Architectural Testing

TEST REPORT

Report No.: D3598.01-109-44

Rendered to:

ACCESS MAGNETICS LLC
Bay City, Michigan

PRODUCT TYPE: Pet Door
SERIES/MODEL: Freedom Pet Pass Door

Title	Summary of Results
Air Infiltration	0.2 L/s/m² (0.04 cfm/ft²)
Air Exfiltration	0.2 L/s/m² (0.03 cfm/ft²)

Reference must be made to Report No. D3598.01-109-44, dated 03/12/14 for complete test specimen description and detailed test results.

1.0 Report Issued To: Access Magnetics LLC
3104 Old Kawkawlin Road
Bay City, Michigan 48706

2.0 Test Laboratory: Architectural Testing, Inc.
130 Derry Court
York, Pennsylvania 17406-8405
717-764-7700

3.0 Project Summary:

3.1 Product Type: Pet Door

3.2 Series/Model: Freedom Pet Pass Door

3.3 Compliance Statement: Results obtained are tested values and were secured by using the designated test method(s). Test specimen description and results are reported herein.

3.4 Test Date: 02/26/2014

3.5 Test Record Retention End Date: All test records for this report will be retained until February 26, 2018.

3.6 Test Location: Architectural Testing, Inc. test facility in York, Pennsylvania.

3.7 Test Sample Source: The test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Architectural Testing for a minimum of four years from the test completion date.

3.8 Drawing Reference: The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Architectural Testing per the drawings located in Appendix B. Any deviations are documented herein or on the drawings.

3.9 List of Official Observers:

Name	Company
Brian Algar	Access Magnetics LLC
Michael D. Stremmel, P.E.	Architectural Testing, Inc.
Ken R. Stough	Architectural Testing, Inc.

4.0 Test Method(s):

ASTM E 283-04, *Test Method for Determining Rate of Airflow Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen.*

5.0 Test Specimen Description:

5.1 Product Sizes:

Overall Area: 0.2 m^2 (1.8 ft^2)	**Width**		**Height**	
	millimeters	**inches**	**millimeters**	**inches**
Overall size	356	14	470	18-1/2
Flap size	273	10-3/4	359	14-1/8
Security door	278	10-15/16	384	15-1/8

5.2 Frame Construction:

Frame Member	**Material**	**Description**
Inside and face frame	PVC	Machined out of one solid piece of 1/2" thick PVC
Box frame stiles and rails	PVC	Solid PVC utilizing an additional 1/2" thick PVC piece on the top and bottom rail secured with 3/16" crown staples spaced 3-1/2" on center. The bottom rail utilized a self-adhered non-slip strip.

	Joinery Type	**Detail**
Box frame stiles and rails	Square-cut and butted	Secured with one 3/16" crown staple per corner

5.0 Test Specimen Description: (Continued)

5.3 Flap Construction:

Flap Member	Material	Description
Flap seal and clamp spacer	TPO	0.060" thick
Chew guard and clamp	Polycarbonate	0.177" thick clear
Two way flap	Canvas	Two pieces of 0.020" thick canvas with foam core stitched together
Security door	Acrylic	Solid sheet of 0.277" thick material

	Joinery Type	Detail
Security door	N/A	Slid into a notch in the inside frame top and bottom rail and secured with one 1/4" diameter hitch pin.
Chew guard	N/A	Attached with five brass rivets to the flap seal
Flap seal, clamp spacer, clamp and two way flap	N/A	Guard clamp attached with five #10 x 1-1/2" long pan head screws spaced 3" on center through the clamp, clamp spacer, flap seal and two way flap into the outer frame.

5.4 Weatherstripping:

Description	Quantity	Location
1/4" hollow foam gasket	1 Row	Inside frame perimeter
1/4" thick by 3/8" wide foam seal	1 Row	Face frame perimeter and between the flap seal and face frame

5.5 Drainage:

Drainage Method	Size	Quantity	Location
Weep notch	0.03" wide by 11/16" long	1	Gap between magnets at bottom right corner of face frame

5.0 Test Specimen Description: (Continued)

5.6 Hardware:

Description	Quantity	Location
1/4" diameter hitch pin	1	Centered on the top of the security door
Knob	1	Center of security door
1/16" thick by 1/2" wide strip magnet	2 Rows	Flap seal, both sides and bottom
1/16" thick by 1/2" wide strip magnet	1 Row	Two way flap and face frame, both sides and bottom

5.7 Reinforcement: No reinforcement was utilized.

6.0 Installation:

The specimen was installed into a Spruce-Pine-Fir wood buck. A sheet of 1/2" plywood was utilized to simulate the surface of a door for mounting purposes. The rough opening allowed for a 1/16" shim space.

Location	Anchor Description	Anchor Location
Rails	#8 x 1-1/2" long wafer head screws	Located 1-3/4" from each end and spaced 5" on center through the inside frame into the box frame.
Stiles	#8 x 1-1/2" long wafer head screws	Located 2-3/8" from each end and spaced 6" on center through the inside frame into the box frame.

7.0 Test Results: The temperature during testing was 18°C (65°F). The results are tabulated as follows:

Title of Test	Results	Allowed	Note
Air Leakage, Infiltration per ASTM E 283 at 75 Pa (1.57 psf)	0.2 L/s/m^2 (0.04 cfm/ft^2)	N/A	1
Air Leakage, Exfiltration per ASTM E 283 at 75 Pa (1.57 psf)	0.2 L/s/m^2 (0.03 cfm/ft^2)	N/A	1
Air Leakage, Infiltration per ASTM E 283 at 75 Pa (1.57 psf)	0.4 L/s/m2 (0.07 cfm/ft2)	N/A	2
Air Leakage, Exfiltration per ASTM E 283 at 75 Pa (1.57 psf)	0.3 L/s/m2 (0.06 cfm/ft2)	N/A	2

***General Note**: All testing was performed in accordance with the referenced standard(s). The door opened and closed 12 times prior to taking the air leakage readings*

Note 1: Air leakage measurement was taken to the face frame, excluding the foam seal between the face frame and door interface.

Note 2: Air leakage measurement was taken to the face of the plywood test buck, including the foam seal between the face frame and door interface.

Note 3: All air testing was performed with the security panel removed from the specimen.

Architectural Testing will service this report for the entire test record retention period. Test records that are retained such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be retained by Architectural Testing, Inc. for the entire test record retention period.

This 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 approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, Inc.

Digitally Signed by: Ken R. Stough

Ken R. Stough
Technician

Digitally Signed by: Michael D. Stremmel

Michael D. Stremmel, P.E.
Senior Project Engineer

KRS:asm

Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Photograph (1)
Appendix-B: Drawings (9)

Appendix A

Photograph

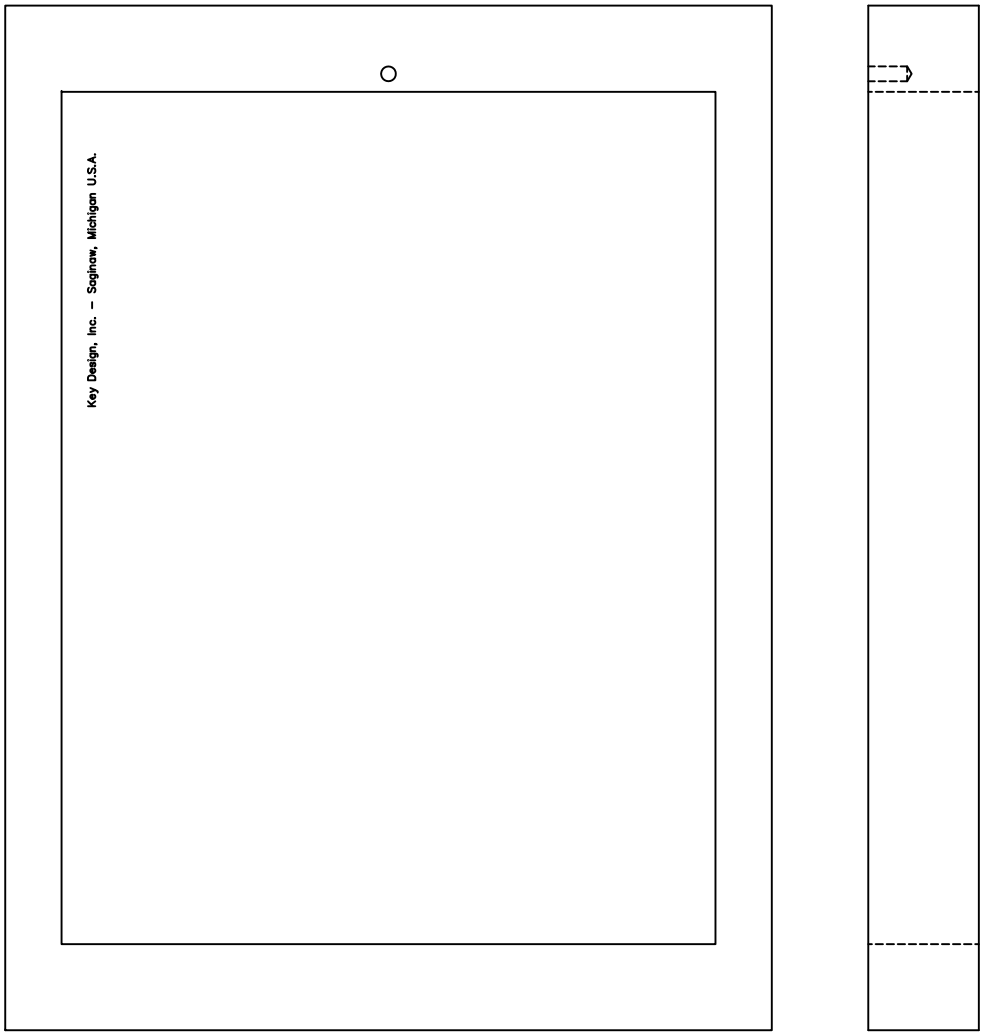
Photo No. 1
Freedom Pet Pass Door

Appendix B

Drawings

DRAWING NO.-

REVISIONS						MF
REV SYM	DET	CHANGE	BY	CK	DATE	



BOX FRAME
(1) REQD
MATL: PVC

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STAMP OR ETCH ON ALUMINUM ONLY

DO NOT SCALE DRAWING UNLESS OTHERWISE

2 PLACE DECIMALS ±.01
INCHES
3 PLACE DECIMALS ±.005
INCHES
4 PLACE DECIMALS ±.0005
INCHES

KEY DESIGN INC.

FREEDOM PET PASS

DESIGN APPROVED	DRAWN BY
CHECKED BY	SCALE 1:1
DATE	DATE

THIRD ANGLE PROJECTION

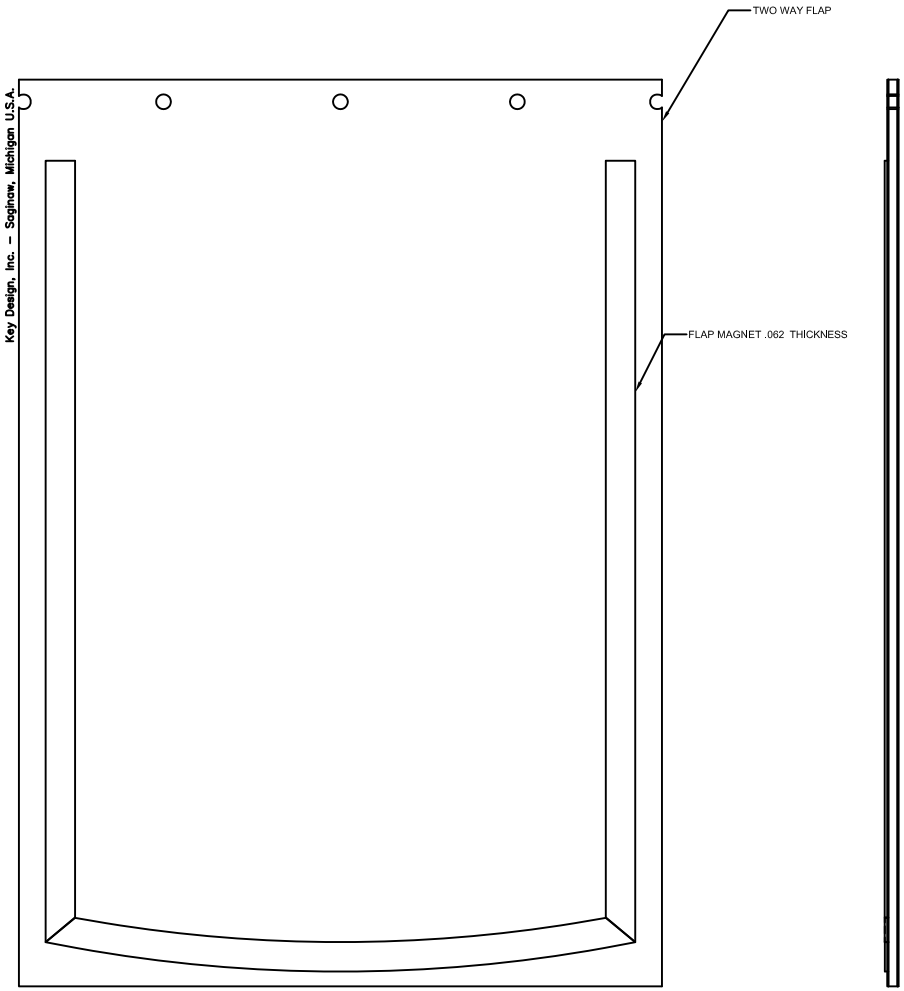
SHEET NO.

TOTAL NO. OF SHEETS

DRAWING NUMBER

DRAWING NO.-

REVISIONS						MF
REV SYM	DET	CHANGE	BY	CK	DATE	



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TWO WAY FLAP ASM
(1) REQ'D.

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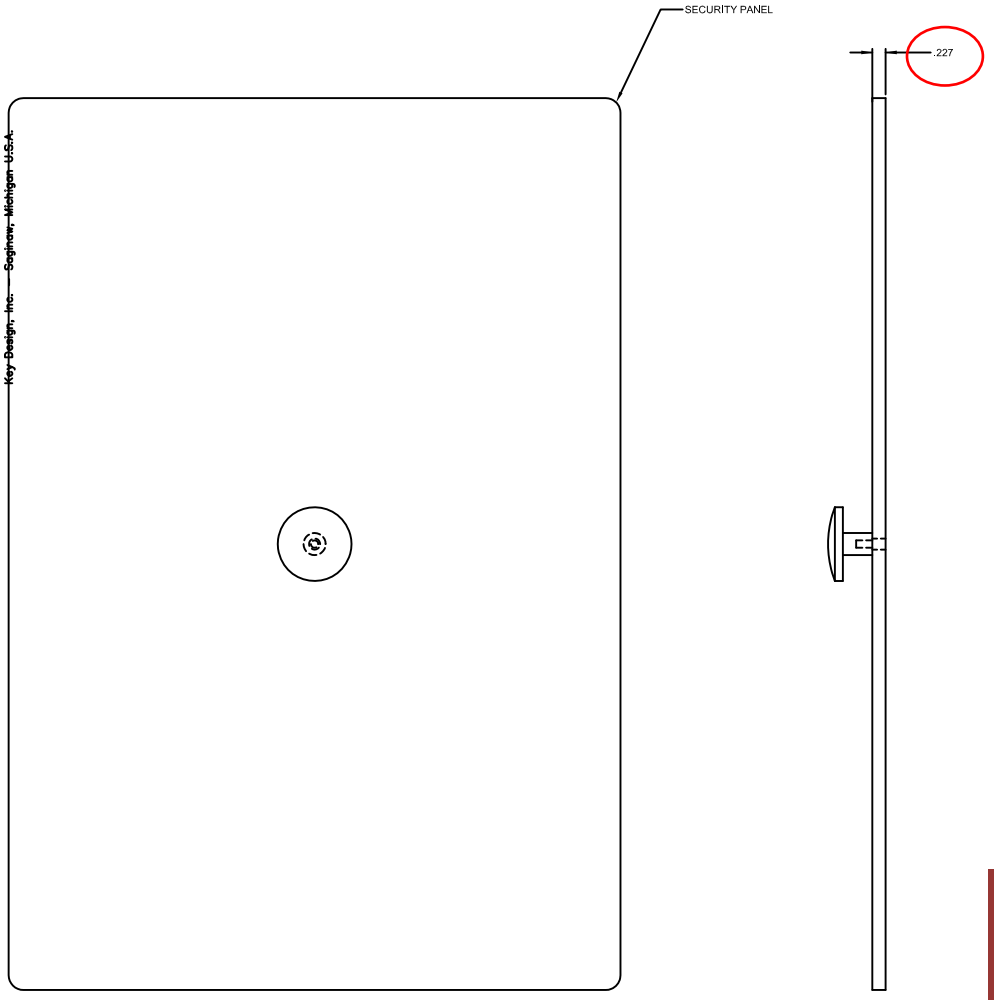

SECURITY PANEL
(1) REQD
MATL:ACRYLIC - .277 THICK

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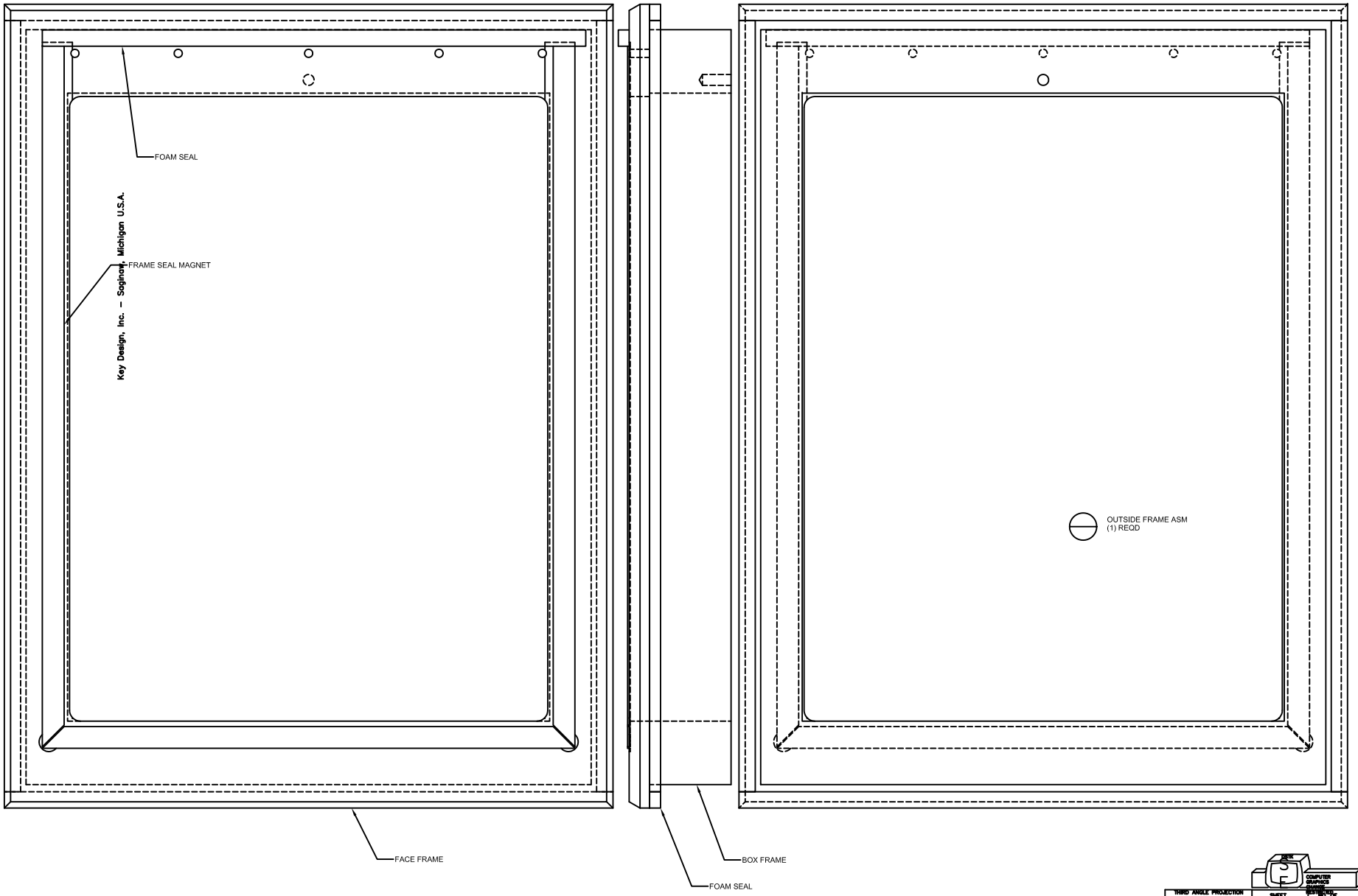

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4 PLACE DECIMALS ±.0005 INCHES

ANGLES ±1° SURFACE FINISH

KEY DESIGN INC.

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ENGINEERING STUDIES

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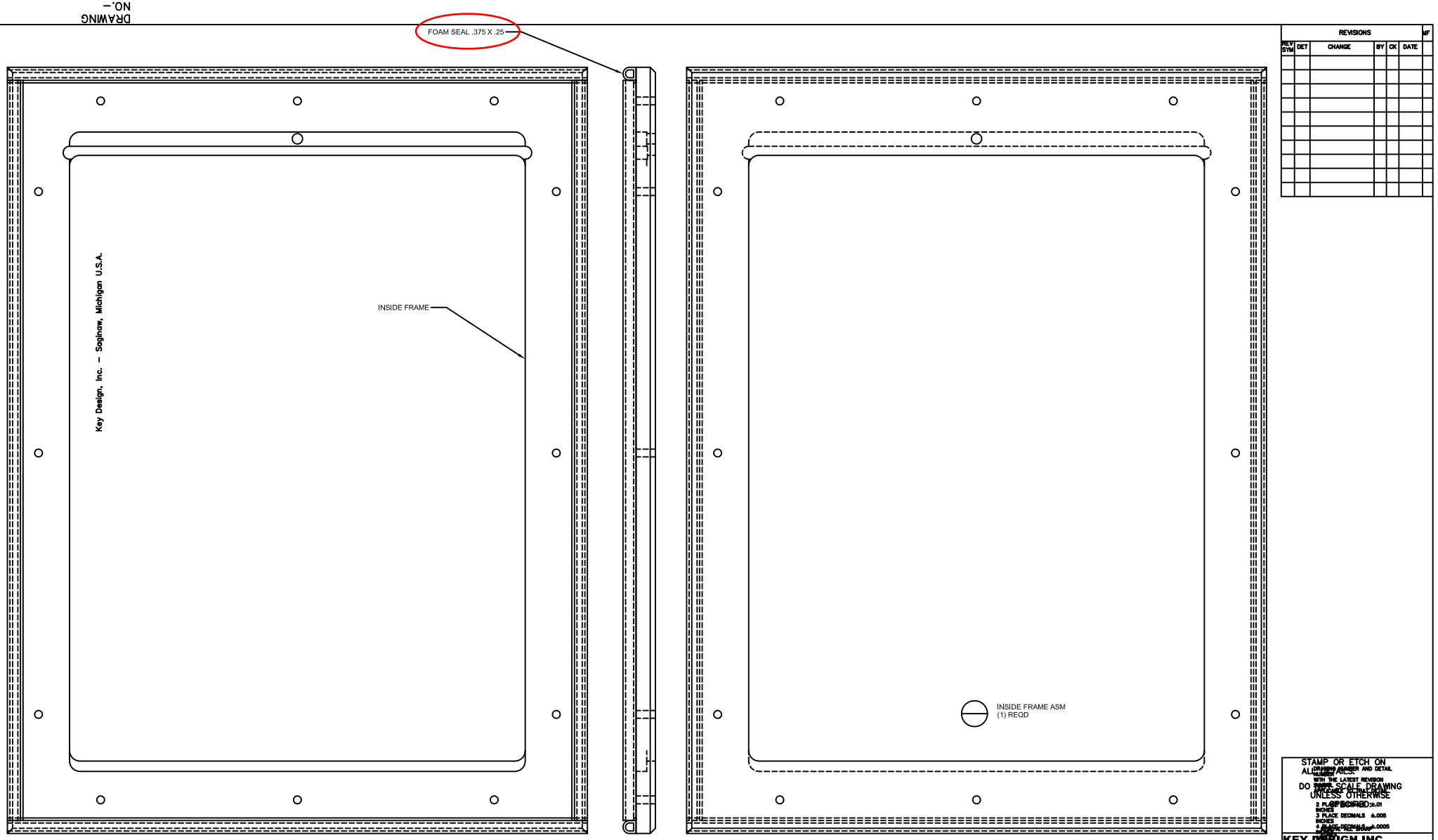

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INCHES
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INCHES

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FRAME AND FLAP MAGNETS

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UNLESS OTHERWISE SPECIFIED: ±.01
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INCHES
3 PLACE DECIMALS ±.005
INCHES
4 PLACE DECIMALS ±.0005
INCHES
ANGLES ±2° BEND

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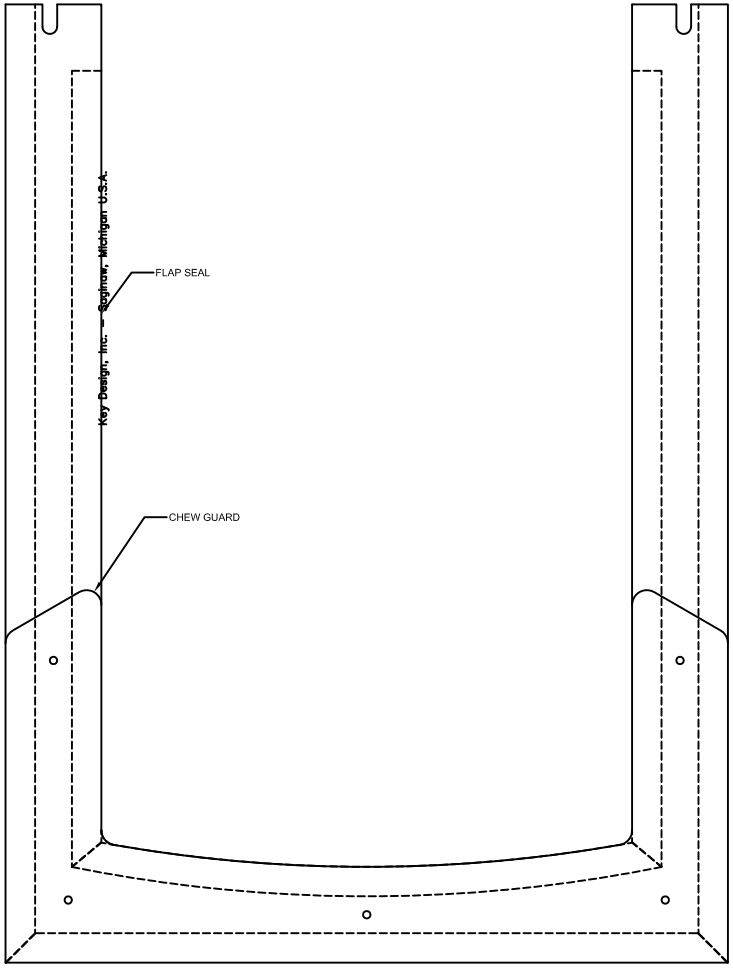

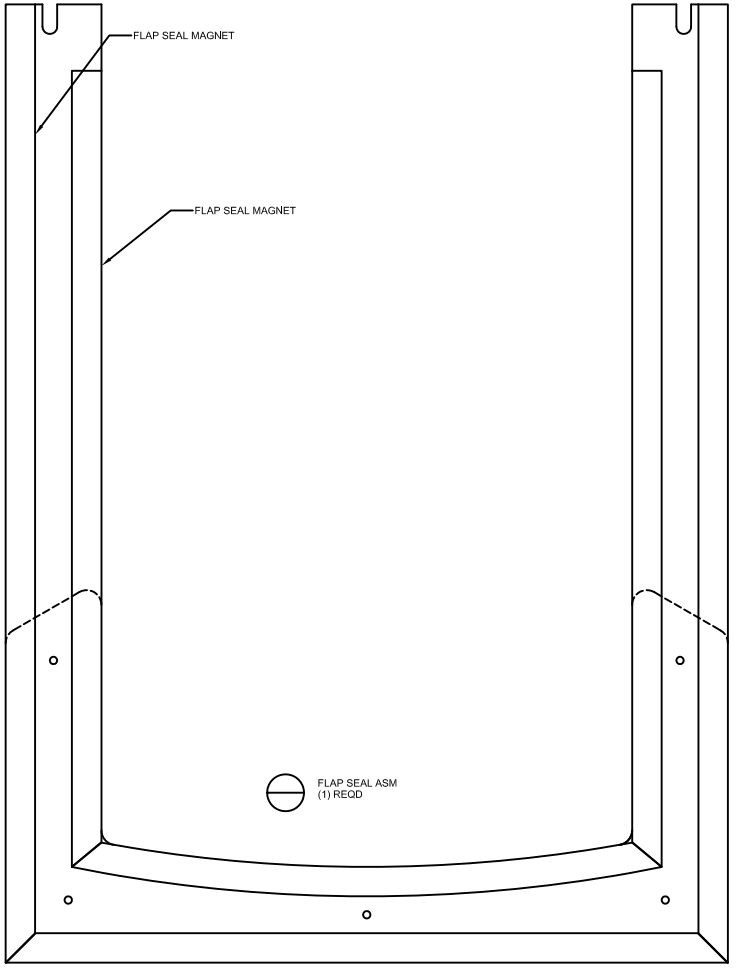

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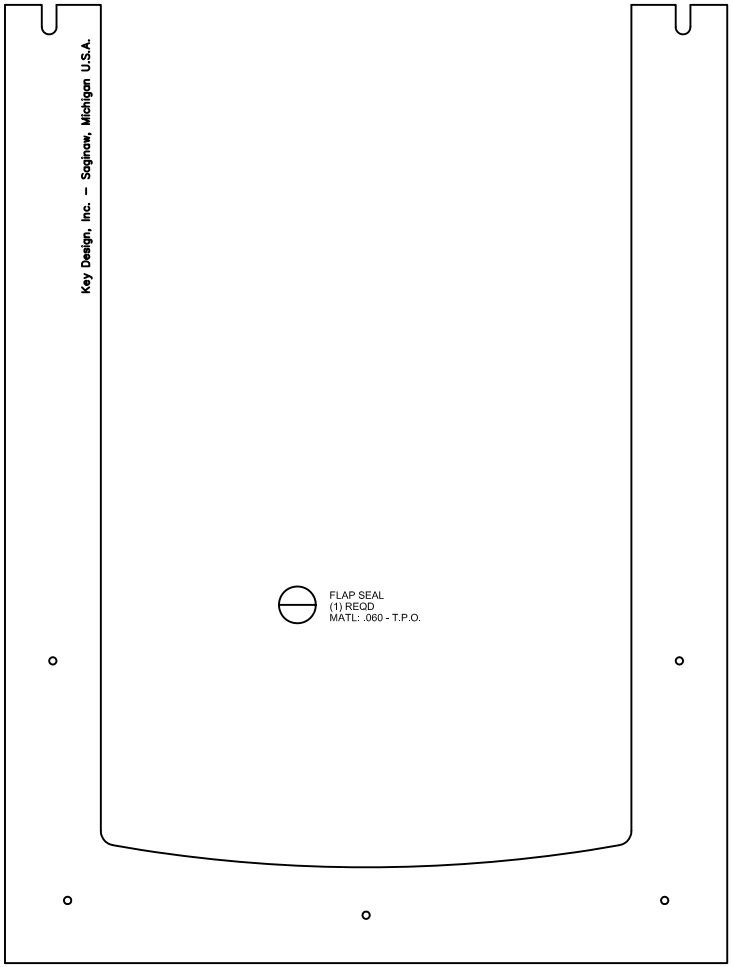

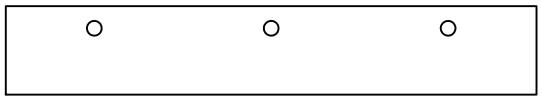

CLAMP SPACER
(1) REQD
MATL: .060 T.P.O.

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INCHES
ANGLES ±1° SHEET

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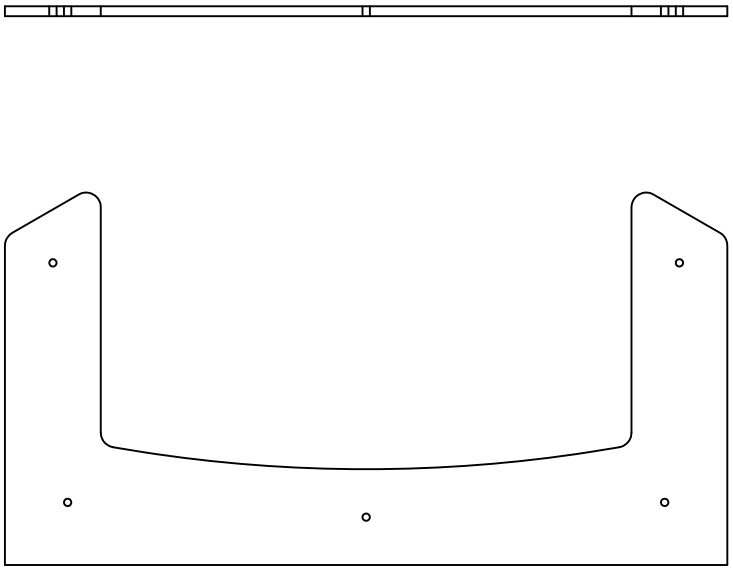
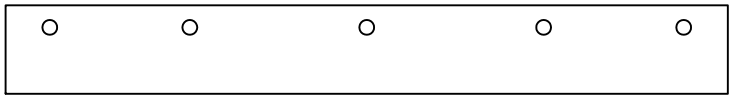


CHEW GUARD
(1) REQD
MATL: POLYCARBONATE - .177 THICKNESS

CLAMP
(1) REQD
MATL: POLYCARBONATE - .177 THICKNESS



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ANGLES ±2° SHEET

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