



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	>=0.40	
		=0.25		
		=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					
Signature Casement Windows - Operating (8219)											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-320-00346-00001	0.45	0.56	0.59	44					2.56	1.5	0.05	16	
	3/4"	Insul Low-E	WEA-N-320-00347-00001	0.33	0.31	0.52	53					1.87	1.5	0.05	17	
	3/4"	Insul Low E w/Argon	WEA-N-320-00355-00001	0.30	0.30	0.52	56					1.70	1.5	0.05	20	
	3/4"	Passive Solar	WEA-N-320-00350-00001	0.34	0.50	0.57	53					1.93	1.5	0.05	27	
	3/4"	Passive Solar w/Argon	WEA-N-320-00358-00001	0.31	0.50	0.57	56					1.76	1.5	0.05	30	
	3/4"	Passive Solar Extreme	WEA-N-320-00351-00001	0.29	0.45	0.56	41					1.65	1.5	0.05	30	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-320-00359-00001	0.27	0.45	0.56	44					1.53	1.5	0.05	32	
	3/4"	Zo-e-shield 5	WEA-N-320-00348-00001	0.33	0.20	0.47	54					1.87	1.5	0.05	11	
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-320-00356-00001	0.30	0.20	0.47	57				Y	1.70	1.5	0.05	14	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-320-00349-00001	0.28	0.20	0.45	42			Y	Y	1.59	1.5	0.05	17	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-320-00357-00001	0.26	0.20	0.45	45			Y	Y	1.48	1.5	0.05	19	
	1"	Zo-e-shield 6	WEA-N-320-00436-00001	0.32	0.20	0.46	44				Y	1.82	1.5	0.05	12	
	1"	Zo-e-shield 6 w/ Argon	WEA-N-320-00444-00001	0.29	0.20	0.46	46				Y	1.65	1.5	0.05	15	
	1"	Zo-e SafeGuard Certified	WEA-N-320-00441-00001	0.32	0.20	0.45	44				Y	1.82	1.5	0.05	12	
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-320-00449-00001	0.29	0.20	0.45	43				Y	1.65	1.5	0.05	15	
	1"	Zo-e-shield 7	WEA-N-320-00386-00001	0.26	0.19	0.37	59			Y	Y	1.48	1.5	0.05	18	
	1"	Zo-e-shield 7 w/ Argon	WEA-N-320-00400-00001	0.23	0.18	0.37	63			Y	Y	1.31	1.5	0.05	22	
	3/4"	Insul Low-E 240	WEA-N-320-00352-00001	0.34	0.19	0.29	53					1.93	1.5	0.05	9	
	3/4"	Insul Low-E 240 w/Argon	WEA-N-320-00360-00001	0.31	0.19	0.29	56				Y	1.76	1.5	0.05	12	
	3/4"	Insul Low-E 340	WEA-N-320-00353-00001	0.33	0.14	0.28	53					1.87	1.5	0.05	7	
3/4"	Insul Low-E 340 w/Argon	WEA-N-320-00361-00001	0.30	0.13	0.28	56				Y	1.70	1.5	0.05	10		
3/4"	Bronze Low E	WEA-N-320-00347-00011	0.33	0.29	0.38	53					1.87	1.5	0.05	16		
3/4"	Bronze Low E w/Argon	WEA-N-320-00355-00011	0.30	0.29	0.38	56					1.70	1.5	0.05	19		
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-320-00346-00002	0.45	0.51	0.54	44					2.56	1.5	0.05	13	
	3/4"	Insul Low-E	WEA-N-320-00347-00002	0.33	0.28	0.47	53					1.87	1.5	0.05	15	
	3/4"	Insul Low E w/Argon	WEA-N-320-00355-00002	0.30	0.28	0.47	56					1.70	1.5	0.05	19	
	3/4"	Passive Solar	WEA-N-320-00350-00002	0.34	0.45	0.52	53					1.93	1.5	0.05	24	
	3/4"	Passive Solar w/Argon	WEA-N-320-00358-00002	0.31	0.45	0.52	56					1.76	1.5	0.05	27	
	3/4"	Passive Solar Extreme	WEA-N-320-00351-00002	0.29	0.41	0.50	41					1.65	1.5	0.05	27	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-320-00359-00002	0.27	0.41	0.50	44					1.53	1.5	0.05	30	
	3/4"	Zo-e-shield 5	WEA-N-320-00348-00002	0.33	0.19	0.42	54					1.87	1.5	0.05	10	
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-320-00356-00002	0.30	0.18	0.42	57				Y	1.70	1.5	0.05	13	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-320-00349-00002	0.28	0.18	0.41	42			Y	Y	1.59	1.5	0.05	15	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-320-00357-00002	0.26	0.18	0.41	45			Y	Y	1.48	1.5	0.05	18	
	1"	Zo-e-shield 6	WEA-N-320-00436-00002	0.32	0.19	0.42	44				Y	1.82	1.5	0.05	11	
	1"	Zo-e-shield 6 w/ Argon	WEA-N-320-00444-00002	0.29	0.18	0.42	46				Y	1.65	1.5	0.05	14	
	1"	Zo-e SafeGuard Certified	WEA-N-320-00441-00002	0.32	0.18	0.41	44				Y	1.82	1.5	0.05	10	
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-320-00449-00002	0.29	0.18	0.41	43				Y	1.65	1.5	0.05	14	
	1"	Zo-e-shield 7	WEA-N-320-00387-00001	0.27	0.17	0.34	59			Y	Y	1.53	1.5	0.05	16	
	1"	Zo-e-shield 7 w/ Argon	WEA-N-320-00401-00001	0.23	0.17	0.34	63			Y	Y	1.31	1.5	0.05	21	
	3/4"	Insul Low-E 240	WEA-N-320-00352-00002	0.34	0.18	0.26	53					1.93	1.5	0.05	8	
	3/4"	Insul Low-E 240 w/Argon	WEA-N-320-00360-00002	0.31	0.17	0.26	56				Y	1.76	1.5	0.05	11	
	3/4"	Insul Low-E 340	WEA-N-320-00353-00002	0.33	0.13	0.25	53					1.87	1.5	0.05	6	
3/4"	Insul Low-E 340 w/Argon	WEA-N-320-00361-00002	0.30	0.12	0.25	56				Y	1.70	1.5	0.05	10		
3/4"	Bronze Low E	WEA-N-320-00347-00012	0.33	0.27	0.35	53					1.87	1.5	0.05	15		
3/4"	Bronze Low E w/Argon	WEA-N-320-00355-00012	0.30	0.26	0.35	56					1.70	1.5	0.05	18		
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-320-00346-00003	0.45	0.47	0.48	44					2.56	1.5	0.05	11	
	3/4"	Insul Low-E	WEA-N-320-00347-00003	0.33	0.25	0.42	53					1.87	1.5	0.05	13	
	3/4"	Insul Low E w/Argon	WEA-N-320-00355-00003	0.30	0.25	0.42	56					1.70	1.5	0.05	17	
	3/4"	Passive Solar	WEA-N-320-00350-00003	0.34	0.41	0.46	53					1.93	1.5	0.05	21	
	3/4"	Passive Solar w/Argon	WEA-N-320-00358-00003	0.31	0.41	0.46	56					1.76	1.5	0.05	25	
	3/4"	Passive Solar Extreme	WEA-N-320-00351-00003	0.29	0.37	0.45	41					1.65	1.5	0.05	25	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-320-00359-00003	0.27	0.38	0.45	44					1.53	1.5	0.05	28	
	3/4"	Zo-e-shield 5	WEA-N-320-00348-00003	0.33	0.17	0.38	54					1.87	1.5	0.05	9	
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-320-00356-00003	0.30	0.17	0.38	57				Y	1.70	1.5	0.05	12	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-320-00349-00003	0.28	0.17	0.37	42			Y	Y	1.59	1.5	0.05	15	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-320-00357-00003	0.26	0.17	0.37	45			Y	Y	1.48	1.5	0.05	17	
	1"	Zo-e-shield 6	WEA-N-320-00436-00003	0.32	0.17	0.37	44				Y	1.82	1.5	0.05	10	
	1"	Zo-e-shield 6 w/ Argon	WEA-N-320-00444-00003	0.29	0.17	0.37	46				Y	1.65	1.5	0.05	14	
	1"	Zo-e SafeGuard Certified	WEA-N-320-00441-00003	0.32	0.17	0.37	44				Y	1.82	1.5	0.05	10	
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-320-00449-00003	0.29	0.17	0.37	43				Y	1.65	1.5	0.05	14	
	1"	Zo-e-shield 7	WEA-N-320-00387-00002	0.27	0.16	0.30	59			Y	Y	1.53	1.5	0.05	16	
	1"	Zo-e-shield 7 w/ Argon	WEA-N-320-00401-00002	0.23	0.16	0.30	63			Y	Y	1.31	1.5	0.05	20	
	3/4"	Insul Low-E 240	WEA-N-320-00352-00003	0.34	0.16	0.23	53					1.93	1.5	0.05	7	
	3/4"	Insul Low-E 240 w/Argon	WEA-N-320-00360-00003	0.31	0.16	0.23	56				Y	1.76	1.5	0.05	11	
	3/4"	Insul Low-E 340	WEA-N-320-00353-00003	0.33	0.12	0.23	53					1.87	1.5	0.05	6	
3/4"	Insul Low-E 340 w/Argon	WEA-N-320-00361-00003	0.30	0.11	0.23	56				Y	1.70	1.5	0.05	9		
3/4"	Bronze Low E	WEA-N-320-00347-00013	0.33	0.24	0.31	53					1.87	1.5	0.05	13		
3/4"	Bronze Low E w/Argon	WEA-N-320-00355-00013	0.30	0.24	0.31	56					1.70	1.5	0.05	17		