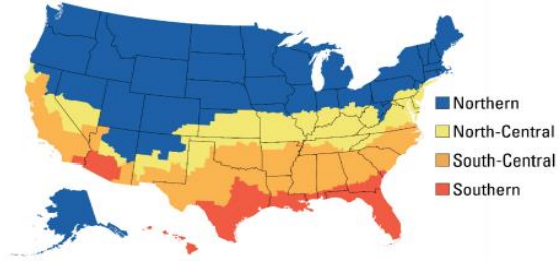



Thermal Performance Data

Contemporary Push Out Casement Windows - Picture/Transom (8217)

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		
		=0.26		
	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										ENERGY STAR		CANADIAN ENERGY PERFORMANCE DATA				ENERGY STAR	
Contemporary Push Out Casement Windows - Picture/Transom (8217)										US ENERGY STAR V 7.0						CANADA ENERGY STAR v 5.0	
Grille Option	Glazing thickness	³NFRC Total Unit Calculations ⁴Glazing 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		
								N	NC	SC	S						
No GIA or SDL	1"	Triple Low-E	WEA-N-285-01433-00001	0.29	0.31	0.52	59					1.65	1.5	0.05	22		
	1"	Triple Low-E w/ Argon	WEA-N-285-01445-00001	0.26	0.31	0.52	62					1.48	1.5	0.05	25		
	1"	Zo-e-shield 7	WEA-N-285-01439-00001	0.25	0.20	0.41	63		Y	Y	Y	1.42	1.5	0.05	20		
	1"	Zo-e-shield 7 w/ Argon	WEA-N-285-01451-00001	0.21	0.20	0.41	67	Y	Y	Y	Y	1.19	1.5	0.05	25	Y	
	1.375"	ES Zo-e-shield 7	WEA-N-285-01568-00001	0.20	0.20	0.41	68	Y	Y	Y	Y	1.14	1.5	0.05	26	Y	
	1.375"	ES Zo-e-shield 7 w/ Argon	WEA-N-285-01575-00001	0.17	0.20	0.41	71	Y	Y	Y	Y	0.97	1.5	0.05	30	Y	
	1.375"	ES Triple Insul Low-E	WEA-N-285-01569-00001	0.25	0.31	0.52	62		Y			1.42	1.5	0.05	27		
	1.375"	ES Triple Insul Low-E w/ Argon	WEA-N-285-01576-00001	0.23	0.31	0.52	64		Y			1.31	1.5	0.05	29		
	1.375"	ES Triple Insul LE 272/CL/LE180	WEA-N-285-01570-00001	0.20	0.30	0.50	67	Y	Y			1.14	1.5	0.05	32	Y	
	1.375"	ES Triple Insul LE 272/CL/LE180 w/Argon	WEA-N-285-01577-00001	0.18	0.30	0.50	70	Y	Y			1.02	1.5	0.05	35	Y	
	1.375"	ES Triple Insul LE 366/CL/LEi89	WEA-N-285-01567-00001	0.21	0.20	0.46	50	Y	Y	Y	Y	1.19	1.5	0.05	25	Y	
	1.375"	ES Triple Insul LE 366/CL/LEi89 w/Argon	WEA-N-285-01574-00001	0.20	0.20	0.46	53	Y	Y	Y	Y	1.14	1.5	0.05	26	Y	
1.375"	ES Triple Insul LE 366/CL/LE180	WEA-N-285-01566-00001	0.20	0.20	0.45	68	Y	Y	Y	Y	1.14	1.5	0.05	26	Y		
1.375"	ES Triple Insul LE 366/CL/LE180 w/Argon	WEA-N-285-01573-00001	0.18	0.20	0.45	70	Y	Y	Y	Y	1.02	1.5	0.05	29	Y		
Less Than 1" GIA or SDL	1"	Triple Low-E	WEA-N-285-01434-00001	0.30	0.28	0.47	59					1.70	1.5	0.05	19		
	1"	Triple Low-E w/ Argon	WEA-N-285-01446-00001	0.26	0.28	0.47	62					1.48	1.5	0.05	24		
	1"	Zo-e-shield 7	WEA-N-285-01440-00001	0.25	0.19	0.37	63		Y	Y	Y	1.42	1.5	0.05	20		
	1"	Zo-e-shield 7 w/ Argon	WEA-N-285-01452-00001	0.22	0.18	0.37	67	Y	Y	Y	Y	1.25	1.5	0.05	23		
	1.375"	ES Zo-e-shield 7	WEA-N-285-01568-00002	0.20	0.18	0.37	68	Y	Y	Y	Y	1.14	1.5	0.05	25	Y	
	1.375"	ES Zo-e-shield 7 w/ Argon	WEA-N-285-01575-00002	0.17	0.18	0.37	71	Y	Y	Y	Y	0.97	1.5	0.05	29	Y	
	1.375"	ES Triple Insul Low-E	WEA-N-285-01569-00002	0.25	0.28	0.47	62		Y			1.42	1.5	0.05	25		
	1.375"	ES Triple Insul Low-E w/ Argon	WEA-N-285-01576-00002	0.23	0.28	0.47	64		Y			1.31	1.5	0.05	27		
	1.375"	ES Triple Insul LE 272/CL/LE180	WEA-N-285-01570-00002	0.20	0.27	0.45	67	Y	Y			1.14	1.5	0.05	31	Y	
	1.375"	ES Triple Insul LE 272/CL/LE180 w/Argon	WEA-N-285-01577-00002	0.18	0.27	0.45	70	Y	Y			1.02	1.5	0.05	33	Y	
	1.375"	ES Triple Insul LE 366/CL/LEi89	WEA-N-285-01567-00002	0.21	0.18	0.41	50	Y	Y	Y	Y	1.19	1.5	0.05	24	Y	
	1.375"	ES Triple Insul LE 366/CL/LEi89 w/Argon	WEA-N-285-01574-00002	0.20	0.18	0.41	53	Y	Y	Y	Y	1.14	1.5	0.05	25	Y	
1.375"	ES Triple Insul LE 366/CL/LE180	WEA-N-285-01566-00002	0.20	0.18	0.40	68	Y	Y	Y	Y	1.14	1.5	0.05	25	Y		
1.375"	ES Triple Insul LE 366/CL/LE180 w/Argon	WEA-N-285-01573-00002	0.18	0.18	0.40	70	Y	Y	Y	Y	1.02	1.5	0.05	28	Y		
1" Or Over GIA or SDL	1"	Triple Low-E	WEA-N-285-01434-00002	0.30	0.25	0.41	59					1.70	1.5	0.05	17		
	1"	Triple Low-E w/ Argon	WEA-N-285-01446-00002	0.26	0.25	0.41	62					1.48	1.5	0.05	22		
	1"	Zo-e-shield 7	WEA-N-285-01440-00002	0.25	0.17	0.32	63		Y	Y	Y	1.42	1.5	0.05	19		
	1"	Zo-e-shield 7 w/ Argon	WEA-N-285-01452-00002	0.22	0.17	0.32	67	Y	Y	Y	Y	1.25	1.5	0.05	22		
	1.375"	ES Zo-e-shield 7	WEA-N-285-01568-00003	0.20	0.17	0.32	68	Y	Y	Y	Y	1.14	1.5	0.05	25	Y	
	1.375"	ES Zo-e-shield 7 w/ Argon	WEA-N-285-01575-00003	0.17	0.16	0.32	71		Y	Y	Y	0.97	1.5	0.05	28	Y	
	1.375"	ES Triple Insul Low-E	WEA-N-285-01569-00003	0.25	0.25	0.41	62		Y			1.42	1.5	0.05	23		
	1.375"	ES Triple Insul Low-E w/ Argon	WEA-N-285-01576-00003	0.23	0.25	0.41	64		Y			1.31	1.5	0.05	26		
	1.375"	ES Triple Insul LE 272/CL/LE180	WEA-N-285-01570-00003	0.20	0.24	0.40	67	Y	Y			1.14	1.5	0.05	29	Y	
	1.375"	ES Triple Insul LE 272/CL/LE180 w/Argon	WEA-N-285-01577-00003	0.18	0.24	0.40	70	Y	Y			1.02	1.5	0.05	31	Y	
	1.375"	ES Triple Insul LE 366/CL/LEi89	WEA-N-285-01567-00003	0.21	0.17	0.36	50	Y	Y	Y	Y	1.19	1.5	0.05	24	Y	
	1.375"	ES Triple Insul LE 366/CL/LEi89 w/Argon	WEA-N-285-01574-00003	0.20	0.16	0.36	53		Y	Y	Y	1.14	1.5	0.05	24	Y	
1.375"	ES Triple Insul LE 366/CL/LE180	WEA-N-285-01566-00003	0.20	0.16	0.36	68		Y	Y	Y	1.14	1.5	0.05	24	Y		
1.375"	ES Triple Insul LE 366/CL/LE180 w/Argon	WEA-N-285-01573-00003	0.18	0.16	0.36	70		Y	Y	Y	1.02	1.5	0.05	27	Y		