



# Thermal Performance Data

Premium Direct-Set Windows (8307)  
(5/8" jamb)

**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  $R = 1/U$ .

<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 glass lite thicknesses.

ENERGY PERFORMANCE DATA													CANADIAN ENERGY PERFORMANCE DATA			
Premium Direct-Set Windows (8307)													CANADIAN ENERGY PERFORMANCE DATA			
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-294-01130-00001	0.48	0.70	0.74	43					2.73	1.5	0.01	21	
	3/4"	Insul Low-E	WEA-N-294-01134-00001	0.32	0.38	0.65	54					1.82	1.5	0.01	22	
	3/4"	Insul Low E w/Argon	WEA-N-294-01202-00001	0.28	0.37	0.65	58					1.59	1.5	0.01	27	
	3/4"	Passive Solar	WEA-N-294-01146-00001	0.33	0.62	0.71	54					1.87	1.5	0.01	35	Y
	3/4"	Passive Solar w/Argon	WEA-N-294-01214-00001	0.29	0.62	0.71	58					1.65	1.5	0.01	40	Y
	3/4"	Passive Solar Extreme	WEA-N-294-01150-00001	0.27	0.56	0.70	42					1.53	1.5	0.01	39	Y
	3/4"	Passive Solar Extreme w/Argon	WEA-N-294-01218-00001	0.24	0.56	0.70	45	Y				1.36	1.5	0.01	43	Y
	3/4"	Zo-e-shield 5	WEA-N-294-01138-00001	0.31	0.25	0.58	55					1.76	1.5	0.01	16	
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-294-01206-00001	0.27	0.25	0.58	58					1.53	1.5	0.01	21	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-294-01142-00001	0.26	0.24	0.57	43					1.48	1.5	0.01	21	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-294-01210-00001	0.23	0.24	0.57	47		Y			1.31	1.5	0.01	25	
	1"	Zo-e-shield 6	WEA-N-294-01170-00001	0.34	0.25	0.57	52					1.93	1.5	0.01	12	
	1"	Zo-e-shield 6 w/ Argon	WEA-N-294-01238-00001	0.28	0.25	0.57	56					1.59	1.5	0.01	20	
	1"	Zo-e SafeGuard Certified	WEA-N-294-01182-00001	0.33	0.25	0.57	52					1.87	1.5	0.01	13	
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-294-01250-00001	0.28	0.25	0.57	56					1.59	1.5	0.01	20	
	1"	Zo-e-shield 7	WEA-N-294-01190-00001	0.24	0.23	0.47	64		Y	Y	Y	1.36	1.5	0.01	23	
	1"	Zo-e-shield 7 w/ Argon	WEA-N-294-01258-00001	0.20	0.23	0.47	68	Y	Y	Y	Y	1.14	1.5	0.01	28	Y
	3/4"	Insul Low-E 240	WEA-N-294-01154-00001	0.32	0.23	0.36	54					1.82	1.5	0.01	13	
	3/4"	Insul Low-E 240 w/Argon	WEA-N-294-01222-00001	0.28	0.23	0.36	57			Y	Y	1.59	1.5	0.01	18	
	3/4"	Insul Low-E 340	WEA-N-294-01158-00001	0.31	0.17	0.35	55				Y	1.76	1.5	0.01	11	
3/4"	Insul Low-E 340 w/Argon	WEA-N-294-01226-00001	0.27	0.16	0.35	58			Y	Y	1.53	1.5	0.01	16		
3/4"	Bronze Low E	WEA-N-294-01134-00011	0.32	0.36	0.48	54					1.82	1.5	0.01	21		
3/4"	Bronze Low E w/Argon	WEA-N-294-01202-00011	0.28	0.36	0.48	58					1.59	1.5	0.01	26		
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-294-01130-00002	0.48	0.63	0.67	43					2.73	1.5	0.01	17	
	3/4"	Insul Low-E	WEA-N-294-01134-00002	0.32	0.34	0.58	54					1.82	1.5	0.01	20	
	3/4"	Insul Low E w/Argon	WEA-N-294-01202-00002	0.28	0.34	0.58	58					1.59	1.5	0.01	25	
	3/4"	Passive Solar	WEA-N-294-01146-00002	0.33	0.56	0.64	54					1.87	1.5	0.01	31	
	3/4"	Passive Solar w/Argon	WEA-N-294-01214-00002	0.29	0.56	0.64	58					1.65	1.5	0.01	36	Y
	3/4"	Passive Solar Extreme	WEA-N-294-01150-00002	0.27	0.51	0.63	42					1.53	1.5	0.01	36	Y
	3/4"	Passive Solar Extreme w/Argon	WEA-N-294-01218-00002	0.24	0.51	0.63	45	Y				1.36	1.5	0.01	40	Y
	3/4"	Zo-e-shield 5	WEA-N-294-01138-00002	0.31	0.23	0.52	55				Y	1.76	1.5	0.01	15	
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-294-01206-00002	0.27	0.23	0.52	58			Y	Y	1.53	1.5	0.01	20	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-294-01142-00002	0.26	0.22	0.51	43			Y	Y	1.48	1.5	0.01	20	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-294-01210-00002	0.23	0.22	0.51	47		Y	Y	Y	1.31	1.5	0.01	24	
	1"	Zo-e-shield 6	WEA-N-294-01171-00001	0.36	0.23	0.52	52					2.04	1.5	0.01	9	
	1"	Zo-e-shield 6 w/ Argon	WEA-N-294-01239-00001	0.30	0.23	0.52	56				Y	1.70	1.5	0.01	16	
	1"	Zo-e SafeGuard Certified	WEA-N-294-01183-00001	0.36	0.23	0.51	52					2.04	1.5	0.01	9	
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-294-01251-00001	0.30	0.22	0.51	56				Y	1.70	1.5	0.01	15	
	1"	Zo-e-shield 7	WEA-N-294-01191-00001	0.24	0.21	0.42	64		Y	Y	Y	1.36	1.5	0.01	22	
	1"	Zo-e-shield 7 w/ Argon	WEA-N-294-01259-00001	0.20	0.21	0.42	68	Y	Y	Y	Y	1.14	1.5	0.01	27	Y
	3/4"	Insul Low-E 240	WEA-N-294-01154-00002	0.32	0.21	0.32	54					1.82	1.5	0.01	12	
	3/4"	Insul Low-E 240 w/Argon	WEA-N-294-01222-00002	0.28	0.21	0.32	57			Y	Y	1.59	1.5	0.01	17	
	3/4"	Insul Low-E 340	WEA-N-294-01158-00002	0.31	0.15	0.32	55				Y	1.76	1.5	0.01	10	
3/4"	Insul Low-E 340 w/Argon	WEA-N-294-01226-00002	0.27	0.15	0.32	58			Y	Y	1.53	1.5	0.01	15		
3/4"	Bronze Low E	WEA-N-294-01134-00012	0.32	0.32	0.43	54					1.82	1.5	0.01	19		
3/4"	Bronze Low E w/Argon	WEA-N-294-01202-00012	0.28	0.32	0.43	58					1.59	1.5	0.01	24		
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-294-01130-00003	0.48	0.57	0.60	43					2.73	1.5	0.01	13	
	3/4"	Insul Low-E	WEA-N-294-01134-00003	0.32	0.31	0.52	54					1.82	1.5	0.01	18	
	3/4"	Insul Low E w/Argon	WEA-N-294-01202-00003	0.28	0.31	0.52	58					1.59	1.5	0.01	23	
	3/4"	Passive Solar	WEA-N-294-01146-00003	0.33	0.50	0.57	54					1.87	1.5	0.01	28	
	3/4"	Passive Solar w/Argon	WEA-N-294-01214-00003	0.29	0.50	0.57	58					1.65	1.5	0.01	33	
	3/4"	Passive Solar Extreme	WEA-N-294-01150-00003	0.27	0.46	0.56	42					1.53	1.5	0.01	33	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-294-01218-00003	0.24	0.46	0.56	45	Y				1.36	1.5	0.01	37	Y
	3/4"	Zo-e-shield 5	WEA-N-294-01138-00003	0.31	0.21	0.47	55				Y	1.76	1.5	0.01	14	
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-294-01206-00003	0.27	0.20	0.47	58			Y	Y	1.53	1.5	0.01	18	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-294-01142-00003	0.26	0.20	0.46	43			Y	Y	1.48	1.5	0.01	19	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-294-01210-00003	0.23	0.20	0.46	47		Y	Y	Y	1.31	1.5	0.01	23	
	1"	Zo-e-shield 6	WEA-N-294-01171-00002	0.36	0.21	0.46	52					2.04	1.5	0.01	7	
	1"	Zo-e-shield 6 w/ Argon	WEA-N-294-01239-00002	0.30	0.21	0.46	56				Y	1.70	1.5	0.01	15	
	1"	Zo-e SafeGuard Certified	WEA-N-294-01183-00002	0.36	0.21	0.46	52					2.04	1.5	0.01	7	
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-294-01251-00002	0.30	0.20	0.46	56				Y	1.70	1.5	0.01	14	
	1"	Zo-e-shield 7	WEA-N-294-01191-00002	0.24	0.19	0.37	64		Y	Y	Y	1.36	1.5	0.01	21	
	1"	Zo-e-shield 7 w/ Argon	WEA-N-294-01259-00002	0.20	0.19	0.37	68	Y	Y	Y	Y	1.14	1.5	0.01	26	Y
	3/4"	Insul Low-E 240	WEA-N-294-01154-00003	0.32	0.19	0.29	54					1.82	1.5	0.01	11	
	3/4"	Insul Low-E 240 w/Argon	WEA-N-294-01222-00003	0.28	0.19	0.29	57			Y	Y	1.59	1.5	0.01	16	
	3/4"	Insul Low-E 340	WEA-N-294-01158-00003	0.31	0.14	0.28	55				Y	1.76	1.5	0.01	10	
3/4"	Insul Low-E 340 w/Argon	WEA-N-294-01226-00003	0.27	0.14	0.28	58			Y	Y	1.53	1.5	0.01	15		
3/4"	Bronze Low E	WEA-N-294-01134-00013	0.32	0.29	0.39	54					1.82	1.5	0.01	17		
3/4"	Bronze Low E w/Argon	WEA-N-294-01202-00013	0.28	0.29	0.39	58					1.59	1.5	0.01	22		