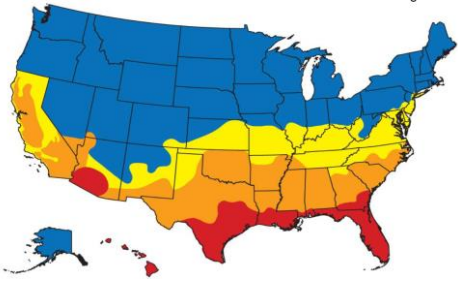


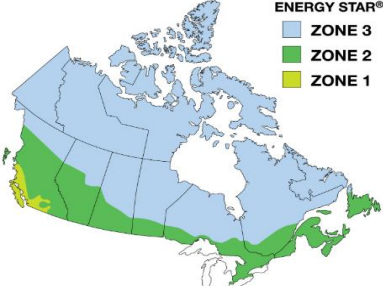
Thermal Performance Data

Premium Direct-Set Windows (8306)

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	
	North-Central	=0.30	>=0.42	
		<=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>ENERGY STAR® ZONE 3 ZONE 2 ZONE 1</p> <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**.

^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/3mm glass lite thicknesses.

ENERGY PERFORMANCE DATA

Premium Direct-Set Windows (8306)



US
ENERGY STAR V
6.0

CANADIAN ENERGY
PERFORMANCE DATA



CANADA
ENERGY
STAR v 4.1

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 6.0				CANADIAN ENERGY PERFORMANCE DATA						
								N	NC	SC	S	U-Value (metric)	Maximum Air Leakage Ls/m²	Air Infiltration/Exfiltration Average	Energy Rating	1	2	3
No GIA or SDL	3/4"	Clear Insul	WEA-N-281-01501-00001	0.47	0.67	0.71	42					2.67	0.6	0.05	20			
	3/4"	Insul Low-E	WEA-N-281-01502-00001	0.32	0.34	0.60	53					1.82	0.6	0.05	20			
	3/4"	Insul Low E w/Argon	WEA-N-281-01508-00001	0.28	0.33	0.60	57	Y	Y			1.59	0.6	0.05	24	Y		
	3/4"	Passive Solar	WEA-N-281-01329-00001	0.33	0.59	0.68	54					1.87	0.6	0.05	33	Y	Y	
	3/4"	Passive Solar w/Argon	WEA-N-281-01377-00001	0.29	0.59	0.68	58	Y				1.65	0.6	0.05	38	Y	Y	Y
	3/4"	Zo-e-shield 5	WEA-N-281-01503-00001	0.32	0.25	0.53	53				Y	1.82	0.6	0.05	14			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-281-01509-00001	0.28	0.24	0.53	57		Y	Y	Y	1.59	0.6	0.05	19	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-281-01257-00001	0.26	0.23	0.54	43	Y	Y	Y	Y	1.48	0.6	0.05	21	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-281-01297-00001	0.23	0.23	0.54	47	Y	Y	Y	Y	1.31	0.6	0.05	24	Y	Y	
	1"	Zo-e-shield 6	WEA-N-281-01267-00001	0.31	0.24	0.55	55				Y	1.76	0.6	0.05	15			
	1"	Zo-e-shield 6 w/ Argon	WEA-N-281-01307-00001	0.28	0.24	0.55	59		Y	Y	Y	1.59	0.6	0.05	19	Y		
	1"	Zo-e SafeGuard Certified	WEA-N-281-01275-00001	0.31	0.24	0.55	56				Y	1.76	0.6	0.05	15			
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-281-01315-00001	0.27	0.23	0.55	59	Y	Y	Y	Y	1.53	0.6	0.05	20	Y		
	3/4"	Insul Low-E 240	WEA-N-281-01345-00001	0.32	0.22	0.34	54				Y	1.82	0.6	0.05	13			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-281-01393-00001	0.29	0.22	0.34	58		Y	Y	Y	1.65	0.6	0.05	16			
	3/4"	Insul Low-E 340	WEA-N-281-01361-00001	0.32	0.22	0.33	55				Y	1.82	0.6	0.05	13			
3/4"	Insul Low-E 340 w/Argon	WEA-N-281-01409-00001	0.28	0.22	0.33	58		Y	Y	Y	1.59	0.6	0.05	18	Y			
3/4"	Bronze Low E	WEA-N-281-01217-00011	0.32	0.34	0.46	55					1.82	0.6	0.05	20				
3/4"	Bronze Low E w/Argon	WEA-N-281-01233-00011	0.28	0.34	0.46	58	Y	Y			1.59	0.6	0.05	25	Y			
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-281-01501-00002	0.47	0.61	0.64	42					2.67	0.6	0.05	17			
	3/4"	Insul Low-E	WEA-N-281-01502-00002	0.32	0.30	0.54	53					1.82	0.6	0.05	17			
	3/4"	Insul Low E w/Argon	WEA-N-281-01508-00002	0.28	0.30	0.54	57		Y			1.59	0.6	0.05	22	Y		
	3/4"	Passive Solar	WEA-N-281-01329-00002	0.33	0.53	0.61	54					1.87	0.6	0.05	30	Y	Y	
	3/4"	Passive Solar w/Argon	WEA-N-281-01377-00002	0.29	0.53	0.61	58	Y				1.65	0.6	0.05	34	Y	Y	Y
	3/4"	Zo-e-shield 5	WEA-N-281-01503-00002	0.32	0.22	0.48	53				Y	1.82	0.6	0.05	13			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-281-01509-00002	0.28	0.22	0.48	57		Y	Y	Y	1.59	0.6	0.05	18	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-281-01257-00002	0.26	0.21	0.49	43	Y	Y	Y	Y	1.48	0.6	0.05	20	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-281-01297-00002	0.23	0.21	0.49	47	Y	Y	Y	Y	1.31	0.6	0.05	23	Y	Y	
	1"	Zo-e-shield 6	WEA-N-281-01267-00002	0.31	0.22	0.49	55				Y	1.76	0.6	0.05	14			
	1"	Zo-e-shield 6 w/ Argon	WEA-N-281-01307-00002	0.28	0.22	0.49	59		Y	Y	Y	1.59	0.6	0.05	18	Y		
	1"	Zo-e SafeGuard Certified	WEA-N-281-01275-00002	0.31	0.22	0.49	56				Y	1.76	0.6	0.05	14			
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-281-01315-00002	0.27	0.21	0.49	59	Y	Y	Y	Y	1.53	0.6	0.05	19	Y		
	3/4"	Insul Low-E 240	WEA-N-281-01345-00002	0.32	0.20	0.31	54				Y	1.82	0.6	0.05	12			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-281-01393-00002	0.29	0.20	0.31	58		Y	Y	Y	1.65	0.6	0.05	15			
	3/4"	Insul Low-E 340	WEA-N-281-01361-00002	0.32	0.20	0.30	55				Y	1.82	0.6	0.05	12			
3/4"	Insul Low-E 340 w/Argon	WEA-N-281-01409-00002	0.28	0.20	0.30	58		Y	Y	Y	1.59	0.6	0.05	17	Y			
3/4"	Bronze Low E	WEA-N-281-01217-00012	0.32	0.31	0.41	55					1.82	0.6	0.05	18				
3/4"	Bronze Low E w/Argon	WEA-N-281-01233-00012	0.28	0.31	0.41	58		Y			1.59	0.6	0.05	23	Y			
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-281-01501-00003	0.47	0.54	0.57	42					2.67	0.6	0.05	13			
	3/4"	Insul Low-E	WEA-N-281-01502-00003	0.32	0.27	0.48	53					1.82	0.6	0.05	16			
	3/4"	Insul Low E w/Argon	WEA-N-281-01508-00003	0.28	0.27	0.48	57		Y			1.59	0.6	0.05	21	Y		
	3/4"	Passive Solar	WEA-N-281-01329-00004	0.33	0.53	0.61	54					1.87	0.6	0.05	30	Y	Y	
	3/4"	Passive Solar w/Argon	WEA-N-281-01377-00003	0.29	0.48	0.54	58	Y				1.65	0.6	0.05	31	Y	Y	
	3/4"	Zo-e-shield 5	WEA-N-281-01503-00003	0.32	0.20	0.43	53				Y	1.82	0.6	0.05	12			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-281-01509-00003	0.28	0.20	0.43	57		Y	Y	Y	1.59	0.6	0.05	17	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-281-01257-00004	0.26	0.21	0.49	43	Y	Y	Y	Y	1.48	0.6	0.05	20	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-281-01297-00003	0.23	0.19	0.43	47	Y	Y	Y	Y	1.31	0.6	0.05	22	Y	Y	
	1"	Zo-e-shield 6	WEA-N-281-01267-00004	0.31	0.24	0.49	55				Y	1.76	0.6	0.05	15			
	1"	Zo-e-shield 6 w/ Argon	WEA-N-281-01307-00003	0.28	0.20	0.44	59		Y	Y	Y	1.59	0.6	0.05	17	Y		
	1"	Zo-e SafeGuard Certified	WEA-N-281-01275-00003	0.31	0.20	0.44	56				Y	1.76	0.6	0.05	13			
	1"	Zo-e SafeGuard Certified w/ Argon	WEA-N-281-01315-00003	0.27	0.19	0.44	59	Y	Y	Y	Y	1.53	0.6	0.05	17	Y		
	3/4"	Insul Low-E 240	WEA-N-281-01345-00004	0.32	0.20	0.31	54				Y	1.82	0.6	0.05	12			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-281-01393-00003	0.29	0.18	0.28	58		Y	Y	Y	1.65	0.6	0.05	14			
	3/4"	Insul Low-E 340	WEA-N-281-01361-00004	0.32	0.20	0.30	55				Y	1.82	0.6	0.05	12			
3/4"	Insul Low-E 340 w/Argon	WEA-N-281-01409-00003	0.28	0.18	0.27	58		Y	Y	Y	1.59	0.6	0.05	15				
3/4"	Bronze Low E	WEA-N-281-01217-00014	0.32	0.31	0.41	55					1.82	0.6	0.05	18				
3/4"	Bronze Low E w/Argon	WEA-N-281-01233-00013	0.28	0.28	0.37	58		Y			1.59	0.6	0.05	21	Y			