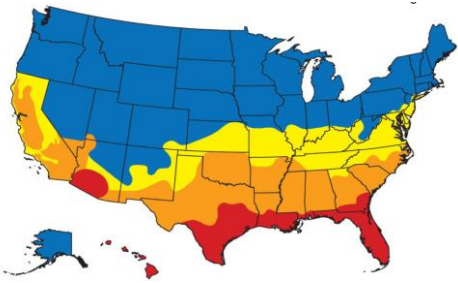
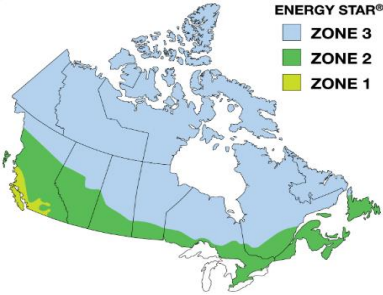


# Thermal Performance Data

Weather Shield Casement Windows - Picture/Transom (6204)

**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**.

<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

Weather Shield Casement Windows - Picture/Transom (6204)



CANADIAN ENERGY PERFORMANCE DATA



US ENERGY STAR V 6.0

CANADA ENERGY STAR v 4.1

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				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-244-00607-00001	0.45	0.63	0.66	45					2.56	0.6	0.20	20				
	3/4"	Insul Low-E	WEA-N-244-00608-00001	0.31	0.34	0.58	57					1.76	0.6	0.20	21				
	3/4"	Insul Low E w/Argon	WEA-N-244-00616-00001	0.27	0.34	0.58	60	Y	Y			1.53	0.6	0.20	26	Y			
	3/4"	Passive Solar	WEA-N-244-00611-00001	0.32	0.55	0.64	56					1.82	0.6	0.20	32	Y	Y		
	3/4"	Passive Solar w/Argon	WEA-N-244-00619-00001	0.28	0.55	0.64	60	Y				1.59	0.6	0.20	37	Y	Y	Y	
	3/4"	Passive Solar Extreme	WEA-N-244-00612-00001	0.26	0.50	0.62	44	Y				1.48	0.6	0.20	36	Y	Y	Y	
	3/4"	Passive Solar Extreme w/Argon	WEA-N-244-00620-00001	0.24	0.50	0.62	47	Y				1.36	0.6	0.20	39	Y	Y	Y	
	3/4"	Zo-e-shield 5	WEA-N-244-00609-00001	0.30	0.22	0.52	57		Y	Y	Y		1.70	0.6	0.20	15			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-244-00617-00001	0.27	0.22	0.52	61	Y	Y	Y	Y		1.53	0.6	0.20	19	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-244-00610-00001	0.25	0.22	0.51	45	Y	Y	Y	Y		1.42	0.6	0.20	21	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-244-00618-00001	0.23	0.22	0.51	48	Y	Y	Y	Y		1.31	0.6	0.20	24	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-244-00697-00001	0.30	0.22	0.51	57		Y	Y	Y		1.70	0.6	0.20	15			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-244-00705-00001	0.26	0.22	0.51	60	Y	Y	Y	Y		1.48	0.6	0.20	20	Y		
	3/4"	Zo-e SafeGuard Certified	WEA-N-244-00702-00001	0.30	0.22	0.51	57		Y	Y	Y		1.70	0.6	0.20	15			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-244-00710-00001	0.26	0.22	0.51	61	Y	Y	Y	Y		1.48	0.6	0.20	20	Y		
	7/8"	Zo-e-shield 7	WEA-N-244-00623-00001	0.26	0.21	0.42	63	Y	Y	Y	Y		1.48	0.6	0.20	19	Y		
	7/8"	Zo-e-shield 7 w/ Argon	WEA-N-244-00627-00001	0.22	0.20	0.42	68	Y	Y	Y	Y		1.25	0.6	0.20	24	Y	Y	
	3/4"	Insul Low-E 240	WEA-N-244-00613-00001	0.31	0.21	0.32	56				Y		1.76	0.6	0.20	13			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-244-00621-00001	0.28	0.20	0.32	60		Y	Y	Y		1.59	0.6	0.20	16	Y		
	3/4"	Insul Low-E 340	WEA-N-244-00614-00001	0.31	0.15	0.31	57				Y		1.76	0.6	0.20	10			
3/4"	Insul Low-E 340 w/Argon	WEA-N-244-00622-00001	0.27	0.15	0.31	60	Y	Y	Y	Y		1.53	0.6	0.20	15				
3/4"	Bronze Low E	WEA-N-244-00608-00011	0.31	0.32	0.44	57						1.76	0.6	0.20	20				
3/4"	Bronze Low E w/Argon	WEA-N-244-00616-00011	0.27	0.32	0.44	60	Y	Y				1.53	0.6	0.20	25	Y			
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-244-00607-00002	0.45	0.56	0.59	45					2.56	0.6	0.20	16				
	3/4"	Insul Low-E	WEA-N-244-00608-00002	0.31	0.30	0.52	57					1.76	0.6	0.20	18				
	3/4"	Insul Low E w/Argon	WEA-N-244-00616-00002	0.27	0.30	0.52	60	Y	Y			1.53	0.6	0.20	23	Y			
	3/4"	Passive Solar	WEA-N-244-00611-00002	0.32	0.50	0.57	56					1.82	0.6	0.20	29	Y			
	3/4"	Passive Solar w/Argon	WEA-N-244-00619-00002	0.28	0.50	0.57	60	Y				1.59	0.6	0.20	34	Y	Y		
	3/4"	Passive Solar Extreme	WEA-N-244-00612-00002	0.26	0.45	0.56	44	Y				1.48	0.6	0.20	33	Y	Y		
	3/4"	Passive Solar Extreme w/Argon	WEA-N-244-00620-00002	0.24	0.45	0.56	47	Y				1.36	0.6	0.20	36	Y	Y	Y	
	3/4"	Zo-e-shield 5	WEA-N-244-00609-00002	0.30	0.20	0.47	57		Y	Y	Y		1.70	0.6	0.20	14			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-244-00617-00002	0.27	0.20	0.47	61	Y	Y	Y	Y		1.53	0.6	0.20	18	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-244-00610-00002	0.25	0.20	0.46	45	Y	Y	Y	Y		1.42	0.6	0.20	20	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-244-00618-00002	0.23	0.20	0.46	48	Y	Y	Y	Y		1.31	0.6	0.20	22	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-244-00697-00002	0.30	0.20	0.46	57		Y	Y	Y		1.70	0.6	0.20	14			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-244-00705-00002	0.26	0.20	0.46	60	Y	Y	Y	Y		1.48	0.6	0.20	19	Y		
	3/4"	Zo-e SafeGuard Certified	WEA-N-244-00702-00002	0.30	0.20	0.46	57		Y	Y	Y		1.70	0.6	0.20	14			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-244-00710-00002	0.26	0.20	0.46	61	Y	Y	Y	Y		1.48	0.6	0.20	19	Y		
	7/8"	Zo-e-shield 7	WEA-N-244-00624-00001	0.27	0.19	0.37	63	Y	Y	Y	Y		1.53	0.6	0.20	17	Y		
	7/8"	Zo-e-shield 7 w/ Argon	WEA-N-244-00628-00001	0.23	0.18	0.37	68	Y	Y	Y	Y		1.31	0.6	0.20	21	Y	Y	
	3/4"	Insul Low-E 240	WEA-N-244-00613-00002	0.31	0.19	0.29	56				Y		1.76	0.6	0.20	12			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-244-00621-00002	0.28	0.19	0.29	60		Y	Y	Y		1.59	0.6	0.20	16			
	3/4"	Insul Low-E 340	WEA-N-244-00614-00002	0.31	0.14	0.28	57				Y		1.76	0.6	0.20	9			
3/4"	Insul Low-E 340 w/Argon	WEA-N-244-00622-00002	0.27	0.13	0.28	60	Y	Y	Y	Y		1.53	0.6	0.20	14				
3/4"	Bronze Low E	WEA-N-244-00608-00012	0.31	0.29	0.39	57						1.76	0.6	0.20	18				
3/4"	Bronze Low E w/Argon	WEA-N-244-00616-00012	0.27	0.29	0.39	60	Y	Y				1.53	0.6	0.20	23	Y			
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-244-00607-00003	0.45	0.50	0.53	45					2.56	0.6	0.20	12				
	3/4"	Insul Low-E	WEA-N-244-00608-00003	0.31	0.27	0.46	57					1.76	0.6	0.20	17				
	3/4"	Insul Low E w/Argon	WEA-N-244-00616-00003	0.27	0.27	0.46	60	Y	Y			1.53	0.6	0.20	22	Y			
	3/4"	Passive Solar	WEA-N-244-00611-00003	0.32	0.44	0.51	56					1.82	0.6	0.20	25	Y			
	3/4"	Passive Solar w/Argon	WEA-N-244-00619-00003	0.28	0.45	0.51	60	Y				1.59	0.6	0.20	31	Y	Y		
	3/4"	Passive Solar Extreme	WEA-N-244-00612-00003	0.26	0.40	0.49	44	Y	Y			1.48	0.6	0.20	30	Y	Y		
	3/4"	Passive Solar Extreme w/Argon	WEA-N-244-00620-00003	0.24	0.41	0.49	47	Y				1.36	0.6	0.20	34	Y	Y		
	3/4"	Zo-e-shield 5	WEA-N-244-00609-00003	0.30	0.18	0.41	57		Y	Y	Y		1.70	0.6	0.20	13			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-244-00617-00003	0.27	0.18	0.41	61	Y	Y	Y	Y		1.53	0.6	0.20	16	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-244-00610-00003	0.25	0.18	0.40	45	Y	Y	Y	Y		1.42	0.6	0.20	19	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-244-00618-00003	0.23	0.18	0.40	48	Y	Y	Y	Y		1.31	0.6	0.20	21	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-244-00697-00003	0.30	0.18	0.41	57		Y	Y	Y		1.70	0.6	0.20	13			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-244-00705-00003	0.26	0.18	0.41	60	Y	Y	Y	Y		1.48	0.6	0.20	18	Y		
	3/4"	Zo-e SafeGuard Certified	WEA-N-244-00702-00003	0.30	0.18	0.41	57		Y	Y	Y		1.70	0.6	0.20	13			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-244-00710-00003	0.26	0.18	0.41	61	Y	Y	Y	Y		1.48	0.6	0.20	18	Y		
	7/8"	Zo-e-shield 7	WEA-N-244-00624-00002	0.27	0.17	0.33	63	Y	Y	Y	Y		1.53	0.6	0.20	16			
	7/8"	Zo-e-shield 7 w/ Argon	WEA-N-244-00628-00002	0.23	0.17	0.33	68	Y	Y	Y	Y		1.31	0.6	0.20	21	Y	Y	
	3/4"	Insul Low-E 240	WEA-N-244-00613-00003	0.31	0.17	0.26	56				Y		1.76	0.6	0.20	11			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-244-00621-00003	0.28	0.17	0.26	60		Y	Y	Y		1.59	0.6	0.20	15			
	3/4"	Insul Low-E 340	WEA-N-244-00614-00003	0.31	0.13	0.25	57				Y		1.76	0.6	0.20	9			
3/4"	Insul Low-E 340 w/Argon	WEA-N-244-00622-00003	0.27	0.12	0.25	60	Y	Y	Y	Y		1.53	0.6	0.20	13				