

## TEST REPORT FOR GRAHAM ARCHITECTURAL PRODUCTS CORP.

Report No: N3596.01-116-45 R2

Date: 08/02/24

### SECTION 6

### SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (SR6800 Outswing Casement)												
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft <sup>2</sup> -F)			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)				Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)		
1	XL Edge: E272/AIR/CLR (6M/6M) 1" IG											
	0.224	0.500	0.224					AIR	0.042(#2)	CL	SS-D	N
	U-Factor 0.41			SHGC(N) 0.30				VT(N) 0.50		CR 50		
2	XL Edge: E272/ARG/CLR (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.38			SHGC(N) 0.30				VT(N) 0.50		CR 53		
3	XL Edge: E366/ARG/CLR (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.020(#2)	CL	SS-D	N
	U-Factor 0.38			SHGC(N) 0.21				VT(N) 0.45		CR 53		
4	XL Edge: E340/ARG/CLR (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.028(#2)	CL	SS-D	N
	U-Factor 0.38			SHGC(N) 0.14				VT(N) 0.27		CR 53		
5	XL Edge: E272/ARG/LAMI (6M/3M .030PVB 3M) 1" IG											
	0.224	0.486	0.264					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.38			SHGC(N) 0.30				VT(N) 0.50		CR 54		
6	XL Edge: E272/ARG/i89 (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.042(#2) / 0.149(#4)	CL	SS-D	N
	U-Factor 0.35			SHGC(N) 0.29				VT(N) 0.49		CR 42		
7	XL Edge: E366/ARG/i89 (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.020(#2) / 0.149(#4)	CL	SS-D	N
	U-Factor 0.34			SHGC(N) 0.20				VT(N) 0.44		CR 43		
8	Endur: E272/AIR/CLR (6M/6M) 1" IG											
	0.224	0.500	0.224					AIR	0.042(#2)	CL	SS-D	N
	U-Factor 0.41			SHGC(N) 0.30				VT(N) 0.50		CR 51		
9	Endur: E272/ARG/CLR (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.38			SHGC(N) 0.30				VT(N) 0.50		CR 54		
10	Endur: E366/ARG/CLR (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.020(#2)	CL	SS-D	N
	U-Factor 0.37			SHGC(N) 0.21				VT(N) 0.45		CR 54		

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### SECTION 6 (Continued)

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TOTAL PRODUCT CALCULATIONS (SR6800 Outswing Casement)												
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft2-F)			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)				Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)		
11	Endur: E340/ARG/CLR (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.028(#2)	CL	SS-D	N
	U-Factor 0.38			SHGC(N) 0.14				VT(N) 0.27		CR 54		
12	Endur: E272/ARG/LAMI (6M/3M .030PVB 3M) 1" IG											
	0.224	0.486	0.264					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.38			SHGC(N) 0.30				VT(N) 0.50		CR 54		
13	Endur: E272/ARG/i89 (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.042(#2) / 0.149(#4)	CL	SS-D	N
	U-Factor 0.34			SHGC(N) 0.29				VT(N) 0.49		CR 43		
14	Endur: E366/ARG/i89 (6M/6M) 1" IG											
	0.224	0.500	0.224					ARG95	0.020(#2) / 0.149(#4)	CL	SS-D	N
	U-Factor 0.34			SHGC(N) 0.20				VT(N) 0.44		CR 44		
15	Chromatech: SN68/ARG/LAMI (6M/3M .060PVB 3M) 1" IG											
	0.221	0.456	0.294					ARG95	0.039(#2)	CL	SS-D	N
	U-Factor 0.39			SHGC(N) 0.28				VT(N) 0.49		CR 52		
16	Chromatech: SN68/ARG/CLR (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.039(#2)	CL	SS-D	N
	U-Factor 0.39			SHGC(N) 0.28				VT(N) 0.49		CR 50		
17	Chromatech: SNX6227/ARG/CLR (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.020(#2)	CL	SS-D	N
	U-Factor 0.39			SHGC(N) 0.20				VT(N) 0.45		CR 50		
18	Chromatech: SNX5123/ARG/CLR (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.021(#2)	CL	SS-D	N
	U-Factor 0.39			SHGC(N) 0.18				VT(N) 0.37		CR 50		
19	Chromatech: SB60/ARG/CLR (6M/6M) 1" IG											
	0.223	0.500	0.223					ARG95	0.035(#2)	CL	SS-D	N
	U-Factor 0.39			SHGC(N) 0.29				VT(N) 0.51		CR 50		
20	Chromatech: SB70/ARG/CLR (6M/6M) 1" IG											
	0.223	0.500	0.223					ARG95	0.018(#2)	CL	SS-D	N
	U-Factor 0.39			SHGC(N) 0.21				VT(N) 0.46		CR 50		

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### SECTION 6 (Continued)

### SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (SR6800 Outswing Casement)												
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type
	U-Factor (Btu/Hr-Ft2-F)			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)				Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)		
21	Chromatech: SN68/ARG/IS20 (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.039(#2) / 0.198(#4)	CL	SS-D	N
	U-Factor 0.36			SHGC(N) 0.27				VT(N) 0.48		CR 40		
22	Chromatech: SNX6227/ARG/IS20 (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.020(#2) / 0.198(#4)	CL	SS-D	N
	U-Factor 0.36			SHGC(N) 0.20				VT(N) 0.43		CR 41		
23	Chromatech Ultra: SN68/ARG/LAMI (6M/3M .060PVB 3M) 1" IG											
	0.221	0.456	0.294					ARG95	0.039(#2)	CL	TS-D	N
	U-Factor 0.38			SHGC(N) 0.28				VT(N) 0.49		CR 55		
24	Chromatech Ultra: SN68/ARG/CLR (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.039(#2)	CL	TS-D	N
	U-Factor 0.38			SHGC(N) 0.28				VT(N) 0.49		CR 53		
25	Chromatech Ultra: SNX6227/ARG/CLR (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.020(#2)	CL	TS-D	N
	U-Factor 0.38			SHGC(N) 0.20				VT(N) 0.45		CR 53		
26	Chromatech Ultra: SNX5123/ARG/CLR (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.021(#2)	CL	TS-D	N
	U-Factor 0.38			SHGC(N) 0.18				VT(N) 0.37		CR 53		
27	Chromatech Ultra: SB60/ARG/CLR (6M/6M) 1" IG											
	0.223	0.500	0.223					ARG95	0.035(#2)	CL	TS-D	N
	U-Factor 0.38			SHGC(N) 0.29				VT(N) 0.51		CR 53		
28	Chromatech Ultra: SB70/ARG/CLR (6M/6M) 1" IG											
	0.223	0.500	0.223					ARG95	0.018(#2)	CL	TS-D	N
	U-Factor 0.38			SHGC(N) 0.21				VT(N) 0.46		CR 54		
29	Chromatech Ultra: SN68/ARG/IS20 (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.039(#2) / 0.198(#4)	CL	TS-D	N
	U-Factor 0.35			SHGC(N) 0.27				VT(N) 0.48		CR 44		
30	Chromatech Ultra: SNX6227/ARG/IS20 (6M/6M) 1" IG											
	0.221	0.500	0.221					ARG95	0.020(#2) / 0.198(#4)	CL	TS-D	N
	U-Factor 0.35			SHGC(N) 0.20				VT(N) 0.43		CR 44		

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**SECTION 6 (Continued)**

**SIMULATION RESULTS**

TOTAL PRODUCT CALCULATIONS (SR6800 Outswing Casement)													
Option Number	Pane Thickness 1 (in)	Gap Width 1 (in)	Pane Thickness 2 (in)	Gap Width 2 (in)	Pane Thickness 3 (in)	Gap Width 3 (in)	Pane Thickness 4 (in)	Gap Fill	Low-e (Surface #)	Tint	Spacer	Grid Type	
	U-Factor (Btu/Hr-Ft <sup>2</sup> -F)			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)				Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance (CR)			
31	Viracon SS: VE12M/ARG/CLR (6M/6M) 1" IG												
	0.223	0.456	0.294					ARG95	0.040(#2)	CL	TS-D	N	
	U-Factor		0.39	SHGC(N)			0.28	VT(N)		0.51	CR		52