



Thermal Performance Data

Premium French Casement Windows - Operating (8218)

WEATHER SHIELD.

WINDOWS & DOORS

US Qualification Criteria	Climate Zone	U-Value	SHGC		
 <p>Energy Star Version 7.0 Starting October 2023</p>	Northern	<=0.22	>=0.17	Prescriptive	
			=0.23	>=0.35	Equivalent Energy Performance
			=0.24		
			=0.25	>=0.40	
			=0.26		
	North-Central	<=0.25	<=0.40		
South-Central	<=0.28	<=0.23			
Southern	<=0.32	<=0.23			

Canadian Qualification Criteria	U-Value	or	Energy Rating
 <p>Energy Star Version 5.0 starting January 2020</p>	<=1.22		>=34
	Air Leakage <= 1.5 L/s/m2		

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 glass lite thicknesses.

ENERGY PERFORMANCE DATA													CANADIAN ENERGY PERFORMANCE DATA			
Premium French Casement Windows - Operating (8218)													ENERGY STAR		ENERGY STAR	
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 7.0				U-Value (metric)	Maximum Air Leakage L/s/m2	Air Infiltration/Exfiltration Average	Energy Rating	CANADA ENERGY STAR v5.0
								N	NC	SC	S					
No GIA or SDL	3/4"	Clear Insul	WEA-N-290-00751-00001	0.46	0.57	0.59	42					2.61	1.5	0.02	16	
	3/4"	Insul Low-E	WEA-N-290-00768-00001	0.33	0.31	0.52	52					1.87	1.5	0.02	17	
	3/4"	Insul Low E w/Argon	WEA-N-290-00876-00001	0.30	0.30	0.52	55					1.70	1.5	0.02	20	
	3/4"	Passive Solar	WEA-N-290-00803-00001	0.34	0.50	0.57	52					1.93	1.5	0.02	27	
	3/4"	Passive Solar w/Argon	WEA-N-290-00912-00001	0.31	0.50	0.57	55					1.76	1.5	0.02	30	
	3/4"	Passive Solar Extreme	WEA-N-290-00809-00001	0.29	0.45	0.56	41					1.65	1.5	0.02	30	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-290-00918-00001	0.27	0.45	0.56	44					1.53	1.5	0.02	32	
	3/4"	Zo-e-shield 5	WEA-N-290-00785-00001	0.33	0.21	0.47	53					1.87	1.5	0.02	11	
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-290-00894-00001	0.29	0.20	0.47	56				Y	1.65	1.5	0.02	15	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-290-00828-00001	0.28	0.20	0.45	42			Y	Y	1.59	1.5	0.02	17	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-290-00936-00001	0.26	0.20	0.45	45			Y	Y	1.48	1.5	0.02	19	
	1"	Zo-e-shield 6	WEA-N-290-00846-00001	0.35	0.21	0.46	50					1.99	1.5	0.02	9	
	1"	Zo-e-shield 6 w/ Argon	WEA-N-290-00948-00001	0.30	0.20	0.46	53				Y	1.70	1.5	0.02	14	
	1"	Zo-e SafeGuard Certified	WEA-N-290-00864-00001	0.34	0.21	0.45	50					1.93	1.5	0.02	10	
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-290-00966-00001	0.30	0.20	0.45	54				Y	1.70	1.5	0.02	14	
	3/4"	Insul Low-E 240	WEA-N-290-00815-00001	0.33	0.19	0.29	52					1.87	1.5	0.02	10	
	3/4"	Insul Low-E 240 w/Argon	WEA-N-290-00924-00001	0.30	0.19	0.29	55				Y	1.70	1.5	0.02	14	
	3/4"	Insul Low-E 340	WEA-N-290-00821-00001	0.33	0.14	0.28	52					1.87	1.5	0.02	7	
	3/4"	Insul Low-E 340 w/Argon	WEA-N-290-00930-00001	0.30	0.13	0.28	55				Y	1.70	1.5	0.02	10	
	3/4"	Bronze Low E	WEA-N-290-00779-00001	0.33	0.29	0.39	52					1.87	1.5	0.02	16	
3/4"	Bronze Low E w/Argon	WEA-N-290-00888-00001	0.30	0.29	0.39	55					1.70	1.5	0.02	19		
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-290-00751-00002	0.46	0.50	0.53	42					2.61	1.5	0.02	12	
	3/4"	Insul Low-E	WEA-N-290-00768-00002	0.33	0.27	0.46	52					1.87	1.5	0.02	15	
	3/4"	Insul Low E w/Argon	WEA-N-290-00876-00002	0.30	0.27	0.46	55					1.70	1.5	0.02	18	
	3/4"	Passive Solar	WEA-N-290-00803-00002	0.34	0.44	0.51	52					1.93	1.5	0.02	23	
	3/4"	Passive Solar w/Argon	WEA-N-290-00912-00002	0.31	0.45	0.51	55					1.76	1.5	0.02	27	
	3/4"	Passive Solar Extreme	WEA-N-290-00809-00002	0.29	0.40	0.49	41					1.65	1.5	0.02	27	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-290-00918-00002	0.27	0.41	0.49	44					1.53	1.5	0.02	30	
	3/4"	Zo-e-shield 5	WEA-N-290-00785-00002	0.33	0.19	0.41	53					1.87	1.5	0.02	10	
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-290-00894-00002	0.29	0.18	0.41	56				Y	1.65	1.5	0.02	14	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-290-00828-00002	0.28	0.18	0.40	42			Y	Y	1.59	1.5	0.02	16	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-290-00936-00002	0.26	0.18	0.40	45			Y	Y	1.48	1.5	0.02	18	
	1"	Zo-e-shield 6	WEA-N-290-00847-00001	0.36	0.19	0.40	50					2.04	1.5	0.02	6	
	1"	Zo-e-shield 6 w/ Argon	WEA-N-290-00949-00001	0.34	0.18	0.40	53					1.93	1.5	0.02	8	
	1"	Zo-e SafeGuard Certified	WEA-N-290-00865-00001	0.36	0.19	0.40	50					2.04	1.5	0.02	6	
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-290-00967-00001	0.32	0.18	0.40	54				Y	1.82	1.5	0.02	10	
	3/4"	Insul Low-E 240	WEA-N-290-00815-00002	0.33	0.17	0.26	52					1.87	1.5	0.02	9	
	3/4"	Insul Low-E 240 w/Argon	WEA-N-290-00924-00002	0.30	0.17	0.26	55				Y	1.70	1.5	0.02	13	
	3/4"	Insul Low-E 340	WEA-N-290-00821-00002	0.33	0.13	0.25	52					1.87	1.5	0.02	7	
	3/4"	Insul Low-E 340 w/Argon	WEA-N-290-00930-00002	0.30	0.12	0.25	55				Y	1.70	1.5	0.02	10	
	3/4"	Bronze Low E	WEA-N-290-00779-00002	0.33	0.26	0.34	52					1.87	1.5	0.02	14	
3/4"	Bronze Low E w/Argon	WEA-N-290-00888-00002	0.30	0.26	0.34	55					1.70	1.5	0.02	18		
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-290-00751-00004	0.46	0.45	0.46	42					2.61	1.5	0.02	9	
	3/4"	Insul Low-E	WEA-N-290-00768-00004	0.33	0.25	0.40	52					1.87	1.5	0.02	13	
	3/4"	Insul Low E w/Argon	WEA-N-290-00876-00004	0.30	0.24	0.40	55					1.70	1.5	0.02	17	
	3/4"	Passive Solar	WEA-N-290-00803-00004	0.34	0.39	0.45	52					1.93	1.5	0.02	20	
	3/4"	Passive Solar w/Argon	WEA-N-290-00912-00004	0.31	0.40	0.45	55					1.76	1.5	0.02	25	
	3/4"	Passive Solar Extreme	WEA-N-290-00809-00004	0.29	0.36	0.43	41					1.65	1.5	0.02	25	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-290-00918-00004	0.27	0.36	0.43	44					1.53	1.5	0.02	27	
	3/4"	Zo-e-shield 5	WEA-N-290-00785-00004	0.33	0.17	0.36	53					1.87	1.5	0.02	9	
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-290-00894-00004	0.29	0.16	0.36	56				Y	1.65	1.5	0.02	13	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-290-00828-00004	0.28	0.16	0.36	42			Y	Y	1.59	1.5	0.02	14	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-290-00936-00004	0.26	0.16	0.36	45			Y	Y	1.48	1.5	0.02	17	
	1"	Zo-e-shield 6	WEA-N-290-00848-00001	0.36	0.17	0.36	50					2.04	1.5	0.02	5	
	1"	Zo-e-shield 6 w/ Argon	WEA-N-290-00950-00001	0.31	0.16	0.36	53				Y	1.76	1.5	0.02	11	
	1"	Zo-e SafeGuard Certified	WEA-N-290-00866-00001	0.36	0.17	0.35	50					2.04	1.5	0.02	5	
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-290-00968-00001	0.32	0.16	0.35	54				Y	1.82	1.5	0.02	9	
	3/4"	Insul Low-E 240	WEA-N-290-00815-00004	0.33	0.16	0.22	52					1.87	1.5	0.02	8	
	3/4"	Insul Low-E 240 w/Argon	WEA-N-290-00924-00004	0.30	0.15	0.22	55				Y	1.70	1.5	0.02	11	
	3/4"	Insul Low-E 340	WEA-N-290-00822-00001	0.33	0.12	0.22	52					1.87	1.5	0.02	6	
	3/4"	Insul Low-E 340 w/Argon	WEA-N-290-00930-00004	0.30	0.11	0.22	55				Y	1.70	1.5	0.02	9	
	3/4"	Bronze Low E	WEA-N-290-00779-00004	0.33	0.24	0.30	52					1.87	1.5	0.02	13	
3/4"	Bronze Low E w/Argon	WEA-N-290-00888-00004	0.30	0.23	0.30	55				Y	1.70	1.5	0.02	16		