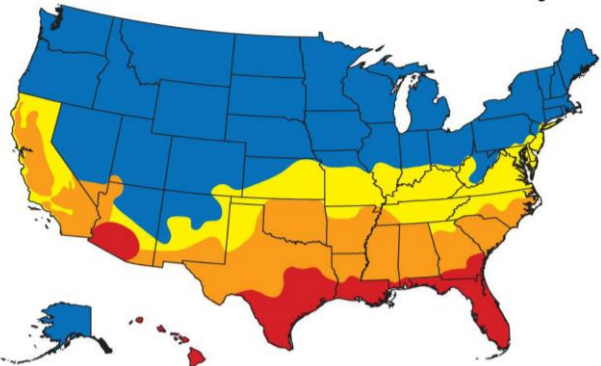


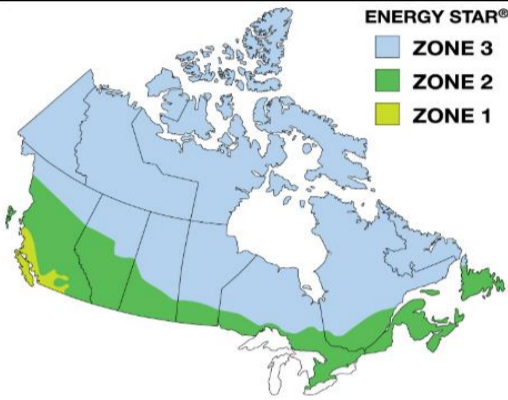
# Thermal Performance Data

Premium 1-3/4" Inswing Side Hinge French Door (8510)

**WEATHER SHIELD.**

**WINDOWS & DOORS**

US Qualification Criteria	Climate Zone	U-Value	SHGC
 <p>As of January 2016</p>	Northern	<=0.30	<=0.40
	North-Central		<=0.25
	South-Central		
	Southern		

Canadian Qualification Criteria	Climate Zone	U-Value	or	Energy Rating
 <p>As of February 2015</p>	Zone 1	<=1.60		>=25
	Zone 2	<=1.40		>=29
	Zone 3	<=1.20		>=34
	Air Leakage <= 0.3 cfm/ft2			

## 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**.

<sup>a</sup> 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.

<sup>b</sup> Published values reflect 3mm/3mm glass lite thicknesses.

ENERGY PERFORMANCE DATA								ENERGY STAR		CANADIAN ENERGY PERFORMANCE DATA				ENERGY STAR				
Premium 1-3/4" Inswing Side Hinge French Door (8510)								US ENERGY STAR V 6.0						CANADA ENERGY STAR v 4.1				
Grille Option	Glazing thickness	<sup>a</sup> NFRC Total Unit Calculations <sup>b</sup> Glazing Option	CPD #	U-Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Condensation Resistance Rating	N	NC	SC	S	U-Value (metric)	Maximum Air Leakage L/s/m2	Air Infiltration/Exfiltration Average	Energy Rating	1	2	3
No GIA or SDL	3/4"	Clear Insul	WEA-N-297-01519-00001	0.44	0.44	0.45	44					2.50	0.6	0.25	10			
	3/4"	Insul Low-E	WEA-N-297-01520-00001	0.35	0.24	0.40	56					1.99	0.6	0.25	10			
	3/4"	Insul Low E w/Argon	WEA-N-297-01528-00001	0.32	0.24	0.40	58					1.82	0.6	0.25	14			
	3/4"	Passive Solar	WEA-N-297-01522-00001	0.35	0.39	0.44	56					1.99	0.6	0.25	18			
	3/4"	Passive Solar w/Argon	WEA-N-297-01530-00001	0.33	0.39	0.44	58					1.87	0.6	0.25	21			
	3/4"	Passive Solar Extreme	WEA-N-297-01526-00001	0.31	0.35	0.43	43					1.76	0.6	0.25	21			
	3/4"	Passive Solar Extreme w/Argon	WEA-N-297-01534-00001	0.30	0.35	0.43	46	Y	Y			1.70	0.6	0.25	22			
	3/4"	Zo-e-shield 5	WEA-N-297-01521-00001	0.34	0.16	0.36	57					1.93	0.6	0.25	6			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-297-01529-00001	0.32	0.16	0.36	58					1.82	0.6	0.25	9			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-297-01525-00001	0.31	0.16	0.35	44					1.76	0.6	0.25	10			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-297-01533-00001	0.29	0.16	0.35	47	Y	Y	Y	Y	1.65	0.6	0.25	13			
	3/4"	Zo-e-shield 6	WEA-N-297-01661-00001	0.34	0.16	0.35	57					1.93	0.6	0.25	6			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-297-01668-00001	0.32	0.16	0.35	60					1.82	0.6	0.25	9			
	3/4"	Zo-e SafeGuard Certified	WEA-N-297-01664-00001	0.34	0.16	0.35	57					1.93	0.6	0.25	6			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-297-01671-00001	0.32	0.16	0.35	60					1.82	0.6	0.25	9			
	1"	Zo-e-shield 7	WEA-N-297-01723-00001	0.30	0.15	0.29	60	Y	Y	Y	Y	1.70	0.6	0.25	11			
	1"	Zo-e-shield 7 w/ Argon	WEA-N-297-01725-00001	0.27	0.15	0.29	60	Y	Y	Y	Y	1.53	0.6	0.25	15			
	3/4"	Insul Low-E 240	WEA-N-297-01523-00001	0.35	0.15	0.22	56					1.99	0.6	0.25	5			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-297-01531-00001	0.33	0.15	0.22	58					1.87	0.6	0.25	7			
	3/4"	Insul Low-E 340	WEA-N-297-01524-00001	0.35	0.11	0.21	57					1.99	0.6	0.25	2			
3/4"	Insul Low-E 340 w/Argon	WEA-N-297-01532-00001	0.32	0.11	0.21	58					1.82	0.6	0.25	6				
3/4"	Bronze Low E	WEA-N-297-01520-00011	0.35	0.23	0.30	56					1.99	0.6	0.25	9				
3/4"	Bronze Low E w/Argon	WEA-N-297-01528-00011	0.32	0.22	0.30	58					1.82	0.6	0.25	12				
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-297-01519-00002	0.44	0.38	0.39	44					2.50	0.6	0.25	7			
	3/4"	Insul Low-E	WEA-N-297-01520-00002	0.35	0.21	0.34	56					1.99	0.6	0.25	8			
	3/4"	Insul Low E w/Argon	WEA-N-297-01528-00002	0.32	0.20	0.34	58					1.82	0.6	0.25	11			
	3/4"	Passive Solar	WEA-N-297-01522-00002	0.35	0.33	0.37	56					1.99	0.6	0.25	15			
	3/4"	Passive Solar w/Argon	WEA-N-297-01530-00002	0.33	0.33	0.37	58					1.87	0.6	0.25	18			
	3/4"	Passive Solar Extreme	WEA-N-297-01526-00002	0.31	0.30	0.36	43					1.76	0.6	0.25	18			
	3/4"	Passive Solar Extreme w/Argon	WEA-N-297-01534-00002	0.30	0.30	0.36	46	Y	Y			1.70	0.6	0.25	20			
	3/4"	Zo-e-shield 5	WEA-N-297-01521-00002	0.34	0.14	0.30	57					1.93	0.6	0.25	5			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-297-01529-00002	0.32	0.14	0.30	58					1.82	0.6	0.25	8			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-297-01525-00002	0.31	0.14	0.30	44					1.76	0.6	0.25	9			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-297-01533-00002	0.29	0.14	0.30	47	Y	Y	Y	Y	1.65	0.6	0.25	11			
	3/4"	Zo-e-shield 6	WEA-N-297-01661-00002	0.34	0.14	0.30	57					1.93	0.6	0.25	5			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-297-01668-00002	0.32	0.14	0.30	60					1.82	0.6	0.25	8			
	3/4"	Zo-e SafeGuard Certified	WEA-N-297-01664-00002	0.34	0.14	0.30	57					1.93	0.6	0.25	5			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-297-01671-00002	0.32	0.14	0.30	60					1.82	0.6	0.25	8			
	1"	Zo-e-shield 7	WEA-N-297-01735-00001	0.30	0.13	0.24	60	Y	Y	Y	Y	1.70	0.6	0.25	10			
	1"	Zo-e-shield 7 w/ Argon	WEA-N-297-01737-00001	0.27	0.13	0.24	60	Y	Y	Y	Y	1.53	0.6	0.25	14			
	3/4"	Insul Low-E 240	WEA-N-297-01523-00002	0.35	0.13	0.19	56					1.99	0.6	0.25	3			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-297-01531-00002	0.33	0.13	0.19	58					1.87	0.6	0.25	6			
	3/4"	Insul Low-E 340	WEA-N-297-01524-00002	0.35	0.10	0.18	57					1.99	0.6	0.25	2			
3/4"	Insul Low-E 340 w/Argon	WEA-N-297-01532-00002	0.32	0.09	0.18	58					1.82	0.6	0.25	5				
3/4"	Bronze Low E	WEA-N-297-01520-00012	0.35	0.20	0.25	56					1.99	0.6	0.25	7				
3/4"	Bronze Low E w/Argon	WEA-N-297-01528-00012	0.32	0.19	0.25	58					1.82	0.6	0.25	11				
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-297-01519-00003	0.44	0.32	0.32	44					2.50	0.6	0.25	3			
	3/4"	Insul Low-E	WEA-N-297-01520-00003	0.35	0.18	0.28	56					1.99	0.6	0.25	6			
	3/4"	Insul Low E w/Argon	WEA-N-297-01528-00003	0.32	0.18	0.28	58					1.82	0.6	0.25	10			
	3/4"	Passive Solar	WEA-N-297-01522-00003	0.35	0.28	0.31	56					1.99	0.6	0.25	12			
	3/4"	Passive Solar w/Argon	WEA-N-297-01530-00003	0.33	0.28	0.31	58					1.87	0.6	0.25	15			
	3/4"	Passive Solar Extreme	WEA-N-297-01526-00003	0.31	0.26	0.31	43					1.76	0.6	0.25	16			
	3/4"	Passive Solar Extreme w/Argon	WEA-N-297-01534-00003	0.30	0.26	0.31	46	Y	Y			1.70	0.6	0.25	17			
	3/4"	Zo-e-shield 5	WEA-N-297-01521-00003	0.34	0.12	0.26	57					1.93	0.6	0.25	4			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-297-01529-00003	0.32	0.12	0.26	58					1.82	0.6	0.25	7			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-297-01525-00003	0.31	0.12	0.25	44					1.76	0.6	0.25	8			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-297-01533-00003	0.29	0.12	0.25	47	Y	Y	Y	Y	1.65	0.6	0.25	10			
	3/4"	Zo-e-shield 6	WEA-N-297-01661-00003	0.34	0.12	0.25	57					1.93	0.6	0.25	4			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-297-01668-00003	0.32	0.12	0.25	60					1.82	0.6	0.25	7			
	3/4"	Zo-e SafeGuard Certified	WEA-N-297-01664-00003	0.34	0.12	0.25	57					1.93	0.6	0.25	4			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-297-01671-00003	0.32	0.12	0.25	60					1.82	0.6	0.25	7			
	1"	Zo-e-shield 7	WEA-N-297-01735-00002	0.30	0.11	0.20	60	Y	Y	Y	Y	1.70	0.6	0.25	9			
	1"	Zo-e-shield 7 w/ Argon	WEA-N-297-01737-00002	0.27	0.11	0.20	60	Y	Y	Y	Y	1.53	0.6	0.25	12			
	3/4"	Insul Low-E 240	WEA-N-297-01523-00003	0.35	0.11	0.16	56					1.99	0.6	0.25	2			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-297-01531-00003	0.33	0.11	0.16	58					1.87	0.6	0.25	5			
	3/4"	Insul Low-E 340	WEA-N-297-01524-00003	0.35	0.09	0.15	57					1.99	0.6	0.25	1			
3/4"	Insul Low-E 340 w/Argon	WEA-N-297-01532-00003	0.32	0.08	0.15	58					1.82	0.6	0.25	4				
3/4"	Bronze Low E	WEA-N-297-01520-00013	0.35	0.17	0.21	56					1.99	0.6	0.25	6				
3/4"	Bronze Low E w/Argon	WEA-N-297-01528-00013	0.32	0.17	0.21	58					1.82	0.6	0.25	9				