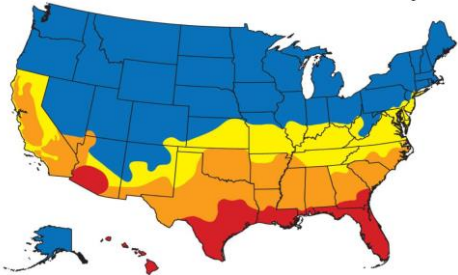
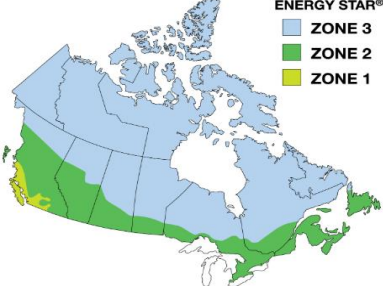


# Thermal Performance Data

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

**WEATHER SHIELD.**  
**WINDOWS & DOORS**

US Qualification Criteria	Climate Zone	U-Value	SHGC	
 <p>As of January 2016</p>	Northern	<=0.27	Any	Prescriptive
		=0.28	>=0.32	Equivalent Energy Performance
		=0.29	>=0.37	
		=0.30	>=0.42	
	North-Central	<=0.30	<=0.40	
	South-Central	<=0.30	<=0.25	
Southern	<=0.40	<=0.25		

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														CANADIAN ENERGY PERFORMANCE DATA		ENERGY STAR		
Premium Direct-Set Windows (8307)														ENERGY STAR		ENERGY STAR		
Grille Option	Glazing thickness	a)NFRC Total Unit Calculations b)Glazing Option	CPD #	U-Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Condensation Resistance Rating	US ENERGY STAR V 6.0				U-Value (metric)	Maximum Air Leakage L/s/m2	Air Infiltration/Exfiltration Average	Energy Rating	CANADA ENERGY STAR v 4.1		
								N	NC	SC	S					1	2	3
No GIA or SDL	3/4"	Clear Insul	WEA-N-294-01283-00001	0.48	0.70	0.74	42					2.73	0.6	0.01	21			
	3/4"	Insul Low-E	WEA-N-294-01284-00001	0.32	0.35	0.63	53					1.82	0.6	0.01	20			
	3/4"	Insul Low E w/Argon	WEA-N-294-01290-00001	0.28	0.35	0.63	57	Y	Y			1.59	0.6	0.01	25	Y		
	3/4"	Passive Solar	WEA-N-294-01146-00001	0.33	0.62	0.71	54					1.87	0.6	0.01	35	Y	Y	Y
	3/4"	Passive Solar w/Argon	WEA-N-294-01214-00001	0.29	0.62	0.71	58	Y				1.65	0.6	0.01	40	Y	Y	Y
	3/4"	Passive Solar Extreme	WEA-N-294-01150-00001	0.27	0.56	0.70	42	Y				1.53	0.6	0.01	39	Y	Y	Y
	3/4"	Passive Solar Extreme w/Argon	WEA-N-294-01218-00001	0.24	0.56	0.70	45	Y				1.36	0.6	0.01	43	Y	Y	Y
	3/4"	Zo-e-shield 5	WEA-N-294-01285-00001	0.32	0.26	0.56	53					1.82	0.6	0.01	15			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-294-01291-00001	0.27	0.25	0.56	57	Y	Y	Y	Y	1.53	0.6	0.01	21	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-294-01142-00001	0.26	0.24	0.57	43	Y	Y	Y	Y	1.48	0.6	0.01	21	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-294-01210-00001	0.23	0.24	0.57	47	Y	Y	Y	Y	1.31	0.6	0.01	25	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-294-01170-00001	0.34	0.25	0.57	52				Y	1.93	0.6	0.01	12			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-294-01238-00001	0.28	0.25	0.57	56		Y	Y	Y	1.59	0.6	0.01	20	Y		
	3/4"	Zo-e SafeGuard Certified	WEA-N-294-01182-00001	0.33	0.25	0.57	52				Y	1.87	0.6	0.01	13			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-294-01250-00001	0.28	0.25	0.57	56		Y	Y	Y	1.59	0.6	0.01	20	Y		
	1"	Zo-e-shield 7	WEA-N-294-01190-00001	0.24	0.23	0.47	64	Y	Y	Y	Y	1.36	0.6	0.01	23	Y	Y	
	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	0.6	0.01	28	Y	Y	Y
	3/4"	Insul Low-E 240	WEA-N-294-01154-00001	0.32	0.23	0.36	54				Y	1.82	0.6	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	Y	1.59	0.6	0.01	18	Y		
	3/4"	Insul Low-E 340	WEA-N-294-01158-00001	0.31	0.17	0.35	55				Y	1.76	0.6	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	Y	Y	1.53	0.6	0.01	16				
3/4"	Bronze Low E	WEA-N-294-01134-00011	0.32	0.36	0.48	54					1.82	0.6	0.01	21				
3/4"	Bronze Low E w/Argon	WEA-N-294-01202-00011	0.28	0.36	0.48	58	Y	Y			1.59	0.6	0.01	26	Y			
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-294-01283-00002	0.48	0.63	0.67	42					2.73	0.6	0.01	17			
	3/4"	Insul Low-E	WEA-N-294-01284-00002	0.32	0.32	0.57	53					1.82	0.6	0.01	19			
	3/4"	Insul Low E w/Argon	WEA-N-294-01290-00002	0.28	0.31	0.57	57		Y			1.59	0.6	0.01	23	Y		
	3/4"	Passive Solar	WEA-N-294-01146-00002	0.33	0.56	0.64	54					1.87	0.6	0.01	31	Y	Y	
	3/4"	Passive Solar w/Argon	WEA-N-294-01214-00002	0.29	0.56	0.64	58	Y				1.65	0.6	0.01	36	Y	Y	Y
	3/4"	Passive Solar Extreme	WEA-N-294-01150-00002	0.27	0.51	0.63	42	Y				1.53	0.6	0.01	36	Y	Y	Y
	3/4"	Passive Solar Extreme w/Argon	WEA-N-294-01218-00002	0.24	0.51	0.63	45	Y				1.36	0.6	0.01	40	Y	Y	Y
	3/4"	Zo-e-shield 5	WEA-N-294-01285-00002	0.32	0.23	0.50	53				Y	1.82	0.6	0.01	13			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-294-01291-00002	0.27	0.23	0.50	57	Y	Y	Y	Y	1.53	0.6	0.01	20	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-294-01142-00002	0.26	0.22	0.51	43	Y	Y	Y	Y	1.48	0.6	0.01	20	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-294-01210-00002	0.23	0.22	0.51	47	Y	Y	Y	Y	1.31	0.6	0.01	24	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-294-01171-00001	0.36	0.23	0.52	52				Y	2.04	0.6	0.01	9			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-294-01239-00001	0.30	0.23	0.52	56		Y	Y	Y	1.70	0.6	0.01	16			
	3/4"	Zo-e SafeGuard Certified	WEA-N-294-01183-00001	0.36	0.23	0.51	52				Y	2.04	0.6	0.01	9			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-294-01251-00001	0.30	0.22	0.51	56		Y	Y	Y	1.70	0.6	0.01	15			
	1"	Zo-e-shield 7	WEA-N-294-01191-00001	0.24	0.21	0.42	64	Y	Y	Y	Y	1.36	0.6	0.01	22	Y	Y	
	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	0.6	0.01	27	Y	Y	Y
	3/4"	Insul Low-E 240	WEA-N-294-01154-00002	0.32	0.21	0.32	54				Y	1.82	0.6	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	Y	1.59	0.6	0.01	17	Y		
	3/4"	Insul Low-E 340	WEA-N-294-01158-00002	0.31	0.15	0.32	55				Y	1.76	0.6	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	Y	Y	1.53	0.6	0.01	15				
3/4"	Bronze Low E	WEA-N-294-01134-00012	0.32	0.32	0.43	54					1.82	0.6	0.01	19				
3/4"	Bronze Low E w/Argon	WEA-N-294-01202-00012	0.28	0.32	0.43	58	Y	Y			1.59	0.6	0.01	24	Y			
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-294-01283-00003	0.48	0.57	0.60	42					2.73	0.6	0.01	13			
	3/4"	Insul Low-E	WEA-N-294-01284-00003	0.32	0.29	0.51	53					1.82	0.6	0.01	17			
	3/4"	Insul Low E w/Argon	WEA-N-294-01290-00003	0.28	0.28	0.51	57		Y			1.59	0.6	0.01	21	Y		
	3/4"	Passive Solar	WEA-N-294-01146-00003	0.33	0.50	0.57	54					1.87	0.6	0.01	28	Y		
	3/4"	Passive Solar w/Argon	WEA-N-294-01214-00003	0.29	0.50	0.57	58	Y				1.65	0.6	0.01	33	Y	Y	
	3/4"	Passive Solar Extreme	WEA-N-294-01150-00003	0.27	0.46	0.56	42	Y				1.53	0.6	0.01	33	Y	Y	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-294-01218-00003	0.24	0.46	0.56	45	Y				1.36	0.6	0.01	37	Y	Y	Y
	3/4"	Zo-e-shield 5	WEA-N-294-01285-00003	0.32	0.21	0.45	53				Y	1.82	0.6	0.01	12			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-294-01291-00003	0.27	0.21	0.45	57	Y	Y	Y	Y	1.53	0.6	0.01	19	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-294-01142-00003	0.26	0.20	0.46	43	Y	Y	Y	Y	1.48	0.6	0.01	19	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-294-01210-00003	0.23	0.20	0.46	47	Y	Y	Y	Y	1.31	0.6	0.01	23	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-294-01171-00002	0.36	0.21	0.46	52				Y	2.04	0.6	0.01	7			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-294-01239-00002	0.30	0.21	0.46	56		Y	Y	Y	1.70	0.6	0.01	15			
	3/4"	Zo-e SafeGuard Certified	WEA-N-294-01183-00002	0.36	0.21	0.46	52				Y	2.04	0.6	0.01	7			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-294-01251-00002	0.30	0.20	0.46	56		Y	Y	Y	1.70	0.6	0.01	14			
	1"	Zo-e-shield 7	WEA-N-294-01191-00002	0.24	0.19	0.37	64	Y	Y	Y	Y	1.36	0.6	0.01	21	Y	Y	
	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	0.6	0.01	26	Y	Y	Y
	3/4"	Insul Low-E 240	WEA-N-294-01154-00003	0.32	0.19	0.29	54				Y	1.82	0.6	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	Y	1.59	0.6	0.01	16	Y		
	3/4"	Insul Low-E 340	WEA-N-294-01158-00003	0.31	0.14	0.28	55				Y	1.76	0.6	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	Y	Y	1.53	0.6	0.01	15				
3/4"	Bronze Low E	WEA-N-294-01134-00013	0.32	0.29	0.39	54					1.82	0.6	0.01	17				
3/4"	Bronze Low E w/Argon	WEA-N-294-01202-00013	0.28	0.29	0.39	58		Y			1.59	0.6	0.01	22	Y			