

# Thermal Performance Data

Visions 3500 Casement (9202)



ENERGY PERFORMANCE DATA								CANADIAN ENERGY PERFORMANCE DATA				ENERGY STAR						
NFRC Total Unit Calculations <sup>a</sup>								US ENERGY STAR V 6.0				CANADA ENERGY STAR v 4.1						
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-303-00002-00001	0.41	0.51	0.53	45					2.33	0.6	0.05	18			
	3/4"	Insul Low-E	WEA-N-303-00013-00001	0.30	0.28	0.47	58		Y			1.70	0.6	0.05	19			
	3/4"	Insul Low E w/Argon	WEA-N-303-00034-00001	0.27	0.28	0.47	62	Y	Y			1.53	0.6	0.05	23	Y		
	3/4"	Bronze Low E	WEA-N-303-00016-00001	0.30	0.26	0.35	58		Y			1.70	0.6	0.05	18			
	3/4"	Bronze Low E w/Argon	WEA-N-303-00037-00001	0.27	0.26	0.35	62	Y	Y			1.53	0.6	0.05	21	Y		
	3/4"	Insul Low-E 340	WEA-N-303-00133-00001	0.30	0.13	0.25	59		Y	Y	Y	1.70	0.6	0.05	10			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-303-00149-00001	0.27	0.12	0.25	62	Y	Y	Y	Y	1.53	0.6	0.08	13			
	3/4"	Zo-e-shield 5	WEA-N-303-00049-00001	0.30	0.19	0.42	59		Y	Y	Y	1.70	0.6	0.05	14			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-303-00089-00001	0.27	0.18	0.42	62	Y	Y	Y	Y	1.53	0.6	0.05	17	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-303-00065-00001	0.25	0.18	0.41	45	Y	Y	Y	Y	1.42	0.6	0.05	19	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-303-00105-00001	0.23	0.18	0.41	49	Y	Y	Y	Y	1.31	0.6	0.05	22	Y	Y	
	3/4"	Insul Low-E 180	WEA-N-303-00125-00001	0.31	0.45	0.51	58					1.76	0.6	0.05	27	Y		
	3/4"	Insul Low E 180 w/Argon	WEA-N-303-00141-00001	0.28	0.45	0.51	61	Y				1.59	0.6	0.08	31	Y	Y	
	3/4"	Zo-e-shield 6	WEA-N-303-00068-00001	0.31	0.19	0.41	56				Y	1.76	0.6	0.05	12			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-303-00108-00001	0.28	0.18	0.41	60		Y	Y	Y	1.59	0.6	0.05	15			
	1"	Zo-e-shield 7 (Triple Glazed)	WEA-N-303-00156-00001	0.25	0.17	0.34	67	Y	Y	Y	Y	1.42	0.6	0.08	19	Y		
	1"	Zo-e-shield 7 w/ Argon (Triple Glazed)	WEA-N-303-00158-00001	0.22	0.17	0.34	71	Y	Y	Y	Y	1.25	0.6	0.08	22	Y	Y	
Less Than 1" GIA or SDL	3/4"	Clear Insul	WEA-N-303-00002-00002	0.41	0.46	0.48	45					2.33	0.6	0.05	15			
	3/4"	Insul Low-E	WEA-N-303-00013-00002	0.30	0.25	0.42	58		Y	Y	Y	1.70	0.6	0.05	17			
	3/4"	Insul Low E w/Argon	WEA-N-303-00034-00002	0.27	0.25	0.42	62	Y	Y	Y	Y	1.53	0.6	0.05	21	Y		
	3/4"	Bronze Low E	WEA-N-303-00016-00002	0.30	0.24	0.31	58		Y	Y	Y	1.70	0.6	0.05	17			
	3/4"	Bronze Low E w/Argon	WEA-N-303-00037-00002	0.27	0.24	0.31	62	Y	Y	Y	Y	1.53	0.6	0.05	20	Y		
	3/4"	Insul Low-E 340	WEA-N-303-00133-00002	0.30	0.12	0.23	59		Y	Y	Y	1.70	0.6	0.05	10			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-303-00149-00002	0.27	0.11	0.23	62	Y	Y	Y	Y	1.53	0.6	0.08	13			
	3/4"	Zo-e-shield 5	WEA-N-303-00049-00002	0.30	0.17	0.38	59		Y	Y	Y	1.70	0.6	0.05	12			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-303-00089-00002	0.27	0.17	0.38	62	Y	Y	Y	Y	1.53	0.6	0.05	16	Y		
	3/4"	Zo-e-shield 5 Extreme	WEA-N-303-00065-00002	0.25	0.17	0.37	45	Y	Y	Y	Y	1.42	0.6	0.05	19	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-303-00105-00002	0.23	0.17	0.37	49	Y	Y	Y	Y	1.31	0.6	0.05	21	Y	Y	
	3/4"	Insul Low-E 180	WEA-N-303-00125-00002	0.31	0.41	0.46	58					1.76	0.6	0.05	25	Y		
	3/4"	Insul Low E 180 w/Argon	WEA-N-303-00141-00002	0.28	0.41	0.46	61	Y				1.59	0.6	0.08	29	Y		
	3/4"	Zo-e-shield 6	WEA-N-303-00069-00001	0.32	0.17	0.37	56				Y	1.82	0.6	0.05	10			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-303-00109-00001	0.29	0.17	0.37	60		Y	Y	Y	1.65	0.6	0.05	14			
	1"	Zo-e-shield 7 (Triple Glazed)	WEA-N-303-00157-00001	0.25	0.16	0.30	67	Y	Y	Y	Y	1.42	0.6	0.08	18	Y		
	1"	Zo-e-shield 7 w/ Argon (Triple Glazed)	WEA-N-303-00159-00001	0.22	0.15	0.30	71	Y	Y	Y	Y	1.25	0.6	0.08	21	Y	Y	
1" or Over GIA or SDL	3/4"	Clear Insul	WEA-N-303-00002-00003	0.41	0.42	0.43	45					2.33	0.6	0.05	13			
	3/4"	Insul Low-E	WEA-N-303-00013-00003	0.30	0.23	0.38	58		Y	Y	Y	1.70	0.6	0.05	16			
	3/4"	Insul Low E w/Argon	WEA-N-303-00034-00003	0.27	0.23	0.38	62	Y	Y	Y	Y	1.53	0.6	0.05	20	Y		
	3/4"	Bronze Low E	WEA-N-303-00016-00003	0.30	0.22	0.28	58		Y	Y	Y	1.70	0.6	0.05	15			
	3/4"	Bronze Low E w/Argon	WEA-N-303-00037-00003	0.27	0.22	0.28	62	Y	Y	Y	Y	1.53	0.6	0.05	19	Y		
	3/4"	Insul Low-E 340	WEA-N-303-00133-00003	0.30	0.11	0.20	59		Y	Y	Y	1.70	0.6	0.05	9			
	3/4"	Insul Low-E 340 w/Argon	WEA-N-303-00149-00003	0.27	0.10	0.20	62	Y	Y	Y	Y	1.53	0.6	0.08	12			
	3/4"	Zo-e-shield 5	WEA-N-303-00049-00003	0.30	0.16	0.34	59		Y	Y	Y	1.70	0.6	0.05	12			
	3/4"	Zo-e-shield 5 w/ Argon	WEA-N-303-00089-00003	0.27	0.15	0.34	62	Y	Y	Y	Y	1.53	0.6	0.05	15			
	3/4"	Zo-e-shield 5 Extreme	WEA-N-303-00065-00003	0.25	0.15	0.33	45	Y	Y	Y	Y	1.42	0.6	0.05	17	Y		
	3/4"	Zo-e-shield 5 Extreme w/ Argon	WEA-N-303-00105-00003	0.23	0.15	0.33	49	Y	Y	Y	Y	1.31	0.6	0.05	20	Y		
	3/4"	Insul Low-E 180	WEA-N-303-00125-00003	0.31	0.37	0.42	58					1.76	0.6	0.05	23			
	3/4"	Insul Low E 180 w/Argon	WEA-N-303-00141-00003	0.28	0.37	0.42	61	Y	Y			1.59	0.6	0.08	26	Y		
	3/4"	Zo-e-shield 6	WEA-N-303-00069-00002	0.32	0.16	0.33	56				Y	1.82	0.6	0.05	9			
	3/4"	Zo-e-shield 6 w/ Argon	WEA-N-303-00109-00002	0.29	0.15	0.33	60		Y	Y	Y	1.65	0.6	0.05	12			
	1"	Zo-e-shield 7 (Triple Glazed)	WEA-N-303-00157-00002	0.25	0.14	0.27	67	Y	Y	Y	Y	1.42	0.6	0.08	17	Y		
	1"	Zo-e-shield 7 w/ Argon (Triple Glazed)	WEA-N-303-00159-00002	0.22	0.14	0.27	71	Y	Y	Y	Y	1.25	0.6	0.08	21	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.

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

US Qualification Criteria	Climate Zone	U-Factor	*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		

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