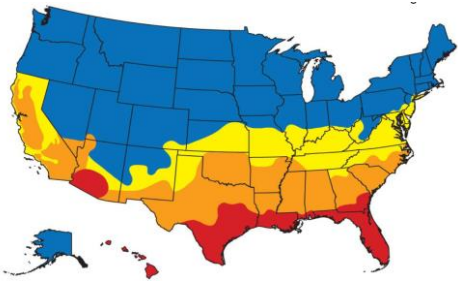
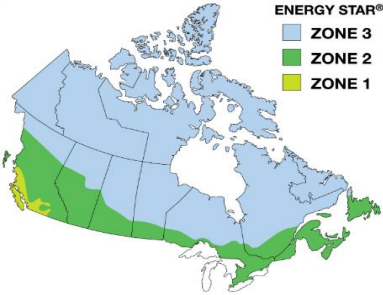


Thermal Performance Data

Contemporary Flush Frame Casement Windows - Picture/Transom (8216)

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>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

Contemporary Flush Frame Casement Windows - Picture/Transom (8216)



CANADIAN ENERGY PERFORMANCE DATA



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				U-Value (metric)	Maximum Air Leakage Ls/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-285-01307-00001	0.46	0.63	0.65	42					2.61	0.6	0.05	19			
	3/4"	Insul Low-E	WEA-N-285-01308-00001	0.32	0.31	0.56	52					1.82	0.6	0.05	18			
	3/4"	Insul Low E w/Argon	WEA-N-285-01314-00001	0.28	0.31	0.56	56			Y		1.59	0.6	0.05	23	Y		
	3/4"	Passive Solar	WEA-N-285-01033-00001	0.33	0.55	0.63	54					1.87	0.6	0.05	31	Y	Y	
	3/4"	Passive Solar w/Argon	WEA-N-285-01034-00001	0.29	0.55	0.63	57	Y				1.65	0.6	0.05	36	Y	Y	Y
	3/4"	Passive Solar Extreme	WEA-N-285-01035-00001	0.27	0.50	0.61	41	Y				1.53	0.6	0.05	35	Y	Y	Y
	3/4"	Passive Solar Extreme w/Argon	WEA-N-285-01036-00001	0.25	0.50	0.61	45	Y				1.42	0.6	0.05	38	Y	Y	Y
	3/4"	Zo-e-shield 5	WEA-N-285-01309-00001	0.32	0.23	0.49	52				Y	1.82	0.6	0.05	13			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-285-01315-00001	0.28	0.23	0.49	56		Y	Y	Y	1.59	0.6	0.05	18	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-285-01031-00001	0.26	0.22	0.50	42	Y	Y	Y	Y	1.48	0.6	0.05	20	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-285-01032-00001	0.24	0.22	0.50	46	Y	Y	Y	Y	1.36	0.6	0.05	23	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-285-01047-00001	0.33	0.22	0.50	52				Y	1.87	0.6	0.05	12			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-285-01049-00001	0.28	0.22	0.50	55		Y	Y	Y	1.59	0.6	0.05	18	Y		
	3/4"	Zo-e SafeGuard Certified	WEA-N-285-01063-00001	0.32	0.22	0.50	47				Y	1.82	0.6	0.05	13			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-285-01065-00001	0.28	0.22	0.50	56		Y	Y	Y	1.59	0.6	0.05	18	Y		
	1"	Zo-e-shield 7	WEA-N-285-01067-00001	0.25	0.20	0.41	63	Y	Y	Y	Y	1.42	0.6	0.05	20	Y		
	1"	Zo-e-shield 7 w/ Argon	WEA-N-285-01069-00001	0.21	0.20	0.41	67	Y	Y	Y	Y	1.19	0.6	0.05	25	Y	Y	Y
	3/4"	Insul Low-E 240	WEA-N-285-01037-00001	0.32	0.21	0.32	53				Y	1.82	0.6	0.05	12			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-285-01038-00001	0.29	0.20	0.32	57		Y	Y	Y	1.65	0.6	0.05	15			
	3/4"	Insul Low-E 340	WEA-N-285-01039-00001	0.32	0.15	0.31	54				Y	1.82	0.6	0.05	9			
3/4"	Insul Low-E 340 w/Argon	WEA-N-285-01040-00001	0.28	0.15	0.31	58		Y	Y	Y	1.59	0.6	0.05	14				
3/4"	Bronze Low E	WEA-N-285-01027-00011	0.32	0.32	0.43	54					1.82	0.6	0.05	19				
3/4"	Bronze Low E w/Argon	WEA-N-285-01028-00011	0.28	0.32	0.43	57	Y	Y			1.59	0.6	0.05	24	Y			
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-285-01307-00002	0.46	0.56	0.58	42					2.61	0.6	0.05	15			
	3/4"	Insul Low-E	WEA-N-285-01308-00002	0.32	0.28	0.50	52					1.82	0.6	0.05	16			
	3/4"	Insul Low E w/Argon	WEA-N-285-01314-00002	0.28	0.28	0.50	56			Y		1.59	0.6	0.05	21	Y		
	3/4"	Passive Solar	WEA-N-285-01033-00002	0.33	0.49	0.56	54					1.87	0.6	0.05	27	Y		
	3/4"	Passive Solar w/Argon	WEA-N-285-01034-00002	0.29	0.49	0.56	57	Y				1.65	0.6	0.05	32	Y	Y	
	3/4"	Passive Solar Extreme	WEA-N-285-01035-00002	0.27	0.45	0.55	41	Y				1.53	0.6	0.05	32	Y	Y	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-285-01036-00002	0.25	0.45	0.55	45	Y				1.42	0.6	0.05	35	Y	Y	Y
	3/4"	Zo-e-shield 5	WEA-N-285-01309-00002	0.32	0.21	0.44	52				Y	1.82	0.6	0.05	12			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-285-01315-00002	0.28	0.20	0.44	56		Y	Y	Y	1.59	0.6	0.05	17	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-285-01031-00002	0.26	0.20	0.45	42	Y	Y	Y	Y	1.48	0.6	0.05	19	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-285-01032-00002	0.24	0.20	0.45	46	Y	Y	Y	Y	1.36	0.6	0.05	22	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-285-01048-00001	0.35	0.20	0.45	52				Y	1.99	0.6	0.05	8			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-285-01050-00001	0.30	0.20	0.45	55		Y	Y	Y	1.70	0.6	0.05	14			
	3/4"	Zo-e SafeGuard Certified	WEA-N-285-01064-00001	0.35	0.20	0.45	47				Y	1.99	0.6	0.05	8			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-285-01066-00001	0.30	0.20	0.45	56		Y	Y	Y	1.70	0.6	0.05	14			
	1"	Zo-e-shield 7	WEA-N-285-01068-00001	0.25	0.19	0.37	63	Y	Y	Y	Y	1.42	0.6	0.05	20	Y		
	1"	Zo-e-shield 7 w/ Argon	WEA-N-285-01070-00001	0.21	0.18	0.37	67	Y	Y	Y	Y	1.19	0.6	0.05	24	Y	Y	Y
	3/4"	Insul Low-E 240	WEA-N-285-01037-00002	0.32	0.19	0.28	53				Y	1.82	0.6	0.05	11			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-285-01038-00002	0.29	0.19	0.28	57		Y	Y	Y	1.65	0.6	0.05	15			
	3/4"	Insul Low-E 340	WEA-N-285-01039-00002	0.32	0.14	0.28	54				Y	1.82	0.6	0.05	8			
3/4"	Insul Low-E 340 w/Argon	WEA-N-285-01040-00002	0.28	0.13	0.28	58		Y	Y	Y	1.59	0.6	0.05	13				
3/4"	Bronze Low E	WEA-N-285-01027-00012	0.32	0.29	0.38	54					1.82	0.6	0.05	17				
3/4"	Bronze Low E w/Argon	WEA-N-285-01028-00012	0.28	0.29	0.38	57		Y			1.59	0.6	0.05	22	Y			
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-285-01307-00003	0.46	0.50	0.52	42					2.61	0.6	0.05	12			
	3/4"	Insul Low-E	WEA-N-285-01308-00003	0.32	0.25	0.44	52				Y	1.82	0.6	0.05	14			
	3/4"	Insul Low E w/Argon	WEA-N-285-01314-00003	0.28	0.25	0.44	56		Y	Y	Y	1.59	0.6	0.05	20	Y		
	3/4"	Passive Solar	WEA-N-285-01033-00003	0.33	0.44	0.50	54					1.87	0.6	0.05	24			
	3/4"	Passive Solar w/Argon	WEA-N-285-01034-00003	0.29	0.44	0.50	57	Y				1.65	0.6	0.05	29	Y	Y	
	3/4"	Passive Solar Extreme	WEA-N-285-01035-00003	0.27	0.40	0.49	41	Y	Y			1.53	0.6	0.05	29	Y	Y	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-285-01036-00003	0.25	0.40	0.49	45	Y	Y			1.42	0.6	0.05	32	Y	Y	
	3/4"	Zo-e-shield 5	WEA-N-285-01309-00003	0.32	0.19	0.39	52				Y	1.82	0.6	0.05	11			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-285-01315-00003	0.28	0.18	0.39	56		Y	Y	Y	1.59	0.6	0.05	15			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-285-01031-00003	0.26	0.18	0.40	42	Y	Y	Y	Y	1.48	0.6	0.05	18	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-285-01032-00003	0.24	0.18	0.40	46	Y	Y	Y	Y	1.36	0.6	0.05	21	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-285-01048-00002	0.35	0.18	0.40	52				Y	1.99	0.6	0.05	7			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-285-01050-00002	0.30	0.18	0.40	55		Y	Y	Y	1.70	0.6	0.05	13			
	3/4"	Zo-e SafeGuard Certified	WEA-N-285-01064-00002	0.35	0.18	0.39	47				Y	1.99	0.6	0.05	7			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-285-01066-00002	0.30	0.18	0.39	56		Y	Y	Y	1.70	0.6	0.05	13			
	1"	Zo-e-shield 7	WEA-N-285-01068-00002	0.25	0.17	0.32	63	Y	Y	Y	Y	1.42	0.6	0.05	19	Y		
	1"	Zo-e-shield 7 w/ Argon	WEA-N-285-01070-00002	0.21	0.17	0.32	67	Y	Y	Y	Y	1.19	0.6	0.05	24	Y	Y	
	3/4"	Insul Low-E 240	WEA-N-285-01037-00003	0.32	0.17	0.25	53				Y	1.82	0.6	0.05	10			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-285-01038-00003	0.29	0.17	0.25	57		Y	Y	Y	1.65	0.6	0.05	14			
	3/4"	Insul Low-E 340	WEA-N-285-01039-00003	0.32	0.13	0.24	54				Y	1.82	0.6	0.05	8			
3/4"	Insul Low-E 340 w/Argon	WEA-N-285-01040-00003	0.28	0.12	0.24	58		Y	Y	Y	1.59	0.6	0.05	12				
3/4"	Bronze Low E	WEA-N-285-01027-00013	0.32	0.26	0.34	54					1.82	0.6	0.05	15				
3/4"	Bronze Low E w/Argon	WEA-N-285-01028-00013	0.28	0.26	0.34	57		Y			1.59	0.6	0.05	20	Y			