

STEVES AND SONS COMPUTER SIMULATION REPORT

SCOPE OF WORK

FIBERGLASS ENTRY DOOR - NFRC 100/200

REPORT NUMBER

P0339.06-116-45 R0

TEST DATE

09/22/22

ISSUE DATE

12/19/23

RECORD RETENTION END DATE

09/22/27

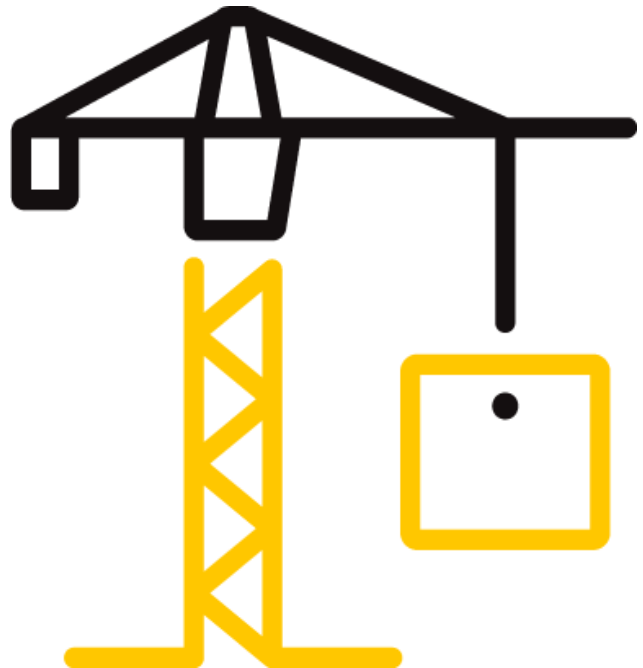
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TEST REPORT FOR STEVES & SONS

Report No.: P0339.06-116-45 R0

Date: 12/19/23

REPORT ISSUED TO

STEVES & SONS

203 Humble Avenue

San Antonio, Texas 78225

SECTION 1

SUMMARY

SERIES/MODEL: Fiberglass Entry Door

Architectural Testing, Inc. (an Intertek company) dba Intertek Building & Construction (B&C) was contracted to perform U-Factor, Solar Heat Gain Coefficient, and Visible Transmittance simulations in accordance with the National Fenestration Rating Council (NFRC).

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends five years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for the entire test record retention period.

For INTERTEK B&C:

COMPLETED BY: Dale C. White
TITLE: Simulation Technician
SIGNATURE:
DATE: 12/19/23

DCW:dcw

REVIEWED BY: Eric S. Leitner
TITLE: Manager - Simulations &
Thermal Testing, SIRC
SIGNATURE:
DATE: 12/19/23

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SECTION 2

TEST METHODS

The products were evaluated in accordance with the following:

ANSI/NFRC 100-2020, Procedure for Determining Fenestration Product U-Factors

ANSI/NFRC 200-2020, Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence

SECTION 3

TEST PROCEDURE

The total product, including specific frame, spacer, and glass details, was modeled using NFRC approved software.

FRAME AND EDGE MODELING	THERM 7.8.57
CENTER-OF-GLASS MODELING	WINDOW 7.8.57
TOTAL PRODUCT CALCULATIONS	NFRC Approved Spreadsheet
SPECTRAL DATA LIBRARY	IGDB 94.0

Modeling Assumptions / Technical Interpretations

Any modeling assumptions and technical interpretations required to model this product are listed below.

- 1) To prevent air infiltration, tape was applied to all interior sash crack locations.
- 2) The NFRC SDR Door Frames and Caming were used for simulation
- 3) Optilite S1.1 Plus cannot be certified at this time. Marked with *

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SECTION 4
SIMULATION SPECIMEN DESCRIPTION

SERIES/MODEL	Fiberglass Entry Door
PRODUCT TYPE	Swinging Door - Single Leaf Entrance Door
FRAME MATERIAL	WD - Wood
SASH MATERIAL	FF - Fiberglass w/ foam-filled insulation
STANDARD SIZE	960mm x 2090mm

SPACER OPTIONS			
TYPE	PRIMARY SEAL	SECONDARY SEAL	CODE
Aluminum Dual Seal Spacer	Butyl Rubber	Polysulfide	A1-D
Edgetherm Swiggle Spacer	Butyl Rubber	Polysulfide	A5-D
Decoseal Spacer	Butyl Rubber	Polysulfide	A5-D

GRID OPTIONS		
GRID SIZE	GRID TYPE	GRID PATTERN
0.750" x 1.25"	Aluminum Rectangular Grid (Painted)	NFRC Standard

REINFORCEMENT OPTIONS	
LOCATION	MATERIAL
None	-

GAS FILLING TECHNIQUE	
FILL TYPE	METHOD
90% Argon	Single or Dual Probe

EDGE-OF-GLASS CONSTRUCTION	
INTERIOR CONDITION	PVC lite frame with silicone between glass
EXTERIOR CONDITION	PVC lite frame with silicone between glass

WEATHERSTRIPPING		
TYPE	QUANTITY	LOCATION
Vinyl Gasket	1 row	Bottom of slab
Foam Gasket	1 row	Head/jamb

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SECTION 4

SIMULATION SPECIMEN DESCRIPTION

FRAME/SASH MATERIALS FINISH	
INTERIOR	Wood frame with foam filled fiberglass panel
EXTERIOR	Wood frame with foam filled fiberglass panel

VALIDATION MATRIX*	
PRODUCT LINE	REPORT NUMBER

**These products are part of a validation matrix. Only one is required for validation testing.*

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SECTION 5
SPECIALTY PRODUCTS TABLE

The specialty products method allows the manufacturer to determine the overall product SHGC and VT for any glazing option. The center of glass SHGC and/or VT must be determined using WINDOW 7.8.57. This method gives overall product SHGC and VT indexed on center of glass properties. All values used in the calculations are truncated to six decimal place precision.

No Lite - 6 Panel

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.010037		
SHGC1	0.010037		
VT0	0.000000		
VT1	0.000000		

1/4 Lite

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.010247	0.010291	0.010334
SHGC1	0.131871	0.118529	0.105908
VT0	0.000000	0.000000	0.000000
VT1	0.121623	0.108237	0.095574

1/2 Lite

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.009951	0.010054	0.010149
SHGC1	0.246550	0.215647	0.186907
VT0	0.000000	0.000000	0.000000
VT1	0.236599	0.205593	0.176757

3/4 Lite

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.009742	0.009880	0.010008
SHGC1	0.327516	0.286148	0.247664
VT0	0.000000	0.000000	0.000000
VT1	0.217774	0.276267	0.237655

$$SHGC = SHGC0 + SHGCc (SHGC1 - SHGC0)$$

$$VT = VT0 + VTc (VT1 - VT0)$$

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Full Lite

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.009461	0.009640	0.009807
SHGC1	0.435288	0.381543	0.331404
VT0	0.000000	0.000000	0.000000
VT1	0.425827	0.371903	0.321596

1/2 Lite Mini Blind (Up, Retracted)

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.013544		
SHGC1	0.196933		
VT0	0.000000		
VT1	0.183389		

3/4 Lite Mini Blind (Up, Retracted)

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.014052		
SHGC1	0.267887		
VT0	0.000000		
VT1	0.253835		

Full Lite Mini Blind (Up, Retracted)

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.015017		
SHGC1	0.356268		
VT0	0.000000		
VT1	0.341251		

$$SHGC = SHGC0 + SHGCc (SHGC1 - SHGC0)$$

$$VT = VT0 + VTc (VT1 - VT0)$$

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SECTION 5
SPECIALTY PRODUCTS TABLE

The specialty products method allows the manufacturer to determine the overall product SHGC and VT for any glazing option. The center of glass SHGC and/or VT must be determined using WINDOW 7.8.57. This method gives overall product SHGC and VT indexed on center of glass properties. All values used in the calculations are truncated to six decimal place precision.

1/2 Lite IG Blind (Up, Retracted)

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.013495		
SHGC1	0.191745		
VT0	0.000000		
VT1	0.178249		

3/4 Lite IG Blind (Up, Retracted)

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.014104		
SHGC1	0.191745		
VT0	0.000000		
VT1	0.245450		

Full Lite IG Blind (Up, Retracted)

	NO DIVIDERS	DIVIDERS <1	DIVIDERS >1
SHGC0	0.014923		
SHGC1	0.350797		
VT0	0.000000		
VT1	0.335873		

Caming

	1/4 Lite	1/2 Lite	3/4 Lite	Full Lite
SHGC0	0.010014	0.009665	0.009413	0.009069
SHGC1	0.118251	0.215258	0.285681	0.380973
VT0	0.000000	0.000000	0.000000	0.000000
VT1	0.108237	0.205593	0.276267	0.371903

$$\text{SHGC} = \text{SHGC0} + \text{SHGCc} (\text{SHGC1} - \text{SHGC0})$$

$$\text{VT} = \text{VT0} + \text{VTC} (\text{VT1} - \text{VT0})$$

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SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
1	No Lite: 6 Panel											OT	N	N	0.17	0.01	0.00				
2	1/4 Lite: GP Glass: YEA/Argon/Clear - DS/DS 1" IG	0.126	0.162(#2)	0.750	ARG90	0.120						CL	A1-D	N	0.22	0.09	0.09				
3	1/4 Lite: GP Glass: YEA/Argon/Clear - DS/DS 1" IG	0.126	0.162(#2)	0.750	ARG90	0.120						CL	A1-D	G	0.24					0.07	0.07
4	1/4 Lite: GP Glass: Clear/Air/Deco/ Air/Clear -Caming DS/DS/DS 1" IG	0.120		0.316	AIR	0.120		0.316	AIR	0.120		CL	A5-D	G	0.22			0.08	0.08		
5	1/4 Lite: GP Glass: Clear/Air/Clear - Iron Bar - DS/DS 1" IG	0.126	0.162(#2)	0.750	AIR	0.120						CL	A5-D	G	0.22			0.08	0.08		
6	1/4 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - DS/DS 1" IG	0.125	0.057(#2)	0.750	ARG90	0.120						CL	A1-D	N	0.21	0.08	0.10				
7	1/2 Lite: GP Glass: YEA/Argon/Clear - DS/DS 1" IG	0.126	0.162(#2)	0.750	ARG90	0.120						CL	A1-D	N	0.25	0.17	0.18				
8	1/2 Lite: GP Glass: YEA/Argon/Clear - DS/DS 1" IG	0.126	0.162(#2)	0.750	ARG90	0.120						CL	A1-D	G	0.29					0.13	0.14
9	1/2 Lite: GP Glass: Clear/Air/Deco/ Air/Clear -Caming DS/DS/DS 1" IG	0.120		0.316	AIR	0.120		0.316	AIR	0.120		CL	A5-D	G	0.25			0.15	0.15		
10	1/2 Lite: GP Glass: Clear/Air/Clear - Iron Bar - DS/DS 1" IG	0.126	0.162(#2)	0.750	AIR	0.120						CL	A5-D	G	0.25			0.15	0.16		
11	1/2 Lite: GP Glass: YEA/Argon/Clear - Mini-Blind UP - DS/DS 1" IG	0.126	0.162(#2)	0.759	ARG90	0.120						BG	A1-D	N	0.28	0.14	0.14				
12	1/2 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - DS/DS 1" IG	0.125	0.057(#2)	0.750	ARG90	0.120						CL	A1-D	N	0.24	0.15	0.19				

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TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
13	3/4 Lite: GP Glass: YEA/Argon/Clear - DS/DS 1" IG	0.126	0.162(#2)	0.750	ARG90	0.120						CL	A1-D	N	0.27	0.22	0.24				
14	3/4 Lite: GP Glass: YEA/Argon/Clear - DS/DS 1" IG	0.126	0.162(#2)	0.750	ARG90	0.120						CL	A1-D	G	0.33					0.17	0.18
15	3/4 Lite: GP Glass: Clear/Air/Deco/ Air/Clear -Caming DS/DS/DS 1" IG	0.120		0.316	AIR	0.120		0.316	AIR	0.120		CL	A5-D	G	0.27			0.20	0.20		
16	3/4 Lite: GP Glass: Clear/Air/Clear - Iron Bar - DS/DS 1" IG	0.126	0.162(#2)	0.750	AIR	0.120						CL	A5-D	G	0.27			0.19	0.21		
17	3/4 Lite: GP Glass: YEA/Argon/Clear - Mini-Blind UP - DS/DS 1" IG	0.126	0.162(#2)	0.759	ARG90	0.120						BG	A1-D	N	0.31	0.18	0.19				
18	3/4 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - DS/DS 1" IG	0.125	0.057(#2)	0.750	ARG90	0.120						CL	A1-D	N	0.26	0.20	0.26				
19	Full Lite: GP Glass: YEA/Argon/Clear - DS/DS 1" IG	0.126	0.162(#2)	0.750	ARG90	0.120						CL	A1-D	N	0.30	0.29	0.33				
20	Full Lite: GP Glass: YEA/Argon/Clear - DS/DS 1" IG	0.126	0.162(#2)	0.750	ARG90	0.120						CL	A1-D	G	0.38					0.23	0.25
21	Full Lite: GP Glass: Clear/Air/Deco/ Air/Clear -Caming DS/DS/DS 1" IG	0.120		0.316	AIR	0.120		0.316	AIR	0.120		CL	A5-D	G	0.31			0.26	0.28		
22	Full Lite: GP Glass: Clear/Air/Clear - Iron Bar - DS/DS 1" IG	0.126	0.162(#2)	0.750	AIR	0.120						CL	A5-D	G	0.30			0.26	0.28		
23	Full Lite: GP Glass: YEA/Argon/Clear - Mini-Blind UP - DS/DS 1" IG	0.126	0.162(#2)	0.759	ARG90	0.120						BG	A1-D	N	0.35	0.24	0.26				
24	Full Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - DS/DS 1" IG	0.125	0.057(#2)	0.750	ARG90	0.120						CL	A1-D	N	0.28	0.26	0.34				

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SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
25	1/2 Lite: Weier Glass: Optilite 1,1 Plus/Air/Clear - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	AIR	0.120						BG	A1-D	N	0.28	0.10	0.14				
26	1/2 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	ARG90	0.120						BG	A1-D	N	0.27	0.10	0.14				
27	3/4 Lite: Weier Glass: Optilite 1,1 Plus/Air/Clear - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	AIR	0.120						BG	A1-D	N	0.31	0.14	0.19				
28	3/4 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	ARG90	0.120						BG	A1-D	N	0.29	0.14	0.19				
29	Full Lite: Weier Glass: Optilite 1,1 Plus/Air/Clear - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	AIR	0.120						BG	A1-D	N	0.34	0.19	0.26				
30	Full Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	ARG90	0.120						BG	A1-D	N	0.33	0.19	0.26				
31	1/2 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Advantage(#4) - IG Blind UP - DS/DS 1" IG	0.125	0.057(#2)	0.747	ARG90	0.118	0.164(#4)					BG	A1-D	N	0.24	0.11	0.13				
32	3/4 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Advantage(#4) - IG Blind UP - DS/DS 1" IG	0.125	0.057(#2)	0.747	ARG90	0.118	0.164(#4)					BG	A1-D	N	0.26	0.15	0.19				

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SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
33	Full Lite: Weier Glass: Optilite 1,1 Plus/Argon/Advantage(#4) - IG Blind UP - DS/DS 1" IG	0.125	0.057(#2)	0.747	ARG90	0.118	0.164(#4)					BG	A1-D	N	0.28	0.20	0.25				
34	1/4 Lite: Weier: Clear/Air/Deco/Air/Clear - DS 1" Decorative Caming	0.118		0.316	AIR	0.118		0.316	AIR	0.118		CL	A5-D	G	0.22			0.09	0.08		
35	1/4 Lite: Weier: Advantage/Air/Clear - DS 1" Wrought Iron	0.118	0.164(#2)	0.750	AIR	0.118						CL	A5-D	G	0.22			0.08	0.08		
36	1/2 Lite: Weier: Clear/Air/Deco/Air/Clear - DS 1" Decorative Caming	0.118		0.316	AIR	0.118		0.316	AIR	0.118		CL	A5-D	G	0.25			0.15	0.16		
37	1/2 Lite: Weier: Advantage/Air/Clear - DS 1" Wrought Iron	0.118	0.164(#2)	0.750	AIR	0.118						CL	A5-D	G	0.25			0.15	0.16		
38	3/4 Lite: Weier: Clear/Air/Deco/Air/Clear - DS 1" Decorative Caming	0.118		0.316	AIR	0.118		0.316	AIR	0.118		CL	A5-D	G	0.27			0.20	0.21		
39	3/4 Lite: Weier: Advantage/Air/Clear - DS 1" Wrought Iron	0.118	0.164(#2)	0.750	AIR	0.118						CL	A5-D	G	0.27			0.20	0.21		
40	Full Lite: Weier: Clear/Air/Deco/Air/Clear - DS 1" Decorative Caming	0.118		0.316	AIR	0.118		0.316	AIR	0.118		CL	A5-D	G	0.31			0.27	0.28		

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SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
41	Full Lite: Weier: Advantage/Air/Clear - DS 1" Wrought Iron	0.118	0.164(#2)	0.750	AIR	0.118						CL	A5-D	G	0.30			0.27	0.29		
42	1/4 Lite: Weier: YEA/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.126	0.162(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.21			0.08	0.08		
43	1/4 Lite: Weier: S1.1 Plus/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.124	0.051(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.20			0.06	0.08		
44	1/4 Lite: Weier: US1.16/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.124	0.069(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.20			0.07	0.08		
45	1/4 Lite: Weier: YEA/Argon/Clear - DS 1" Wrought Iron	0.126	0.162(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.21			0.08	0.08		
46	1/4 Lite: Weier: S1.1 Plus/Argon/Clear - DS 1" Wrought Iron	0.124	0.051(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.21			0.07	0.08		
47	1/4 Lite: Weier: US1.16/Argon/Clear - DS 1" Wrought Iron	0.124	0.069(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.21			0.08	0.09		
48	1/4 Lite: Weier: YEA/Argon/Clear - DS 1" Wrought Iron	0.126	0.162(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.21			0.08	0.08		
49	1/4 Lite: Weier: S1.1 Plus/Argon/Clear - DS 1" Wrought Iron	0.124	0.051(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.20			0.07	0.08		



Total Quality. Assured.

130 Derry Court
York, PA 17406

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TEST REPORT FOR STEVES & SONS

Report No.: P0339.06-116-45 R0

Date: 12/19/23

SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
50	1/4 Lite: Weier: US1.16/Argon/Clear - DS 1" Wrought Iron	0.124	0.069(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.21			0.08	0.09		
51	1/2 Lite: Weier: YEA/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.126	0.162(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.23			0.14	0.15		
52	1/2 Lite: Weier: S1.1 Plus/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.124	0.051(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.22			0.11	0.15		
53	1/2 Lite: Weier: US1.16/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.124	0.069(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.22			0.13	0.16		
54	1/2 Lite: Weier: YEA/Argon/Clear - DS 1" Wrought Iron	0.126	0.162(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.24			0.15	0.16		
55	1/2 Lite: Weier: S1.1 Plus/Argon/Clear - DS 1" Wrought Iron	0.124	0.051(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.23			0.11	0.16		
56	1/2 Lite: Weier: US1.16/Argon/Clear - DS 1" Wrought Iron	0.124	0.069(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.23			0.14	0.17		
57	1/2 Lite: Weier: YEA/Argon/Clear - DS 1" Wrought Iron	0.126	0.162(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.24			0.15	0.16		
58	1/2 Lite: Weier: S1.1 Plus/Argon/Clear - DS 1" Wrought Iron	0.124	0.051(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.23			0.11	0.16		
59	1/2 Lite: Weier: US1.16/Argon/Clear - DS 1" Wrought Iron	0.124	0.069(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.23			0.14	0.17		

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SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
60	3/4 Lite: Weier: YEA/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.126	0.162(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.24			0.18	0.19		
61	3/4 Lite: Weier: S1.1 Plus/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.124	0.051(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.24			0.14	0.20		
62	3/4 Lite: Weier: US1.16/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.124	0.069(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.24			0.17	0.21		
63	3/4 Lite: Weier: YEA/Argon/Clear - DS 1" Wrought Iron	0.126	0.162(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.26			0.20	0.21		
64	3/4 Lite: Weier: S1.1 Plus/Argon/Clear - DS 1" Wrought Iron	0.124	0.051(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.25			0.15	0.21		
65	3/4 Lite: Weier: US1.16/Argon/Clear - DS 1" Wrought Iron	0.124	0.069(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.25			0.18	0.23		
66	3/4 Lite: Weier: YEA/Argon/Clear - DS 1" Wrought Iron	0.126	0.162(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.26			0.20	0.21		
67	3/4 Lite: Weier: S1.1 Plus/Argon/Clear - DS 1" Wrought Iron	0.124	0.051(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.24			0.15	0.21		
68	3/4 Lite: Weier: US1.16/Argon/Clear - DS 1" Wrought Iron	0.124	0.069(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.25			0.18	0.23		



Total Quality. Assured.

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TEST REPORT FOR STEVES & SONS

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SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
69	Full Lite: Weier: YEA/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.126	0.162(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.26			0.24	0.26		
70	Full Lite: Weier: S1.1 Plus/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.124	0.051(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.25			0.18	0.26		
71	Full Lite: Weier: US1.16/Argon /Deco/Argon/Clear - DS 1" Decorative Caming	0.124	0.069(#2)	0.316	ARG90	0.118		0.316	ARG90	0.118		CL	A5-D	G	0.26			0.22	0.28		
72	Full Lite: Weier: YEA/Argon/Clear - DS 1" Wrought Iron	0.126	0.162(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.29			0.26	0.29		
73	Full Lite: Weier: S1.1 Plus/Argon/Clear - DS 1" Wrought Iron	0.124	0.051(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.27			0.20	0.29		
74	Full Lite: Weier: US1.16/Argon/Clear - DS 1" Wrought Iron	0.124	0.069(#2)	0.750	ARG90	0.118						CL	A5-D	G	0.27			0.24	0.31		
75	Full Lite: Weier: YEA/Argon/Clear - DS 1" Wrought Iron	0.126	0.162(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.28			0.26	0.29		
76	Full Lite: Weier: S1.1 Plus/Argon/Clear - DS 1" Wrought Iron	0.124	0.051(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.27			0.20	0.29		
77	Full Lite: Weier: US1.16/Argon/Clear - DS 1" Wrought Iron	0.124	0.069(#2)	0.750	ARG90	0.118						CL	A1-D	G	0.27			0.24	0.31		



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SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
78	1/4 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - DS/DS 1" IG	0.125	0.057(#2)	0.750	ARG90	0.120						CL	TP-D	N	0.20	0.09	0.11				
79	1/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#4)					CL	TP-D	N	0.20	0.08	0.10				
80	1/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.20	0.08	0.10				
81	1/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#4)					CL	A1-D	N	0.21	0.08	0.10				
82	1/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.22	0.08	0.10				
83	1/4 Lite: Weier: Optilite 1,1 Plus/Argon /Clear/Argon/Clear - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.118		0.313	ARG90	0.118		CL	A1-D	N	0.21	0.08	0.10				
84	1/4 Lite: Weier: Optilite 1,1 Plus/Argon /YEA/Argon/Clear - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.126	0.162(#4)	0.313	ARG90	0.118		CL	A1-D	N	0.20	0.07	0.09				
85	1/4 Lite: Weier: Optilite 1,1 Plus/Argon /Clear/Argon/YEA - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.118		0.313	ARG90	0.126	0.162(#5)	CL	A1-D	N	0.20	0.07	0.09				
86	1/4 Lite: Weier: OptiSolar D80/Argon/Clear - DS 1"	0.126	0.053(#2)	0.750	ARG90	0.118						CL	TP-D	N	0.20	0.06	0.10				
87	1/4 Lite: Weier: OptiSolar D80/Argon/Clear - DS 1"	0.126	0.053(#2)	0.750	ARG90	0.118						CL	A1-D	N	0.22	0.06	0.10				
88	1/4 Lite: Weier: Hurricane Lami/Argon/Clear 8,6mm/3mm 1"	0.326		0.531	ARG90	0.118						CL	TP-D	N	0.23	0.10	0.11				

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SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
89	1/4 Lite: Weier: Hurricane Lami YEA/Argon/Clear 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.118						CL	TP-D	N	0.21	0.09	0.10				
90	1/4 Lite: Weier: Hurricane Lami/Argon/YEA 8,6mm/3mm 1"	0.326		0.531	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.21	0.10	0.10				
91	1/4 Lite: Weier: Hurricane Lami YEA/Argon/YEA 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.20	0.09	0.10				
92	1/4 Lite: Weier: Hurricane Lami/Argon/Clear 8,6mm/3mm 1"	0.326		0.531	ARG90	0.118						CL	A1-D	N	0.24	0.10	0.11				
93	1/4 Lite: Weier: Hurricane Lami YEA/Argon/Clear 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.118						CL	A1-D	N	0.22	0.09	0.10				
94	1/4 Lite: Weier: Hurricane Lami/Argon/YEA 8,6mm/3mm 1"	0.326		0.531	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.22	0.10	0.10				
95	1/4 Lite: Weier: Hurricane Lami YEA/Argon/YEA 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.21	0.09	0.10				
96	1/2 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - DS/DS 1" IG	0.125	0.057(#2)	0.750	ARG90	0.120						CL	TP-D	N	0.22	0.16	0.20				
97	1/2 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#4)					CL	TP-D	N	0.21	0.13	0.18				
98	1/2 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.22	0.13	0.18				
99	1/2 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#4)					CL	A1-D	N	0.23	0.13	0.18				
100	1/2 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.24	0.13	0.18				



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TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
101	1/2 Lite: Weier: Optilite 1,1 Plus/Argon /Clear/Argon/Clear - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.118		0.313	ARG90	0.118		CL	A1-D	N	0.23	0.13	0.18				
102	1/2 Lite: Weier: Optilite 1,1 Plus/Argon /YEA/Argon/Clear - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.126	0.162(#4)	0.313	ARG90	0.118		CL	A1-D	N	0.22	0.12	0.17				
103	1/2 Lite: Weier: Optilite 1,1 Plus/Argon /Clear/Argon/YEA - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.118		0.313	ARG90	0.126	0.162(#5)	CL	A1-D	N	0.22	0.12	0.17				
104	1/2 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	ARG90	0.126	0.162(#4)					BH	TP-D	N	0.24	0.11	0.14				
105	1/2 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	ARG90	0.126	0.162(#3)					BH	TP-D	N	0.26	0.11	0.14				
106	1/2 Lite: Weier: OptiSolar D80/Argon/Clear - DS 1"	0.126	0.053(#2)	0.750	ARG90	0.118						CL	TP-D	N	0.22	0.11	0.18				
107	1/2 Lite: Weier: OptiSolar D80/Argon/Clear - DS 1"	0.126	0.053(#2)	0.750	ARG90	0.118						CL	A1-D	N	0.24	0.11	0.18				
108	1/2 Lite: Weier: OptiSolar D80/Argon/Clear - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.118						BH	TP-D	N	0.26	0.09	0.13				
109	1/2 Lite: Weier: OptiSolar D80/Argon/YEA IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.162(#3)					BH	TP-D	N	0.26	0.08	0.13				

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SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
110	1/2 Lite: Weier: OptiSolar D80/Argon/OptiSolar D80 - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.053(#3)					BH	TP-D	N	0.26	0.08	0.12				
111	1/2 Lite: Weier: OptiSolar D80/Argon/Clear - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.118						BH	A1-D	N	0.27	0.09	0.13				
112	1/2 Lite: Weier: OptiSolar D80/Argon/YEA - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.162(#3)					BH	A1-D	N	0.27	0.08	0.13				
113	1/2 Lite: Weier: OptiSolar D80/Argon/OptiSolar D80 - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.053(#3)					BH	A1-D	N	0.27	0.08	0.12				
114	1/2 Lite: Weier: Hurricane Lami/Argon/Clear 8,6mm/3mm 1"	0.326		0.531	ARG90	0.118						CL	TP-D	N	0.27	0.18	0.20				
115	1/2 Lite: Weier: Hurricane Lami YEA/Argon/Clear 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.118						CL	TP-D	N	0.23	0.16	0.19				
116	1/2 Lite: Weier: Hurricane Lami/Argon/YEA 8,6mm/3mm 1"	0.326		0.531	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.23	0.17	0.19				
117	1/2 Lite: Weier: Hurricane Lami YEA/Argon/YEA 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.22	0.15	0.18				
118	1/2 Lite: Weier: Hurricane Lami/Argon/Clear 8,6mm/3mm 1"	0.326		0.531	ARG90	0.118						CL	A1-D	N	0.28	0.18	0.20				
119	1/2 Lite: Weier: Hurricane Lami YEA/Argon/Clear 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.118						CL	A1-D	N	0.24	0.16	0.19				

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SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
120	1/2 Lite: Weier: Hurricane Lami/Argon/YEA 8,6mm/3mm 1"	0.326		0.531	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.24	0.17	0.19				
121	1/2 Lite: Weier: Hurricane Lami YEA/Argon/YEA 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.24	0.15	0.18				
122	3/4 Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - DS/DS 1" IG	0.125	0.057(#2)	0.750	ARG90	0.120						CL	TP-D	N	0.24	0.21	0.27				
123	3/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#4)					CL	TP-D	N	0.22	0.17	0.24				
124	3/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.24	0.17	0.24				
125	3/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#4)					CL	A1-D	N	0.24	0.17	0.24				
126	3/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.26	0.17	0.24				
127	3/4 Lite: Weier: Optilite 1,1 Plus/Argon /Clear/Argon/Clear - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.118		0.313	ARG90	0.118		CL	A1-D	N	0.24	0.17	0.24				
128	3/4 Lite: Weier: Optilite 1,1 Plus/Argon /YEA/Argon/Clear - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.126	0.162(#4)	0.313	ARG90	0.118		CL	A1-D	N	0.23	0.16	0.22				
129	3/4 Lite: Weier: Optilite 1,1 Plus/Argon /Clear/Argon/YEA - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.118		0.313	ARG90	0.126	0.162(#5)	CL	A1-D	N	0.23	0.16	0.22				



Total Quality. Assured.

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TEST REPORT FOR STEVES & SONS

Report No.: P0339.06-116-45 R0

Date: 12/19/23

SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
130	3/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	ARG90	0.126	0.162(#4)					BH	TP-D	N	0.26	0.14	0.19				
131	3/4 Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	ARG90	0.126	0.162(#3)					BH	TP-D	N	0.29	0.14	0.19				
132	3/4 Lite: Weier: OptiSolar D80/Argon/Clear - DS 1"	0.126	0.053(#2)	0.750	ARG90	0.118						CL	TP-D	N	0.24	0.14	0.24				
133	3/4 Lite: Weier: OptiSolar D80/Argon/Clear - DS 1"	0.126	0.053(#2)	0.750	ARG90	0.118						CL	A1-D	N	0.26	0.14	0.24				
134	3/4 Lite: Weier: OptiSolar D80/Argon/Clear - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.118						BH	TP-D	N	0.29	0.11	0.19				
135	3/4 Lite: Weier: OptiSolar D80/Argon/YEA IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.162(#3)					BH	TP-D	N	0.29	0.11	0.17				
136	3/4 Lite: Weier: OptiSolar D80/Argon/OptiSolar D80 - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.053(#3)					BH	TP-D	N	0.28	0.11	0.16				
137	3/4 Lite: Weier: OptiSolar D80/Argon/Clear - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.118						BH	A1-D	N	0.30	0.11	0.19				
138	3/4 Lite: Weier: OptiSolar D80/Argon/YEA IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.162(#3)					BH	A1-D	N	0.30	0.11	0.17				

TEST REPORT FOR STEVES & SONS

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Date: 12/19/23

SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
139	3/4 Lite: Weier: OptiSolar D80/Argon/OptiSolar D80 - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.053(#3)					BH	A1-D	N	0.29	0.11	0.16				
140	3/4 Lite: Weier: Hurricane Lami/Argon/Clear 8,6mm/3mm 1"	0.326		0.531	ARG90	0.118						CL	TP-D	N	0.30	0.24	0.27				
141	3/4 Lite: Weier: Hurricane Lami YEA/Argon/Clear 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.118						CL	TP-D	N	0.25	0.21	0.25				
142	3/4 Lite: Weier: Hurricane Lami/Argon/YEA 8,6mm/3mm 1"	0.326		0.531	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.25	0.22	0.25				
143	3/4 Lite: Weier: Hurricane Lami YEA/Argon/YEA 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.24	0.20	0.24				
144	3/4 Lite: Weier: Hurricane Lami/Argon/Clear 8,6mm/3mm 1"	0.326		0.531	ARG90	0.118						CL	A1-D	N	0.31	0.24	0.27				
145	3/4 Lite: Weier: Hurricane Lami YEA/Argon/Clear 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.118						CL	A1-D	N	0.26	0.21	0.25				
146	3/4 Lite: Weier: Hurricane Lami/Argon/YEA 8,6mm/3mm 1"	0.326		0.531	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.26	0.22	0.25				
147	3/4 Lite: Weier: Hurricane Lami YEA/Argon/YEA 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.26	0.20	0.24				
148	Full Lite: Weier Glass: Optilite 1,1 Plus/Argon/Clear - DS/DS 1" IG	0.125	0.057(#2)	0.750	ARG90	0.120						CL	TP-D	N	0.26	0.28	0.36				
149	Full Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#4)					CL	TP-D	N	0.22	0.18	0.25				
150	Full Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.24	0.18	0.25				



Total Quality. Assured.

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SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
151	Full Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#4)					CL	A1-D	N	0.24	0.18	0.25				
152	Full Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - DS 1"	0.124	0.051(#2)	0.750	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.26	0.18	0.25				
153	Full Lite: Weier: Optilite 1,1 Plus/Argon /Clear/Argon/Clear - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.118		0.313	ARG90	0.118		CL	A1-D	N	0.24	0.17	0.24				
154	Full Lite: Weier: Optilite 1,1 Plus/Argon /YEA/Argon/Clear - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.126	0.162(#4)	0.313	ARG90	0.118		CL	A1-D	N	0.23	0.16	0.23				
155	Full Lite: Weier: Optilite 1,1 Plus/Argon /Clear/Argon/YEA - DS 1"	0.124	0.051(#2)	0.313	ARG90	0.118		0.313	ARG90	0.126	0.162(#5)	CL	A1-D	N	0.23	0.16	0.23				
156	Full Lite: Weier: Optilite 1,1 Plus/Argon/YEA (4) - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	ARG90	0.126	0.162(#4)					BH	TP-D	N	0.26	0.15	0.20				
157	Full Lite: Weier: Optilite 1,1 Plus/Argon/YEA (3) - IG Blind UP - DS/DS 1" IG	0.124	0.051(#2)	0.747	ARG90	0.126	0.162(#3)					BH	TP-D	N	0.29	0.15	0.20				
158	Full Lite: Weier: OptiSolar D80/Argon/Clear - DS 1"	0.126	0.053(#2)	0.750	ARG90	0.118						CL	TP-D	N	0.24	0.14	0.24				
159	Full Lite: Weier: OptiSolar D80/Argon/Clear - DS 1"	0.126	0.053(#2)	0.750	ARG90	0.118						CL	A1-D	N	0.26	0.14	0.24				

TEST REPORT FOR STEVES & SONS

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Date: 12/19/23

SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
160	Full Lite: Weier: OptiSolar D80/Argon/Clear - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.118						BH	TP-D	N	0.29	0.12	0.19				
161	Full Lite: Weier: OptiSolar D80/Argon/YEA - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.162(#3)					BH	TP-D	N	0.29	0.11	0.18				
162	Full Lite: Weier: OptiSolar D80/Argon/OptiSolar D80 - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.053(#3)					BH	TP-D	N	0.29	0.11	0.17				
163	Full Lite: Weier: OptiSolar D80/Argon/Clear - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.118						BH	A1-D	N	0.30	0.12	0.19				
164	Full Lite: Weier: OptiSolar D80/Argon/YEA - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.162(#3)					BH	A1-D	N	0.30	0.11	0.18				
165	Full Lite: Weier: OptiSolar D80/Argon/OptiSolar D80 - IG Blind UP - DS/DS 1" IG	0.126	0.053(#2)	0.747	ARG90	0.126	0.053(#3)					BH	A1-D	N	0.29	0.11	0.17				
166	Full Lite: Weier: Hurricane Lami/Argon/Clear 8,6mm/3mm 1"	0.326		0.531	ARG90	0.118						CL	TP-D	N	0.30	0.24	0.28				
167	Full Lite: Weier: Hurricane Lami YEA/Argon/Clear 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.118						CL	TP-D	N	0.25	0.22	0.26				
168	Full Lite: Weier: Hurricane Lami/Argon/YEA 8,6mm/3mm 1"	0.326		0.531	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.25	0.23	0.26				

TEST REPORT FOR STEVES & SONS

Report No.: P0339.06-116-45 R0

Date: 12/19/23

SECTION 6

SIMULATION RESULTS

TOTAL PRODUCT CALCULATIONS (Fiberglass Entry Door)																					
Option Number	Description	Pane Thickness 1 (in.)	Low-e Pane 1	Gap Width 1 (in.)	Gap Fill 1	Pane Thickness 2 (in.)	Low-e Pane 2	Gap Width 2 (in.)	Gap Fill 2	Pane Thickness 3 (in.)	Low-e Pane 3	Tint	Spacer	Grid Type	U-Factor (Btu/hr-ft2-F)	SHGC - No Grids	VT - No Grids	SHGC - Grids < 1"	VT - Grids < 1"	SHGC - Grids > 1"	VT - Grids > 1"
169	Full Lite: Weier: Hurricane Lami YEA/Argon/YEA 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.126	0.162(#3)					CL	TP-D	N	0.24	0.21	0.24				
170	Full Lite: Weier: Hurricane Lami/Argon/Clear 8,6mm/3mm 1"	0.326		0.531	ARG90	0.118						CL	A1-D	N	0.31	0.24	0.28				
171	Full Lite: Weier: Hurricane Lami YEA/Argon/Clear 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.118						CL	A1-D	N	0.26	0.22	0.26				
172	Full Lite: Weier: Hurricane Lami/Argon/YEA 8,6mm/3mm 1"	0.326		0.531	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.26	0.23	0.26				
173	Full Lite: Weier: Hurricane Lami YEA/Argon/YEA 8,6mm/3mm 1"	0.334	0.162(#2)	0.531	ARG90	0.126	0.162(#3)					CL	A1-D	N	0.26	0.21	0.24				



Total Quality. Assured.

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TEST REPORT FOR STEVES & SONS

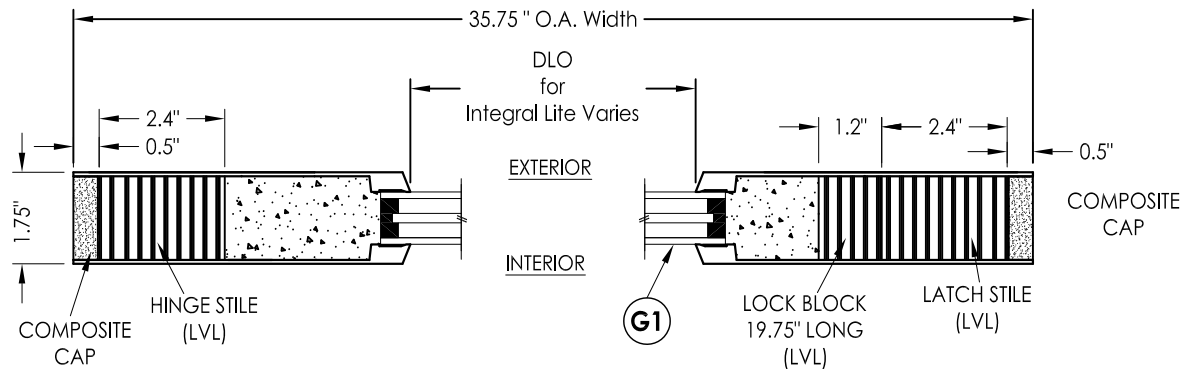
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Date: 12/19/23

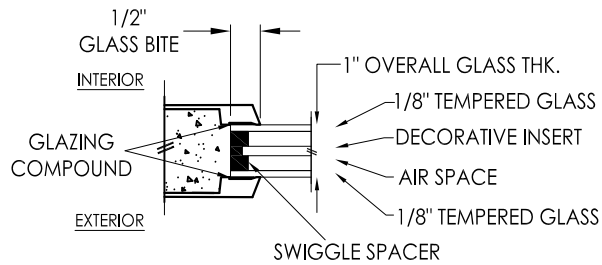
SECTION 7

DRAWINGS / BILL OF MATERIALS

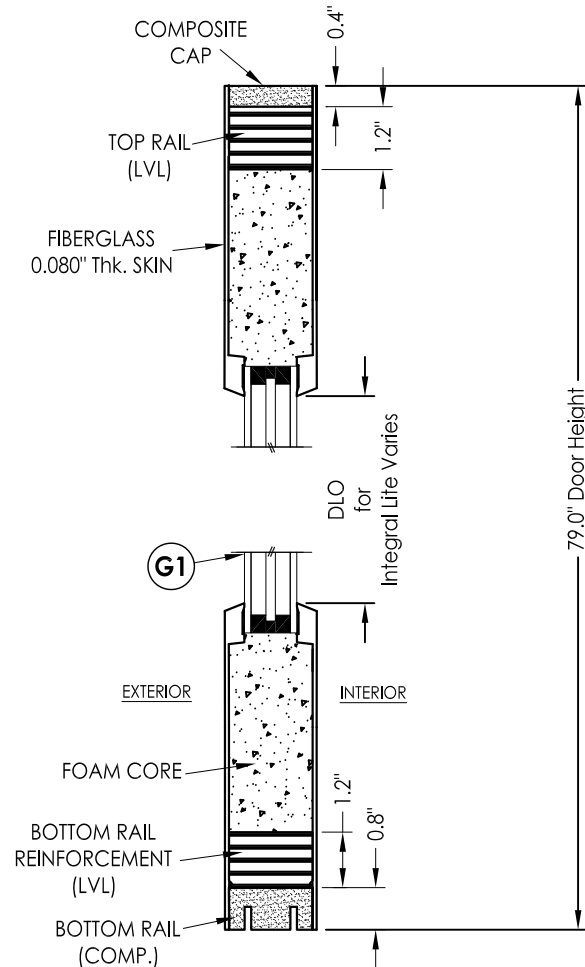
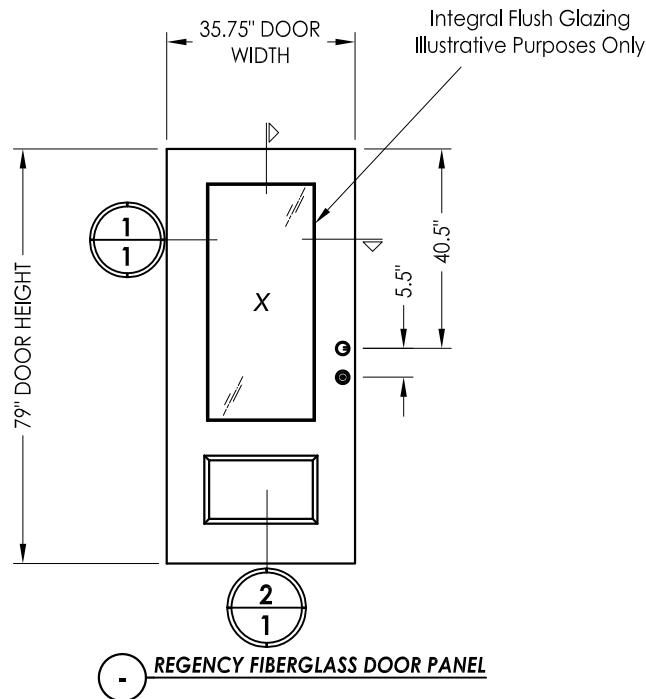
The drawings which follow have been reviewed by Intertek B&C and are representative of the simulation result(s) reported herein. Any deviations are documented herein or on the drawings.



1
1 **HORIZONTAL CROSS SECTION**

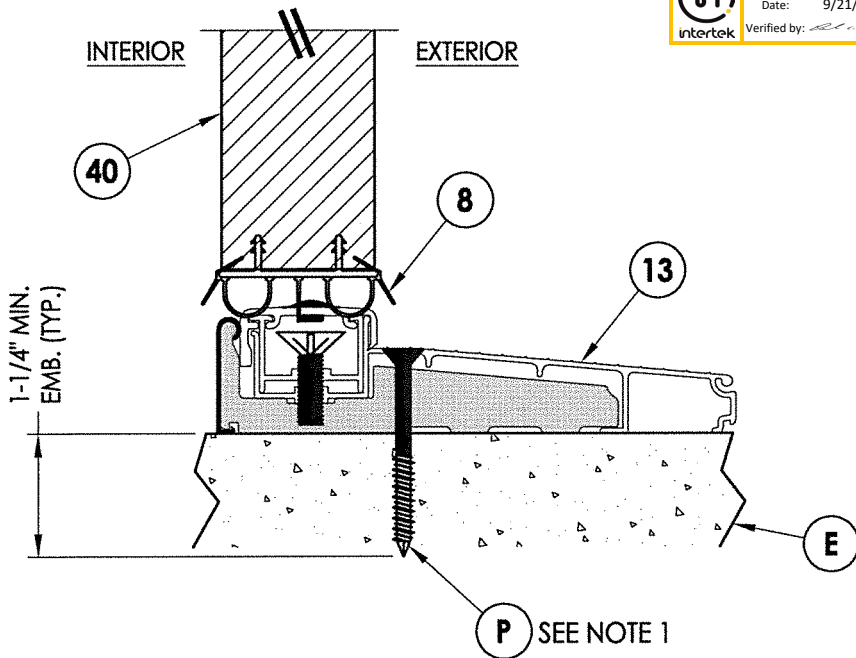


G1 **GLAZING DETAIL**



2
1 **VERTICAL CROSS SECTION**



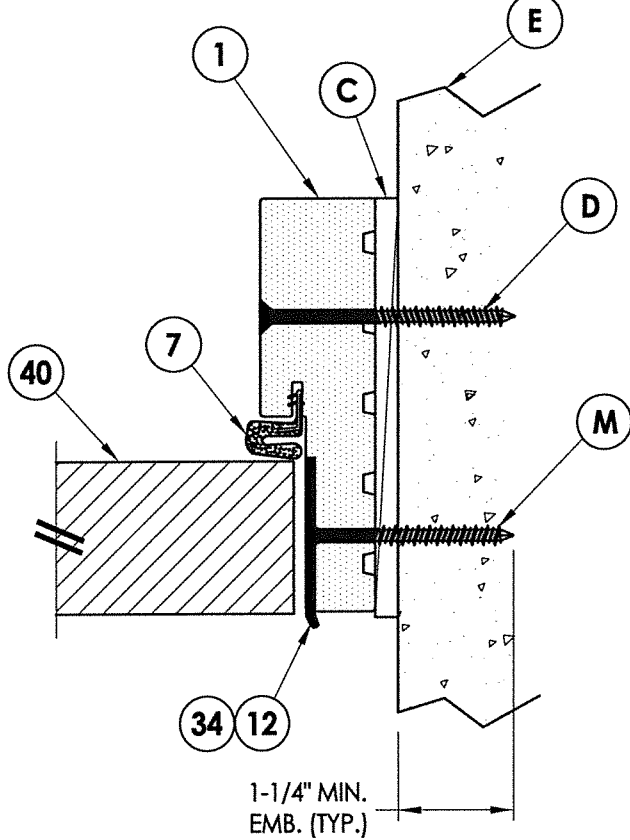




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Date: 9/21/2022

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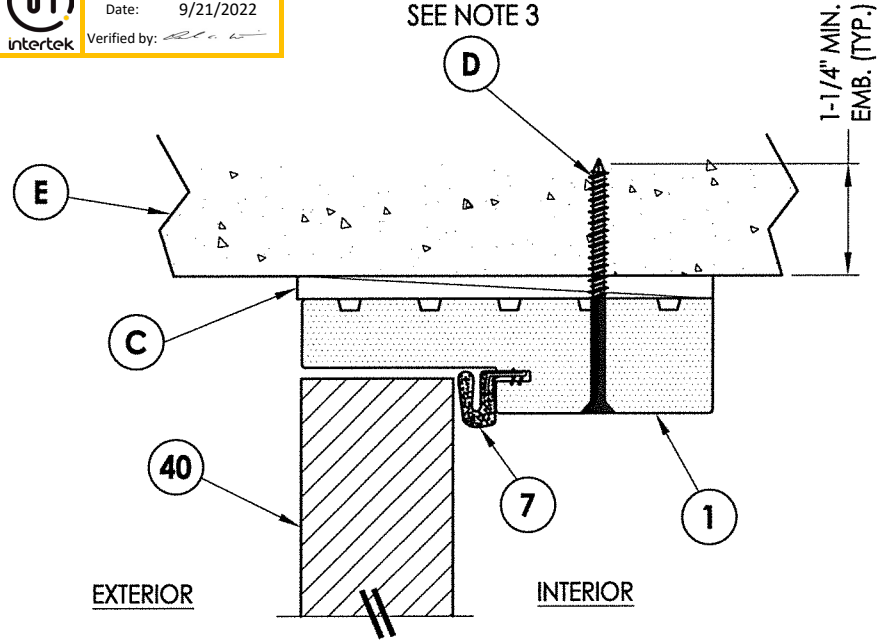
2 HORIZONTAL CROSS SECTION



Report #: P0339-116-45

Date: 9/21/2022

Verified by: *[Signature]*



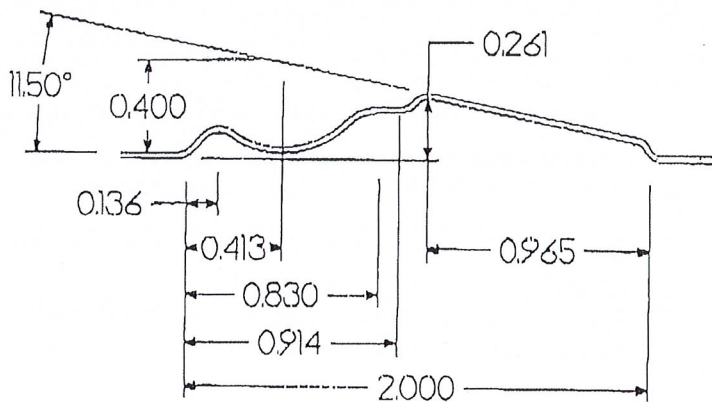
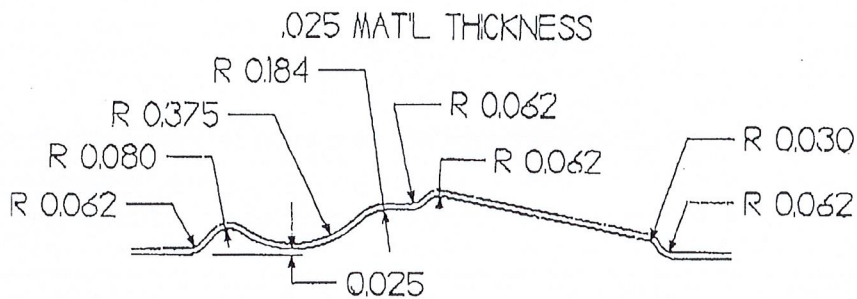
EXTERIOR

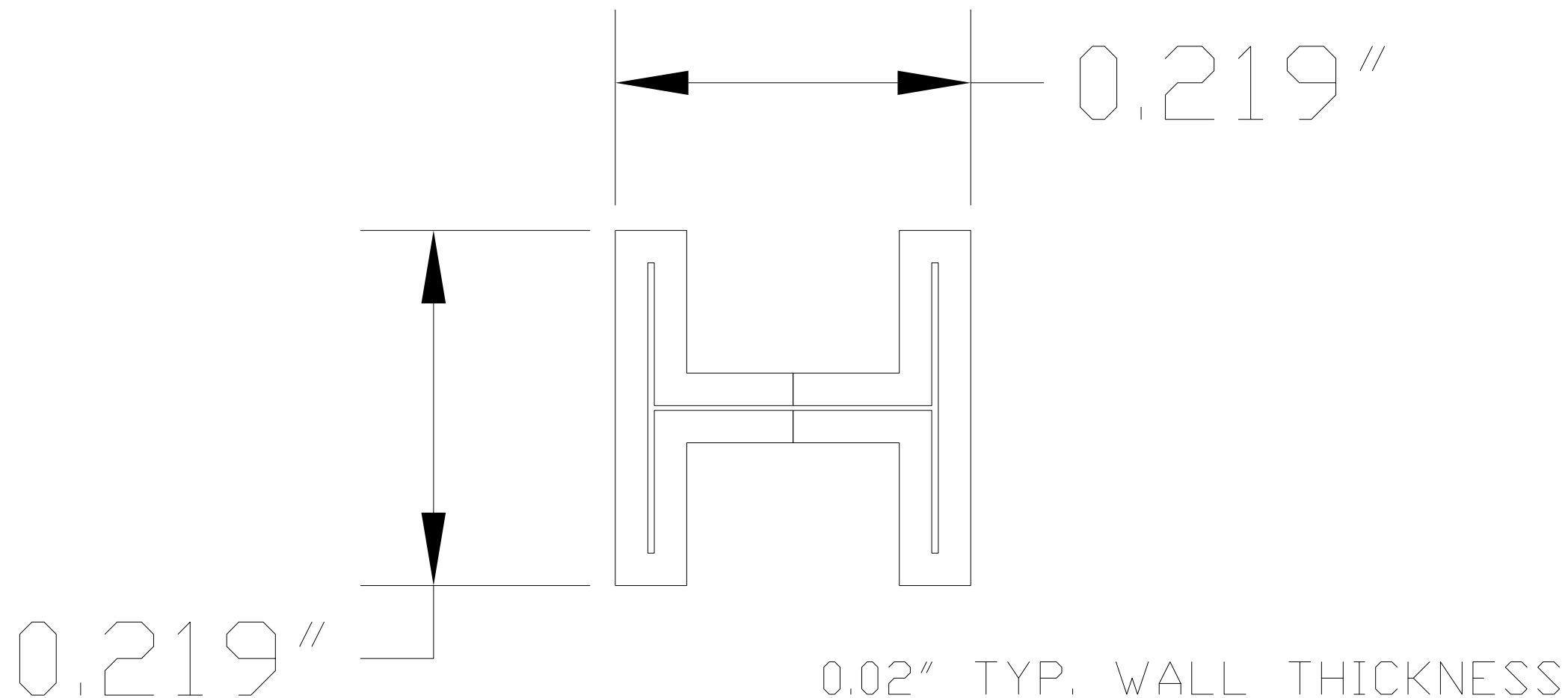
INTERIOR

4 VERTICAL CROSS SECTION

Shown Direct to Masonry
Outswing shown (Inswing similar)

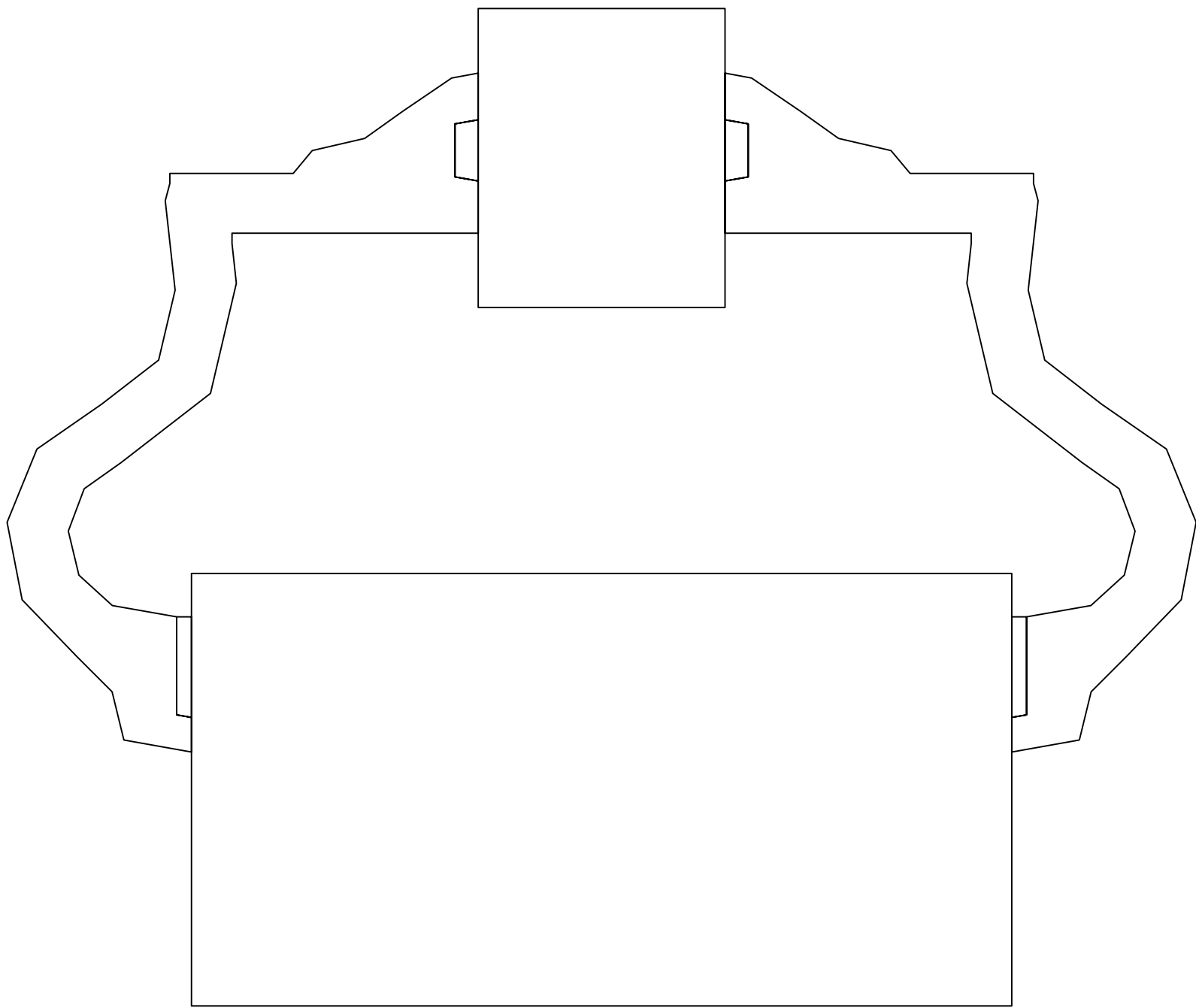
NEW REVISED PROFILE SLIGHT CHANGES



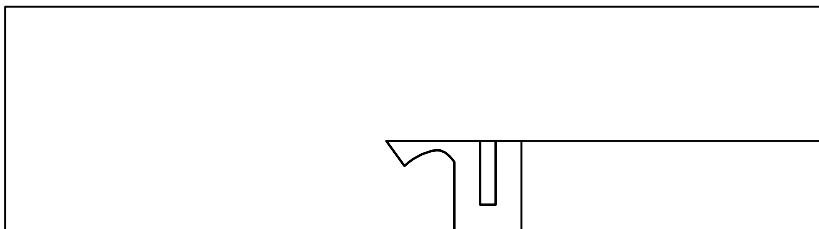


DEFAULT CAMMING PROFILE

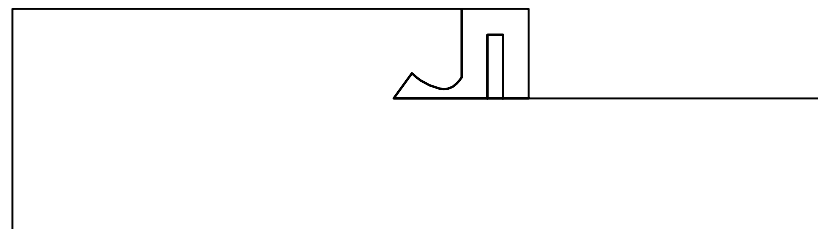
MAT'L: BRASS

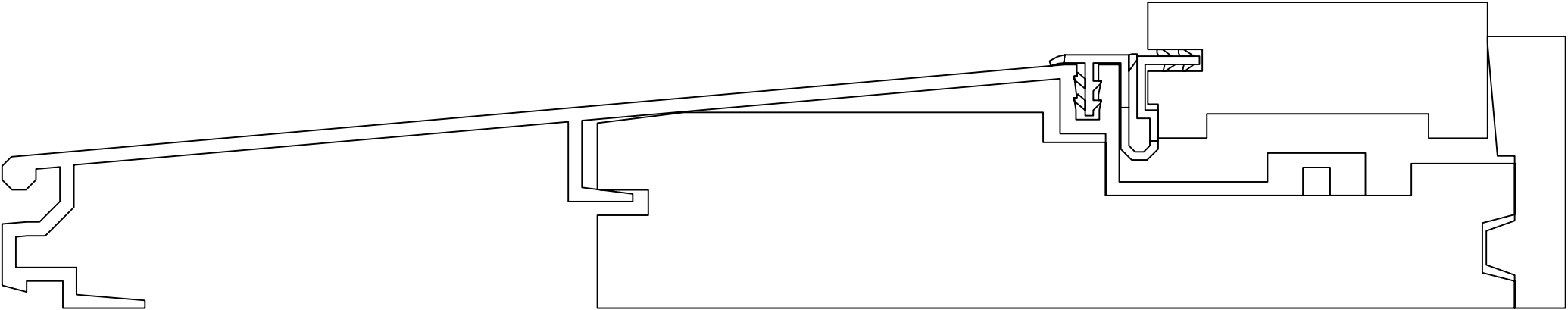


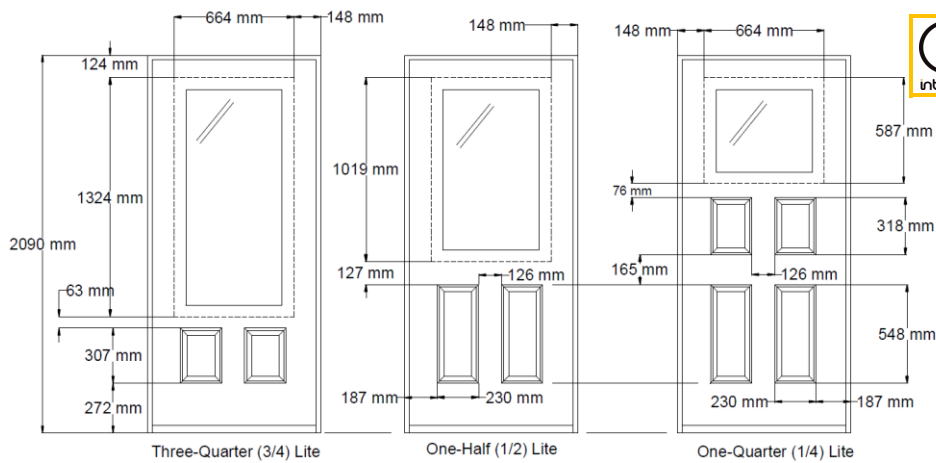
Head



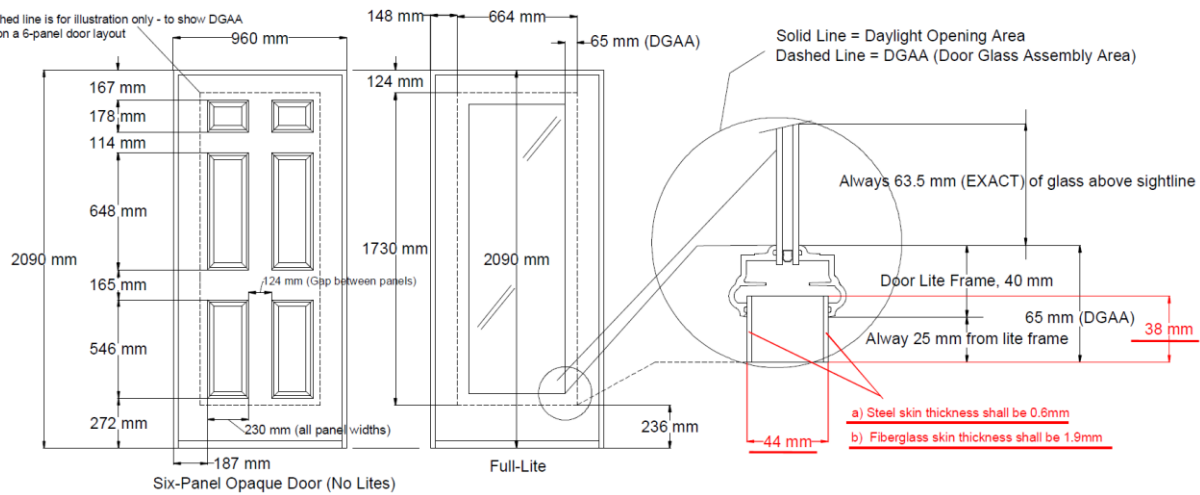
Jambs

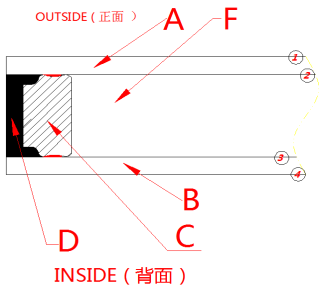
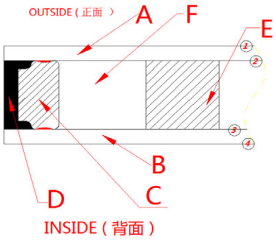


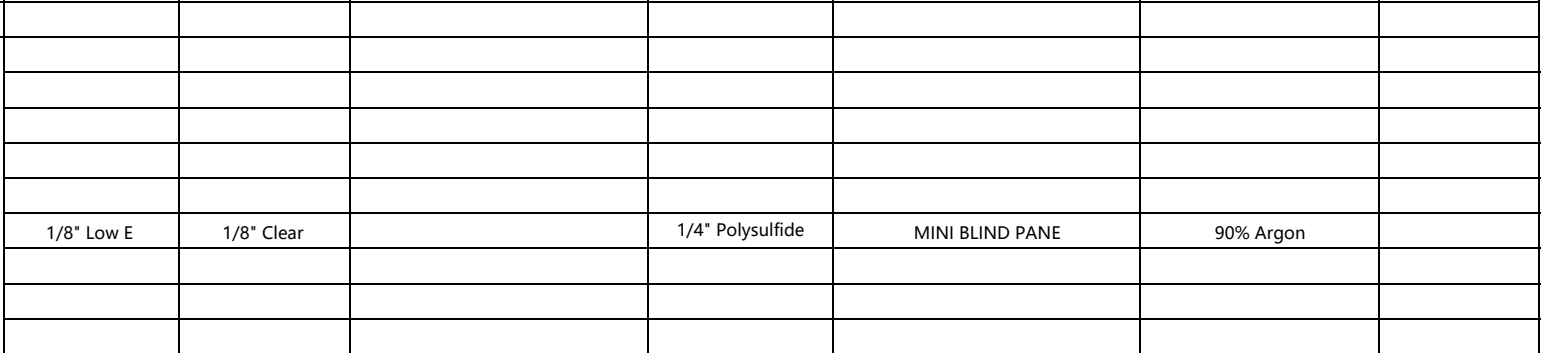
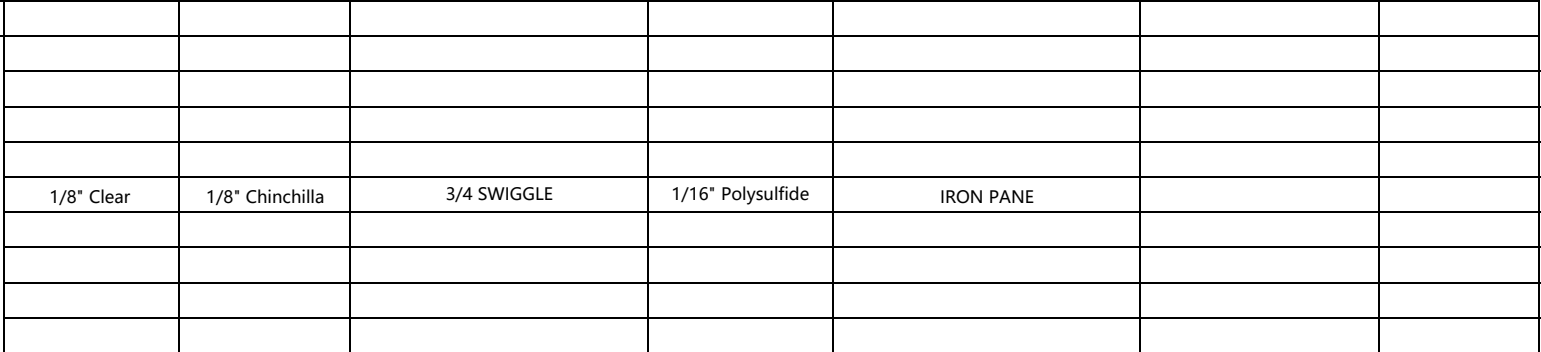
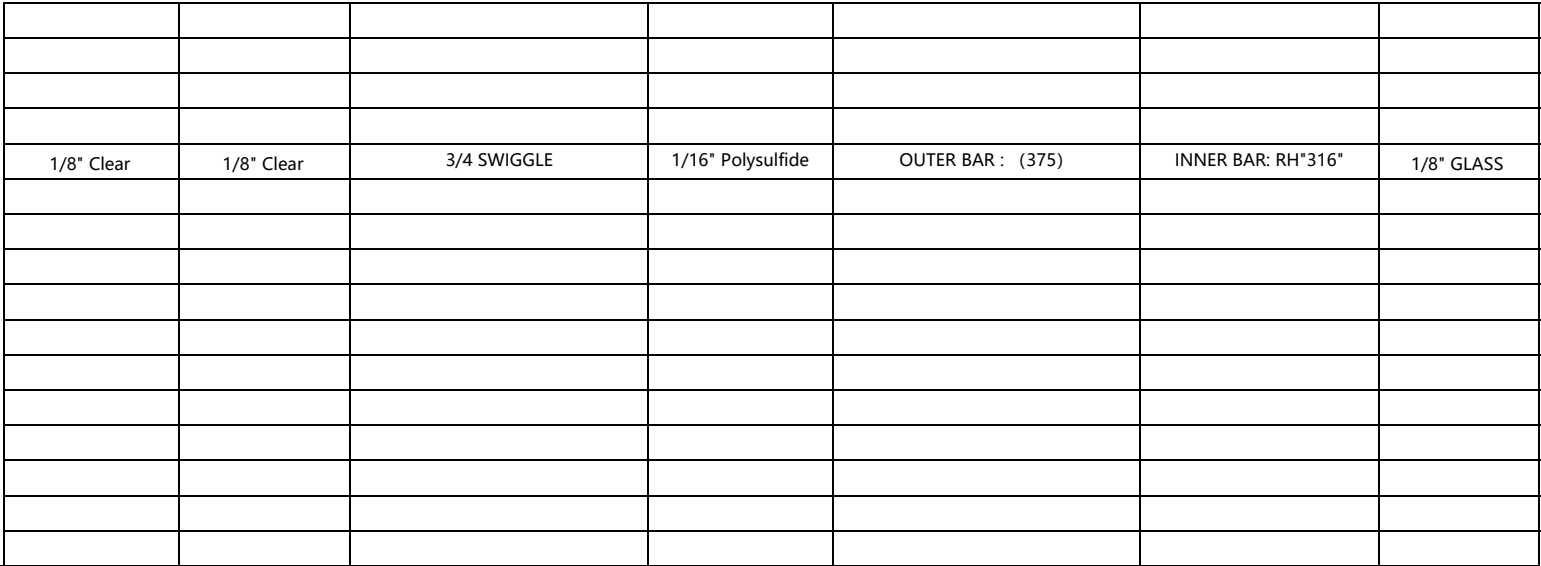


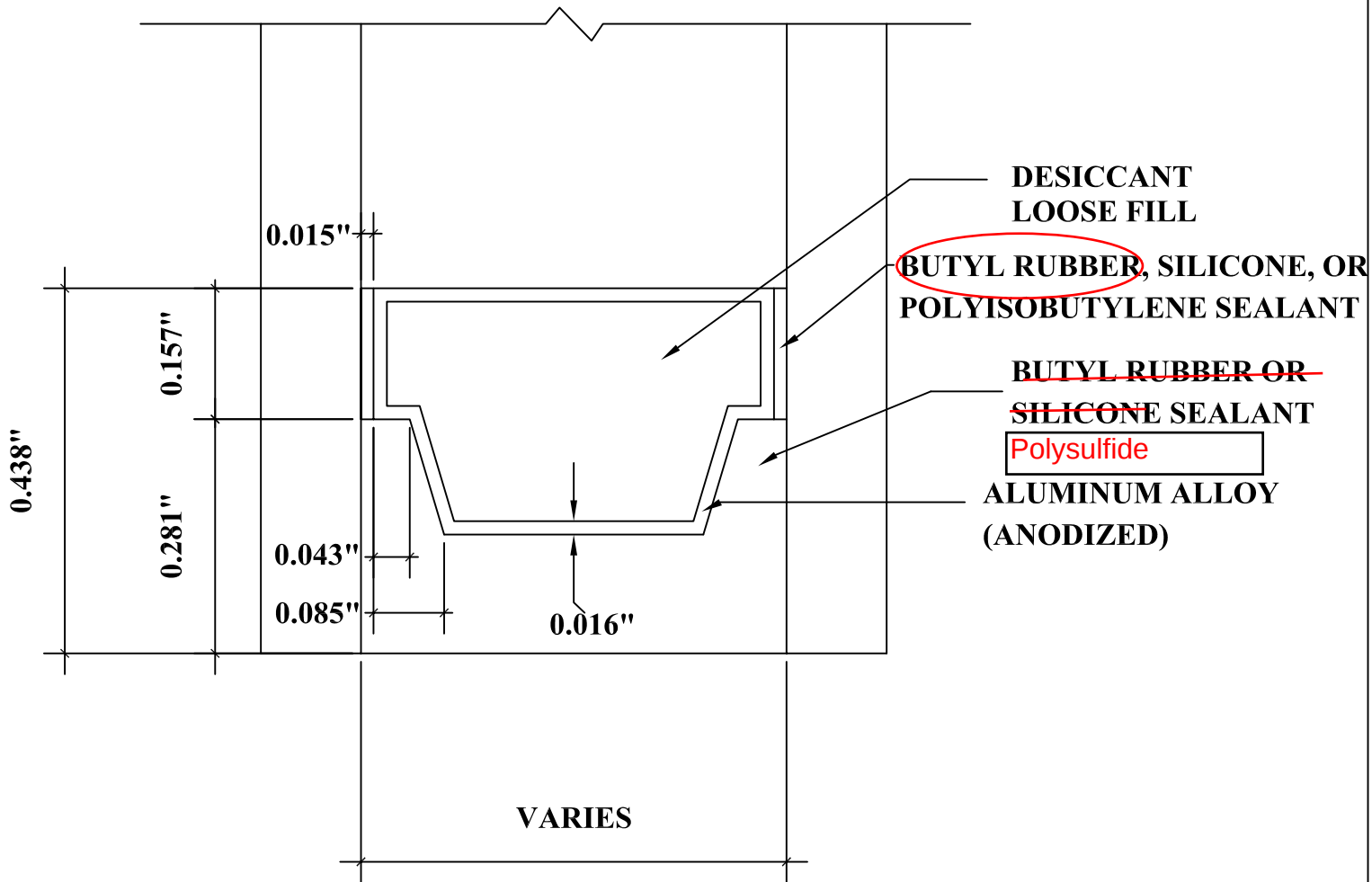


This dashed line is for illustration only - to show DGAA overlay on a 6-panel door layout



	A	B	C	D	E	F	G
							
	1/8" Low E	1/8" Clear	3/4 * 1/4 ALUMINUM SPACER	1/4" Polysulfide		90% Argon	
							
	1/8" Low E	1/8" Clear	3/4 * 1/4 ALUMINUM SPACER	1/4" Polysulfide	3/4 * 1 1/2 ALUMINUM SPACER	90% Argon	
 Report #: P0339-116-45 Date: 9/21/2022 Verified by: <i>[Signature]</i>							





DETAIL FOR THERMAL MODELING OF
ALUMINUM SPACER (A1-D)



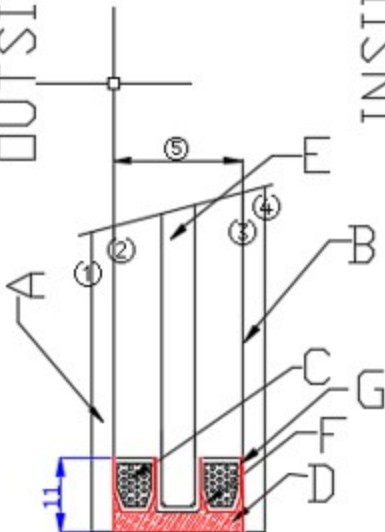
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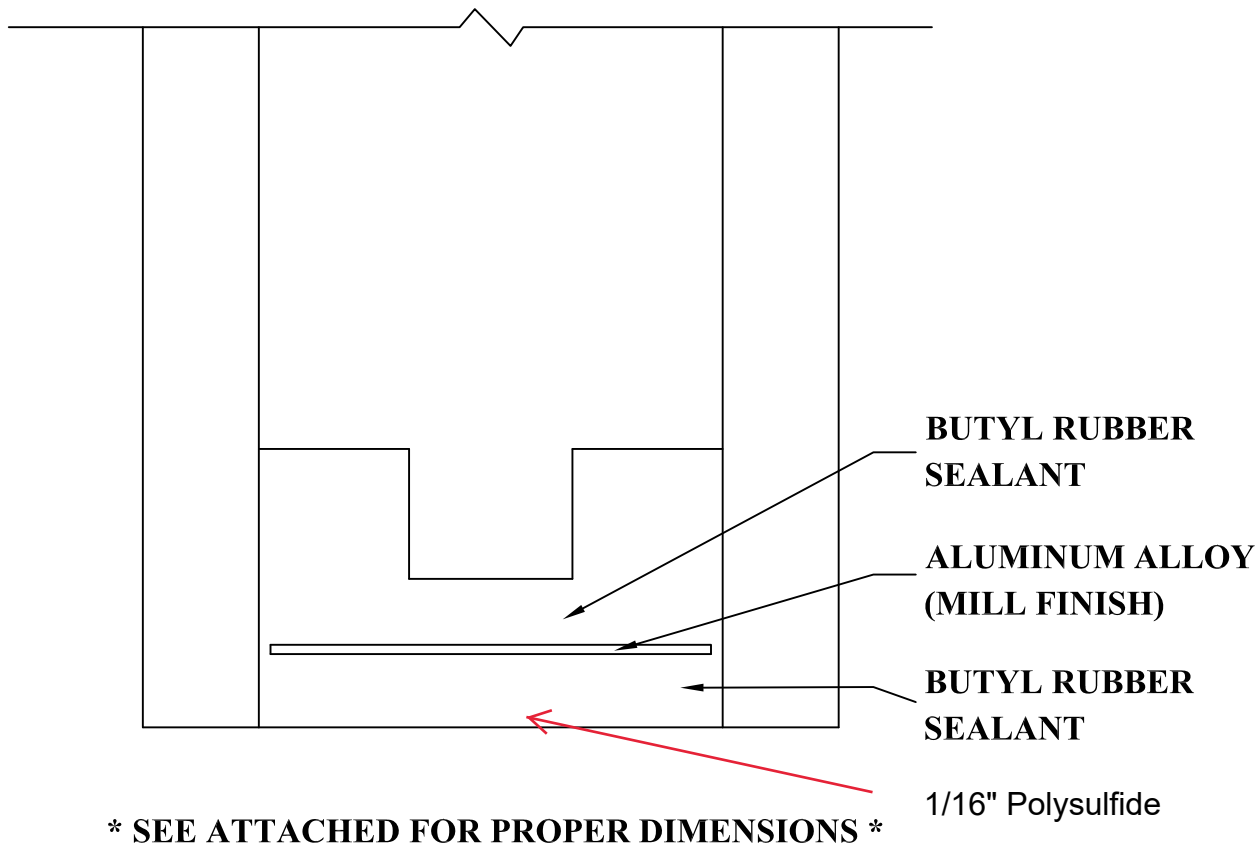
Date: 9/21/2022

Verified by: *[Signature]*

OUTSIDE

INSIDE





DETAIL FOR THERMAL MODELING OF
QUANEX DECOSEAL SPACER (~~A5-S~~) A5-D

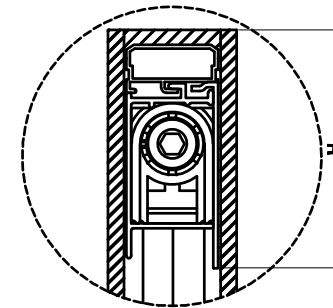
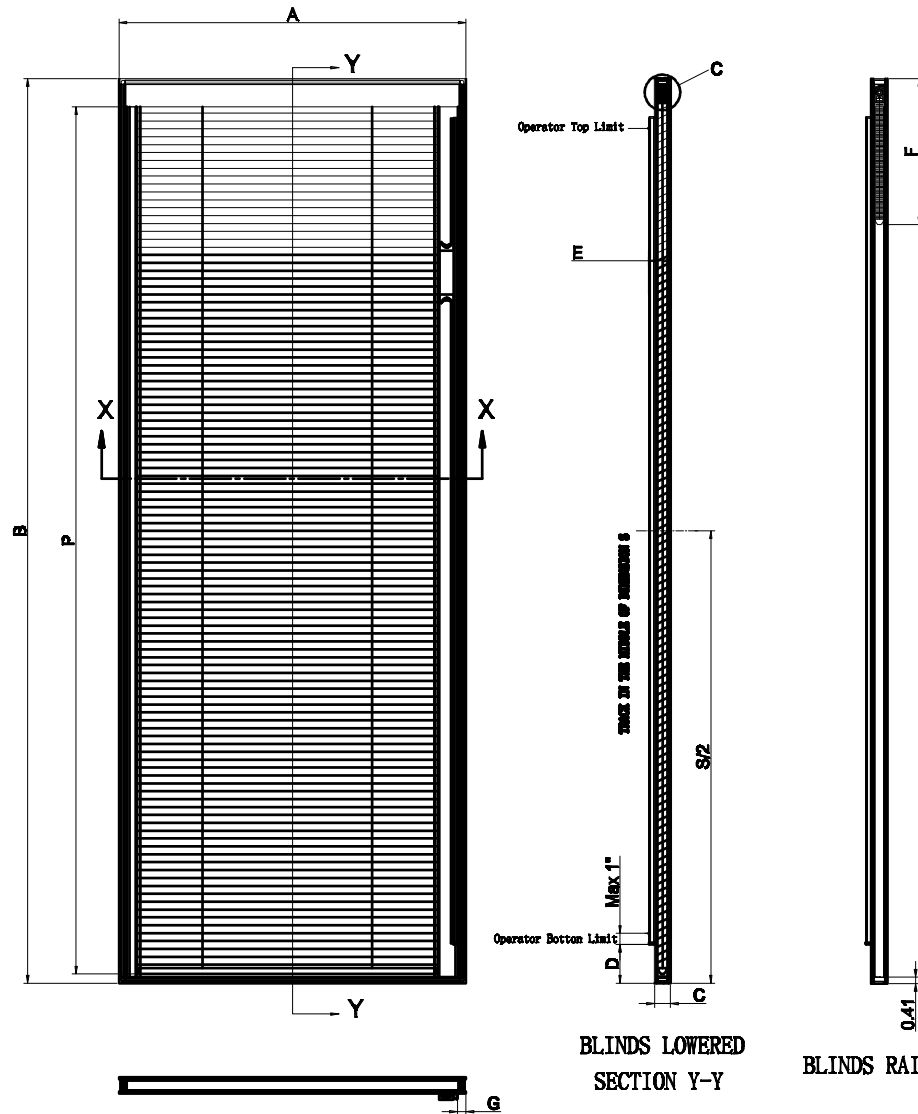


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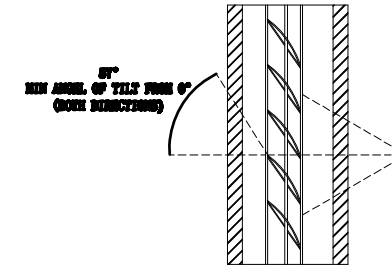
Date: 9/21/2022

Verified by: *[Signature]*

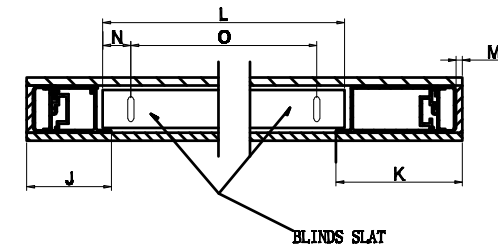
A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	NOTES
$\pm .082$ - .031	$\pm .082$ - .031	$\pm .010$	$\pm .200$	$\pm .020$	$\pm .200$	$\pm .040$	$\pm .040$	$\pm .040$	$\pm .040$	$\pm .020$	$\pm .040$ - .020	$\pm .030$	$\pm .030$	$\pm .200$	
7	64	1.020	6.614	1.417	4.280	0.669	1.931	1.365	2.034	3.937	0.118	0.984	1.969	61.575	
8	36	1.020	2.882	1.417	3.276	0.669	1.931	1.365	2.034	4.921	0.118	0.984	2.953	33.547	
20	36	1.020	2.882	1.417	3.276	0.669	1.931	1.365	2.034	16.929	0.118	2.362	12.205	33.547	
20	64	1.020	6.614	1.417	4.280	0.669	1.931	1.365	2.034	16.929	0.118	2.362	12.205	61.575	
20	80	1.020	8.189	1.417	4.847	0.669	1.931	1.365	2.034	16.929	0.118	2.362	12.205	77.563	
22	36	1.020	2.882	1.417	3.276	0.669	1.931	1.365	2.034	18.937	0.118	3.150	12.637	33.547	
22	64	1.020	6.614	1.417	4.280	0.669	1.931	1.365	2.034	18.937	0.118	3.150	12.637	61.575	
22	80	1.020	8.189	1.417	4.847	0.669	1.931	1.365	2.034	18.937	0.118	3.150	12.637	77.563	



DETAIL C



PRIVACY SPECIFICATION: SLATS MUST TILT CLOSED SO THAT WHEN VIEWED AT LEVEL VIEWING CONDITIONS, ADJACENT SLATS MUST OVERLAP TO MAINTAIN PRIVACY



SECTION X-X



Report #: P0339-116-45

Date: 9/21/2022

Verified by: *[Signature]*

TEST REPORT FOR STEVES & SONS

Report No.: P0339.06-116-45 R0

Date: 12/19/23

SECTION 8**REVISION LOG**

REVISION #	DATE	PAGES	REVISION
.01R0	09/22/22	N/A	Original Report Issue
.02R0	11/09/22	N/A	Add options 25-30
.02R1	12/01/22	N/A	Revised to correct panel fill.
.03R0	02/07/23	N/A	Add options 31-33
.04R0	03/14/23	N/A	Add options 34-41
.05R0	06/15/23	N/A	Add options 42-77
0.06	12/19/23	N/A	Add options 78-173, Update foam