

Thermal Performance Data

Visions 3500 Awning Windows (9202)



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	
		$= 0.30$	≥ 0.42	
	North-Central	≤ 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/ft ²			

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
Visions 3500 Awning Windows (9202)



CANADIAN ENERGY
PERFORMANCE 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 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-304-00423-00001	0.43	0.51	0.53	44					2.44	0.6	0.01	16			
	3/4"	Insul Low-E	WEA-N-304-00426-00001	0.31	0.28	0.47	56					1.76	0.6	0.01	18			
	3/4"	Insul Low E w/Argon	WEA-N-304-00488-00001	0.28	0.28	0.47	59		Y			1.59	0.6	0.01	21	Y		
	3/4"	Passive Solar	WEA-N-304-00432-00001	0.32	0.45	0.51	55					1.82	0.6	0.01	26	Y		
	3/4"	Passive Solar w/Argon	WEA-N-304-00494-00001	0.29	0.45	0.51	59	Y				1.65	0.6	0.01	30	Y	Y	
	3/4"	Zo-e-shield 5	WEA-N-304-00429-00001	0.31	0.19	0.42	56				Y	1.76	0.6	0.01	12			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-304-00491-00001	0.28	0.18	0.42	60		Y	Y	Y	1.59	0.6	0.01	16			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-304-00444-00001	0.27	0.18	0.41	43	Y	Y	Y	Y	1.53	0.6	0.01	17	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-304-00506-00001	0.24	0.18	0.41	47	Y	Y	Y	Y	1.36	0.6	0.01	21	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-304-00467-00001	0.31	0.18	0.41	55				Y	1.76	0.6	0.01	12			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-304-00529-00001	0.28	0.18	0.41	58				Y	1.59	0.6	0.01	16			
	3/4"	Zo-e SafeGuard Certified	WEA-N-304-00473-00001	0.30	0.18	0.41	55				Y	1.70	0.6	0.01	13			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-304-00535-00001	0.27	0.18	0.41	58	Y	Y	Y	Y	1.53	0.6	0.01	17	Y		
	3/4"	Insul Low-E 240	WEA-N-304-00438-00001	0.31	0.18	0.26	55				Y	1.76	0.6	0.01	12			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-304-00500-00001	0.28	0.17	0.26	59		Y	Y	Y	1.59	0.6	0.01	15			
	3/4"	Insul Low-E 340	WEA-N-304-00441-00001	0.31	0.13	0.25	56				Y	1.76	0.6	0.01	9			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-304-00503-00001	0.28	0.12	0.25	60		Y	Y	Y	1.59	0.6	0.01	12			
	3/4"	Bronze Low E	WEA-N-304-00426-00011	0.31	0.26	0.35	56					1.76	0.6	0.01	16			
	3/4"	Bronze Low E w/Argon	WEA-N-304-00488-00011	0.28	0.26	0.35	59		Y			1.59	0.6	0.01	20	Y		
	Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-304-00423-00002	0.43	0.46	0.48	44					2.44	0.6	0.01	13		
3/4"		Insul Low-E	WEA-N-304-00426-00002	0.31	0.25	0.42	56				Y	1.76	0.6	0.01	16			
3/4"		Insul Low E w/Argon	WEA-N-304-00488-00002	0.28	0.25	0.42	59		Y	Y	Y	1.59	0.6	0.01	20	Y		
3/4"		Passive Solar	WEA-N-304-00432-00002	0.32	0.41	0.46	55					1.82	0.6	0.01	24			
3/4"		Passive Solar w/Argon	WEA-N-304-00494-00002	0.29	0.41	0.46	59	Y				1.65	0.6	0.01	28	Y		
3/4"		Zo-e-shield 5	WEA-N-304-00429-00002	0.31	0.17	0.38	56				Y	1.76	0.6	0.01	11			
3/4"		Zo-e-shield 5 w/ Argon	WEA-N-304-00491-00002	0.28	0.17	0.38	60		Y	Y	Y	1.59	0.6	0.01	15			
3/4"		Zo-e-shield 5 Extreme	WEA-N-304-00444-00002	0.27	0.17	0.37	43	Y	Y	Y	Y	1.53	0.6	0.01	16	Y		
3/4"		Zo-e-shield 5 Extreme w/ Argon	WEA-N-304-00506-00002	0.24	0.17	0.37	47	Y	Y	Y	Y	1.36	0.6	0.01	20	Y	Y	
3/4"		Zo-e-shield 6	WEA-N-304-00467-00002	0.31	0.17	0.37	55				Y	1.76	0.6	0.01	11			
3/4"		Zo-e-shield 6 w/ Argon	WEA-N-304-00529-00002	0.28	0.17	0.37	58				Y	1.59	0.6	0.01	15			
3/4"		Zo-e SafeGuard Certified	WEA-N-304-00473-00002	0.30	0.17	0.37	55				Y	1.70	0.6	0.01	13			
3/4"		Zo-e SafeGuard Certified w/ Argon	WEA-N-304-00535-00002	0.27	0.17	0.37	58	Y	Y	Y	Y	1.53	0.6	0.01	16	Y		
3/4"		Insul Low-E 240	WEA-N-304-00438-00002	0.31	0.16	0.23	55				Y	1.76	0.6	0.01	11			
3/4"		Insul Low-E 240 w/Argon	WEA-N-304-00500-00002	0.28	0.16	0.23	59		Y	Y	Y	1.59	0.6	0.01	14			
3/4"		Insul Low-E 340	WEA-N-304-00441-00002	0.31	0.12	0.23	56				Y	1.76	0.6	0.01	8			
3/4"		Insul Low-E 340 w/Argon	WEA-N-304-00503-00002	0.28	0.11	0.23	60		Y	Y	Y	1.59	0.6	0.01	12			
3/4"		Bronze Low E	WEA-N-304-00426-00012	0.31	0.24	0.31	56				Y	1.76	0.6	0.01	15			
3/4"		Bronze Low E w/Argon	WEA-N-304-00488-00012	0.28	0.24	0.31	59		Y	Y	Y	1.59	0.6	0.01	19	Y		
1" Or Over GIA or SDL		3/4"	Clear Insul	WEA-N-304-00423-00003	0.43	0.42	0.43	44					2.44	0.6	0.01	11		
	3/4"	Insul Low-E	WEA-N-304-00426-00003	0.31	0.23	0.38	56				Y	1.76	0.6	0.01	15			
	3/4"	Insul Low E w/Argon	WEA-N-304-00488-00003	0.28	0.23	0.38	59		Y	Y	Y	1.59	0.6	0.01	18	Y		
	3/4"	Passive Solar	WEA-N-304-00432-00003	0.32	0.37	0.42	55					1.82	0.6	0.01	21			
	3/4"	Passive Solar w/Argon	WEA-N-304-00494-00003	0.29	0.37	0.42	59	Y	Y			1.65	0.6	0.01	25	Y		
	3/4"	Zo-e-shield 5	WEA-N-304-00429-00003	0.31	0.16	0.34	56				Y	1.76	0.6	0.01	11			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-304-00491-00003	0.28	0.15	0.34	60		Y	Y	Y	1.59	0.6	0.01	14			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-304-00444-00003	0.27	0.15	0.33	43	Y	Y	Y	Y	1.53	0.6	0.01	15			
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-304-00506-00003	0.24	0.15	0.33	47	Y	Y	Y	Y	1.36	0.6	0.01	19	Y		
	3/4"	Zo-e-shield 6	WEA-N-304-00467-00003	0.31	0.15	0.33	55				Y	1.76	0.6	0.01	10			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-304-00529-00003	0.28	0.15	0.33	58				Y	1.59	0.6	0.01	14			
	3/4"	Zo-e SafeGuard Certified	WEA-N-304-00473-00003	0.30	0.15	0.33	55				Y	1.70	0.6	0.01	11			
	3/4"	Zo-e SafeGuard Certified w/ Argon	WEA-N-304-00535-00003	0.27	0.15	0.33	58	Y	Y	Y	Y	1.53	0.6	0.01	15			
	3/4"	Insul Low-E 240	WEA-N-304-00438-00003	0.31	0.15	0.21	55				Y	1.76	0.6	0.01	10			
	3/4"	Insul Low-E 240 w/Argon	WEA-N-304-00500-00003	0.28	0.14	0.21	59		Y	Y	Y	1.59	0.6	0.01	13			
	3/4"	Insul Low-E 340	WEA-N-304-00441-00003	0.31	0.11	0.20	56				Y	1.76	0.6	0.01	8			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-304-00503-00003	0.28	0.11	0.20	60		Y	Y	Y	1.59	0.6	0.01	12			
	3/4"	Bronze Low E	WEA-N-304-00426-00013	0.31	0.22	0.28	56				Y	1.76	0.6	0.01	14			
	3/4"	Bronze Low E w/Argon	WEA-N-304-00488-00013	0.28	0.22	0.28	59		Y	Y	Y	1.59	0.6	0.01	18	Y		