

Thermal Performance Data

Premium Double Hung Transom Windows (8117)

WEATHER SHIELD.

WINDOWS & DOORS

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

As of January 2016

Canadian Qualification Criteria		Climate Zone	U-Value	or	Energy Rating
	ENERGY STAR® ZONE 3 ZONE 2 ZONE 1	Zone 1	<=1.60	Air Leakage <= 0.3 cfm/ft ²	>=25
		Zone 2	<=1.40		>=29
		Zone 3	<=1.20		>=34
Air Leakage <= 0.3 cfm/ft ²					

As of February 2015

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											CANADIAN ENERGY PEFORMANCE DATA				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 Ls/m ²	Air Infiltration/Exfiltration Average	Energy Rating		
									N	NC	SC	S						
No GIA or SDL	3/4"	Clear Insul	WEA-N-291-01454-00001	0.46	0.60	0.63	45						2.61	0.6	0.05	17		
	3/4"	Insul Low-E	WEA-N-291-01458-00001	0.32	0.32	0.55	57						1.82	0.6	0.05	19		
	3/4"	Insul Low E w/Argon	WEA-N-291-01515-00001	0.29	0.32	0.55	60		Y				1.65	0.6	0.05	22		
	3/4"	Passive Solar	WEA-N-291-01466-00001	0.33	0.50	0.61	56						1.87	0.6	0.05	28	Y	
	3/4"	Passive Solar w/Argon	WEA-N-291-01523-00001	0.29	0.50	0.61	59	Y					1.65	0.6	0.05	33	Y	Y
	3/4"	Passive Solar Extreme	WEA-N-291-01470-00001	0.27	0.48	0.60	43	Y					1.53	0.6	0.05	34	Y	Y
	3/4"	Passive Solar Extreme w/Argon	WEA-N-291-01527-00001	0.25	0.48	0.60	46	Y					1.42	0.6	0.05	37	Y	Y
	3/4"	Zo-e-shield 5	WEA-N-291-01462-00001	0.32	0.22	0.50	57					Y	1.82	0.6	0.05	13		
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-291-01519-00001	0.28	0.21	0.50	61		Y	Y	Y		1.59	0.6	0.05	17	Y	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-291-01482-00001	0.27	0.21	0.49	44	Y	Y	Y	Y		1.53	0.6	0.05	19	Y	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-291-01539-00001	0.24	0.21	0.49	48	Y	Y	Y	Y		1.36	0.6	0.05	22	Y	Y
	3/4"	Zo-e-shield 6	WEA-N-291-01492-00001	0.34	0.22	0.49	53				Y		1.93	0.6	0.05	10		
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-291-01546-00001	0.29	0.21	0.49	57		Y	Y	Y		1.65	0.6	0.05	16		
	3/4"	Zo-e SafeGuard Certified	WEA-N-291-01501-00001	0.34	0.22	0.49	54				Y		1.93	0.6	0.05	10		
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-291-01555-00001	0.29	0.21	0.49	58		Y	Y	Y		1.65	0.6	0.05	16		
	1"	Zo-e-shield 7	WEA-N-291-01507-00001	0.25	0.20	0.40	64	Y	Y	Y	Y		1.42	0.6	0.05	20	Y	
	1"	Zo-e-shield 7 w/ Argon	WEA-N-291-01561-00001	0.22	0.19	0.40	64	Y	Y	Y	Y		1.25	0.6	0.05	24	Y	Y
	3/4"	Insul Low-E 240	WEA-N-291-01474-00001	0.32	0.20	0.31	56				Y		1.82	0.6	0.05	12		
	3/4"	Insul Low-E 240 w/Argon	WEA-N-291-01531-00001	0.29	0.20	0.31	60		Y	Y	Y		1.65	0.6	0.05	15		
	3/4"	Insul Low-E 340	WEA-N-291-01478-00001	0.32	0.15	0.30	57				Y		1.82	0.6	0.05	9		
	3/4"	Insul Low-E 340 w/Argon	WEA-N-291-01535-00001	0.28	0.14	0.30	61		Y	Y	Y		1.59	0.6	0.05	13		
	3/4"	Bronze Low E	WEA-N-291-01458-00011	0.32	0.31	0.41	57						1.82	0.6	0.05	18		
	3/4"	Bronze Low E w/Argon	WEA-N-291-01515-00011	0.29	0.31	0.41	60		Y				1.65	0.6	0.05	22		
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-291-01454-00002	0.46	0.54	0.56	45						2.61	0.6	0.05	14		
	3/4"	Insul Low-E	WEA-N-291-01458-00002	0.32	0.29	0.49	57						1.82	0.6	0.05	17		
	3/4"	Insul Low E w/Argon	WEA-N-291-01515-00002	0.29	0.29	0.49	60		Y				1.65	0.6	0.05	21		
	3/4"	Passive Solar	WEA-N-291-01466-00002	0.33	0.45	0.54	56						1.87	0.6	0.05	25		
	3/4"	Passive Solar w/Argon	WEA-N-291-01523-00002	0.29	0.45	0.54	59	Y					1.65	0.6	0.05	30	Y	Y
	3/4"	Passive Solar Extreme	WEA-N-291-01470-00002	0.27	0.43	0.53	43	Y					1.53	0.6	0.05	31	Y	Y
	3/4"	Passive Solar Extreme w/Argon	WEA-N-291-01527-00002	0.25	0.43	0.53	46	Y					1.42	0.6	0.05	34	Y	Y
	3/4"	Zo-e-shield 5	WEA-N-291-01462-00002	0.32	0.20	0.44	57				Y		1.82	0.6	0.05	12		
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-291-01519-00002	0.28	0.19	0.44	61		Y	Y	Y		1.59	0.6	0.05	16	Y	
	3/4"	Zo-e-shield 5 Extreme	WEA-N-291-01482-00002	0.27	0.19	0.43	44	Y	Y	Y	Y		1.53	0.6	0.05	17	Y	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-291-01539-00002	0.24	0.19	0.43	48	Y	Y	Y	Y		1.36	0.6	0.05	21	Y	Y
	3/4"	Zo-e-shield 6	WEA-N-291-01493-00001	0.36	0.20	0.44	53				Y		2.04	0.6	0.05	7		
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-291-01547-00001	0.31	0.19	0.44	57				Y		1.76	0.6	0.05	12		
	3/4"	Zo-e SafeGuard Certified	WEA-N-291-01502-00001	0.36	0.20	0.44	54				Y		2.04	0.6	0.05	7		
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-291-01556-00001	0.31	0.19	0.44	58				Y		1.76	0.6	0.05	12		
	1"	Zo-e-shield 7	WEA-N-291-01508-00001	0.26	0.18	0.35	64	Y	Y	Y	Y		1.48	0.6	0.05	18	Y	
	1"	Zo-e-shield 7 w/ Argon	WEA-N-291-01562-00001	0.22	0.18	0.35	64	Y	Y	Y	Y		1.25	0.6	0.05	23	Y	Y
	3/4"	Insul Low-E 240	WEA-N-291-01474-00002	0.32	0.18	0.27	56				Y		1.82	0.6	0.05	10		
	3/4"	Insul Low-E 240 w/Argon	WEA-N-291-01531-00002	0.29	0.18	0.27	60		Y	Y	Y		1.65	0.6	0.05	14		
	3/4"	Insul Low-E 340	WEA-N-291-01478-00002	0.32	0.13	0.27	57											