

TEST REPORT

AAMA/WDMA/CSA 101/I.S.2/A440-17

AAMA/WDMA/CSA 101/I.S.2/A440-11

REPORT NO.: 28004.04-109-11

RENDERED TO: MASTER WINDOW SYSTEMS, INC.
Atlanta, Georgia 30339

PRODUCT TYPE: PVC Patio Door, Type XO

SERIES / MODEL: 3000 Series Patio Door

Test Specimen #1 <i>New Construction Frame</i> <i>830-PD-T030</i>	Summary of Results
Primary Product Designator	Class R – PG50 1829 x 2032 (72 x 80)-SD
Design Pressure	±2400 Pa (±50.13 psf)
Air Infiltration @ 1.57 psf	0.8 L/s/m ² (0.15 cfm/ft ²)
Air Exfiltration @ 1.57 psf	0.7 L/s/m ² (0.14 cfm/ft ²)
Water Penetration Resistance Test Pressure	360 Pa (7.52 psf)

Test Specimen #2 <i>Replacement Frame</i> <i>800-PD-T030</i>	Summary of Results
Primary Product Designator	Class R – PG50 1829 x 2032 (72 x 80)-SD
Design Pressure	±2400 Pa (±50.13 psf)
Air Infiltration @ 1.57 psf	<i>See Specimen #1</i>
Air Exfiltration @ 1.57 psf	<i>See Specimen #1</i>
Water Penetration Resistance Test Pressure	<i>See Specimen #1</i>

Test Completion Date: 2/22/2024

Reference must be made to Report No. 28004.04-109-11, dated 3/19/2025 for complete test specimen description and detailed test results.

CLIENT INFORMATION: MASTER WINDOW SYSTEMS, INC.
5070 Nifda Drive SE
Atlanta, Georgia 30339

TEST LABORATORY: Molimo, LLC
1140 Lincoln Avenue
Springdale, Pennsylvania 15144
724-410-7324

PROJECT SUMMARY:

PRODUCT TYPE: PVC Patio Door, Type XO

SERIES/MODEL: 3000 Series Patio Door

PROJECT SUMMARY:

Molimo, LLC was contracted to perform testing on the above-referenced products. The results are tested values and were secured by using the designated test methods. A summary of the rating achieved for the specimens tested are shown in the table below.

This product was originally tested by Chelsea Building Products as the Series/Model 800-PD-T030, Type XO. This report is a reissue of Report No. 28004.01-109-11 in the name of Master Window Systems, Inc. through written authorization by Chelsea Building Products.

SPECIMEN	SPECIFICATION	PRODUCT RATING
1	101/I.S.2/A440-11/-17	Class R – PG50 1829 x 2032 (72 x 80)-SD
2	101/I.S.2/A440-11/-17	Class R – PG50 1829 x 2032 (72 x 80)-SD

PROJECT DETAILS:

Test Dates: 2/15/2024 – 2/22/2024

Test Record Retention End Date: 2/22/2028

Test Location: Molimo, LLC test facility in Springdale, Pennsylvania

Test Specimen Source: The test specimens were provided by the client. Representative samples of the test specimens will be retained by Molimo for a minimum of four years from the test completion date.

Drawing Reference: The test specimen drawings were supplied by the client. The test specimen construction was verified by Molimo and was found to be representative of the products tested. Test specimen drawings are located in Appendix C of this report.

WITNESSES:

The following representatives witnessed all or part of the testing.

Name	Company
Michael Matovcik	Molimo, LLC
James Grippo	Molimo, LLC

TEST METHODS:

AAMA/WDMA/CSA 101/I.S.2/A440-17, *NAFS 2017 - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

AAMA/WDMA/CSA 101/I.S.2/A440-11, *NAFS 2011 - North American Fenestration Standard/Specification for Windows, Doors, and Skylights*

TEST SPECIMEN DESCRIPTION:**PRODUCT SIZES:**

Test Specimens #1 and #2				
Overall area: 3.7 m ² (40.0 ft ²)	Width		Height	
	Millimeters	Inches	Millimeters	Inches
Overall size	1829	72	2032	80
Panel size	933	36-3/4	1956	77
Screen size	911	35-7/8	1965	77-3/8

TEST SPECIMEN DESCRIPTION: (Continued)
FRAME CONSTRUCTION:

Frame Member	Material	Detail
Head, sill and jambs	PVC	Extruded
Corner construction	--	Miter-cut and thermally welded
Fixed meeting stile	PVC	Extruded, coped and butted to the head and sill, each connection utilized a metal anchor plate secured with four #6 x 1" flat head screws. Two screws to the frame member and two screws to the fixed meeting stile. The fixed meeting stile was secured to the fixed lite adapters with one #8 x 1-1/2" pan head screw at each connection.
Fixed lite adapters	PVC	Extruded, snap-in at head and seal and secured with three #8 x 3" pan head screws. Silicone sealant was applied at the exterior joinery.
Treshold / track cover	PVC	Extruded, sill and head insert at operable panel
Panel roller track	PVC	Extruded, sill track with stainless steel cap
Screen roller track	PVC	Extruded, sill insert

PANEL CONSTRUCTION:

Panel Member	Material	Detail
Rails and stiles	PVC	Extruded
Corner construction	--	Miter-cut and thermally welded

REINFORCEMENT:

The reinforcements were secured with seven #6 x 3/4" self-drilling flat head screws.

Drawing Number	Material	Location
992-4720	Aluminum	Both meeting stiles
873	Aluminum	Lock stile

TEST SPECIMEN DESCRIPTION: (Continued)

GLAZING DETAILS: *No conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimens can be made.*

Description	Detail
Glass Type	1" IG
Glazing Construction (exterior to interior)	1/8" thick tempered glass 3/4" plastic/ butyl 1/8" thick tempered glass
Glazing Method	Set from the exterior against double-sided adhesive tape and secured with vinyl glazing beads
Glazing Bite	1/2"
Daylight Opening Panel: Frame:	807 mm x 1829 mm (31-3/4" x 72") 807 mm x 1829 mm (31-3/4" x 72")

WEATHERSTRIPPING:

Description	Quantity	Location
0.187" back with 0.250" high pile with center fin	2 Rows	All frame members
0.187" back with 0.300" high pile with center fin	1 Row	Both meeting stiles
Adhesive dust pad (1-1/2" x 1/2") with 0.480" high pile with center fin (six piles)	2	Lock stile, one at each end of interlock
Vinyl carrier with 0.650" high pile	1 Row	Screen stile

TEST SPECIMEN DESCRIPTION: (Continued)
DRAINAGE:

Description	Quantity	Location
Weepslot 1/2" wide by 3/16" high	2	Exterior sill face, one 3-1/2" in from each end
Weepslot 1/2" wide by 1/8" high	2	Exterior sill face, screen track drainage, one 3-1/2" in from each end
Weepslot 1-1/2" wide by 3/16" deep	2	Sill, interior track, one at each end
Weepslot 1-1/2" wide by 3/16" deep	2	Sill, intermediate wall, one at each end
Weepslot 3/8" wide by 3/16" deep	2	Sill, fixed panel adapter, glazing plane, one 3" in from each end
Weepslot 3/8" wide by 3/16" deep	2	Sill, fixed panel adapter, bottom surface, one at each end
Weep notch 1-1/4" wide by 1/4" deep	2	Sill, roller track, one 1" in from each end
Weepslot 3/8" wide by 3/16" deep	2	Bottom rail, glazing plane -glazing bead channel, one 3" in from each end
Weepslot 1/4" wide by 1/8" deep	2	Bottom rail, bottom surface, one 4-1/2" in from each end

HARDWARE:

Description	Quantity	Location
Metal lock and handle assembly	1	Lock stile, one 39" up from bottom
Metal keeper	1	Jamb (lock stile)
Metal adjustable dual steel roller assembly	2	Bottom rail, one at each end

SCREEN CONSTRUCTION:

Frame material	Roll-formed aluminum
Corner construction	Miter-cut and keyed (crimped)
Mesh type	Fiberglass mesh
Mesh attachment method	Flexible vinyl spline

TEST SPECIMEN DESCRIPTION: (Continued)

INSTALLATION: The specimens were installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 3/16" shim space. The exterior perimeter of the specimen was sealed with silicone sealant. Specimen #2; the sill was seated in three rows of silicone sealant.

TEST SPECIMEN #1 (NEW CONSTRUCTION FRAME)

Location	Anchor Description	Anchor Spacing
Head, sill and jams (nail fin)	#8 x 1-1/4" long screw	Nominally spaced at 7" on centers and starting 2" in from each corner
Head (through frame)	#8 x 2" long screw	Two screws, one 6" each side of midspan of head.
Jamb/ operable panel (through frame)	#8 x 2" long screw	Two screws, one 6" in from each end
Jamb / operable panel (through frame)	#10 x 2-1/2" long screw	Two screws, keeper screws
Jamb / fixed lite (through frame)	#8 x 2" long screw	Three screws, one at midspan and one 6" in from each end.

TEST SPECIMEN #2 (REPLACEMENT FRAME)

Location	Anchor Description	Anchor Spacing
Head (through frame)	#8 x 2" long screw	Two screws, one 6" each side of midspan of head.
Jamb/ operable panel (through frame)	#8 x 2" long screw	Two screws, one 6" in from each end
Jamb / operable panel (through frame)	#10 x 2-1/2" long screw	Two screws, keeper screws
Jamb / fixed lite (through frame)	#8 x 2" long screw	Three screws, one at midspan and one 6" in from each end.

TEST RESULTS: The temperature during testing was 23.3° C (74° F).

Test Specimen #1

OPERATING FORCE: (per ASTM E 2068)

Test	Results	Allowable	Note
Initiate motion	45 N (10 lbf)	135 N (30 lbf)	1
Maintain motion (opening)	22 N (5 lbf)	90 N (20 lbf)	
Maintain motion (closing)	18 N (4 lbf)	90 N (20 lbf)	
Locks / latches	13 N (3 lbf)	100 N (22.5 lbf)	

Measurement Uncertainty: $\pm 4.5\%$

AIR LEAKAGE TESTING: (per ASTM E 283)

Test	Results	Allowable	Note
Infiltration @ 75 Pa (1.57 psf)	0.8 L/s/m ² (0.15 cfm/ft ²)	1.5 L/s/m ² (0.30 cfm/ft ²)	2
Exfiltration @ 75 Pa (1.57 psf)	0.7 L/s/m ² (0.14 cfm/ft ²)	1.5 L/s/m ² (0.30 cfm/ft ²)	2

Measurement Uncertainty: $\pm 3.63\%$

WATER PENETRATION TESTING: (ASTM E 547)

Test	Results	Allowable	Note
360 Pa (7.52 psf)	Pass	No Leakage	3

UNIFORM LOAD TESTING: (per ASTM E 330)

Design Pressure Test	Results	Allowable	Note
Deflection measured at the fixed meeting stile +2400 Pa (+50.13 psf) -2400 Pa (-50.13 psf)	29.5 mm (1.16") 27.4 mm (1.08")	Report Only	4,5,6

Measurement Uncertainty: $\pm 0.01"$

TEST RESULTS: (Continued)
Test Specimen #1 (Continued)
UNIFORM LOAD TESTING: (per ASTM E 330) (Continued)

Structural Test	Results	Allowable	Note
Permanent Set measured at the fixed meeting stile +3600 Pa (+75.19 psf) -3600 Pa (-75.19 psf)	0.8 mm (0.03") 0.5 mm (0.02")	7.8 mm (0.31") 7.8 mm (0.31")	5,6

Measurement Uncertainty: ±0.01"
SECONDARY TESTING:

Test	Results	Allowable
FORCED ENTRY RESISTANCE per ASTM F 842 Type: A – Grade: 10	Pass	No Entry
THERMOPLASTIC CORNER WELD	Pass	Meets as stated
DEGLAZING per ASTM E 987 Operating Direction – 320 N (70 lbf) Remaining Direction – 230 N (50 lbf)	Pass Pass	Meets as stated Meets as stated

Test Specimen #2
UNIFORM LOAD TESTING: (per ASTM E 330)

Design Pressure Test	Results	Allowable	Note
Deflection measured at the fixed meeting stile +2400 Pa (+50.13 psf) -2400 Pa (-50.13 psf)	33.8 mm (1.33") 32.3 mm (1.27")	Report Only	4,5,6

Measurement Uncertainty: ±0.01"

Structural Test	Results	Allowable	Note
Permanent Set measured at the fixed meeting stile +3600 Pa (+75.19 psf) -3600 Pa (-75.19 psf)	1.0 mm (0.04") 0.5 mm (0.02")	7.8 mm (0.31") 7.8 mm (0.31")	5,6

Measurement Uncertainty: ±0.01"

TEST RESULTS: (Continued)

General Notes: *All testing was performed in accordance with reference test methods.*

- #1: The operating force results listed above represent the maximum force measured among all sash tested.*
- #2: The specimen tested meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resistance.*
- #3: Water Penetration testing was performed without an insect screen.*
- #4: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440 for this product designation and is recorded for information purposes only.*
- #5: All loads were held for 10 seconds.*
- #6: Tape and film were used to seal against air leakage. In our opinion, the tape and film did not influence the results of the test.*

This report is reissued in the name of Master Window Systems, Inc. through written authorization from Chelsea Building Products to whom the original report was rendered. The original Chelsea Building Products Report Number is 28004.01-109-11.

A copy of this report, detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be retained by Molimo, LLC for the entire test record retention period. At the end of this retention period, the service life of this report will expire.

Results obtained are tested values and were secured by using the designated test methods. This test report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written permission of Molimo, LLC.

For MOLIMO, LLC:

Michael Matovcik
Technician

Joseph E. Allison
Regional Project Manager

JPG:sld

Attachments (pages): This report is complete only when all attachments listed are included.

Appendix-A: Alteration Addendum (1)

Appendix-B: Air Seal Location (1)

Appendix-C: Drawings (19)

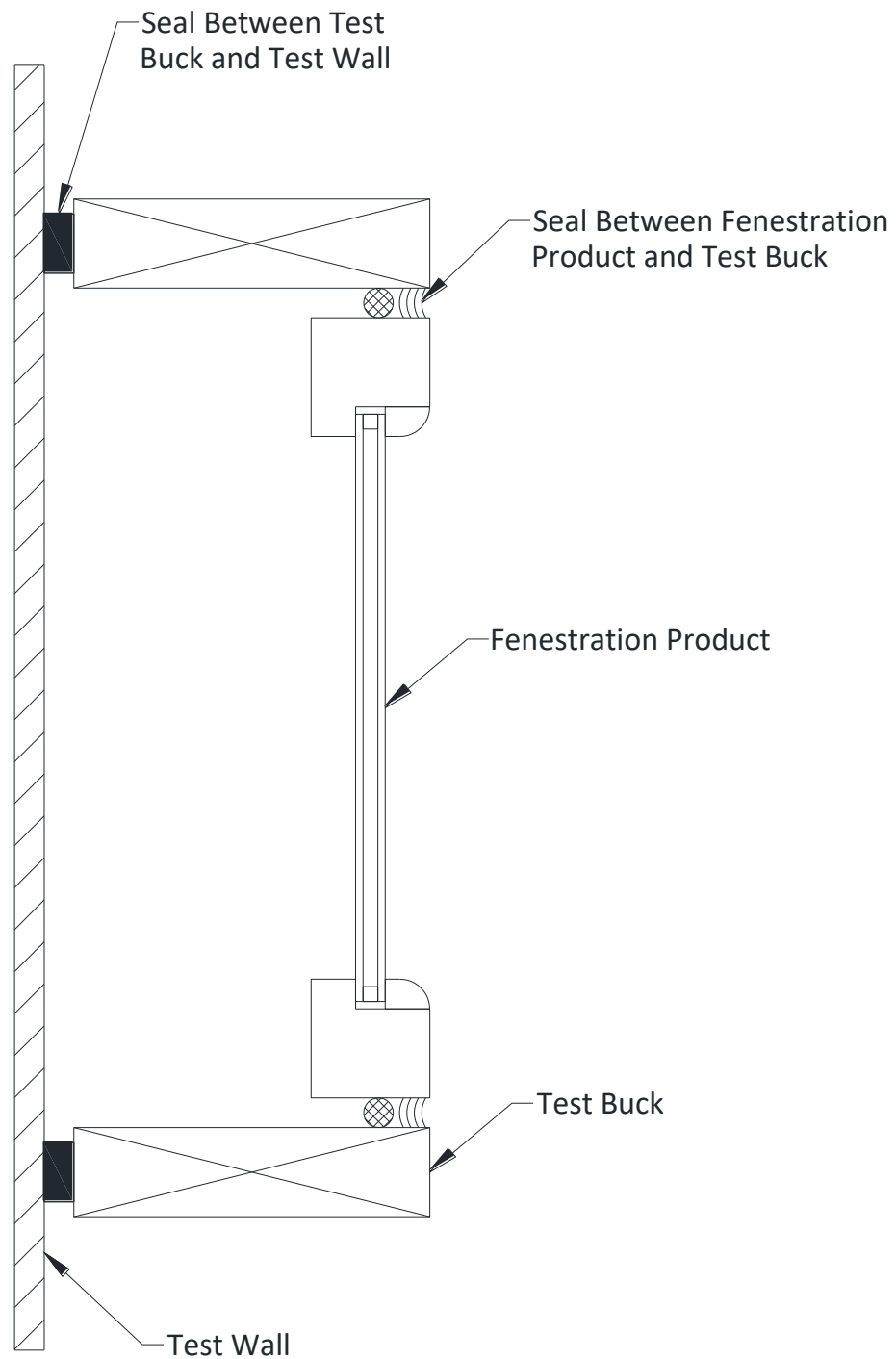
Appendix A

Alteration Addendum

No alterations were performed.

Appendix B

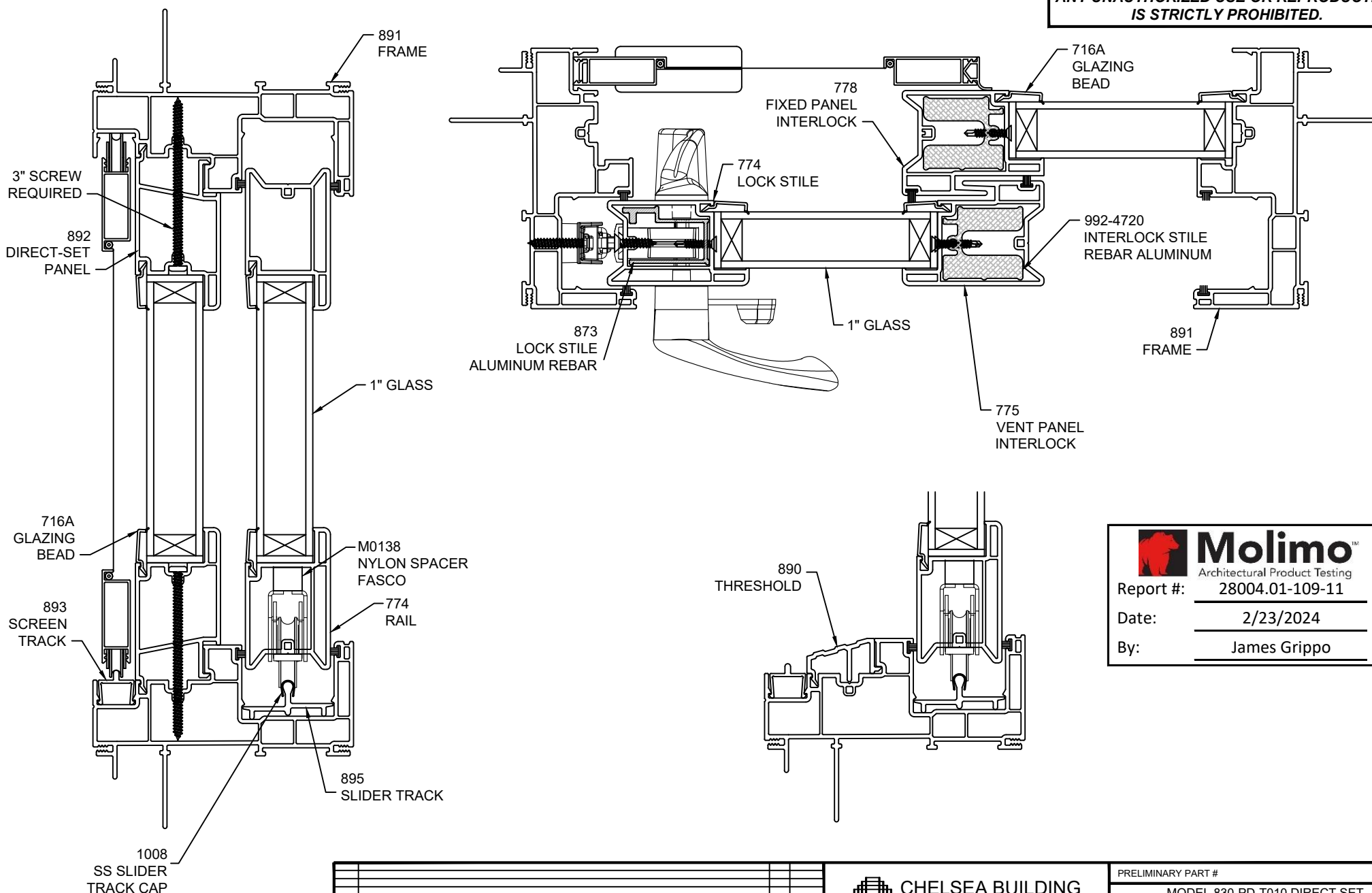
Air Seal Location



Appendix C

Drawings

COPYRIGHT 2012
THIS DRAWING AND ITS CONTENTS
ARE THE SOLE PROPERTY OF
CHELSEA BUILDING PRODUCTS, INC.
ANY UNAUTHORIZED USE OR REPRODUCTION
IS STRICTLY PROHIBITED.



Molimo™
 Architectural Product Testing

Report #: 28004.01-109-11

Date: 2/23/2024

By: James Grippo

No.	REVISION	BY	DATE
6	UPDATED DP50 ALUMINUM	EAS	11-14-23
5	ADDED FASCO M0138 NYLON SPACER, WO#17185	BLG	08/15/17
4	ADDED DP50 STEEL REBAR LAYER	BLG	03/13/13
3	GLAZING COVER 846 REPLACED 9026	BLG	10/23/12
2	UPDATED REBAR	EAS	08-24-12
1	ADDED BEAD LAYERS & MADE 7/8" GLASS STANDARD, ADDED STEEL REBAR TO LOCK STILE	JPP	07-11-12



CHELSEA BUILDING PRODUCTS, INC.

565 CEDAR WAY, OAKMONT PA 15139

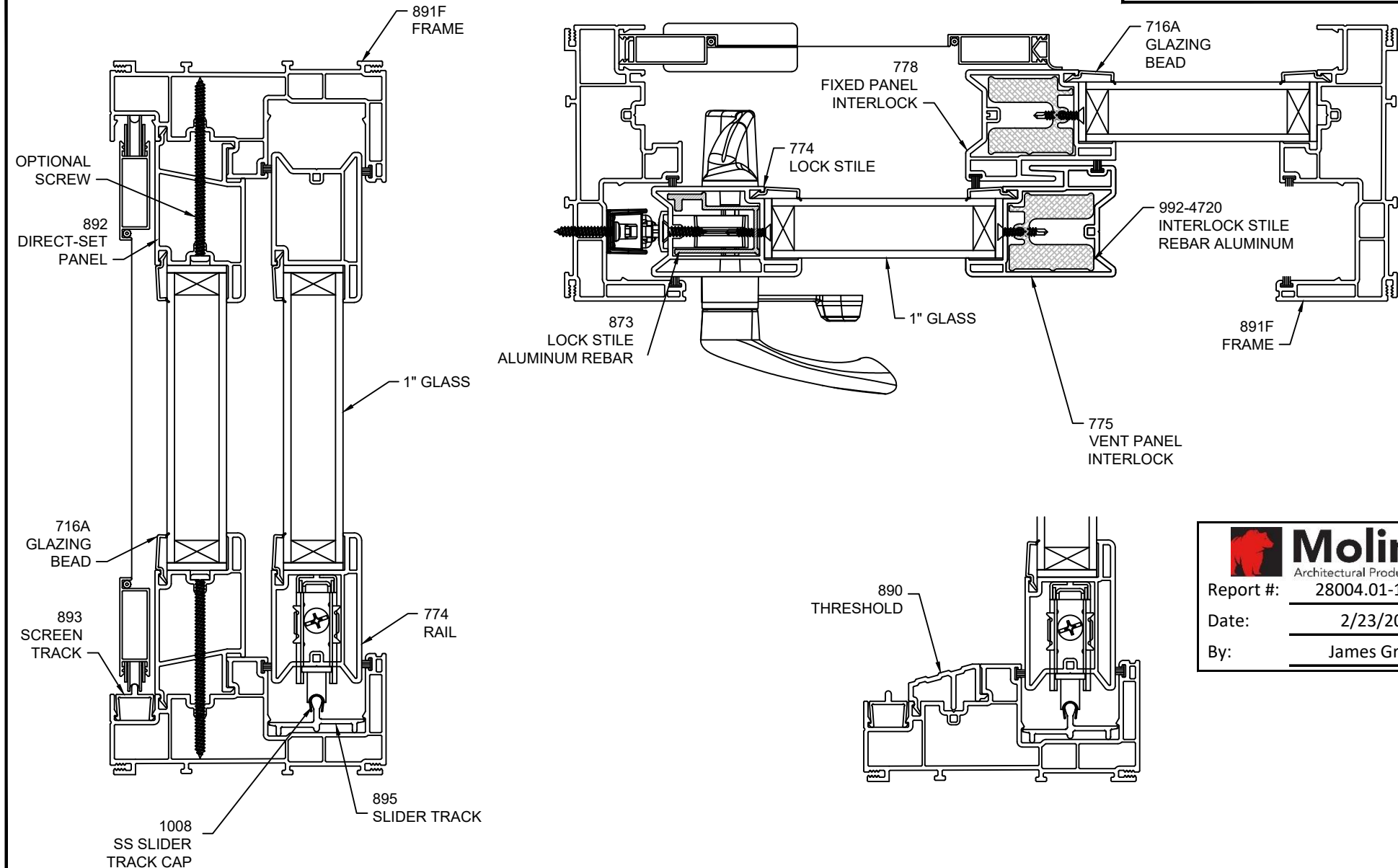
Tel. 412-826-8077, Fax 412-826-0113
 www.chelseabuildingproducts.com

PRELIMINARY PART #

MODEL 830-PD-T010 DIRECT SET
 NEW CONSTRUCTION XO-OX PATIO DOOR

DRAWN BY: EAS	DESIGNED BY:	DATE 05-02-12	SCALE NTS-1
CHECKED BY:	APPROVED BY:	DRAWING No. 830s002	

COPYRIGHT 2012
THIS DRAWING AND ITS CONTENTS
ARE THE SOLE PROPERTY OF
CHELSEA BUILDING PRODUCTS, INC.
ANY UNAUTHORIZED USE OR REPRODUCTION
IS STRICTLY PROHIBITED.



MolimoTM
 Architectural Product Testing

Report #: 28004.01-109-11

Date: 2/23/2024

By: James Grippo

No.	REVISION	BY	DATE
7	UPDATED DP50 ALUMINUM	EAS	11-14-23
6	UPDATED INTERLOCK HARDWARE	EAS	08-07-23
5	ADDED PASCO M0138 NYLON SPACER, WQ#17185	BLG	08/15/17
4	ADDED DP50 STEEL REBAR LAYER	BLG	03/13/13
3	GLAZING COVER 846 REPLACED 9026	BLG	10/23/12
2	UPDATED REBAR	EAS	09-24-12
1	ADDED BEAD LAYERS & MADE 7/8" GLASS STANDARD, ADDED STEEL REBAR TO LOCK STILE	JPP	07-11-12



CHELSEA BUILDING
PRODUCTS, INC.

565 CEDAR WAY, OAKMONT PA 15139

Tel. 412-826-8077, Fax 412-826-0113
 www.chelseabuildingproducts.com

PRELIMINARY PART #

MODEL 800-PD-T010 DIRECT SET
 REPLACEMENT XO-OX PATIO DOOR

DRAWN BY:	DESIGNED BY:	DATE	SCALE
EAS		05-02-12	NTS-1
CHECKED BY:	APPROVED BY:	DRAWING No.	
		800s002	

BILL OF MATERIALS
Model 800-PD-T030
Direct Set XO-OX Patio Door Replacement DP50
February 23, 2024

800pdt030.doc Page 1 of 2

ITEM	DESCRIPTION	CBP PART	QTY	MATERIAL/SOURCE	NOTES
1	Master Frame	891F	4	CBP	2
2	Rail	774	2	CBP	2
3	Lock Stile	774	1	CBP	2
4	Vent Panel Interlock	775	1	CBP	2
5	Fixed Panel Interlock	778	1	CBP	2
6	Threshold	890	2	CBP	2
7	Direct-Set Panel	892	2	CBP	2
8	Glazing Bead (7/8" Glass)	736A	8	CBP	2
9	Screen Track Adapter	893	1	CBP	2
10	Sill Track	895	1	CBP	2
11	Sill Track Stainless Steel Cap	1008	1	Hygrade #TC3	1
12	Lock Rebar (Aluminum)	873	1	Star Extruded Shapes	1
13	Interlock Rebar (Aluminum)	992-4720	2	BRT #19686	1
14	Glazing Tape (1/16" x 3/8")		AR	Lamatek HGT	1
15	Glazing Block (1/8" x 7/8" x 2")		AR	Tremco	1
16	Fixed Post Clip		2	Fasco #992-3465	1
17	Hole Plug (Roller Adjustment & Fixed Post)		4	Ashland #9946	2
18	Roller Assembly		2	Fasco #21008	1
19	Roller Nylon Support Spacer		2	Fasco #M0138	1
SCREWS (#410 Stainless Steel or Zinc Plated)					
20	Roller Assembly		4	#8 x 1/2" PH Flat HD, Type AB, SMS	
21	Direct-Set Panel (thru fixed post)		AR	#8 x 3" PH Pan HD, Type AB SMS	
22	Direct-Set Panel (optional thru frame)		AR	#8 x 3" PH Pan HD, Type AB SMS	
23	Installation		4	#8 x 2-1/2" PH Pan HD, Type AB, SMS	
24	Fixed Post Clip		8	#8 w/#6 Head x 1" PH Flat HD Type A (Merchants Fasteners)	
25	Rebar		AR	#6 x 3/4" PH Flat HD, TEK (Self-drilling)	
WEATHERSTRIPPING					
26	Center Fin Pile (Frame)		AR	.187 x .250	
27	Center Fin Pile (Interlocks)		AR	.187 x .300	
28	Dust Plug (Interlock)		AR	Ultrafab #D5096AMW 1.500" x .500" x .562"	
Fasco Hardware					
29	97 Series Lock Set		1	97BX72ACS14- SWS WHITE 97BX72ACS17- BEIGE 97BX72ACS10- BLACK	3
30	97 Series Lock Set With Key Lock		1	97BX72ACS14K- SWS WHITE 97BX72ACS17K- BEIGE 97BX72ACS10K- BLACK	3

OPTIONAL					
31	Transom Clip	927	AR	CBP	2
32	1/2" Mullion Clip	849	AR	CBP	2
33	Frame Adapter	894	1	CBP	2
34	Glazing Bead (3/4" Glass)	788	8	CBP	2
35	Glazing Bead (1" Glass)	716A	8	CBP	2
36	Glazing Block (1/8" x 1" x 2")		AR	Tremco	1
37	Silicone Glazing Sealant		AR	Pecora #895	1
38	Lock Rebar (Steel)	974	1	Elliot S562 (ref: Fab 974f4)	1
39	Sash Interlock Rebar (Steel)	973	1	Elliot S561	1
40	DP50 Steel Rebar - Large	997	1	Elliot S608	1
41	DP50 Steel Rebar - Small	998	1	Elliot S607	1
42	Structural Mullion (Aluminum) For use with 849 2 pc. 1/2" Mull Clips			BRT #51160	1
43	Screen Frame		AR	Customer Supplied	2
44	Door Stop (Rubber)		AR	Fasco- White M0134 Beige M0135	1
45	Foot Lock		AR	Fasco Hardware FLK1A59-xx	2
46	Swivel Anchor Installation Bracket		AR	Speck Tool LTD #CTM1450	1

NOTES:

- 1 = Or approved equivalent
2 = Specify Color (White, Beige, Brown)
3 = Specify Fasco Hardware Color/Finish

No.	Revision	By	Date
1	Created	EAS	02-23-24

 Molimo Architectural Product Testing	Report #:	28004.01-109-11
	Date:	2/23/2024
	By:	James Grippo

**BILL OF MATERIALS
Model 830-PD-T030**

Direct Set XO-OX Patio Door New Construction DP50

February 23, 2024

830pdt030.doc Page 1 of 2

ITEM	DESCRIPTION	CBP PART	QTY	MATERIAL/SOURCE	NOTES
1	Master Frame	891	4	CBP	2
2	Rail	774	2	CBP	2
3	Lock Stile	774	1	CBP	2
4	Vent Panel Interlock	775	1	CBP	2
5	Fixed Panel Interlock	778	1	CBP	2
6	Threshold	890	2	CBP	2
7	Direct-Set Panel	892	2	CBP	2
8	Glazing Bead (7/8" Glass)	736A	8	CBP	2
9	Screen Track Adapter	893	1	CBP	2
10	Sill Track	895	1	CBP	2
11	Sill Track Stainless Steel Cap	1008	1	Hygrade #TC3	1
12	Lock Rebar (Aluminum)	873	1	Star Extruded Shapes	1
13	Interlock Rebar (Aluminum)	992-4720	2	BRT #19686	1
14	Glazing Tape (1/16" x 3/8")		AR	Lamatek HGT	1
15	Glazing Block (1/8" x 7/8" x 2")		AR	Tremco	1
16	Fixed Post Clip		2	Fasco #992-3465	1
17	Hole Plug (Roller Adjustment & Fixed Post)		4	Ashland #9946	2
18	Roller Assembly		2	Fasco #21008	1
19	Roller Nylon Support Spacer		2	Fasco #M0138	1
SCREWS (#410 Stainless Steel or Zinc Plated)					
20	Roller Assembly		4	#8 x 1/2" PH Flat HD, Type AB, SMS	
21	Direct-Set Panel (thru fixed post)		AR	#8 x 3" PH Pan HD, Type AB SMS	
22	Direct-Set Panel (required thru frame)		AR	#8 x 3" PH Pan HD, Type AB SMS	
23	Fixed Post Clip		8	#8 w/#6 Head x 1" PH Flat HD Type A (Merchants Fasteners)	
24	Rebar		AR	#6 x 3/4" PH Flat HD, TEK (Self-drilling)	
WEATHERSTRIPPING					
25	Center Fin Pile (Frame)		AR	.187 x .250	
26	Center Fin Pile (Interlocks)		AR	.187 x .300	
27	Dust Plug (Interlock)		AR	Ultrafab #D5096AMW 1.500" x .500" x .562"	
Fasco Hardware					
28	97 Series Lock Set		1	97BX72ACS14- SWS WHITE 97BX72ACS17- BEIGE 97BX72ACS10- BLACK	3
29	97 Series Lock Set With Key Lock		1	97BX72ACS14K- SWS WHITE 97BX72ACS17K- BEIGE 97BX72ACS10K- BLACK	3

OPTIONAL					
30	Transom Clip	927	AR	CBP	2
31	1/2" Mullion Clip	849	AR	CBP	2
32	Frame Adapter	894	1	CBP	2
33	Drip Cap for Fin & J-Channel	820	AR	CBP	2
34	Drip Cap for Fin Only	821	AR	CBP	2
35	Glazing Bead (3/4" Glass)	788	8	CBP	2
36	Glazing Bead (1" Glass)	716A	8	CBP	2
37	Glazing Block (1/8" x 1" x 2")		AR	Tremco	1
38	Lock Rebar (Steel)	974	1	Elliot S562 (ref: Fab 974f4)	1
39	Sash Interlock Rebar (Steel)	973	1	Elliot S561	1
40	DP50 Steel Rebar - Large	997	1	Elliot S608	1
41	DP50 Steel Rebar - Small	998	1	Elliot S607	1
42	Silicone Glazing Sealant		AR	Pecora #895	1
43	Structural Mullion (Aluminum) For use with 849 2 pc. 1/2" Mull Clips			BRT #51160	
44	Screen Frame		AR	Customer Supplied	2
45	Door Stop (Rubber)		AR	Fasco- White M0134 Beige M0135	1
46	Foot Lock		AR	Fasco Hardware FLK1A59-xx	2
47	Swivel Anchor Installation Bracket		AR	Speck Tool LTD #CTM1450	1

NOTES:

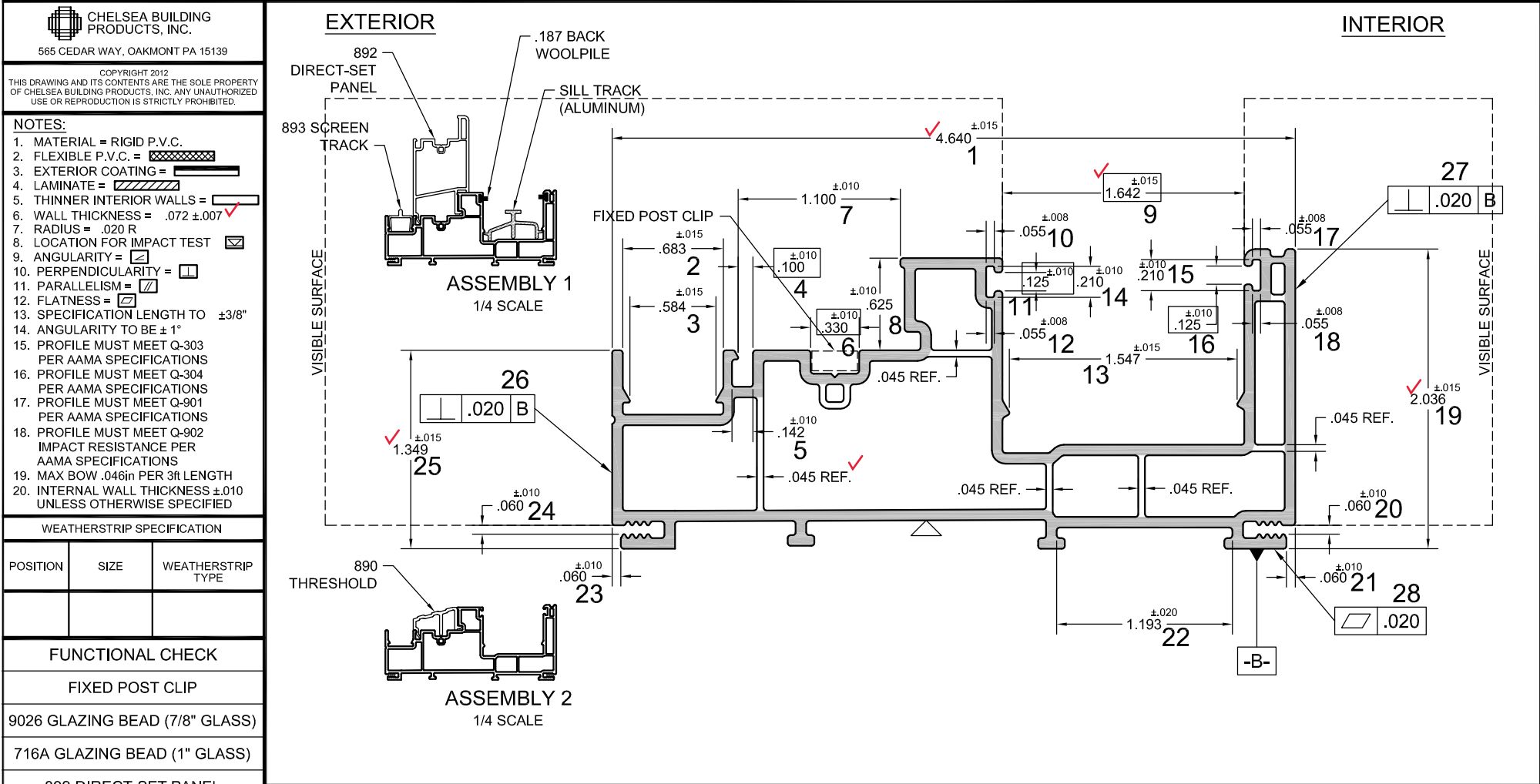
- 1 = Or approved equivalent
2 = Specify Color (White, Beige, Brown)
3 = Specify Fasco Hardware Color/Finish

No.	Revision	By	Date
1	Created	EAS	02-23-24

	Molimo TM Architectural Product Testing
Report #:	28004.01-109-11
Date:	2/23/2024
By:	James Grippo

QC PRINT NUMBER: 891FQC		DRAWN BY: EAS		CHECKED BY:		APPROVED BY:		DEVELOP <input type="checkbox"/> INPROCESS <input type="checkbox"/> PRODUCTION <input type="checkbox"/>	
PART NAME: 891F		DESCRIPTION: PATIO DOOR FRAME			SUPPLIER/PLANT: CHELSEA BUILDING PRODUCTS				

ILLUSTRATION OF PART AND CONTROL POINTS

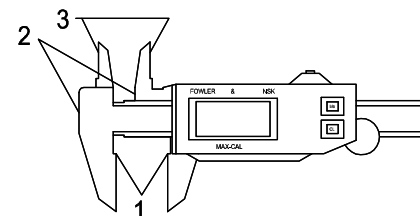


WEATHERSTRIP SPECIFICATION						CUSTOMER LENGTH	CHELSEA CUT LENGTH	TOLERANCE
POSITION	SIZE	WEATHERSTRIP TYPE						
FUNCTIONAL CHECK								
FIXED POST CLIP								
9026 GLAZING BEAD (7/8" GLASS)								
716A GLAZING BEAD (1" GLASS)								
892 DIRECT-SET PANEL								
890 THRESHOLD								
893 SCREEN TRACK								
DRAWN DATE: 05-03-12			NO. REVISION	BY	DATE			

Use the caliper diagram as your guide to measure the following control points.
 Measure the following control points using #1 on the caliper diagram:
 Measure the following control points using #2 on the caliper diagram:
 Measure the following control points using #3 on the caliper diagram:
 Measure the following control points using #4 on the caliper diagram:

Frequency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
 Auditor- 1 sample per shift recorded 1 hour after shift start.

IF ANY CONTROL POINTS ARE NOT IN SPEC.
 CORRECTIVE ACTION REQUIRED




	Report #:	28004.01-109-11
	Date:	2/23/2024
	By:	James Grippo
	4	

PART NAME:892

DESCRIPTION:PATIO DOOR DIRECT-SET PANEL

SUPPLIER/PLANT:CHELSEA BUILDING PRODUCTS

ILLUSTRATION OF PART AND CONTROL POINTS












CHELSEA BUILDING PRODUCTS, INC.
565 CEDAR WAY, OAKMONT PA 15139

COPYRIGHT 2012

THIS DRAWING AND ITS CONTENTS ARE THE SOLE PROPERTY OF CHELSEA BUILDING PRODUCTS, INC. ANY UNAUTHORIZED USE OR REPRODUCTION IS STRICTLY PROHIBITED.

NOTES:

- MATERIAL = RIGID P.V.C.
- FLEXIBLE P.V.C. = 
- EXTERIOR COATING = 
- LAMINATE = 
- THINNER INTERIOR WALLS = 
- WALL THICKNESS = .072 ±.007 ✓
- RADIUS = .020 R
- LOCATION FOR IMPACT TEST 
- ANGULARITY = 
- PERPENDICULARITY = 
- PARALLELISM = 
- FLATNESS = 
- SPECIFICATION LENGTH TO ±3/8"
- ANGULARITY TO BE ±1°
- PROFILE MUST MEET Q-303 PER AAMA SPECIFICATIONS
- PROFILE MUST MEET Q-304 PER AAMA SPECIFICATIONS
- PROFILE MUST MEET Q-901 PER AAMA SPECIFICATIONS
- PROFILE MUST MEET Q-902 IMPACT RESISTANCE PER AAMA SPECIFICATIONS
- MAX BOW .046in PER 3ft LENGTH
- INTERNAL WALL THICKNESS ±.010 UNLESS OTHERWISE SPECIFIED

WEATHERSTRIP SPECIFICATION

POSITION	SIZE	WEATHERSTRIP TYPE

FUNCTIONAL CHECK

891 FRAME
GLAZING BEAD (7/8" GLASS)
716A GLAZING BEAD (1" GLASS)

EXTERIOR

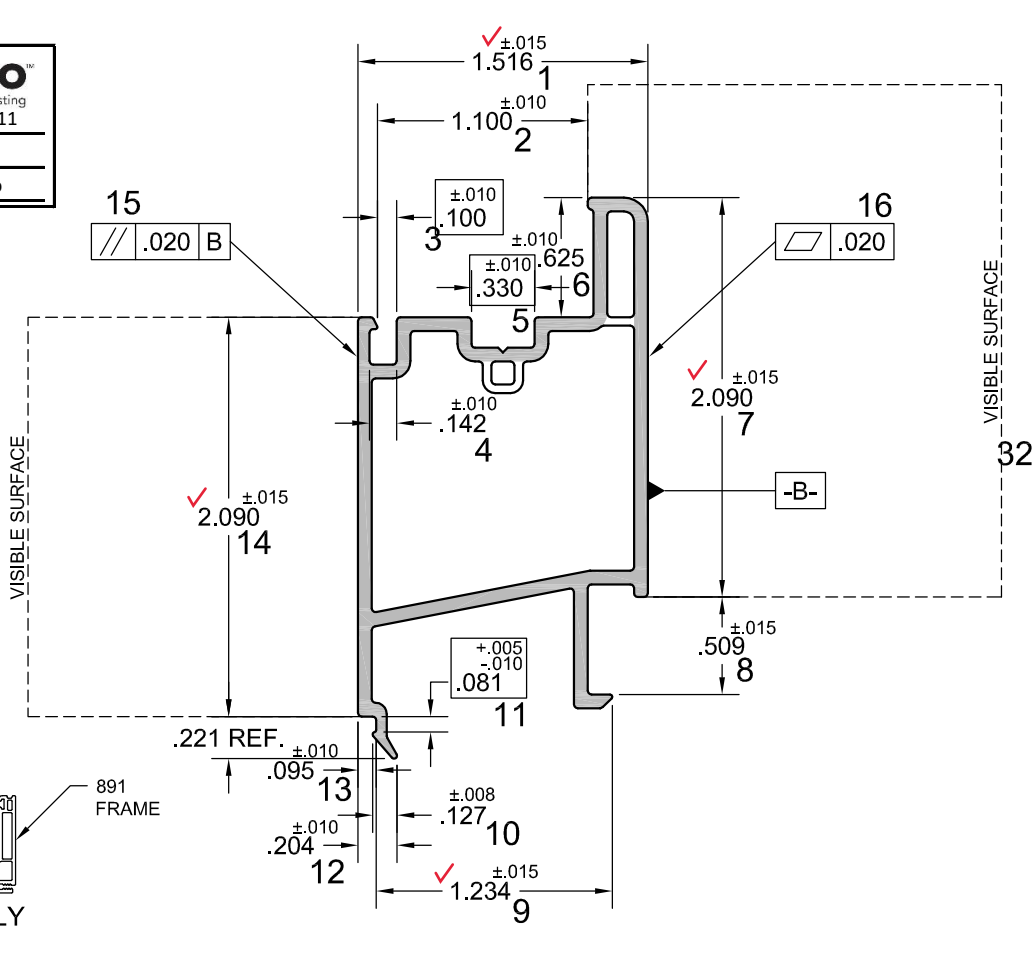


Molimo[™]
Architectural Product Testing

Report #:28004.01-109-11

Date:2/23/2024

By:James Grippio



				CUSTOMER LENGTH	CHELSEA CUT LENGTH	TOLERANCE
DRAWN DATE: 04-03-12						
NO. REVISION				BY	DATE	

Use the caliper diagram as your guide to measure the following control points.
Measure the following control points using #1 on the caliper diagram:
Measure the following control points using #2 on the caliper diagram:
Measure the following control points using #3 on the caliper diagram:
Measure the following control points using #4 on the caliper diagram:

Frequency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
Auditor- 1 sample per shift recorded 1 hour after shift start.

IF ANY CONTROL POINTS ARE NOT IN SPEC.
CORRECTIVE ACTION REQUIRED

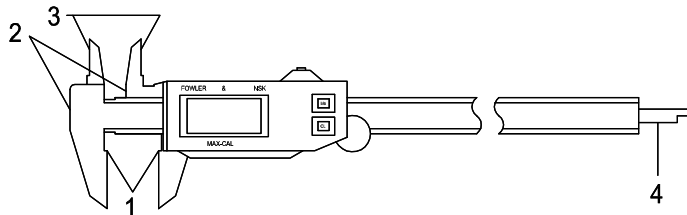


ILLUSTRATION OF PART AND CONTROL POINTS

CHELSEA BUILDING PRODUCTS, INC.
565 CEDAR WAY, OAKMONT PA 15139

COPYRIGHT 2011
THIS DRAWING AND ITS CONTENTS ARE THE SOLE PROPERTY OF CHELSEA BUILDING PRODUCTS, INC. ANY UNAUTHORIZED USE OR REPRODUCTION IS STRICTLY PROHIBITED.

- NOTES:
- MATERIAL = RIGID P.V.C.
 - FLEXIBLE P.V.C. =
 - EXTERIOR COATING =
 - LAMINATE =
 - THINNER INTERIOR WALLS =
 - WALL THICKNESS = 0.071 ✓
 - RADIUS =
 - LOCATION FOR IMPACT TEST
 - ANGULARITY TO BE
 - PERPENDICULARITY =
 - PARALLELISM =
 - FLATNESS =
 - SPECIFICATION LENGTH TO
 - ANGULARITY TO BE ± 1°
 - PROFILE MUST MEET Q-303 ±3/8" PER AAMA SPECIFICATIONS
 - PROFILE MUST MEET Q-304 PER AAMA SPECIFICATIONS
 - PROFILE MUST MEET Q-901 PER AAMA SPECIFICATIONS
 - PROFILE MUST MEET Q-902 IMPACT RESISTANCE PER AAMA SPECIFICATIONS
 - MAX BOW .046in PER 3ft LENGTH
 - INTERNAL WALL THICKNESS ±.010 UNLESS OTHERWISE SPECIFIED

WEATHERSTRIP SPECIFICATION

POSITION	SIZE	WEATHERSTRIP TYPE

FUNCTIONAL CHECK

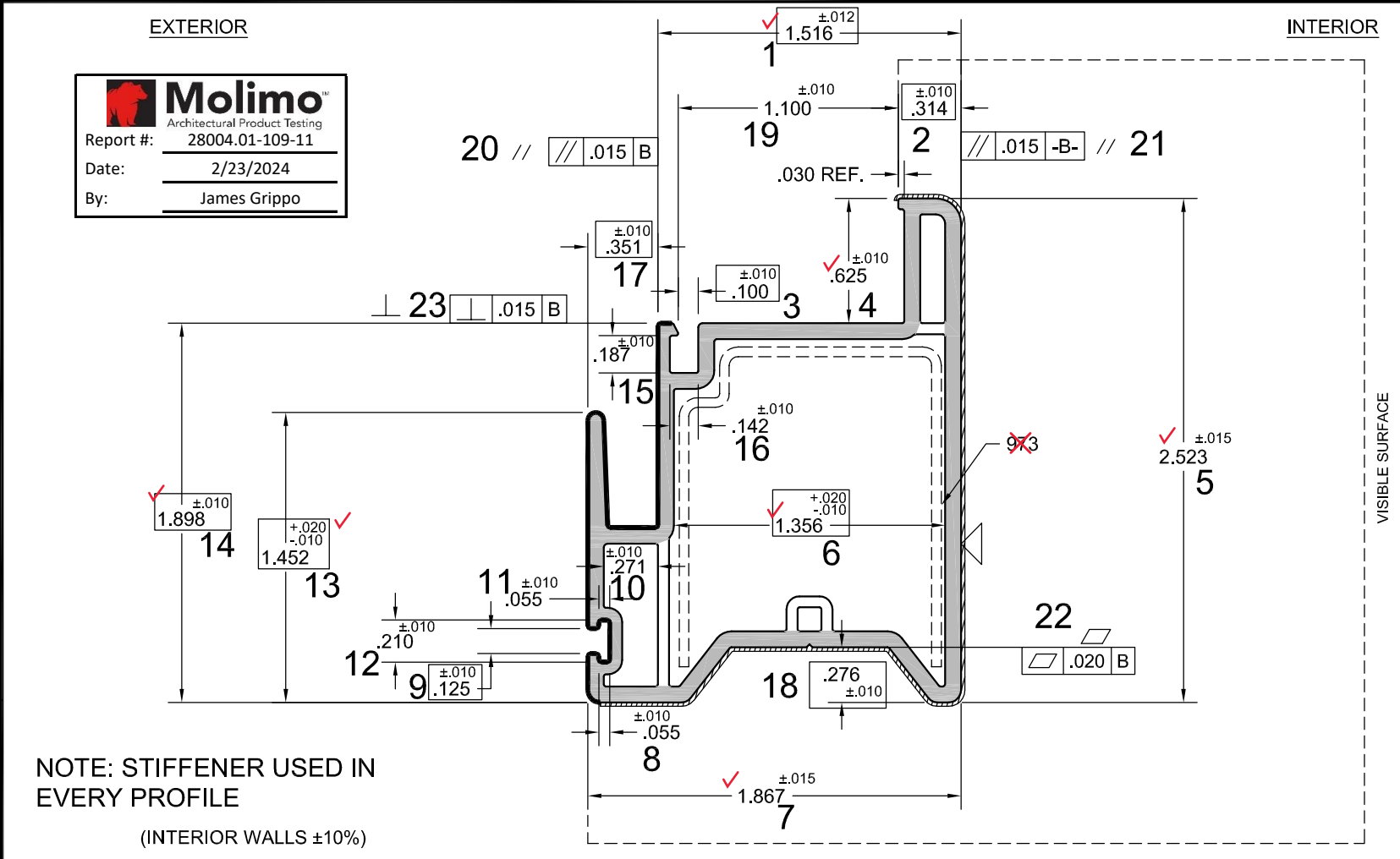
- 716A GLAZING BEAD
- WOOLPILE (.187)
- 975 REBAR

DRAWN DATE: 02-25-04

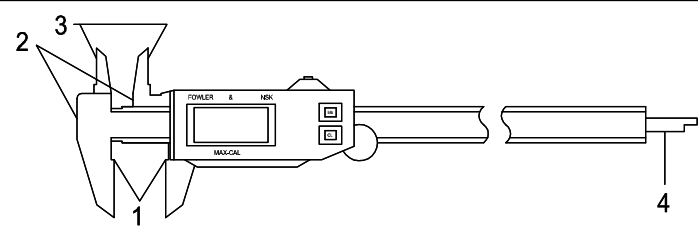
Use the caliper diagram as your guide to measure the following control points.
Measure the following control points using #1 on the caliper diagram:
Measure the following control points using #2 on the caliper diagram:
Measure the following control points using #3 on the caliper diagram:
Measure the following control points using #4 on the caliper diagram:


Frequency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
Auditor- 1 sample per shift recorded 1 hour after shift start.

IF ANY CONTROL POINTS ARE NOT IN SPEC.
CORRECTIVE ACTION REQUIRED



NO.	REVISION	DATE	CUSTOMER LENGTH	CHELSEA CUT LENGTH	TOLERANCE
4	ADDED DIM 19; WO#5001	JPP 01-12-05			
3	REVISED GEO TOLS, UPDATED STIFFENER; WO#5001	JPP 01-06-05			
2	ADDED DIM. NO. 18 .276 ±.010 AND STIIFENER NOTE	BLG 09/28/04			
1	UPDATED PART	JPP 07-28-04			













CHELSEA BUILDING
PRODUCTS, INC.

565 CEDAR WAY, OAKMONT PA 15139

COPYRIGHT 2012
THIS DRAWING AND ITS CONTENTS ARE THE SOLE PROPERTY
OF CHELSEA BUILDING PRODUCTS, INC. ANY UNAUTHORIZED
USE OR REPRODUCTION IS STRICTLY PROHIBITED.

- NOTES:
- MATERIAL = RIGID P.V.C.
 - FLEXIBLE P.V.C. = 
 - EXTERIOR COATING = 
 - LAMINATE = 
 - THINNER INTERIOR WALLS = 
 - WALL THICKNESS = .078 ±.008 ☒
 - RADIUS = .020 R
 - LOCATION FOR IMPACT TEST ☒
 - ANGULARITY = 
 - PERPENDICULARITY = 
 - PARALLELISM = 
 - FLATNESS = 
 - SPECIFICATION LENGTH TO ±3/8"
 - ANGULARITY TO BE ± 1°
 - PROFILE MUST MEET Q-303 PER AAMA SPECIFICATIONS
 - PROFILE MUST MEET Q-304 PER AAMA SPECIFICATIONS
 - PROFILE MUST MEET Q-901 PER AAMA SPECIFICATIONS
 - PROFILE MUST MEET Q-902 IMPACT RESISTANCE PER AAMA SPECIFICATIONS
 - MAX BOW .046in PER 3ft LENGTH
 - INTERNAL WALL THICKNESS ±.010 UNLESS OTHERWISE SPECIFIED

WEATHERSTRIP SPECIFICATION		
POSITION	SIZE	WEATHERSTRIP TYPE

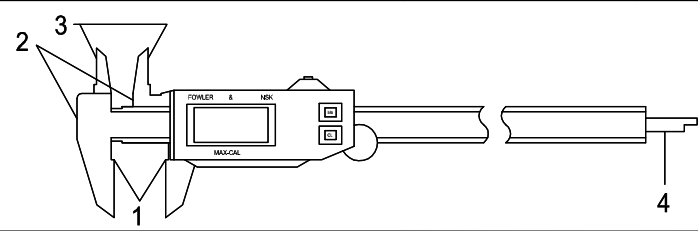
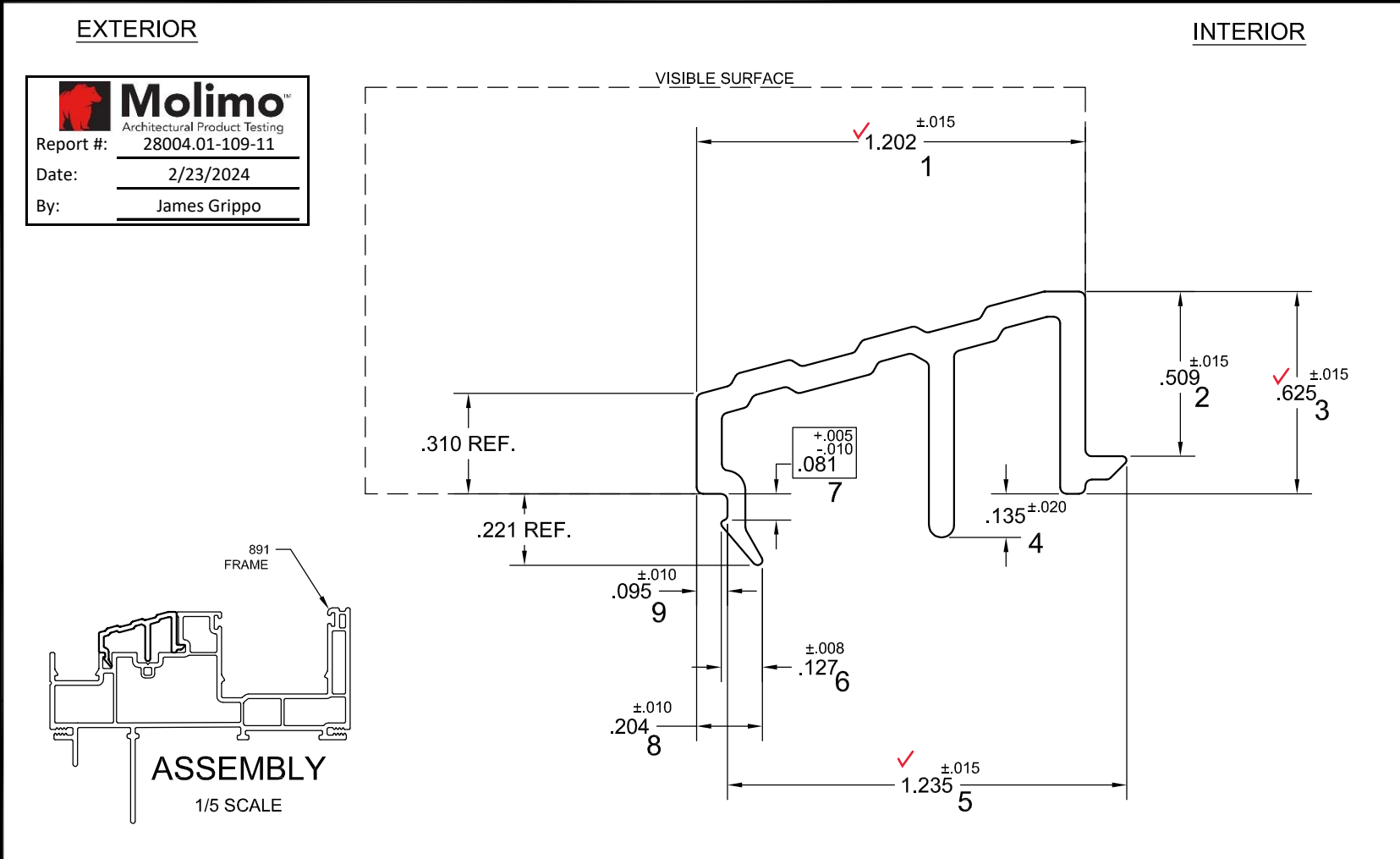
FUNCTIONAL CHECK	
891 FRAME	



				CUSTOMER LENGTH	CHELSEA CUT LENGTH	TOLERANCE
2	REVISED BORDER					
1	.135 DIM WAS .145; WO#12174	DRN	05-21-13			
NO. REVISION		EAS	09-12-12			
		BY	DATE			

Use the caliper diagram as your guide to measure the following control points.
Measure the following control points using #1 on the caliper diagram:
Measure the following control points using #2 on the caliper diagram:
Measure the following control points using #3 on the caliper diagram:
Measure the following control points using #4 on the caliper diagram:

Frequency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
Auditor- 1 sample per shift recorded 1 hour after shift start.

IF ANY CONTROL POINTS ARE NOT IN SPEC.
CORRECTIVE ACTION REQUIRED



MATERIAL = 410 STAINLESS STEEL			
PRELIMINARY PART #			
UNLESS OTHERWISE SPECIFIED			
MATERIAL	STEEL		
CAPSTOCK REQ'D		WALLS	.020
FLEXIBLE P.V.C.		RADII	.015 R
TOTAL AREA	.0135	ANGULARITY	±1°
TOTAL WT/FT	.0085		
TITLE			
PATIO DOOR SILL TRACK CAP			
DRAWN BY:	DESIGNED BY:	DATE	SCALE
MS		1-13-93	NTS-10
CHECKED BY:	APPROVED BY:	DRAWING No.	
		1008	

QC PRINT NUMBER: 716AQC		DRAWN BY: EAS		CHECKED BY:		APPROVED BY:		DEVELOP		INPROCESS		PRODUCTION	
PART NAME: 716A		DESCRIPTION: GLAZING BEAD				SUPPLIER/PLANT: CHELSEA BUILDING PRODUCTS							

ILLUSTRATION OF PART AND CONTROL POINTS



CHELSEA BUILDING PRODUCTS, INC.

565 CEDAR WAY, OAKMONT PA 15139

COPYRIGHT 2012

THIS DRAWING AND ITS CONTENTS ARE THE SOLE PROPERTY OF CHELSEA BUILDING PRODUCTS, INC. ANY UNAUTHORIZED USE OR REPRODUCTION IS STRICTLY PROHIBITED.

NOTES:

1. MATERIAL = RIGID P.V.C.
2. FLEXIBLE P.V.C. =
3. EXTERIOR COATING =
4. LAMINATE =
5. THINNER INTERIOR WALLS =
6. WALL THICKNESS = .045 ±.005 ✓
7. RADIUS = .010
8. LOCATION FOR IMPACT TEST
9. ANGULARITY =
10. PERPENDICULARITY =
11. PARALLELISM =
12. FLATNESS =
13. SPECIFICATION LENGTH TO
14. ANGULARITY TO BE ± 1°
15. PROFILE MUST MEET Q-303 ±3/8" PER AAMA SPECIFICATIONS
16. PROFILE MUST MEET Q-304 PER AAMA SPECIFICATIONS
17. PROFILE MUST MEET Q-901 PER AAMA SPECIFICATIONS
18. PROFILE MUST MEET Q-902 IMPACT RESISTANCE PER AAMA SPECIFICATIONS
19. MAX BOW .046in PER 3ft LENGTH
20. INTERNAL WALL THICKNESS ±.010 UNLESS OTHERWISE SPECIFIED

WEATHERSTRIP SPECIFICATION

POSITION	SIZE	WEATHERSTRIP TYPE

FUNCTIONAL CHECK

705 LIFT RAIL

706 LOCK RAIL

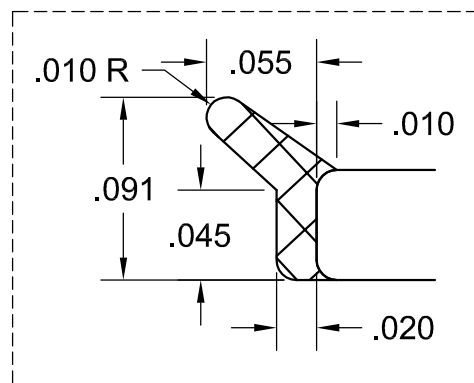
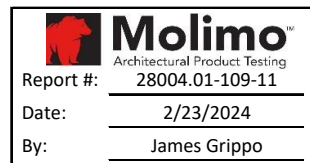
707 KEEPER RAIL

ALL PARTS ARE TO BE PACKED IN SAME DIRECTION

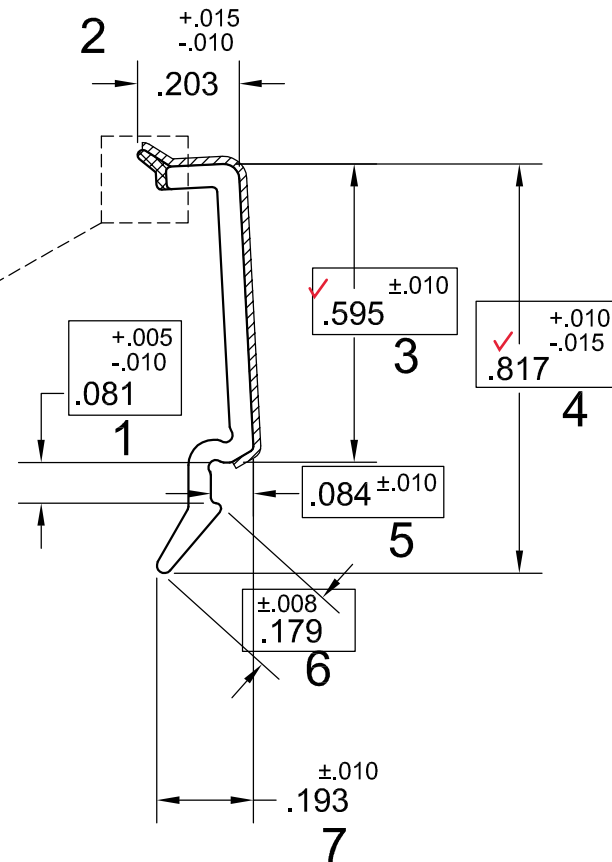
FLEX

W, OW, CW - USE WHITE FLEX

B, SND - USE BEIGE FLEX



FLEX DETAIL
SCALE = 4X



6	ADDED PACK NOTE; WO#13130	EAS	06-20-13	CUSTOMER LENGTH	CHELSEA CUT LENGTH	TOLERANCE
5	REVISED DIM 6; ADDED CRITICALS PER PLANT MANAGER REQUEST	EAS	06-11-13			
4	REVISED BORDER	DRN	05-21-13			
3	ADDED FLEX NOTE	DRN	05-21-13			
2	REVISED DIM .193 TOL & DIM .128 TOL	EAS	05-12-08			
1	REVISED SNAP IN LEG; DIM .193 WAS .198; DIM .128 WAS .138	EAS	06-04-07			
NO.	REVISION	BY	DATE			

DRAWN DATE: 04-24-07

Use the caliper diagram as your guide to measure the following control points.

Measure the following control points using #1 on the caliper diagram: 2,3,4,6,7

Measure the following control points using #2 on the caliper diagram: 5

Measure the following control points using #3 on the caliper diagram: 1

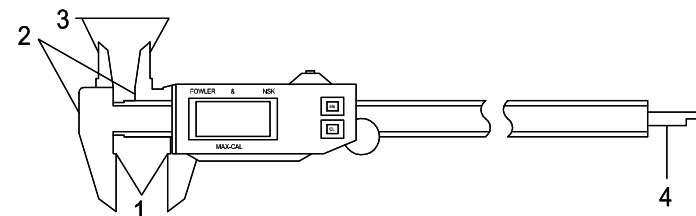
Measure the following control points using #4 on the caliper diagram:

Frequency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.

Auditor- 1 sample per shift recorded 1 hour after shift start.

IF ANY CONTROL POINTS ARE NOT IN SPEC.

CORRECTIVE ACTION REQUIRED



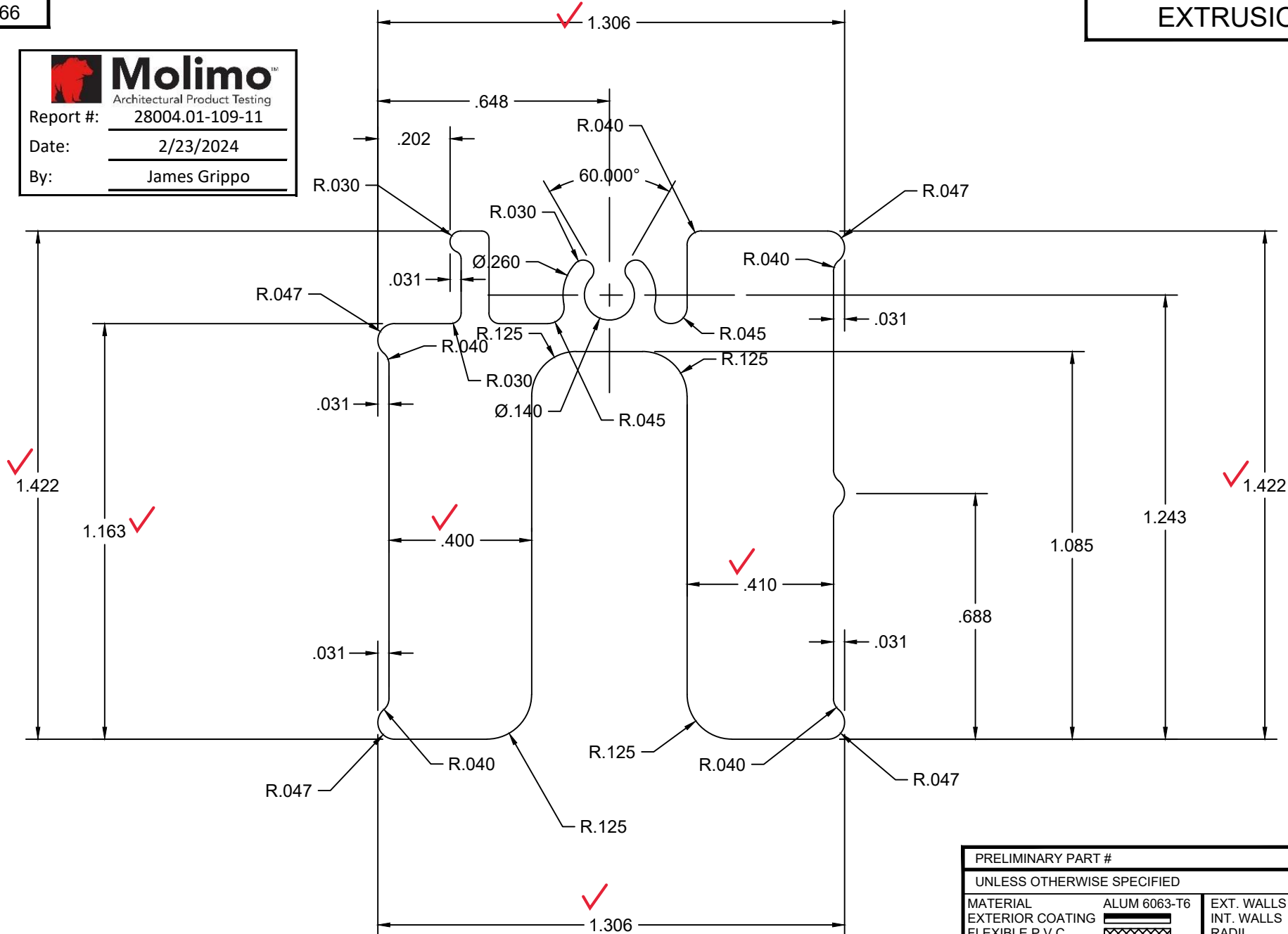


Molimo™
Architectural Product Testing

Report #: 28004.01-109-11

Date: 2/23/2024

By: James Grippo



PRELIMINARY PART

UNLESS OTHERWISE SPECIFIED

MATERIAL	ALUM 6063-T6	EXT. WALLS	.078
EXTERIOR COATING		INT. WALLS	
FLEXIBLE P.V.C.		RADII	.020 R
TOTAL AREA	1.1386 SQIN	ANGULARITY	±1°
STANDARD WT/FT	1.3390 LB		

800 SERIES PATIO DOOR DP50 INTERLOCK REBAR

DRAWN BY: EAS	DESIGNED BY: EAS	DATE 10-23-23	SCALE NTS-1
CHECKED BY:	APPROVED BY:	DRAWING No. 992-4720	



**CHELSEA BUILDING
PRODUCTS**

a member of aluplast group

565 CEDAR WAY, OAKMONT PA 15139

COPYRIGHT 2023

THIS DRAWING AND ITS CONTENTS ARE THE SOLE PROPERTY
OF CHELSEA BUILDING PRODUCTS, INC. ANY UNAUTHORIZED
USE OR REPRODUCTION IS STRICTLY PROHIBITED.

1	CREATED	EAS	10-23-23
No.	REVISION	BY	DATE



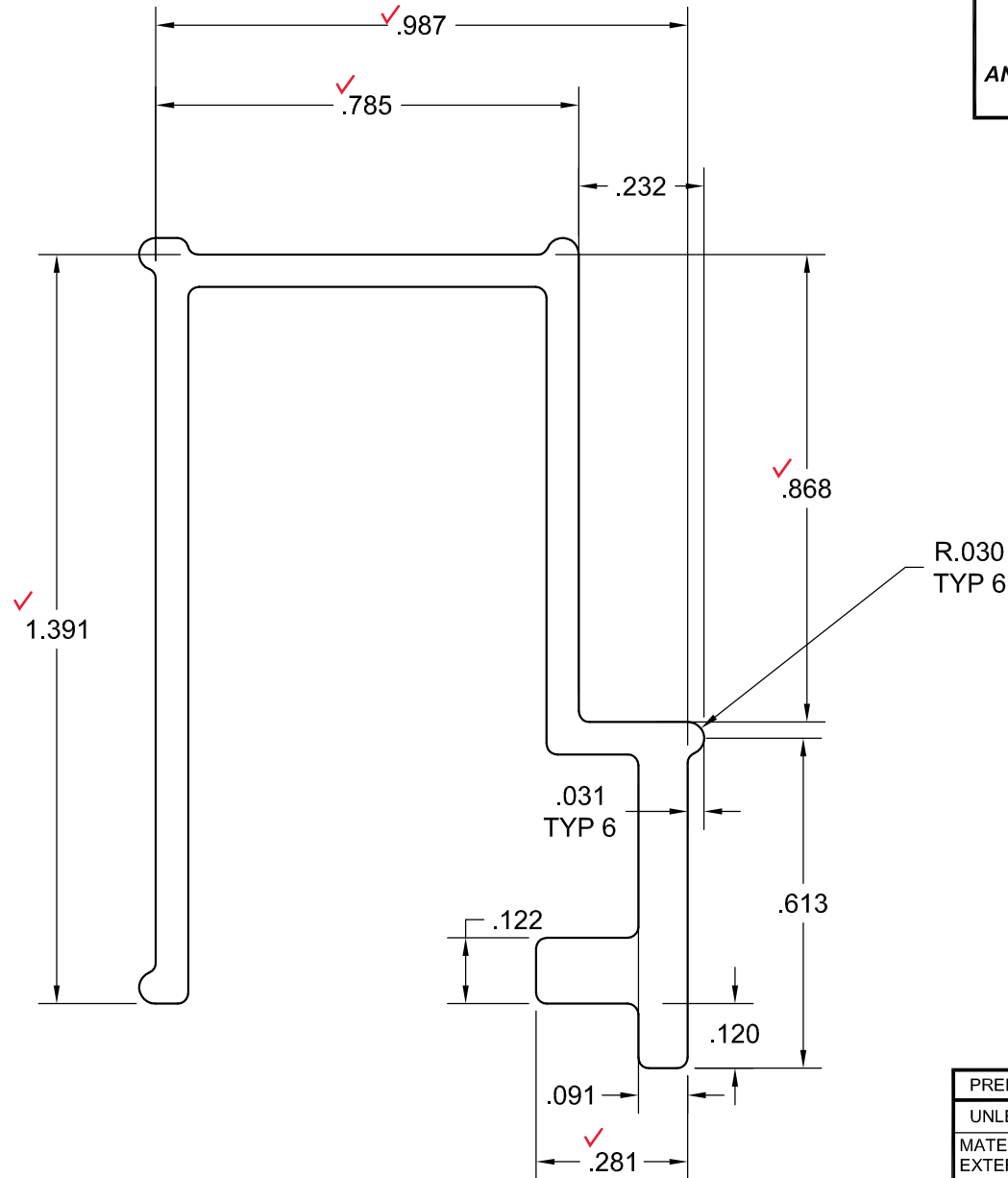
Molimo™
Architectural Product Testing

Report #: 28004.01-109-11

Date: 2/23/2024



By: James Grippo

COPYRIGHT 2012
THIS DRAWING AND ITS CONTENTS
ARE THE SOLE PROPERTY OF
CHELSEA BUILDING PRODUCTS, INC.
ANY UNAUTHORIZED USE OR REPRODUCTION
IS STRICTLY PROHIBITED.



PRELIMINARY PART #

UNLESS OTHERWISE SPECIFIED

MATERIAL ALUM 6063-T5
EXTERIOR COATING 
FLEXIBLE P.V.C. 
TOTAL AREA .2755
STANDARD WT/FT .323

WALLS .060 ✓
RADII .020 R
ANGULARITY ±1°



CHELSEA BUILDING
PRODUCTS, INC.

565 CEDAR WAY, OAKMONT PA 15139

Tel. 412-826-8077, Fax 412-826-0113
www.chelseabuildingproducts.com

ALUMINUM LOCK STILE REBAR

DRAWN BY: BLG	DESIGNED BY: EAS	DATE 08/02/12	SCALE NTS-1
CHECKED BY:	APPROVED BY:	DRAWING No. 873	

No.	REVISION	BY	DATE
1	REVISION: ADDED LEG IN TO REBAR DESIGN AND THICKENED LEG FOR STRENGTH	JRM	8/29/12