

# Thermal Performance Data

Visions 3500 Double Hung Picture (9311)

(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-306-00001-00001	0.45	0.67	0.70	45					2.56	0.6	0.08	22				
	3/4"	Insul Low-E	WEA-N-306-00001-00001	0.30	0.33	0.60	55					1.70	0.6	0.08	22				
	3/4"	Insul Low E w/Argon	WEA-N-306-00001-00001	0.26	0.33	0.60	59	Y	Y			1.48	0.6	0.08	26	Y			
	3/4"	Bronze Low E	WEA-N-306-00021-00001	0.30	0.34	0.45	58		Y			1.70	0.6	0.08	22				
	3/4"	Bronze Low E w/Argon	WEA-N-306-00051-00001	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-306-00180-00001	0.30	0.16	0.33	58		Y	Y	Y		1.70	0.6	0.05	12			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-306-00202-00001	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-306-00066-00001	0.29	0.24	0.56	58		Y	Y	Y		1.65	0.6	0.05	18			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-306-00120-00001	0.25	0.24	0.56	62	Y	Y	Y	Y		1.42	0.6	0.05	23	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-306-00086-00001	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-306-00140-00001	0.21	0.23	0.54	49	Y	Y	Y	Y		1.19	0.6	0.05	27	Y	Y	Y
	3/4"	Insul Low-E 180	WEA-N-306-00169-00001	0.31	0.59	0.68	57						1.76	0.6	0.05	35	Y	Y	Y
	3/4"	Insul Low E 180 w/Argon	WEA-N-306-00191-00001	0.27	0.60	0.68	61	Y					1.53	0.6	0.05	41	Y	Y	Y
	3/4"	Zo-e-shield 6	WEA-N-306-00091-00001	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-306-00145-00001	0.26	0.24	0.54	59	Y	Y	Y	Y		1.48	0.6	0.05	21	Y		
	1"	Zo-e-shield 7 (Triple Glazed)	WEA-N-306-00213-00001	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-306-00215-00001	0.19	0.22	0.44	72	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-306-00001-00004	0.45	0.60	0.63	45					2.56	0.6	0.08	18				
	3/4"	Insul Low-E	WEA-N-306-00001-00004	0.30	0.30	0.54	55		Y			1.70	0.6	0.08	20				
	3/4"	Insul Low E w/Argon	WEA-N-306-00001-00004	0.26	0.30	0.54	59	Y	Y			1.48	0.6	0.08	25	Y			
	3/4"	Bronze Low E	WEA-N-306-00021-00002	0.30	0.31	0.41	58		Y			1.70	0.6	0.08	21				
	3/4"	Bronze Low E w/Argon	WEA-N-306-00051-00002	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-306-00180-00002	0.30	0.15	0.30	58		Y	Y	Y		1.70	0.6	0.05	11			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-306-00202-00002	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-306-00066-00002	0.29	0.22	0.50	58		Y	Y	Y		1.65	0.6	0.05	16			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-306-00120-00002	0.25	0.21	0.50	62	Y	Y	Y	Y		1.42	0.6	0.05	21	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-306-00086-00002	0.24	0.21	0.49	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-306-00140-00002	0.21	0.21	0.49	49	Y	Y	Y	Y		1.19	0.6	0.05	26	Y	Y	Y
	3/4"	Insul Low-E 180	WEA-N-306-00169-00002	0.31	0.54	0.61	57						1.76	0.6	0.05	33	Y	Y	Y
	3/4"	Insul Low E 180 w/Argon	WEA-N-306-00191-00002	0.27	0.54	0.61	61	Y					1.53	0.6	0.05	38	Y	Y	Y
	3/4"	Zo-e-shield 6	WEA-N-306-00092-00001	0.33	0.22	0.49	54				Y		1.87	0.6	0.05	12			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-306-00146-00001	0.28	0.22	0.49	59		Y	Y	Y		1.59	0.6	0.05	18	Y		
	1"	Zo-e-shield 7 (Triple Glazed)	WEA-N-306-00214-00001	0.24	0.20	0.40	67	Y	Y	Y	Y		1.36	0.6	0.05	22	Y	Y	
1"	Zo-e-shield 7 w/ Argon (Triple Glazed)	WEA-N-306-00216-00001	0.20	0.20	0.40	72	Y	Y	Y	Y		1.14	0.6	0.05	26	Y	Y	Y	
1" or Over GIA or SDL	3/4"	Clear Insul	WEA-N-306-00001-00003	0.45	0.54	0.56	45					2.56	0.6	0.08	15				
	3/4"	Insul Low-E	WEA-N-306-00001-00003	0.30	0.27	0.48	55		Y			1.70	0.6	0.08	18				
	3/4"	Insul Low E w/Argon	WEA-N-306-00001-00003	0.26	0.27	0.48	59	Y	Y			1.48	0.6	0.08	23	Y			
	3/4"	Bronze Low E	WEA-N-306-00021-00003	0.30	0.28	0.36	58		Y			1.70	0.6	0.08	19				
	3/4"	Bronze Low E w/Argon	WEA-N-306-00051-00003	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-306-00180-00003	0.30	0.13	0.27	58		Y	Y	Y		1.70	0.6	0.05	10			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-306-00202-00003	0.26	0.13	0.27	61	Y	Y	Y	Y		1.48	0.6	0.05	15			
	3/4"	Zo-e-shield 5	WEA-N-306-00066-00003	0.29	0.20	0.44	58		Y	Y	Y		1.65	0.6	0.05	15			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-306-00120-00003	0.25	0.19	0.44	62	Y	Y	Y	Y		1.42	0.6	0.05	20	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-306-00086-00003	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-306-00140-00003	0.21	0.19	0.43	49	Y	Y	Y	Y		1.19	0.6	0.05	25	Y	Y	Y
	3/4"	Insul Low-E 180	WEA-N-306-00169-00003	0.31	0.48	0.54	57						1.76	0.6	0.05	29	Y	Y	
	3/4"	Insul Low E 180 w/Argon	WEA-N-306-00191-00003	0.27	0.48	0.54	61	Y					1.53	0.6	0.05	34	Y	Y	Y
	3/4"	Zo-e-shield 6	WEA-N-306-00092-00002	0.33	0.20	0.43	54				Y		1.87	0.6	0.05	11			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-306-00146-00002	0.28	0.20	0.43	59		Y	Y	Y		1.59	0.6	0.05	17	Y		
	1"	Zo-e-shield 7 (Triple Glazed)	WEA-N-306-00214-00002	0.24	0.18	0.35	67	Y	Y	Y	Y		1.36	0.6	0.05	21	Y	Y	
1"	Zo-e-shield 7 w/ Argon (Triple Glazed)	WEA-N-306-00216-00002	0.20	0.18	0.35	72	Y	Y	Y	Y		1.14	0.6	0.05	25	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, NFRC 200, and NFRC 500.

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

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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>