

# Thermal Performance Data

Visions 3500 Double Hung Picture (9310)

(non J-channel)




ENERGY PERFORMANCE DATA														CANADIAN ENERGY PERFORMANCE DATA					
NFRC Total Unit Calculations <sup>a</sup>														ENERGY STAR					
Grille Option	Glazing thickness	Glazing Option <sup>b</sup>	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/m <sup>2</sup>	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-274-00575-00001	0.45	0.67	0.70	45					2.56	0.6	0.05	23				
	3/4"	Insul Low-E	WEA-N-274-00594-00001	0.30	0.36	0.61	57		Y			1.70	0.6	0.05	23				
	3/4"	Insul Low E w/Argon	WEA-N-274-00620-00001	0.26	0.36	0.61	61	Y	Y			1.48	0.6	0.05	28	Y			
	3/4"	Bronze Low E	WEA-N-274-00594-00011	0.30	0.34	0.45	57		Y			1.70	0.6	0.05	22				
	3/4"	Bronze Low E w/Argon	WEA-N-274-00620-00011	0.26	0.34	0.45	61	Y	Y			1.48	0.6	0.05	27	Y			
	3/4"	Insul Low-E 340	WEA-N-274-00798-00001	0.30	0.16	0.33	57		Y	Y	Y		1.70	0.6	0.05	12			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-274-00849-00001	0.26	0.15	0.33	61	Y	Y	Y	Y		1.48	0.6	0.05	16	Y		
	3/4"	Zo-e-shield 5	WEA-N-274-00652-00001	0.30	0.24	0.55	57		Y	Y	Y		1.70	0.6	0.05	17			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-274-00712-00001	0.26	0.24	0.55	61	Y	Y	Y	Y		1.48	0.6	0.05	21	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-274-00670-00001	0.24	0.23	0.54	45	Y	Y	Y	Y		1.36	0.6	0.05	23	Y	Y	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-274-00730-00001	0.21	0.23	0.54	48	Y	Y	Y	Y		1.19	0.6	0.05	27	Y	Y	Y
	3/4"	Insul Low-E 180	WEA-N-274-00764-00001	0.31	0.59	0.68	56					1.76	0.6	0.05	35	Y	Y	Y	
	3/4"	Insul Low E 180 w/Argon	WEA-N-274-00815-00001	0.27	0.59	0.68	60	Y				1.53	0.6	0.05	40	Y	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-274-00679-00001	0.32	0.24	0.54	54				Y		1.82	0.6	0.05	14			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-274-00739-00001	0.27	0.24	0.54	59	Y	Y	Y	Y		1.53	0.6	0.05	20	Y		
	1"	Zo-e-shield 7 (Triple Glazed)	WEA-N-274-01096-00001	0.23	0.22	0.44	67	Y	Y	Y	Y		1.31	0.6	0.05	24	Y	Y	
1"	Zo-e-shield 7 w/ Argon (Triple Glazed)	WEA-N-274-01098-00001	0.19	0.22	0.44	71	Y	Y	Y	Y		1.08	0.6	0.05	29	Y	Y	Y	
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-274-00575-00002	0.45	0.60	0.63	45					2.56	0.6	0.05	18				
	3/4"	Insul Low-E	WEA-N-274-00594-00002	0.30	0.32	0.55	57		Y			1.70	0.6	0.05	21				
	3/4"	Insul Low E w/Argon	WEA-N-274-00620-00002	0.26	0.32	0.55	61	Y	Y			1.48	0.6	0.05	26	Y			
	3/4"	Bronze Low E	WEA-N-274-00594-00012	0.30	0.31	0.41	57		Y			1.70	0.6	0.05	21				
	3/4"	Bronze Low E w/Argon	WEA-N-274-00620-00012	0.26	0.31	0.41	61	Y	Y			1.48	0.6	0.05	25	Y			
	3/4"	Insul Low-E 340	WEA-N-274-00798-00002	0.30	0.15	0.30	57		Y	Y	Y		1.70	0.6	0.05	11			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-274-00849-00002	0.26	0.14	0.30	61	Y	Y	Y	Y		1.48	0.6	0.05	16			
	3/4"	Zo-e-shield 5	WEA-N-274-00652-00002	0.30	0.22	0.50	57		Y	Y	Y		1.70	0.6	0.05	15			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-274-00712-00002	0.26	0.21	0.50	61	Y	Y	Y	Y		1.48	0.6	0.05	20	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-274-00670-00002	0.24	0.21	0.48	45	Y	Y	Y	Y		1.36	0.6	0.05	22	Y	Y	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-274-00730-00002	0.21	0.21	0.48	48	Y	Y	Y	Y		1.19	0.6	0.05	26	Y	Y	Y
	3/4"	Insul Low-E 180	WEA-N-274-00764-00002	0.31	0.53	0.61	56					1.76	0.6	0.05	32	Y	Y		
	3/4"	Insul Low E 180 w/Argon	WEA-N-274-00815-00002	0.27	0.53	0.61	60	Y				1.53	0.6	0.05	37	Y	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-274-00680-00001	0.34	0.22	0.49	54				Y		1.93	0.6	0.05	10			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-274-00740-00001	0.29	0.22	0.49	59		Y	Y	Y		1.65	0.6	0.05	16			
	1"	Zo-e-shield 7 (Triple Glazed)	WEA-N-274-01097-00001	0.25	0.20	0.40	67	Y	Y	Y	Y		1.42	0.6	0.05	20	Y		
1"	Zo-e-shield 7 w/ Argon (Triple Glazed)	WEA-N-274-01099-00001	0.21	0.20	0.40	71	Y	Y	Y	Y		1.19	0.6	0.05	25	Y	Y	Y	
1" or Over GIA or SDL	3/4"	Clear Insul	WEA-N-274-00575-00003	0.45	0.54	0.56	45					2.56	0.6	0.05	15				
	3/4"	Insul Low-E	WEA-N-274-00594-00003	0.30	0.29	0.49	57		Y			1.70	0.6	0.05	19				
	3/4"	Insul Low E w/Argon	WEA-N-274-00620-00003	0.26	0.29	0.49	61	Y	Y			1.48	0.6	0.05	24	Y			
	3/4"	Bronze Low E	WEA-N-274-00594-00013	0.30	0.28	0.36	57		Y			1.70	0.6	0.05	19				
	3/4"	Bronze Low E w/Argon	WEA-N-274-00620-00013	0.26	0.28	0.36	61	Y	Y			1.48	0.6	0.05	24	Y			
	3/4"	Insul Low-E 340	WEA-N-274-00798-00003	0.30	0.13	0.26	57		Y	Y	Y		1.70	0.6	0.05	10			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-274-00849-00003	0.26	0.13	0.26	61	Y	Y	Y	Y		1.48	0.6	0.05	15			
	3/4"	Zo-e-shield 5	WEA-N-274-00652-00003	0.30	0.20	0.44	57		Y	Y	Y		1.70	0.6	0.05	14			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-274-00712-00003	0.26	0.19	0.44	61	Y	Y	Y	Y		1.48	0.6	0.05	18	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-274-00670-00003	0.24	0.19	0.43	45	Y	Y	Y	Y		1.36	0.6	0.05	21	Y	Y	
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-274-00730-00003	0.21	0.19	0.43	48	Y	Y	Y	Y		1.19	0.6	0.05	25	Y	Y	Y
	3/4"	Insul Low-E 180	WEA-N-274-00764-00003	0.31	0.47	0.54	56					1.76	0.6	0.05	29	Y			
	3/4"	Insul Low E 180 w/Argon	WEA-N-274-00815-00003	0.27	0.48	0.54	60	Y				1.53	0.6	0.05	34	Y	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-274-00680-00002	0.34	0.20	0.43	54				Y		1.93	0.6	0.05	9			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-274-00740-00002	0.29	0.20	0.43	59		Y	Y	Y		1.65	0.6	0.05	15			
	1"	Zo-e-shield 7 (Triple Glazed)	WEA-N-274-01097-00002	0.25	0.18	0.35	67	Y	Y	Y	Y		1.42	0.6	0.05	19	Y		
1"	Zo-e-shield 7 w/ Argon (Triple Glazed)	WEA-N-274-01099-00002	0.21	0.18	0.35	71	Y	Y	Y	Y		1.19	0.6	0.05	24	Y	Y	Y	

<sup>a</sup> Total Unit calculations are derived from computer simulations that are then verified by 3rd party testing in accordance with NFRC 100-2004, NFRC 200-2004, and NFRC 500-2004.

Revised 7/2/18

<sup>b</sup> Published values reflect 3mm/3mm glass lite thicknesses.

US Qualification Criteria	Climate Zone	U-Factor	*SHGC		
 As of January 2016	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		

\* SHGC = Solar Heat Gain Coefficient  
Air Leakage <= 0.3 cfm/ft<sup>2</sup>