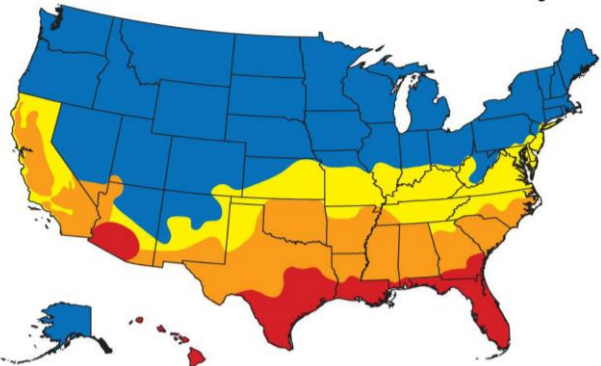


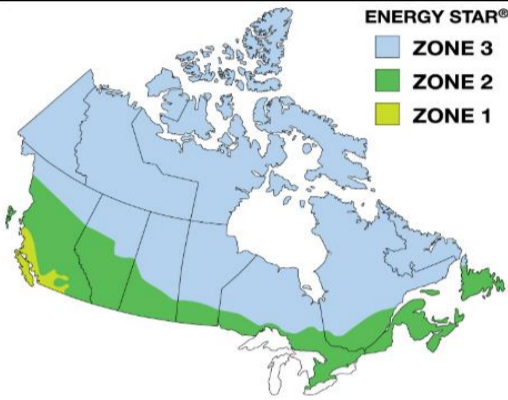
# Thermal Performance Data

Premium Wood Double Hung Windows (6123) - Clad Sash

**WEATHER SHIELD.**

**WINDOWS & DOORS**

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

Canadian Qualification Criteria	Climate Zone	U-Value	or	Energy Rating
 <p>As of February 2015</p>	Zone 1	$\leq 1.60$		$\geq 25$
	Zone 2	$\leq 1.40$		$\geq 29$
	Zone 3	$\leq 1.20$		$\geq 34$
	Air Leakage $\leq 0.3$ cfm/ft <sup>2</sup>			

## 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				
Premium Wood Double Hung Windows (6123) - Clad Sash														CANADA ENERGY STAR v 4.1				
Grille Option	Glazing thickness	aNFRC Total Unit Calculations bGlazing 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-338-00001-00001	0.46	0.55	0.58	46					2.61	0.6	1.17	12			
	3/4"	Insul Low-E	WEA-N-338-00002-00001	0.34	0.30	0.51	52					1.93	0.6	1.17	13			
	3/4"	Insul Low E w/Argon	WEA-N-338-00010-00001	0.31	0.30	0.51	55					1.76	0.6	1.17	16			
	3/4"	Passive Solar	WEA-N-338-00005-00001	0.35	0.49	0.56	52					1.99	0.6	1.17	22			
	3/4"	Passive Solar w/Argon	WEA-N-338-00013-00001	0.32	0.49	0.56	55					1.82	0.6	1.17	26	Y		
	3/4"	Passive Solar Extreme	WEA-N-338-00006-00001	0.30	0.44	0.55	41	Y				1.70	0.6	1.17	26	Y		
	3/4"	Passive Solar Extreme w/Argon	WEA-N-338-00014-00001	0.28	0.44	0.55	44	Y				1.59	0.6	1.17	28	Y		
	3/4"	Zo-e-shield 5	WEA-N-338-00003-00001	0.34	0.20	0.46	53				Y	1.93	0.6	1.17	7			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-338-00011-00001	0.31	0.20	0.46	56				Y	1.76	0.6	1.17	11			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-338-00004-00001	0.29	0.19	0.45	42		Y	Y	Y	1.65	0.6	1.17	13			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-338-00012-00001	0.27	0.19	0.45	45	Y	Y	Y	Y	1.53	0.6	1.17	15			
	3/4"	Zo-e-shield 6	WEA-N-338-00051-00001	0.34	0.20	0.45	54				Y	1.93	0.6	1.17	7			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-338-00059-00001	0.30	0.19	0.45	57		Y	Y	Y	1.70	0.6	1.17	11			
	3/4"	Zo-e SafeGuard Certified	WEA-N-338-00056-00001	0.33	0.19	0.44	54				Y	1.87	0.6	1.17	8			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-338-00064-00001	0.30	0.19	0.44	57		Y	Y	Y	1.70	0.6	1.17	11			
	3/4"	Zo-e-shield 7	WEA-N-338-00017-00001	0.28	0.18	0.37	63		Y	Y	Y	1.59	0.6	1.17	13			
	3/4"	Zo-e-shield 7 w/ Argon	WEA-N-338-00021-00001	0.24	0.18	0.37	64	Y	Y	Y	Y	1.36	0.6	1.17	18	Y		
	3/4"	Insul Low-E 240	WEA-N-338-00007-00001	0.35	0.19	0.28	52				Y	1.99	0.6	1.17	5			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-338-00015-00001	0.32	0.18	0.28	55				Y	1.82	0.6	1.17	8			
	3/4"	Insul Low-E 340	WEA-N-338-00008-00001	0.34	0.13	0.27	52				Y	1.93	0.6	1.17	3			
3/4"	Insul Low-E 340 w/Argon	WEA-N-338-00016-00001	0.31	0.13	0.27	55				Y	1.76	0.6	1.17	7				
3/4"	Bronze Low E	WEA-N-338-00002-00011	0.34	0.28	0.38	52					1.93	0.6	1.17	12				
3/4"	Bronze Low E w/Argon	WEA-N-338-00010-00011	0.31	0.28	0.38	55					1.76	0.6	1.17	15				
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-338-00001-00002	0.46	0.49	0.52	46					2.61	0.6	1.17	9			
	3/4"	Insul Low-E	WEA-N-338-00002-00002	0.34	0.27	0.45	52					1.93	0.6	1.17	11			
	3/4"	Insul Low E w/Argon	WEA-N-338-00010-00002	0.31	0.26	0.45	55					1.76	0.6	1.17	14			
	3/4"	Passive Solar	WEA-N-338-00005-00002	0.35	0.43	0.50	52					1.99	0.6	1.17	19			
	3/4"	Passive Solar w/Argon	WEA-N-338-00013-00002	0.32	0.44	0.50	55					1.82	0.6	1.17	23			
	3/4"	Passive Solar Extreme	WEA-N-338-00006-00002	0.30	0.39	0.48	41		Y			1.70	0.6	1.17	23			
	3/4"	Passive Solar Extreme w/Argon	WEA-N-338-00014-00002	0.28	0.40	0.48	44	Y	Y			1.59	0.6	1.17	26	Y		
	3/4"	Zo-e-shield 5	WEA-N-338-00003-00002	0.34	0.18	0.41	53				Y	1.93	0.6	1.17	6			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-338-00011-00002	0.31	0.18	0.41	56				Y	1.76	0.6	1.17	10			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-338-00004-00002	0.29	0.17	0.40	42		Y	Y	Y	1.65	0.6	1.17	11			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-338-00012-00002	0.27	0.17	0.40	45	Y	Y	Y	Y	1.53	0.6	1.17	14			
	3/4"	Zo-e-shield 6	WEA-N-338-00051-00002	0.34	0.18	0.40	54				Y	1.93	0.6	1.17	6			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-338-00059-00002	0.30	0.17	0.40	57		Y	Y	Y	1.70	0.6	1.17	10			
	3/4"	Zo-e SafeGuard Certified	WEA-N-338-00056-00002	0.33	0.18	0.39	54				Y	1.87	0.6	1.17	7			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-338-00064-00002	0.30	0.17	0.39	57		Y	Y	Y	1.70	0.6	1.17	10			
	3/4"	Zo-e-shield 7	WEA-N-338-00018-00001	0.28	0.16	0.32	54		Y	Y	Y	1.59	0.6	1.17	12			
	3/4"	Zo-e-shield 7 w/ Argon	WEA-N-338-00022-00001	0.25	0.16	0.32	52	Y	Y	Y	Y	1.42	0.6	1.17	16			
	3/4"	Insul Low-E 240	WEA-N-338-00007-00002	0.35	0.17	0.25	52				Y	1.99	0.6	1.17	4			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-338-00015-00002	0.32	0.16	0.25	55				Y	1.82	0.6	1.17	7			
	3/4"	Insul Low-E 340	WEA-N-338-00008-00002	0.34	0.12	0.24	52				Y	1.93	0.6	1.17	2			
3/4"	Insul Low-E 340 w/Argon	WEA-N-338-00016-00002	0.31	0.12	0.24	55				Y	1.76	0.6	1.17	6				
3/4"	Bronze Low E	WEA-N-338-00002-00012	0.34	0.25	0.34	52				Y	1.93	0.6	1.17	10				
3/4"	Bronze Low E w/Argon	WEA-N-338-00010-00012	0.31	0.25	0.34	55				Y	1.76	0.6	1.17	14				
1" Or Over GIA or SDL	3/4"	Clear Insul	WEA-N-338-00001-00003	0.46	0.44	0.45	46					2.61	0.6	1.17	6			
	3/4"	Insul Low-E	WEA-N-338-00002-00003	0.34	0.24	0.40	52				Y	1.93	0.6	1.17	9			
	3/4"	Insul Low E w/Argon	WEA-N-338-00010-00003	0.31	0.24	0.40	55				Y	1.76	0.6	1.17	13			
	3/4"	Passive Solar	WEA-N-338-00005-00003	0.35	0.38	0.44	52					1.99	0.6	1.17	16			
	3/4"	Passive Solar w/Argon	WEA-N-338-00013-00003	0.32	0.39	0.44	55					1.82	0.6	1.17	20			
	3/4"	Passive Solar Extreme	WEA-N-338-00006-00003	0.30	0.35	0.43	41		Y			1.70	0.6	1.17	21			
	3/4"	Passive Solar Extreme w/Argon	WEA-N-338-00014-00003	0.28	0.35	0.43	44	Y	Y			1.59	0.6	1.17	23	Y		
	3/4"	Zo-e-shield 5	WEA-N-338-00003-00003	0.34	0.16	0.36	53				Y	1.93	0.6	1.17	5			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-338-00011-00003	0.31	0.16	0.36	56				Y	1.76	0.6	1.17	8			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-338-00004-00003	0.29	0.16	0.35	42		Y	Y	Y	1.65	0.6	1.17	11			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-338-00012-00003	0.27	0.16	0.35	45	Y	Y	Y	Y	1.53	0.6	1.17	13			
	3/4"	Zo-e-shield 6	WEA-N-338-00051-00003	0.34	0.16	0.35	54				Y	1.93	0.6	1.17	5			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-338-00059-00003	0.30	0.16	0.35	57		Y	Y	Y	1.70	0.6	1.17	10			
	3/4"	Zo-e SafeGuard Certified	WEA-N-338-00056-00003	0.33	0.16	0.35	54				Y	1.87	0.6	1.17	6			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-338-00064-00003	0.30	0.16	0.35	57		Y	Y	Y	1.70	0.6	1.17	10			
	3/4"	Zo-e-shield 7	WEA-N-338-00018-00002	0.28	0.15	0.28	54		Y	Y	Y	1.59	0.6	1.17	12			
	3/4"	Zo-e-shield 7 w/ Argon	WEA-N-338-00022-00002	0.25	0.15	0.28	52	Y	Y	Y	Y	1.42	0.6	1.17	15			
	3/4"	Insul Low-E 240	WEA-N-338-00007-00003	0.35	0.15	0.22	52				Y	1.99	0.6	1.17	3			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-338-00015-00003	0.32	0.15	0.22	55				Y	1.82	0.6	1.17	7			
	3/4"	Insul Low-E 340	WEA-N-338-00008-00003	0.34	0.11	0.21	52				Y	1.93	0.6	1.17	2			
3/4"	Insul Low-E 340 w/Argon	WEA-N-338-00016-00003	0.31	0.11	0.21	55				Y	1.76	0.6	1.17	6				
3/4"	Bronze Low E	WEA-N-338-00002-00013	0.34	0.23	0.30	52				Y	1.93	0.6	1.17	9				
3/4"	Bronze Low E w/Argon	WEA-N-338-00010-00013	0.31	0.22	0.30	55				Y	1.76	0.6	1.17	12				