

## TEST REPORT FOR GRAHAM ARCHITECTURAL PRODUCTS CORP.

Report No: N7354.01-116-45 R1

Date: 05/31/22

### SECTION 6

### SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (GT1500 Fixed)												
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	No Foam: E272 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.224	0.500	0.224					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.32			SHGC(N) 0.35				VT(N) 0.61		CR 59		
2	No Foam: E272 / ARG95 / CLR-LAMI (6MM/3MM 030 PVB 3MM) - 1" IG											
	0.224	0.469	0.264					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.31			SHGC(N) 0.35				VT(N) 0.61		CR 60		
3	No Foam: LAMI-E272 / ARG95 / CLR-LAMI (3MM 060 PVB 3MM/3MM 060 PVB 3MM) - 1" IG											
	0.295	0.375	0.294					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.32			SHGC(N) 0.35				VT(N) 0.60		CR 60		
4	No Foam: E366 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.224	0.500	0.224					ARG95	0.020(#2)	CL	SS-D	N
	U-Factor 0.31			SHGC(N) 0.24				VT(N) 0.55		CR 60		
5	No Foam: VE1-2M / ARG95 / CLR-LAMI (6MM/3MM 060 PVB 3MM) - 1" IG											
	0.223	0.433	0.294					ARG95	0.040(#2)	CL	SS-D	N
	U-Factor 0.32			SHGC(N) 0.33				VT(N) 0.61		CR 59		
6	No Foam: VE1-2M / ARG95 / CLR-LAMI (6MM/3MM 060 PVB 3MM) - 1" IG											
	0.223	0.433	0.294					ARG95	0.040(#2)	CL	TP-S	N
	U-Factor 0.31			SHGC(N) 0.33				VT(N) 0.61		CR 60		
7	No Foam: VE1-2M / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.223	0.520	0.225					ARG95	0.040(#2)	CL	TP-S	N
	U-Factor 0.32			SHGC(N) 0.33				VT(N) 0.61		CR 61		
8	No Foam: SN68 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.221	0.500	0.221					ARG95	0.039(#2)	CL	SS-D	N
	U-Factor 0.33			SHGC(N) 0.33				VT(N) 0.59		CR 56		
9	No Foam: SN68 / ARG95 / CLR-LAMI (5MM/3MM 060 PVB 3MM) - 1" IG											
	0.182	0.500	0.294					ARG95	0.039(#2)	CL	SS-D	N
	U-Factor 0.32			SHGC(N) 0.33				VT(N) 0.59		CR 57		
10	No Foam: LAMI-SN68 / ARG95 / CLR-LAMI (3MM 060 PVB 3MM/3MM 060 PVB 3MM) - 1" IG											
	0.294	0.375	0.294					ARG95	0.039(#2)	CL	SS-D	N
	U-Factor 0.33			SHGC(N) 0.33				VT(N) 0.58		CR 58		

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### SECTION 6 (Continued)

### SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (GT1500 Fixed)												
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	No Foam: SNX 62/27 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.221	0.500	0.221					ARG95	0.020(#2)	CL	SS-D	N
	U-Factor 0.32			SHGC(N) 0.23				VT(N) 0.54		CR 57		
12	No Foam: SNX 62/27 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.221	0.500	0.221					ARG95	0.020(#2)	CL	TS-D	N
	U-Factor 0.31			SHGC(N) 0.23				VT(N) 0.54		CR 60		
13	No Foam: SB60 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.223	0.500	0.223					ARG95	0.035(#2)	CL	SS-D	N
	U-Factor 0.33			SHGC(N) 0.34				VT(N) 0.61		CR 56		
14	No Foam: SB60 / ARG95 / CLR-LAMI (5MM/3MM 060 PVB 3MM) - 1" IG											
	0.184	0.500	0.294					ARG95	0.035(#2)	CL	SS-D	N
	U-Factor 0.32			SHGC(N) 0.35				VT(N) 0.62		CR 57		
15	No Foam: LAMI-SB60 / ARG95 / CLR-LAMI (3MM 060 PVB 3MM/3MM 060 PVB 3MM) - 1" IG											
	0.318	0.375	0.294					ARG95	0.035(#2)	CL	SS-D	N
	U-Factor 0.33			SHGC(N) 0.34				VT(N) 0.61		CR 58		
16	No Foam: SB70 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.223	0.500	0.223					ARG95	0.018(#2)	CL	SS-D	N
	U-Factor 0.32			SHGC(N) 0.24				VT(N) 0.56		CR 57		
17	No Foam: SB70 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.223	0.500	0.223					ARG95	0.018(#2)	CL	TS-D	N
	U-Factor 0.31			SHGC(N) 0.24				VT(N) 0.56		CR 60		
18	No Foam: SB70 / ARG95 / CLR-LAMI (5MM/3MM 060 PVB 3MM) - 1" IG											
	0.184	0.500	0.294					ARG95	0.018(#2)	CL	SS-D	N
	U-Factor 0.32			SHGC(N) 0.24				VT(N) 0.56		CR 58		
19	Foam: E272 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.224	0.500	0.224					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.30			SHGC(N) 0.35				VT(N) 0.61		CR 61		
20	Foam: E272 / ARG95 / CLR-LAMI (6MM/3MM 030 PVB 3MM) - 1" IG											
	0.224	0.469	0.264					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.30			SHGC(N) 0.35				VT(N) 0.61		CR 61		

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**SECTION 6 (Continued)**  
**SIMULATION RESULTS**

TOTAL PRODUCT CALCULATIONS (GT1500 Fixed)												
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	Foam: LAMI-E272 / ARG95 / CLR-LAMI (3MM 060 PVB 3MM 3MM 060 PVB 3MM) - 1" IG											
	0.295	0.375	0.294					ARG95	0.042(#2)	CL	SS-D	N
	U-Factor 0.30			SHGC(N) 0.35				VT(N) 0.60		CR 61		
22	Foam: E366 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.224	0.500	0.224					ARG95	0.020(#2)	CL	SS-D	N
	U-Factor 0.29			SHGC(N) 0.24				VT(N) 0.55		CR 61		
23	Foam: VE1-2M / ARG95 / CLR-LAMI (6MM/3MM 060 PVB 3MM) - 1" IG											
	0.223	0.433	0.294					ARG95	0.040(#2)	CL	SS-D	N
	U-Factor 0.30			SHGC(N) 0.33				VT(N) 0.61		CR 58		
24	Foam: VE1-2M / ARG95 / CLR-LAMI (6MM/3MM 060 PVB 3MM) - 1" IG											
	0.223	0.433	0.294					ARG95	0.040(#2)	CL	TP-S	N
	U-Factor 0.30			SHGC(N) 0.33				VT(N) 0.61		CR 59		
25	Foam: VE1-2M / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.223	0.520	0.225					ARG95	0.040(#2)	CL	TP-S	N
	U-Factor 0.30			SHGC(N) 0.33				VT(N) 0.61		CR 60		
26	Foam: SN68 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.221	0.500	0.221					ARG95	0.039(#2)	CL	SS-D	N
	U-Factor 0.31			SHGC(N) 0.33				VT(N) 0.59		CR 57		
27	Foam: SN68 / ARG95 / CLR-LAMI (5MM/3MM 060 PVB 3MM) - 1" IG											
	0.182	0.500	0.294					ARG95	0.039(#2)	CL	SS-D	N
	U-Factor 0.31			SHGC(N) 0.33				VT(N) 0.59		CR 58		
28	Foam: LAMI-SN68 / ARG95 / CLR-LAMI (3MM 060 PVB 3MM 3MM 060 PVB 3MM) - 1" IG											
	0.294	0.375	0.294					ARG95	0.039(#2)	CL	SS-D	N
	U-Factor 0.31			SHGC(N) 0.33				VT(N) 0.58		CR 59		
29	Foam: SNX 62/27 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.221	0.500	0.221					ARG95	0.020(#2)	CL	SS-D	N
	U-Factor 0.31			SHGC(N) 0.23				VT(N) 0.54		CR 57		
30	Foam: SNX 62/27 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.221	0.500	0.221					ARG95	0.020(#2)	CL	TS-D	N
	U-Factor 0.29			SHGC(N) 0.23				VT(N) 0.54		CR 61		

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TOTAL PRODUCT CALCULATIONS (GT1500 Fixed)												
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	Foam: SB60 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.223	0.500	0.223					ARG95	0.035(#2)	CL	SS-D	N
	U-Factor 0.31			SHGC(N) 0.34				VT(N) 0.61		CR 57		
32	Foam: SB60 / ARG95 / CLR-LAMI (5MM/3MM 060 PVB 3MM) - 1" IG											
	0.184	0.500	0.294					ARG95	0.035(#2)	CL	SS-D	N
	U-Factor 0.30			SHGC(N) 0.35				VT(N) 0.62		CR 58		
33	Foam: LAMI-SB60 / ARG95 / CLR-LAMI (3MM 060 PVB 3MM/3MM 060 PVB 3MM) - 1" IG											
	0.318	0.375	0.294					ARG95	0.035(#2)	CL	SS-D	N
	U-Factor 0.31			SHGC(N) 0.34				VT(N) 0.61		CR 59		
34	Foam: SB70 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.223	0.500	0.223					ARG95	0.018(#2)	CL	SS-D	N
	U-Factor 0.30			SHGC(N) 0.24				VT(N) 0.56		CR 58		
35	Foam: SB70 / ARG95 / CLR (6MM/6MM) - 1" IG											
	0.223	0.500	0.223					ARG95	0.018(#2)	CL	TS-D	N
	U-Factor 0.29			SHGC(N) 0.24				VT(N) 0.56		CR 61		
36	Foam: SB70 / ARG95 / CLR-LAMI (5MM/3MM 060 PVB 3MM) - 1" IG											
	0.184	0.500	0.294					ARG95	0.018(#2)	CL	SS-D	N
	U-Factor 0.30			SHGC(N) 0.24				VT(N) 0.56		CR 59		