N-297-01967-00003	0.36	0.09	0.15	56					2.04	0.6	0.05	0			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-297-01975-00003	0.34	0.09	0.15	57					1.93	0.6	0.05	3			
	3/4"	Bronze Low E	WEA-N-297-01963-00013	0.														