



**AAMA 507-07 THERMAL PERFORMANCE REPORT**

**Rendered to:**

**TUBELITE, INC.**

**SERIES/MODEL: Standard 1-3/4" Wide Stile Double Door**

**TYPE: Swinging Door - Double**

**Report No: B3772.17-116-45**  
**Report Date: 10/27/11**

## AAMA 507-07 THERMAL PERFORMANCE REPORT

Rendered to:

TUBELITE, INC.  
4878 Mackinaw Trail  
Reed City, Michigan 49677

Report No: B3772.17-116-45  
Report Date: 10/27/11  
Simulation Date: 10/27/11

### Project Summary:

Architectural Testing, Inc. was contracted by Tubelite, Inc. to provide U-Factor and Solar Heat Gain Coefficient thermal performance ratings on the Standard 1-3/4" Wide Stile Double Door Swinging Door - Double. The thermal performance ratings were determined in accordance with AAMA 507-07, Standard Practice for Determining the Thermal Performance Characteristics of Fenestration Systems Installed in Commercial Building.

### Reference Documents:

*AAMA 507-07, Standard Practice for Determining the Thermal Performance Characteristics of Fenestration Systems Installed in Commercial Buildings*

*NFRC 100-2010, Procedure for Determining Fenestration Product U-Factors*

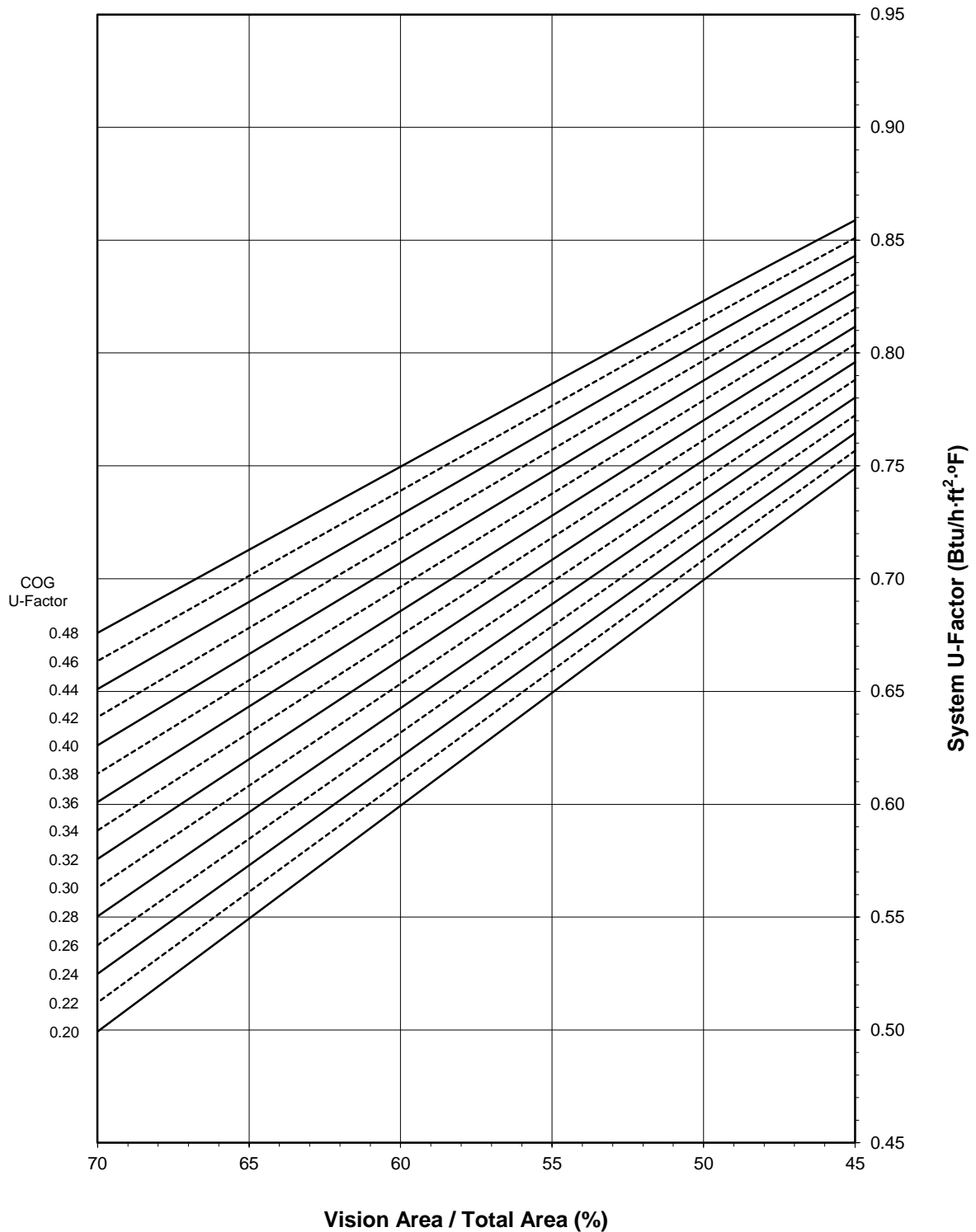
*NFRC 200-2010, Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence*

### Simulation Specimen Description:

**Series/Model:** Standard 1-3/4" Wide Stile Double Door  
**Product Groupings:** 1-3/4" Wide w/o sweep grouped with 1-3/4" Wide w/ sweep.  
**Type:** Swinging Door - Double  
**Frame Material:** Aluminum Framing System  
**Material Finish:** Painted Aluminum  
**Specimen Size:** 1920mm wide by 2090mm high (75-1/2" by 82-3/8")  
**Configuration:** Two vision lites separated by one intermediate vertical  
**Drawing Reference:** Tubelite Standard Doors - 1-3/4" Frame Details

**Tubelite, Inc.**  
**Standard 1-3/4" Wide Stile Double Door - Swinging Door - Double**

**System U-Factor vs. Percentage of Vision Area**



Note: 1 inch Overall - Dual Glazed Glass (0.48-0.20 COG) with Aluminum Spacer



**Tubelite, Inc.**  
**Standard 1-3/4" Wide Stile Double Door - Swinging Door - Double**

**Size Specific U-Factor Matrix\***

Glazing Option	Center of Glass U-Factor	Overall U-Factor
1	0.48	0.82
2	0.46	0.81
3	0.44	0.80
4	0.42	0.79
5	0.40	0.79
6	0.38	0.78
7	0.36	0.77
8	0.34	0.76
9	0.32	0.75
10	0.30	0.74
11	0.28	0.73
12	0.26	0.72
13	0.24	0.71
14	0.22	0.71
15	0.20	0.70

Note: 1 inch Overall - Dual Glazed Glass (0.48-0.20 COG) with Aluminum Spacer

**Size Specific SHGC Matrix\***

Center of Glass SHGC	Overall SHGC
0.75	0.42
0.70	0.39
0.65	0.37
0.60	0.34
0.55	0.32
0.50	0.29
0.45	0.27
0.40	0.24
0.35	0.22
0.30	0.19
0.25	0.17
0.20	0.14
0.15	0.12
0.10	0.09
0.05	0.07

**Size Specific VT Matrix\***

Center of Glass VT	Overall VT
0.75	0.38
0.70	0.35
0.65	0.33
0.60	0.30
0.55	0.28
0.50	0.25
0.45	0.23
0.40	0.20
0.35	0.18
0.30	0.15
0.25	0.13
0.20	0.10
0.15	0.08
0.10	0.05
0.05	0.03

\*Size Specific U-Factor, SHGC, and VT Matrices are based on the standard Swinging Door - Double specimen size of 1920mm wide by 2090mm high (75-1/2" by 82-3/8"). This represents 50.3% Vision Area / Total Area.

Vision Area Data

Option No.	COG U-Factor	COG Temperature	Cross Section	Frame Height	Frame U-Factor	Edge U-Factor	Total Product U-Factor		
							45% Vision Area	NFRC 100-2010	70% Vision Area
							67.04" by 72.98"	75.59" by 82.28"	133.31" by 145.11"
1	0.48	43.7	Ext. Head	7.9645	1.1940	0.5767	0.8588	0.8211	0.6760
			Int. Head	7.9645	1.1940	0.5767			
			Ext. Jamb	7.9056	1.1829	0.5785			
			Int. Jamb	7.9056	1.1829	0.5785			
			Mtg. Rail	12.4279	1.0776	0.5801			
			Ext. Sill	8.2770	1.1346	0.5812			
			Int. Sill	8.2770	1.1346	0.5812			
2	0.46	44.8	Ext. Head	7.9645	1.1939	0.5631	0.8510	0.8122	0.6635
			Int. Head	7.9645	1.1939	0.5631			
			Ext. Jamb	7.9056	1.1829	0.5650			
			Int. Jamb	7.9056	1.1829	0.5650			
			Mtg. Rail	12.4279	1.0774	0.5664			
			Ext. Sill	8.2770	1.1344	0.5675			
			Int. Sill	8.2770	1.1344	0.5675			
3	0.44	45.8	Ext. Head	7.9645	1.1939	0.5495	0.8431	0.8033	0.6511
			Int. Head	7.9645	1.1939	0.5495			
			Ext. Jamb	7.9056	1.1828	0.5514			
			Int. Jamb	7.9056	1.1828	0.5514			
			Mtg. Rail	12.4279	1.0772	0.5528			
			Ext. Sill	8.2770	1.1343	0.5539			
			Int. Sill	8.2770	1.1343	0.5539			
4	0.42	46.8	Ext. Head	7.9645	1.1938	0.5362	0.8352	0.7945	0.6387
			Int. Head	7.9645	1.1938	0.5362			
			Ext. Jamb	7.9056	1.1828	0.5380			
			Int. Jamb	7.9056	1.1828	0.5380			
			Mtg. Rail	12.4279	1.0771	0.5393			
			Ext. Sill	8.2770	1.1342	0.5404			
			Int. Sill	8.2770	1.1342	0.5404			
5	0.40	47.9	Ext. Head	7.9645	1.1938	0.5228	0.8274	0.7856	0.6262
			Int. Head	7.9645	1.1938	0.5228			
			Ext. Jamb	7.9056	1.1827	0.5247			
			Int. Jamb	7.9056	1.1827	0.5247			
			Mtg. Rail	12.4279	1.0769	0.5259			
			Ext. Sill	8.2770	1.1341	0.5270			
			Int. Sill	8.2770	1.1341	0.5270			
6	0.38	48.9	Ext. Head	7.9645	1.1937	0.5096	0.8195	0.7767	0.6136
			Int. Head	7.9645	1.1937	0.5096			
			Ext. Jamb	7.9056	1.1827	0.5115			
			Int. Jamb	7.9056	1.1827	0.5115			
			Mtg. Rail	12.4279	1.0767	0.5127			
			Ext. Sill	8.2770	1.1340	0.5136			
			Int. Sill	8.2770	1.1340	0.5136			

Vision Area Data

Option No.	COG U-Factor	COG Temperature	Cross Section	Frame Height	Frame U-Factor	Edge U-Factor	Total Product U-Factor		
							45% Vision Area	NFRC 100-2010	70% Vision Area
							67.04" by 72.98"	75.59" by 82.28"	133.31" by 145.11"
7	0.36	50.0	Ext. Head	7.9645	1.1937	0.4963	0.8117	0.7678	0.6011
			Int. Head	7.9645	1.1937	0.4963			
			Ext. Jamb	7.9056	1.1826	0.4983			
			Int. Jamb	7.9056	1.1826	0.4983			
			Mtg. Rail	12.4279	1.0766	0.4994			
			Ext. Sill	8.2770	1.1338	0.5002			
			Int. Sill	8.2770	1.1338	0.5002			
8	0.34	51.0	Ext. Head	7.9645	1.1936	0.4833	0.8038	0.7589	0.5885
			Int. Head	7.9645	1.1936	0.4833			
			Ext. Jamb	7.9056	1.1826	0.4853			
			Int. Jamb	7.9056	1.1826	0.4853			
			Mtg. Rail	12.4279	1.0764	0.4863			
			Ext. Sill	8.2770	1.1337	0.4872			
			Int. Sill	8.2770	1.1337	0.4872			
9	0.32	52.0	Ext. Head	7.9645	1.1936	0.4701	0.7960	0.7500	0.5758
			Int. Head	7.9645	1.1936	0.4701			
			Ext. Jamb	7.9056	1.1825	0.4721			
			Int. Jamb	7.9056	1.1825	0.4721			
			Mtg. Rail	12.4279	1.0763	0.4731			
			Ext. Sill	8.2770	1.1336	0.4740			
			Int. Sill	8.2770	1.1336	0.4740			
10	0.30	53.1	Ext. Head	7.9645	1.1936	0.4572	0.7881	0.7412	0.5631
			Int. Head	7.9645	1.1936	0.4572			
			Ext. Jamb	7.9056	1.1825	0.4591			
			Int. Jamb	7.9056	1.1825	0.4591			
			Mtg. Rail	12.4279	1.0761	0.4601			
			Ext. Sill	8.2770	1.1335	0.4610			
			Int. Sill	8.2770	1.1335	0.4610			
11	0.28	54.2	Ext. Head	7.9645	1.1935	0.4441	0.7803	0.7322	0.5504
			Int. Head	7.9645	1.1935	0.4441			
			Ext. Jamb	7.9056	1.1825	0.4461			
			Int. Jamb	7.9056	1.1825	0.4461			
			Mtg. Rail	12.4279	1.0760	0.4471			
			Ext. Sill	8.2770	1.1334	0.4479			
			Int. Sill	8.2770	1.1334	0.4479			
12	0.26	55.2	Ext. Head	7.9645	1.1935	0.4312	0.7724	0.7233	0.5376
			Int. Head	7.9645	1.1935	0.4312			
			Ext. Jamb	7.9056	1.1825	0.4332			
			Int. Jamb	7.9056	1.1825	0.4332			
			Mtg. Rail	12.4279	1.0758	0.4341			
			Ext. Sill	8.2770	1.1333	0.4349			
			Int. Sill	8.2770	1.1333	0.4349			

Vision Area Data

Option No.	COG U-Factor	COG Temperature	Cross Section	Frame Height	Frame U-Factor	Edge U-Factor	Total Product U-Factor		
							45% Vision Area	NFRC 100-2010	70% Vision Area
							67.04" by 72.98"	75.59" by 82.28"	133.31" by 145.11"
13	0.24	56.3	Ext. Head	7.9645	1.1935	0.4183	0.7646	0.7144	0.5249
			Int. Head	7.9645	1.1935	0.4183			
			Ext. Jamb	7.9056	1.1824	0.4204			
			Int. Jamb	7.9056	1.1824	0.4204			
			Mtg. Rail	12.4279	1.0757	0.4212			
			Ext. Sill	8.2770	1.1332	0.4220			
			Int. Sill	8.2770	1.1332	0.4220			
14	0.22	57.3	Ext. Head	7.9645	1.1934	0.4056	0.7567	0.7056	0.5122
			Int. Head	7.9645	1.1934	0.4056			
			Ext. Jamb	7.9056	1.1824	0.4077			
			Int. Jamb	7.9056	1.1824	0.4077			
			Mtg. Rail	12.4279	1.0756	0.4084			
			Ext. Sill	8.2770	1.1331	0.4092			
			Int. Sill	8.2770	1.1331	0.4092			
15	0.20	58.4	Ext. Head	7.9645	1.1934	0.3927	0.7489	0.6966	0.4993
			Int. Head	7.9645	1.1934	0.3927			
			Ext. Jamb	7.9056	1.1824	0.3948			
			Int. Jamb	7.9056	1.1824	0.3948			
			Mtg. Rail	12.4279	1.0754	0.3955			
			Ext. Sill	8.2770	1.1331	0.3963			
			Int. Sill	8.2770	1.1331	0.3963			

Detailed drawings, datasheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period such materials shall be discarded without notice and the service life of this report by Architectural Testing will expire. Results obtained are simulated values and were secured by using the designated test methods. 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 named herein and relates only to the specimen(s) simulated. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC.:

SIMULATED BY:

REVIEWED BY:

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Eric Barilar  
Simulation Technician

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Kevin S. Louder  
Project Engineer

EAB:EAB  
B3772.17-116-45

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

Appendix A: Drawings and Bills of Material (23)

### Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
.01R0	10/27/2011	All	Original Report Issue

All drawings and Bills of Material used in simulating this product are enclosed in this Appendix.

## STANDARD PAIR DOOR BOM -1.75 Frame

**ATI**

**Report #** B3772-116-45

**Date** 10/20/2011

**Simulator** *Eric Barilko*

### FRAME:

Description	QTY	Length	Part number	Material
4500 Jamb 1.3/4" x 4 1/2"	2	82 3/8"	E4544	
Header 1 3/4" x 4 1/2"	1	34 1/4"	E45124	
	1	34 7/23" 80		
Header Door stops & Jambs	2	5/8"	E4531	
Fin Seal Weather pile	30 ft		P1098A	Vinyl
closure open back plate	2		E4543	

### DOOR:

Description	QTY		Narrow P/N	Medium P/N	Wide P/N	Material
Beveled Door Stiles	2	79 13/16"	E0055 - 2 1/8"	E0086- 4"	E0416 - 5"	
Inactive Stile		79 13/16"	E0056 - 2 1/8"	E0087 - 4"	E0417 - 5"	
Astragal Stile		79 13/16"	E1149 - 2 1/8"	E1150 - 4"	E1151 - 5"	
Adjustable Astragal	1	79 13/16"	E1152	E1152	E1152	
Stainless Steel Clip for Adj. Astragal	8		P1539	P1539	P1539	Stainless Steel
Adj. Astragal Pile	2		P938	P938	P938	Vinyl
Door Top Rail	1	29 13/16"	E0255- 2 1/8"	E0054- 4"	E0318 - 5"	
Top Rail Lug	2		P168	P031	P339	AL
Door Botom Rail	1	29 13/16"	E0054- 4"	E0419- 6 1/2"	E0419- 6 1/2"	
Bottom Rail Lug	2		P031	P341	P341	AL
Top Rail & Bottom Rail Tie Rods	2	33 1/4"	P020B	P020	P020	Steel
Washer for Tie Rods	4		P852	P853	P853	steel/AL
Hex nuts for Tie rods	4		S071A	S071A	S071A	Steel

Exterior Glass Stop 1" glass	4
Interior Glass Stop 1" glass	4
Gasket	35.42
Adjustable Wedge Setting Blck	2
Self Adhesive Setting Blck	3

Threshold	1
Threshold clip	2



E0927	E0927	E0927	
E0928	E0928	E0928	
P0017	P0017	P0017	Vinyl
P1911	P1911	P1911	Polypropylene
P1912	P1912	P1912	EPDM
E0019	E0019	E0019	
P679	P679	P679	AL

**MATERIAL:**

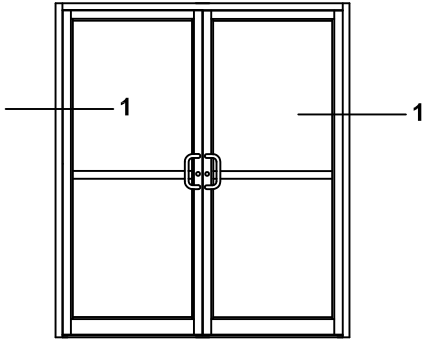
**E - All E part numbers are AL extrusions**

<b>ATI</b>	
<b>Report #</b>	<u>B3772-116-45</u>
<b>Date</b>	<u>10/20/2011</u>
<b>Simulator</b>	<u><i>Eric Barilak</i></u>

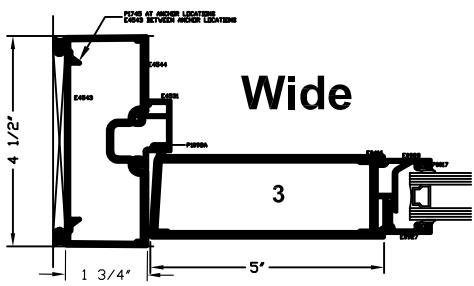
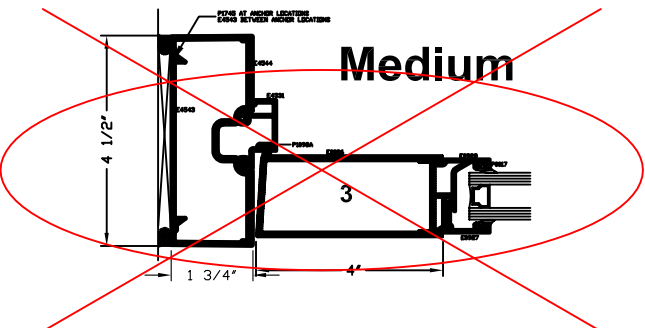
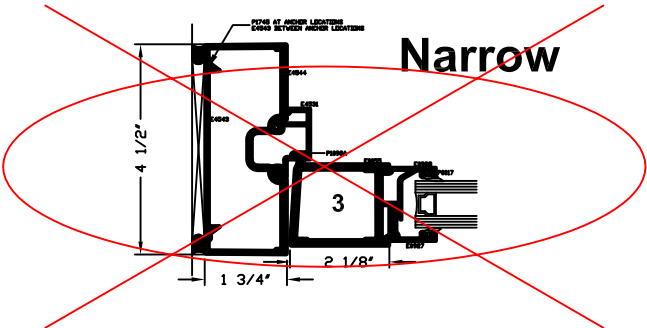
# Standard Doors - Pairs

## Jamb Detail -1 3/4" frame

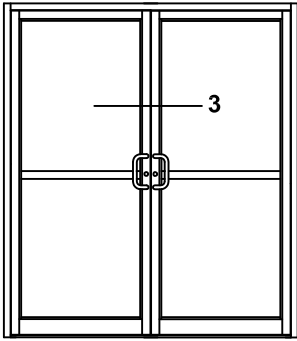
### Elevations & 1/4 Size Details



	ATI
Report #	B3772-116-45
Date	10/20/2011
Simulator	<i>Eric Basille</i>



\*SEALANT, ROD, & ANCHORS NOT BY TUBELITE



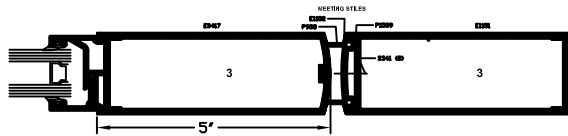
# Standard Doors - Pairs

## Meeting Stile Detail - 1 3/4" Frame

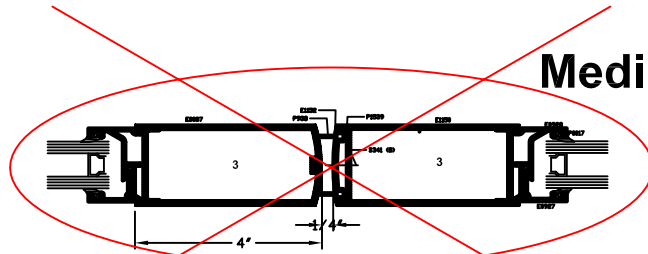
### Elevations & 1/4 Size Details

	ATI
Report #	B3772-116-45
Date	10/20/2011
Simulator	<i>Eric Barilla</i>

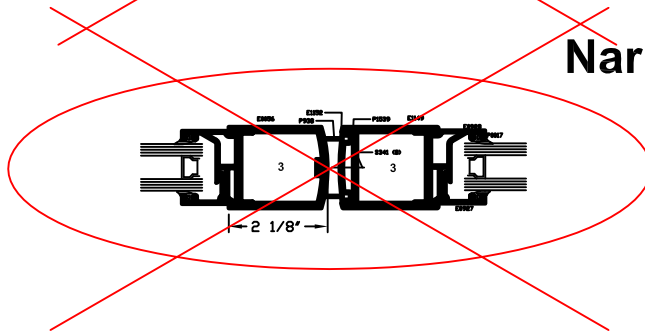
**Wide**



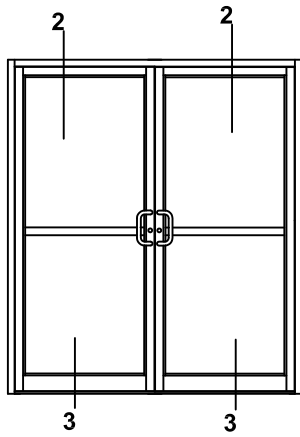
**Medium**



**Narrow**



\*SEALANT, ROD, & ANCHORS NOT BY TUBELITE



# Standard Doors - Pairs

## 1 3/4" Frame

### Elevations & 1/4 Size Details

**ATI**

Report # B3772-116-45

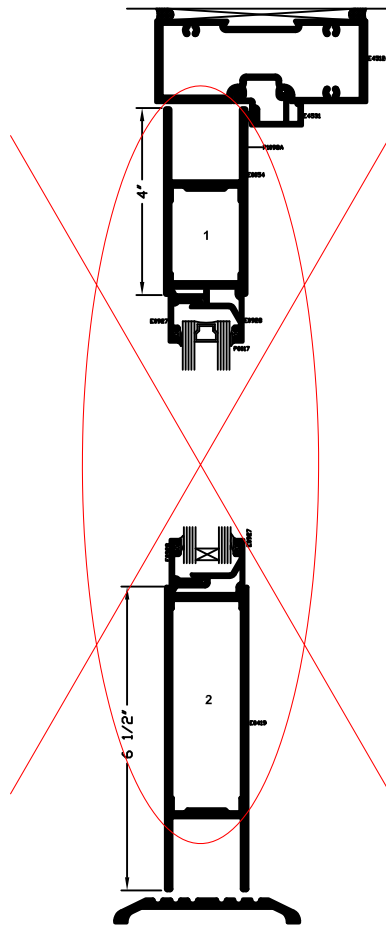
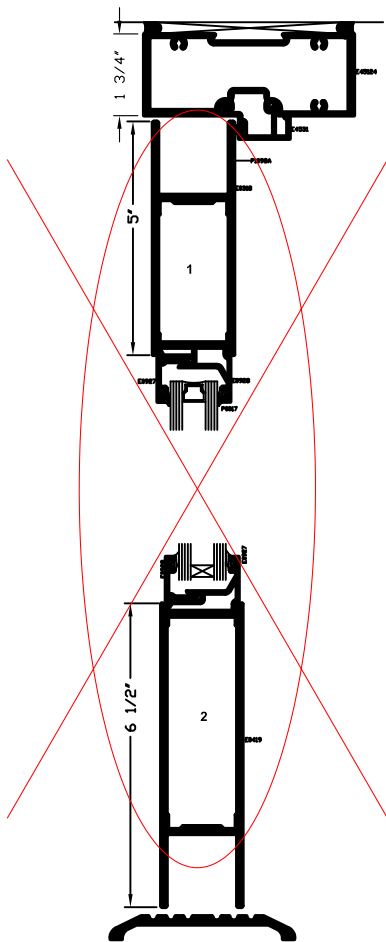
Date 10/20/2011

Simulator Eric Barilko

**Wide**

**Medium**

**Narrow**



\*SEALANT, ROD, & ANCHORS NOT BY TUBELITE

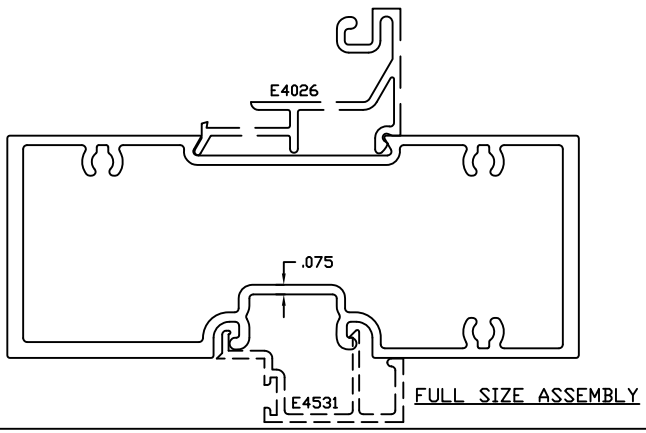
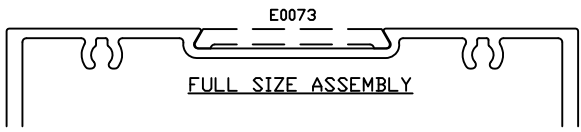
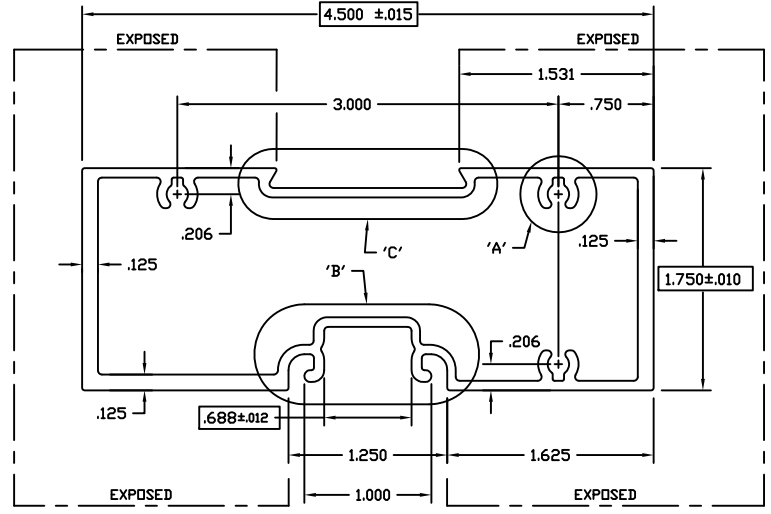
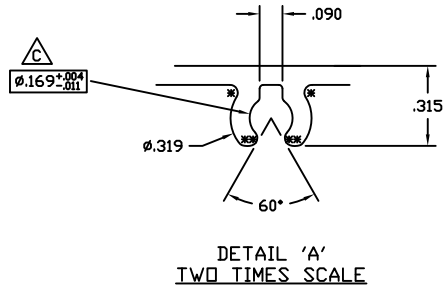
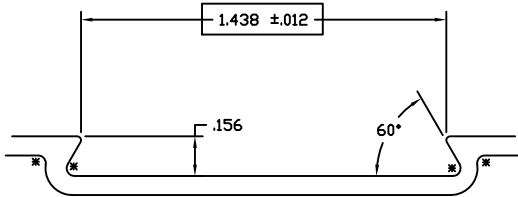
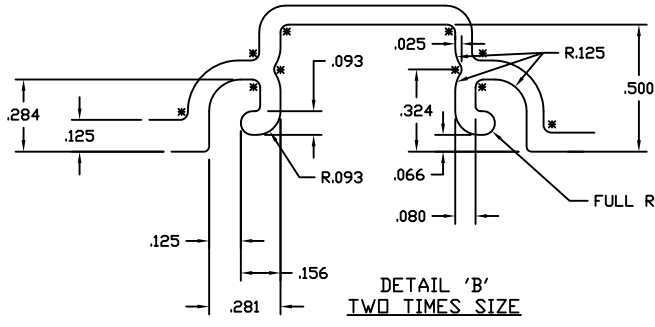


**ATI**

Report # B3772-116-45

Date 10/20/2011

Simulator Eric Barilak



INDICATES CRITICAL DIMENSION

©2006 TUBELITE INC. ALL RIGHTS RESERVED  
ALUMINUM ASSOCIATION STANDARD TOLERANCES APPLY UNLESS NOTED  
ALL UNSPECIFIED RADII .015  
\* INDICATES .031 RADIUS  
□ DENOTES CRITICAL DIMENSION  
ALL DIES PROPERTY OF TUBELITE

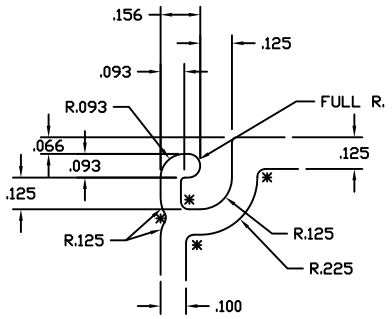
**TUBELITE**  
LEADER IN ECO-FRIENDLY OPERATIONAL CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE NW, SUITE G  
WALKER, MICHIGAN 49544

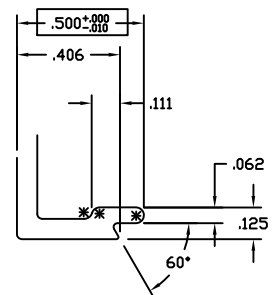
WALL THK	.075	SECTION CLASS	H	MAT'L	6063-T5	RATIO	40:1
PERIMETER DUT (TOTAL)	14.791(29.991)	AREA	1.392	WGT/FT	1.637		
FACTOR	19	CIRCLE SIZE	4.828	INFTLL VOLUME	N/A		
RXX	1.589	SXX	1.539	IXX	3.516	CXX	2.285
RYY	.678	SYY	.701	IYY	.639	CYY	.913

**DOOR HEADER 1 3/4" X 4 1/2" E4500 STOREFRONT**

DRAWN BY	SRD	DRWG DATE	12/08/02	APPV'D BY		DATE APPV'D	
INWG SCALE	NOTED	PRODUCT CODE	160		E45124	REV	C



DETAIL 'A'  
TWO TIMES SIZE



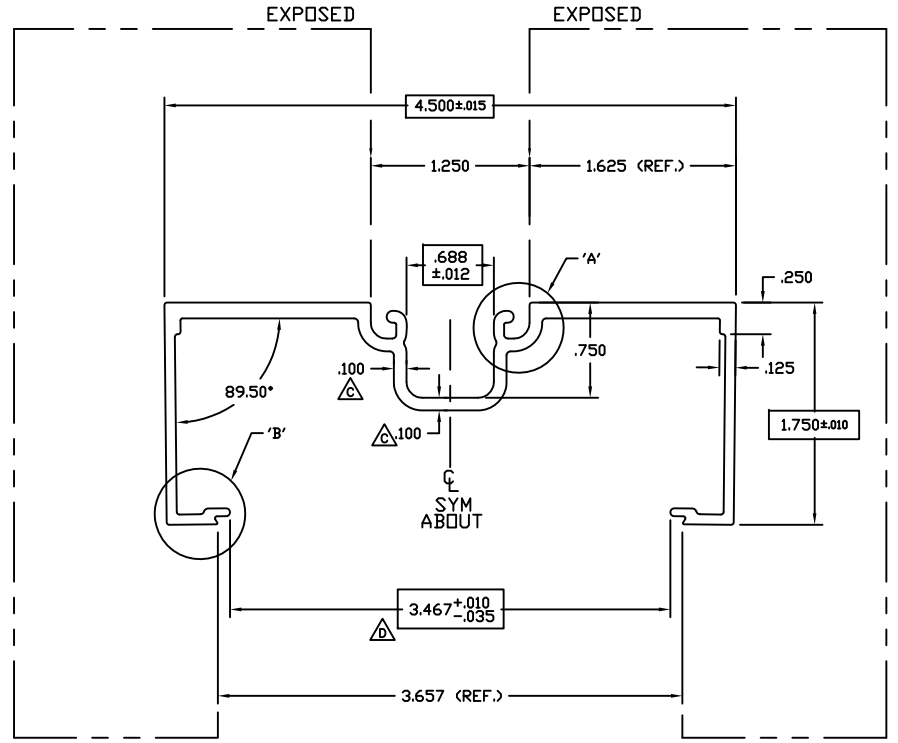
DETAIL 'B'  
TWO TIMES SIZE

**ATI**

Report # B3772-116-45

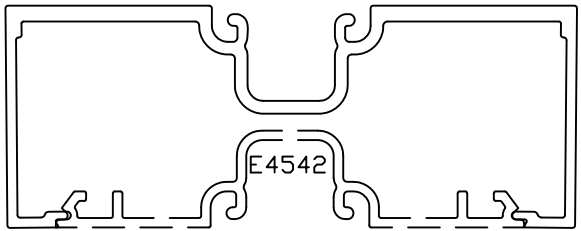
Date 10/20/2011

Simulator Eric Barilko



FULL SIZE

INDICATES CRITICAL DIMENSION



ASSEMBLY

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**TUBELITE**  
LEADING IN HIGH-IMPACT EXTRUSION  
CROWN WALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE NW, SUITE G  
WALKER, MICHIGAN 49544

WALL THK	.080	SECTION CLASS	S	MAT'L	6063-T5	RATIO	53:1
PERIMETER OUT (TOTAL)	20.704	AREA	1.030	WGT/FT	1.211		
FACTOR	17	CIRCLE SIZE	4.802	IN/FILL VOLUME	N/A		
RXX	1.577	SXX	1.139	IXX	2.562	CXX	2.250
RYY	.543	SYY	.245	IYY	.304	CYY	1.241

DENOTES CRITICAL DIMENSION  
 ALL DIES PROPERTY OF TUBELITE

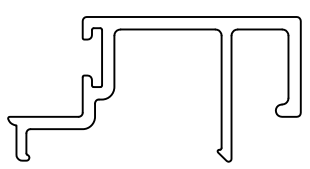
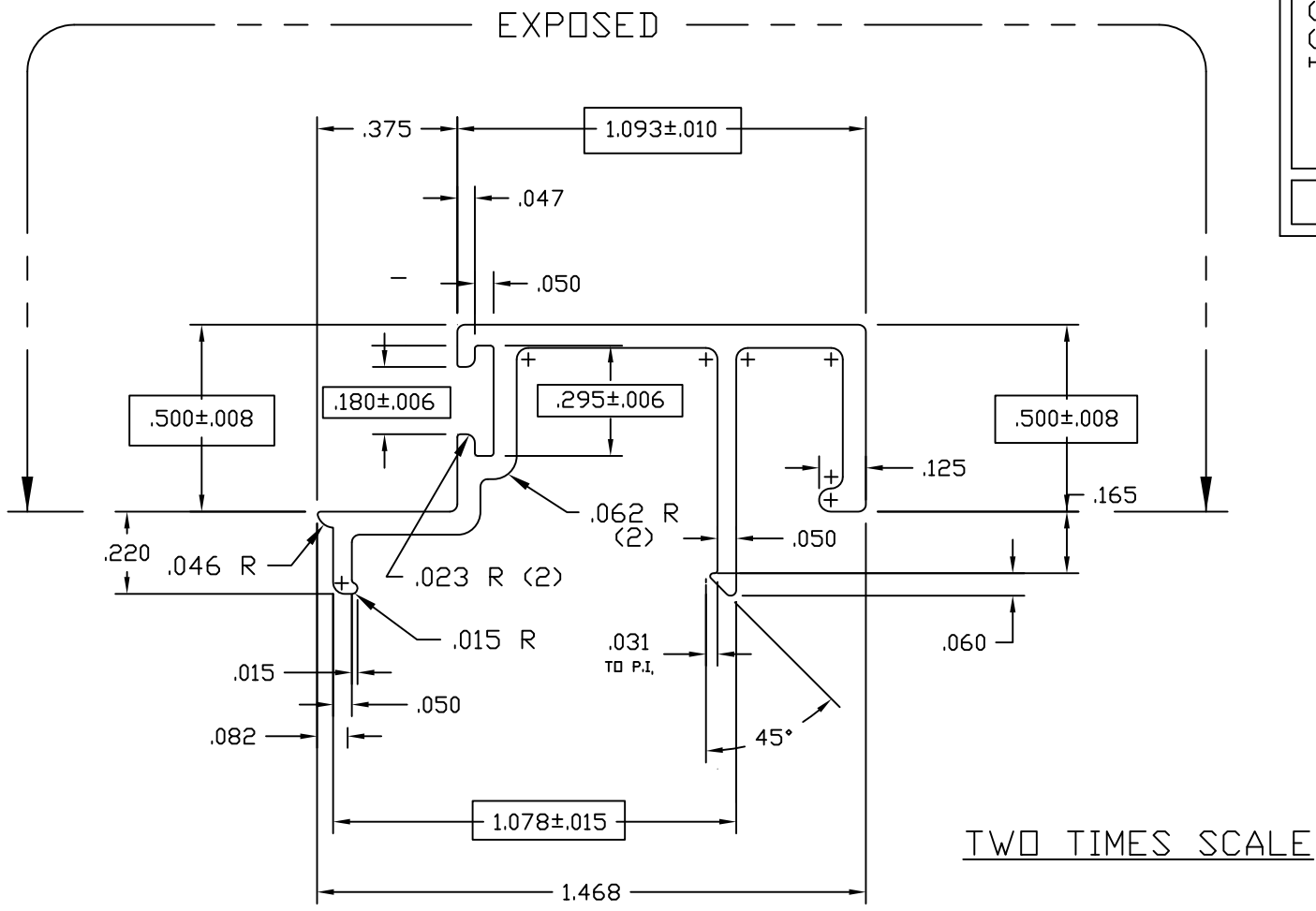
REV	DATE	DESCRIPTION	INTL
ED2933	6-26-97	REV. .125 WALL CONTINUOUS	SRK
A	03/07/03	REVISED GL. POCKET AND REGLET - REDUCED WEIGHT	SRD
	03/07/03	RENAMED E912C14 - RELEASE FOR PRODUCTION	SRD
B	03/17/04	REVISED WALL THICKNESS IN POCKET AREA AND LEGS	CRH
C	04/08/04	REVISED WALL THICKNESS IN POCKET AREA	CRH
D	03/28-07	REDUCED OPENING FOR BETTER FIT	NIK

OPEN BACK FRAME 1 3/4" X 4 1/2"  
E4500 STOREFRONT

DRAWN BY	SRD	DRWG DATE	12/08/02	APPV'D BY		DATE APPV'D	
BWG SCALE	NOTED	PRODUCT CODE	160	E4544			



E4531



ACTUAL SIZE

**ATI**

**Report #** B3772-116-45

**Date** 10/20/2011

**Simulator** Eric Barish

USED WITH 4500 SERIES  
REPLACES E-4510  
USE WITH P-1098A WEATHERING

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CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE NW, SUITE G  
WALKER, MICHIGAN 49544

WALL THK.	.062	SECTION CLASS	S	MAT'L	6063-T5	RATIO	90
PERIMETER OUT (TOTAL)	6.966	AREA	.203	WGT/FT	.238		
FACTOR	29	CIRCLE SIZE	1.58	INFILL VOLUME	N/A		

RXX	.446	SXX	.049	IXX	.040	CXX	.824
RYY	.218	SYY	.021	IYY	.010	CYY	.461

DOOR STOP 1/2" X 1 3/32"  
E4500 STOREFRONT

DRAWN BY	LS	DRWG DATE	02/07/85	APPV'D BY		DATE APPV'D	
DWG SCALE	NOTED	PRODUCT CODE	160	E4531		REV	

REV	DATE	DESCRIPTION	INTL
	3/28/94	UPDATED SECTION PROPERTIES	TPB
	4/12/99	UPDATED EXPOSED	JEK

☐ DENOTES CRITICAL DIMENSION  
ALL DIES PROPERTY OF TUBELITE

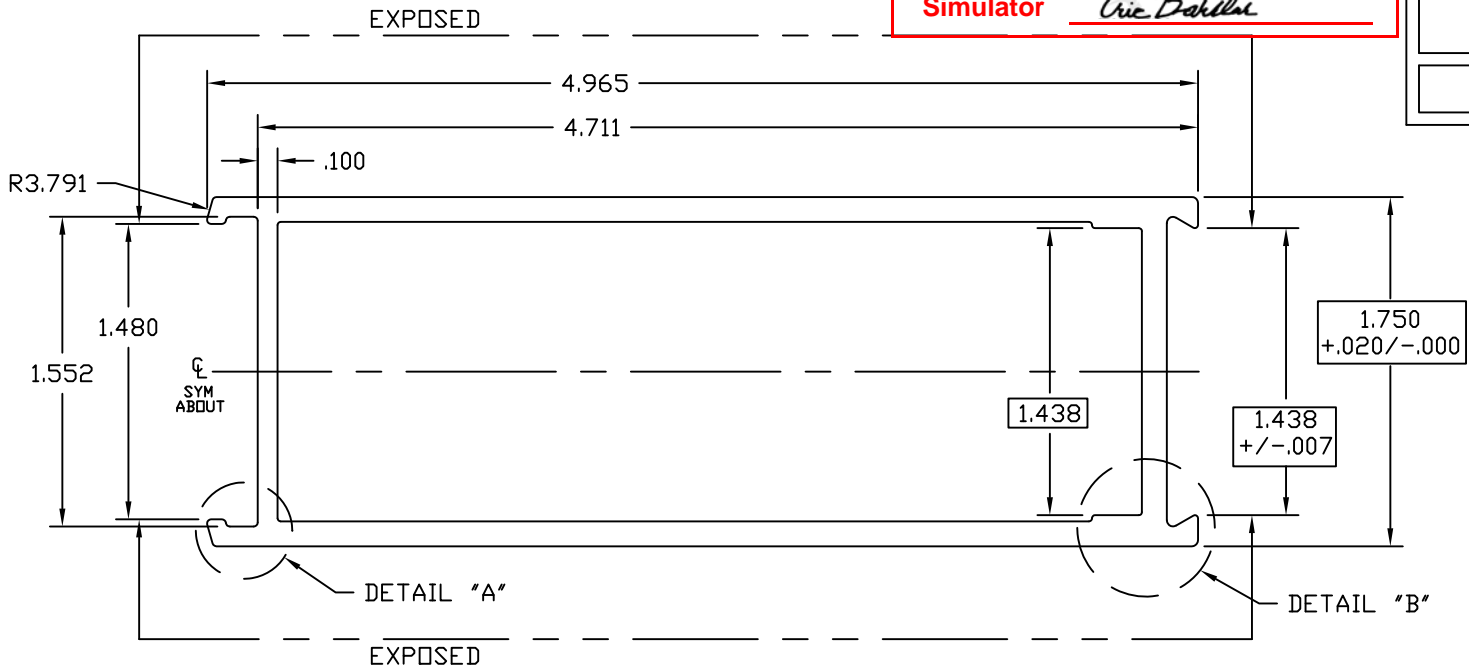


**ATI**

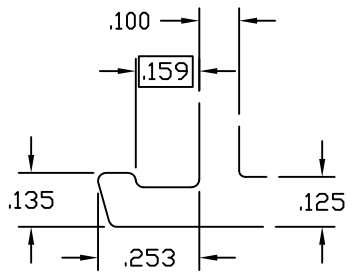
**Report #** B3772-116-45

**Date** 10/20/2011

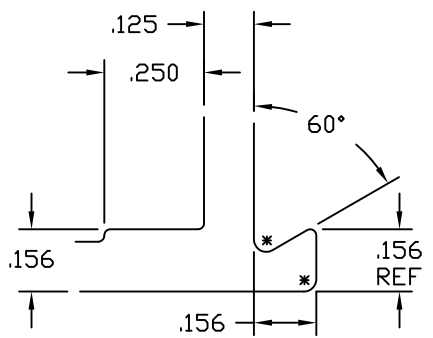
**Simulator** Eric Borde



ACTUAL SIZE



DETAIL "A"  
TWO TIMES SIZE



DETAIL "B"  
TWO TIMES SIZE

DENOTES CRITICAL DIMENSION

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3056 WALKER RIDGE NW, SUITE G  
 WALKER, MICHIGAN 49544

WALL THK.	NOTED	SECTION CLASS	H	MAT'L	6063-T5	RATIO	35:1
PERIMETER OUT (TOTAL)	14.336(25.945)	AREA	1.584	WGT/FT	1.863		
FACTOR	14	CIRCLE SIZE	5.225	INFILL VOLUME	N/A		

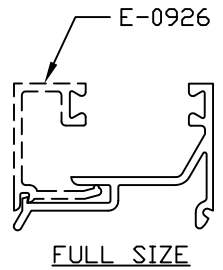
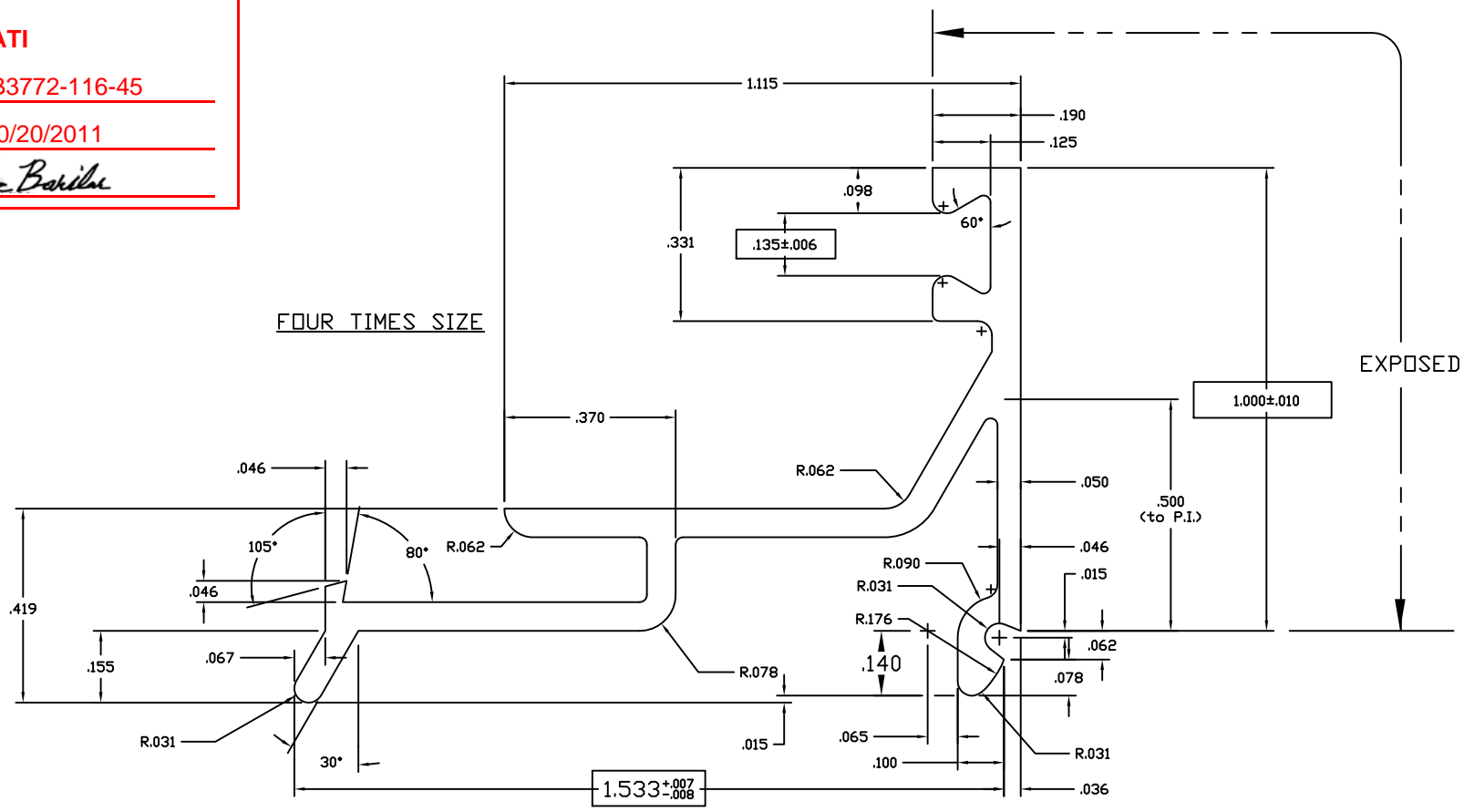
RXX	.748	SXX	1.013	IXX	.886	CXX	.875
RYY	1.632	SYX	1.769	IYY	4.220	CYY	2.579

ADJ. ASTRAGAL STILE 1 3/4" X 5"  
 STOCK DOORS

REV	DATE	DESCRIPTION	INTL
		RELEASED TO PRODUCTION - WAS E903H01 - ER-080702	LDD

DRAWN BY	LDD	DRWG DATE	03/13/07	APPV'D BY		DATE APPV'D	
DWG SCALE	NOTED	PRODUCT CODE	100	E1151		REV	

ATI  
 Report # B3772-116-45  
 Date 10/20/2011  
 Simulator Eric Bakula



NOTES:

- 1) USE E-0927/0928 FOR 1" MAT'L
- 2) USE E-0926/0928 FOR 5/8" MAT'L
- 3) USE GLAZING BEAD P-302 FOR BOTH SIDES OF GLASS OR PANEL

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 DENOTES CRITICAL DIMENSION  
 ALL DIES PROPERTY OF TUBELITE

**TUBELITE**  
 LEADING IN ECO-FRIENDLY OPERATING  
 CURTAINWALL AND ENTRANCE SYSTEMS

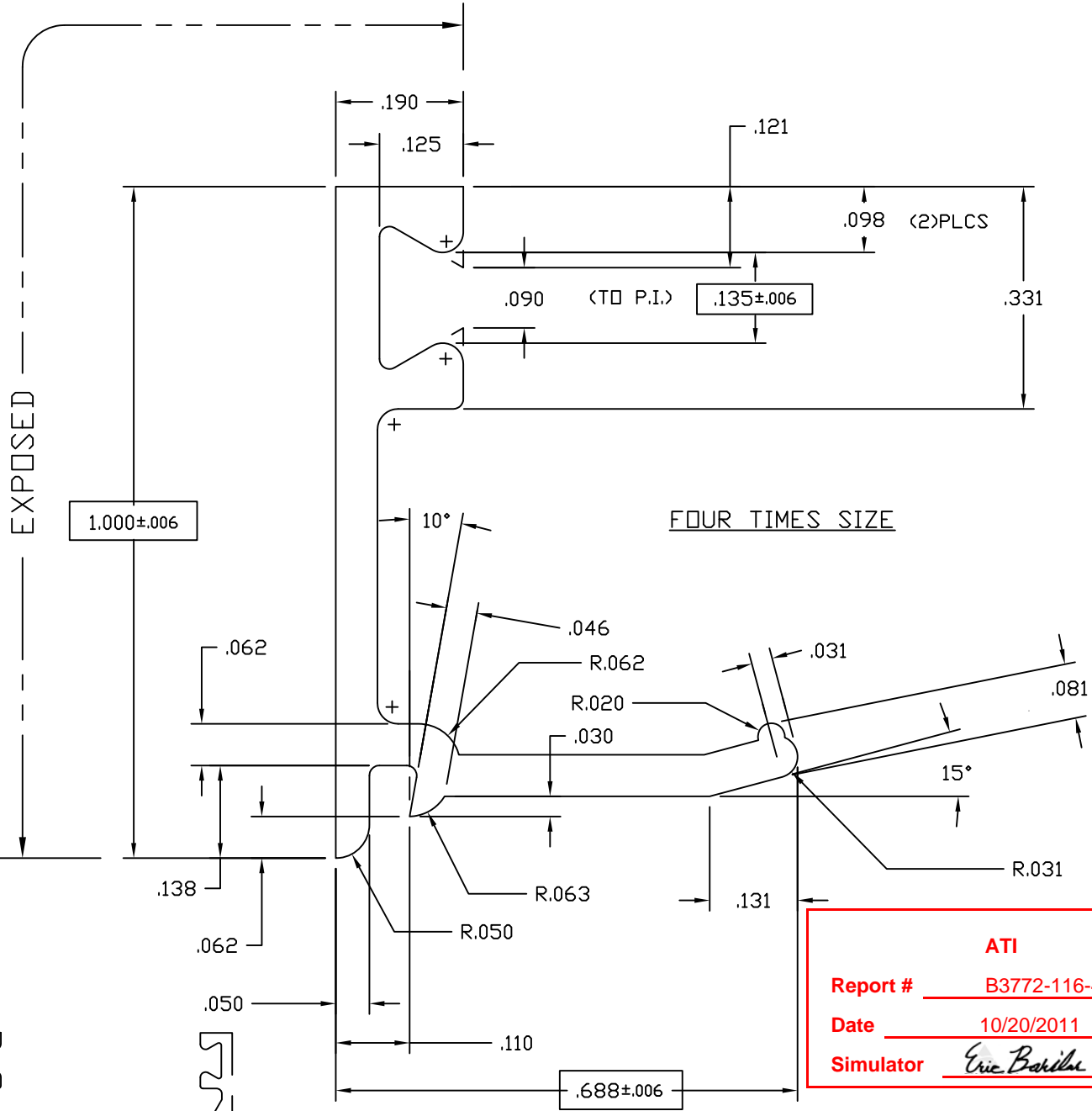
3056 WALKER RIDGE NW, SUITE G  
 WALKER, MICHIGAN 49544

WALL THK	.062	SECTION CLASS	S	MAT'L	6063-T5	RATIO	59:1
PERIMETER OUT (TOTAL)	7.540	AREA	.234	WGT/FT	.275		
FACTOR	27	CIRCLE SIZE	1.938	INFILL VOLUME	N/A		
RXX	.302	SXX	.030	IXX	.021	CXX	.701
RYY	.501	SYY	.113	IYY	.059	CYY	1.049

GLASS STOP, 1" HIGH FOR 1" GLASS STOCK DOORS

DRAWN BY	DWG DATE	07/03/84	APPV'D BY	DATE APPV'D
DWG SCALE	NOTED	PRODUCT CODE	100	E0928

REV	DATE	DESCRIPTION	INTL
	10/12/87	REMOVED LEG	RW



**ATI**

Report # B3772-116-45

Date 10/20/2011

Simulator Eric Barber

- NOTES:
- 1) USE WITH 1" INSULATED GLASS OR 1" PANEL
  - 2) USE GLAZING BEAD P-302 BOTH SIDES
  - 3) USE WITH E-0928 OR E-0929

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3056 WALKER RIDGE NW, SUITE G  
 WALKER, MICHIGAN 49544

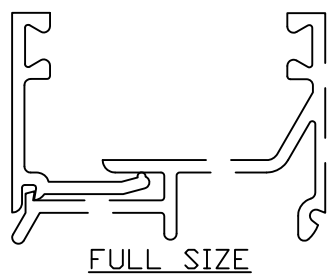
WALL THK.	.062	SECTION CLASS	S	MAT'L	6063-T5	RATIO	74:1
PERIMETER OUT (TOTAL)	4.001	AREA	.124	WGT/FT	.146		
FACTOR	27	CIRCLE SIZE	1.120	INFILL VOLUME	N/A		

RXX	.321	SXX	.023	IXX	.013	CXX	.321
RYY	.185	SYY	.008	IYY	.004	CYY	.185

GLASS STOP, 1" HIGH FOR 1" GLASS  
 STOCK DOORS

DRAWN BY	CRH	DRWG DATE	04/21/99	APPV'D BY		DATE APPV'D	
DWG SCALE	NOTED	PRODUCT CODE	100	E0927		REV	

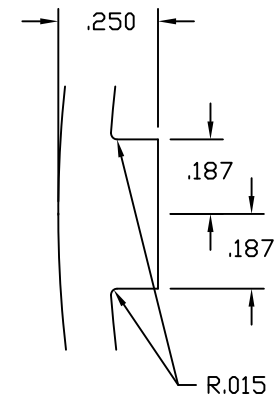
REV	DATE	DESCRIPTION	INTL
X	xx/xx/xx	xxxxxxxxxxxxxx	xxx



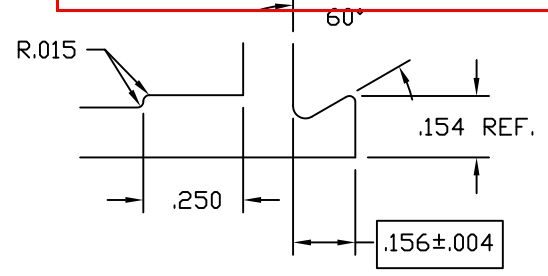


E0417  
B

**ATI**  
**Report #** B3772-116-45  
**Date** 10/20/2011  
**Simulator** Eric Barthe

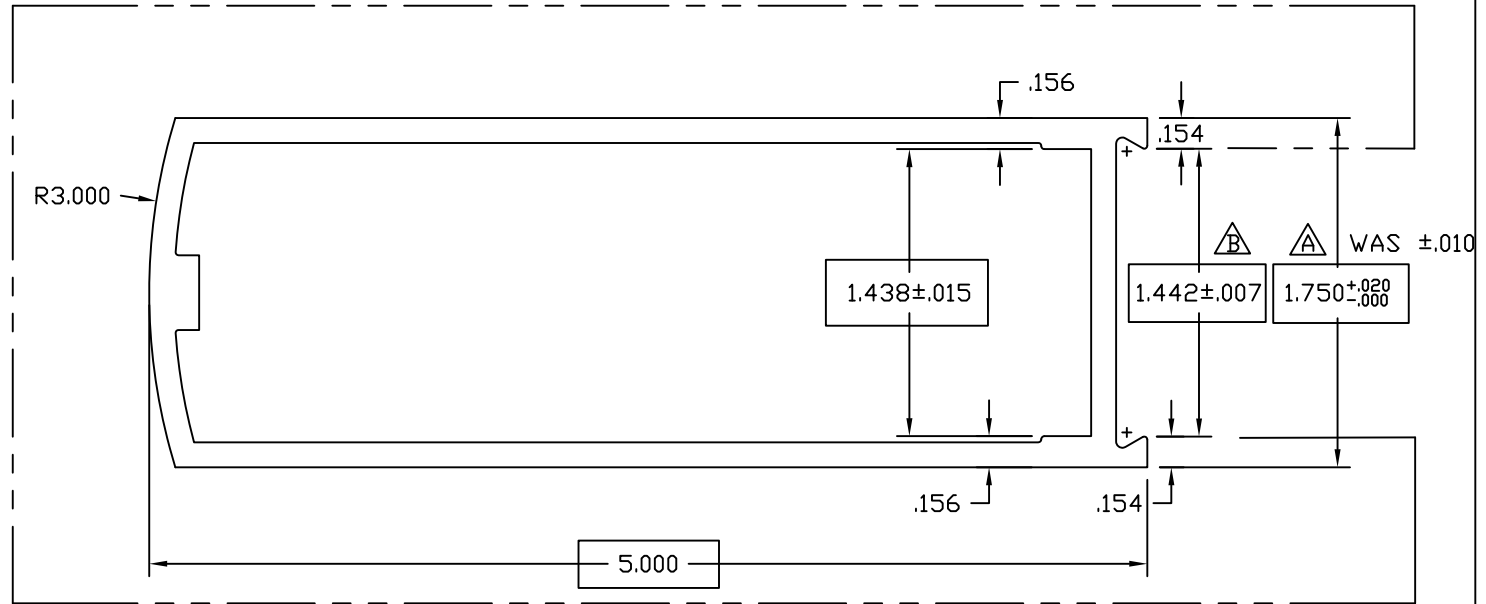


TWO TIMES SIZE



TWO TIMES SIZE

EXPOSED



ACTUAL SIZE

$.125^{+.003}_{-.011}$  TYP WALL UNLESS NOTED

SNAP FIT W/E-0437

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3056 WALKER RIDGE NW, SUITE G  
 WALKER, MICHIGAN 49544

WALL THK.	NOTED	SECTION CLASS	H	MAT'L	6063-T5	RATIO	33:1
PERIMETER OUT (TOTAL)	13.679	(25.882)	AREA	1.661	WGT/FT	1.953	
FACTOR	13	CIRCLE SIZE	5.174	INFILL VOLUME	N/A		

RXX	.731	SXX	1.015	IXX	.888	CXX	.875
RYY	1.705	SYX	1.916	IYY	4.828	CYY	2.520

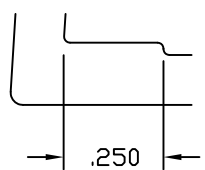
ROUND FACE VERTICAL RAIL 1 3/4" X 5"  
 CUSTOM DOOR/FRAMES

DRAWN BY	DH	DRWG DATE	04/19/84	APPV'D BY		DATE APPV'D	
DWG SCALE	NOTED	PRODUCT CODE	110	E0417		REV	B

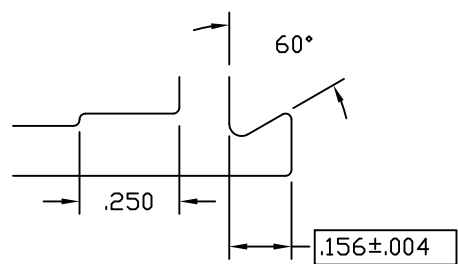
REV	DATE	DESCRIPTION	INTL
A	1/21/92	REVISE TOLERANCES	KMH
B	11/21/02	1.442 +/--.007 WAS 1.438 +.002/--.013	CRH

□ DENOTES CRITICAL DIMENSION  
 ALL DIES PROPERTY OF TUBELITE

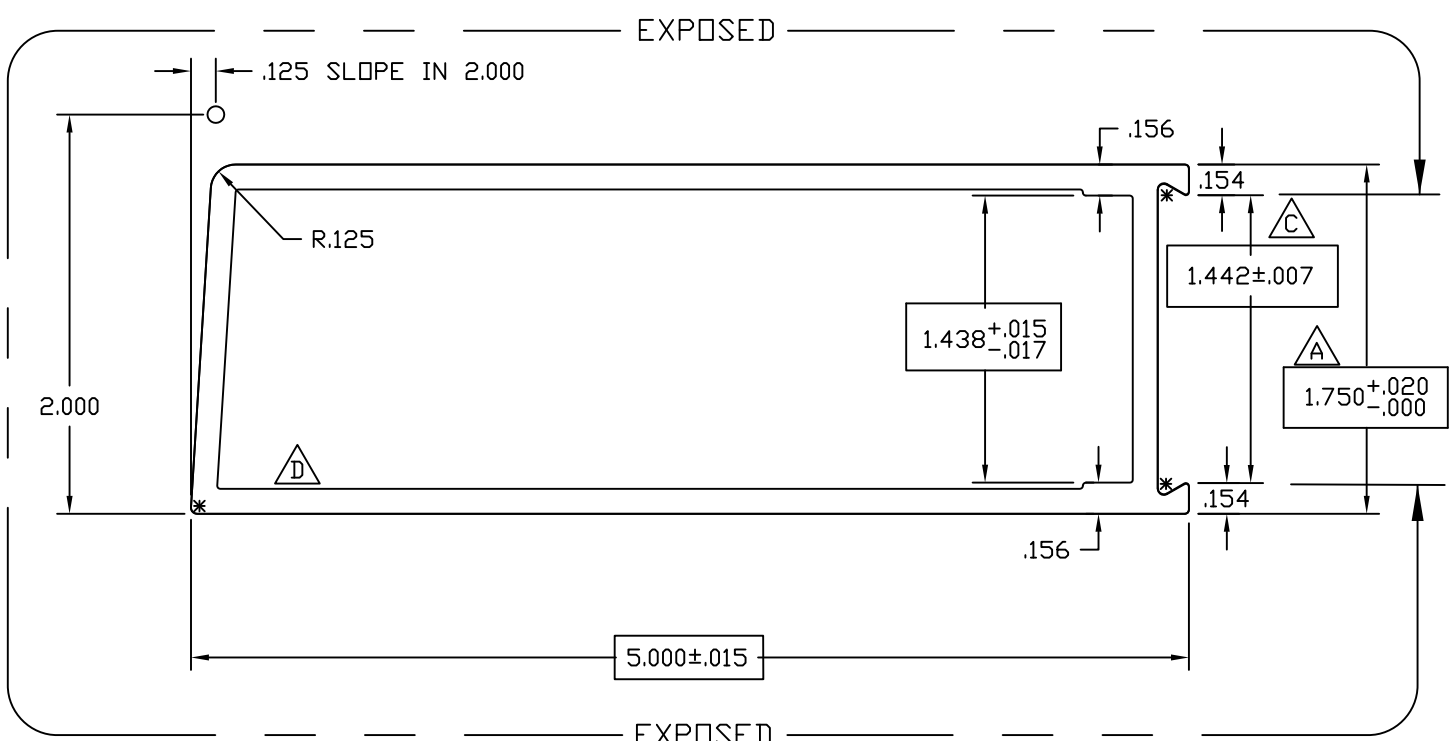
E0416  
D



TWO TIMES SIZE



TWO TIMES SIZE



EXPOSED  
EXPOSED  
ACTUAL SIZE

**ATI**  
**Report #** B3772-116-45  
**Date** 10/20/2011  
**Simulator** Eric Boriluk

$.125^{+.003}_{-.011}$  TYP WALL UNLESS NOTED  
 SNAP FIT W/E-0437

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 CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE NW, SUITE G  
 WALKER, MICHIGAN 49544

WALL THK.	NOTED	SECTION CLASS	H	MAT'L	6063-T5	RATIO	34:1
PERIMETER OUT (TOTAL)	13.733	AREA	1.623	WGT/FT	1.909		
FACTOR	13	CIRCLE SIZE	5.293	INFILL VOLUME	N/A		

RXX	.742	SXX	1.012	IXX	.893	CXX	.883
RYY	1.686	SYX	1.823	IYY	4.611	CYY	2.529

BEVELED VERTICAL RAIL 1 3/4" X 5"  
 CUSTOM DOORS/FRAMES

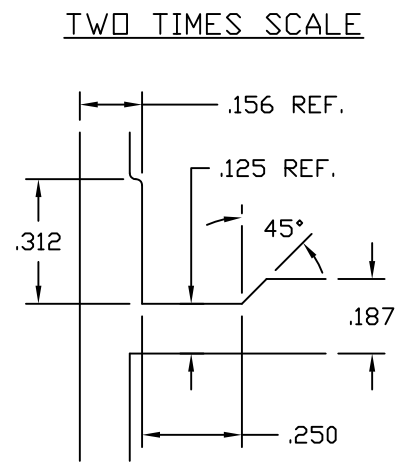
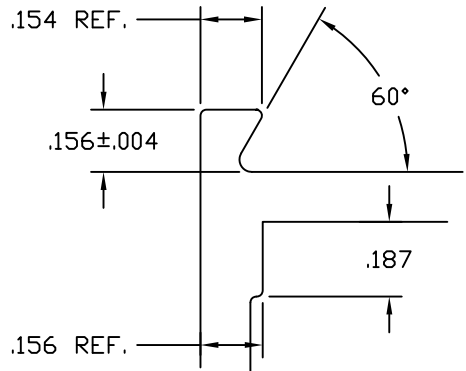
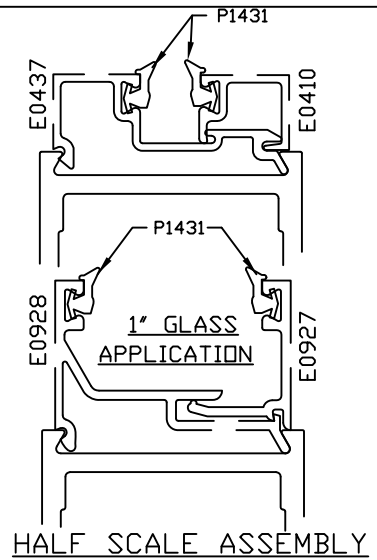
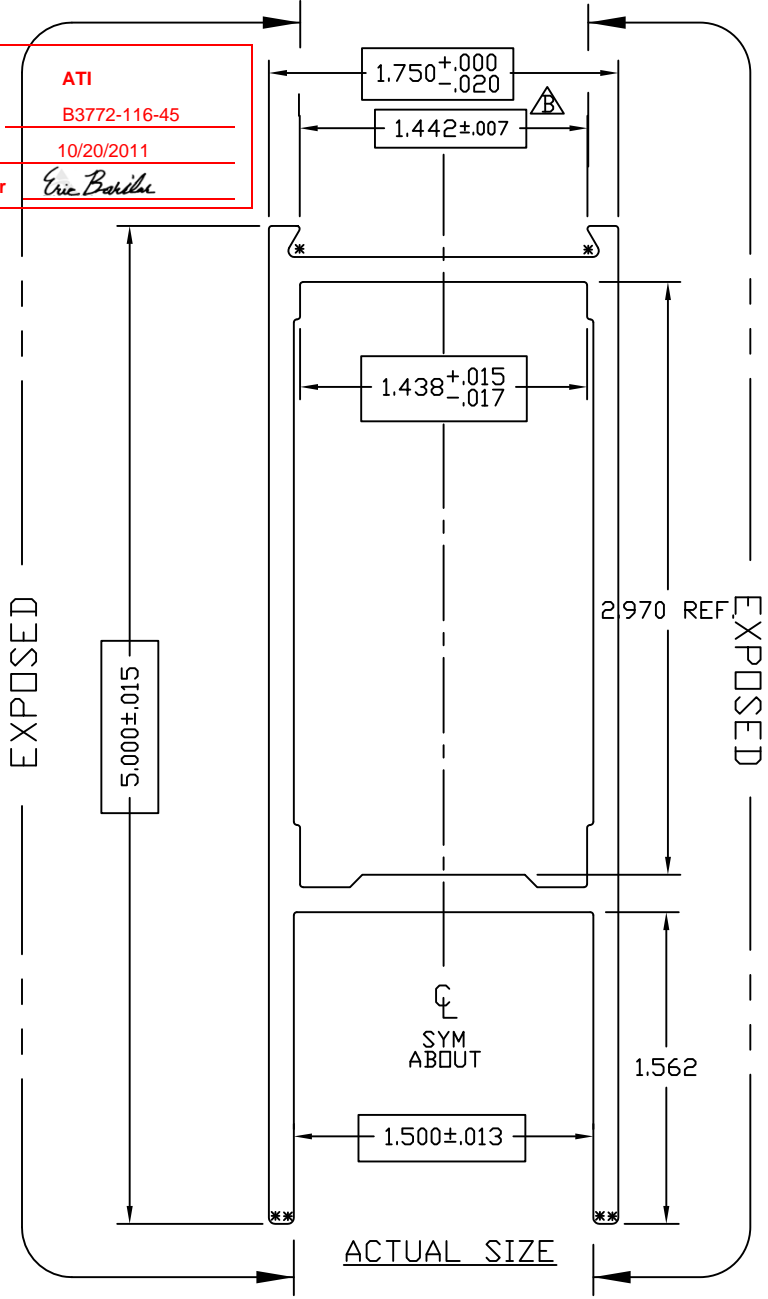
DRAWN BY	DH	DRWG DATE	04/08/84	APPV'D BY		DATE APPV'D	
DWG SCALE	NOTED	PRODUCT CODE	110	E0416		REV	D

REV	DATE	DESCRIPTION	INTL
A	1/21/92	+0.020/-0.000 WAS +/-0.010	KMH
B	04/10/01	1.449 +0.000/-0.010 WAS 1.438 +0.002/-0.013	CRH
C	10/15/02	1.442+/-0.007 WAS 1.449 +0.000/-0.010	CRH
D	12/08/10	RMV .030 step in innser lower left corner	TT

DENOTES CRITICAL DIMENSION  
 ALL DIES PROPERTY OF TUBELITE

E0318  
B

ATI  
Report # B3772-116-45  
Date 10/20/2011  
Simulator *Eric Borilke*



.125 +.003/-0.011 TYP WALL UNLESS NOTED  
SNAP FIT W/E0437(1/4"GLASS) AND E0928(1"GLASS)

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□ DENOTES CRITICAL DIMENSION  
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3056 WALKER RIDGE NW, SUITE G  
WALKER, MICHIGAN 49544

WALL THK.	NOTED	SECTION CLASS	H	MAT'L	6063-T5	RATIO	32:1
PERIMETER OUT (TOTAL)	16.983(26.047)		AREA	1.708	WGT/FT	2.008	
FACTOR	13	CIRCLE SIZE	5.282	INFILL VOLUME	N/A		

RXX	.732	SXX	1.046	IXX	.916	CXX	.875
RYY	1.486	SYX	1.432	IYY	3.773	CYY	2.365

HORIZONTAL RAIL 5" X 1 3/4"  
CUSTOM DOORS/FRAME

REV	DATE	DESCRIPTION	INTL
A	11/07/00	+0.00/-0.10 WAS ±0.02	CRH
B	04/10/02	±.007 WAS +0.00/-0.10	CRH

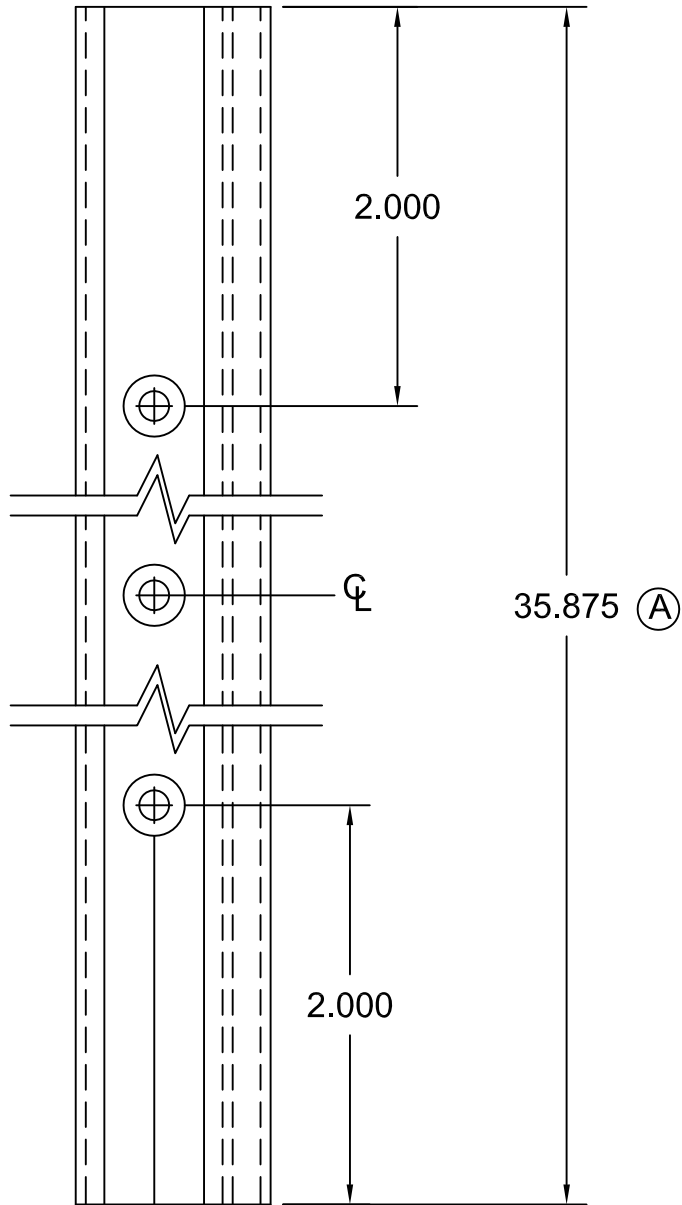
DRAWN BY	DLH	DRWG DATE	04/26/84	APPV'D BY		DATE APPV'D	
DWG SCALE	NOTED	PRODUCT CODE	110	E0318		REV	B

**ATI**

Report #           B3772-116-45          

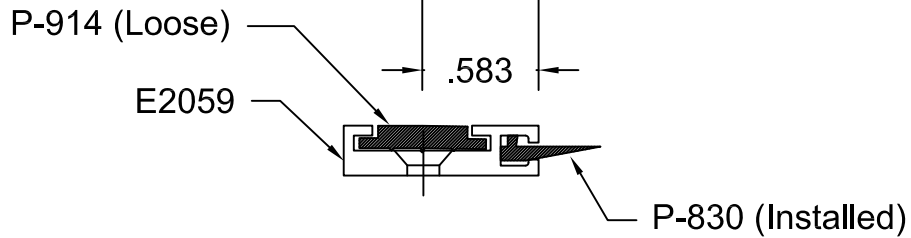
Date           10/20/2011          

Simulator           Eric Barilko          



Operations:

1. Cut to length as required from E2059
2. Drill 3 holes with #25 Drl & Ctsk for S-064 (#6 FHCS)
3. Cut P-830 to length, Install, & Crimp ends
4. Cut P-914 to length, and install.
5. Paint ends as required
6. Ship with three (3) S064 Screws.



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 □ DENOTES CRITICAL DIMENSION

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3056 WALKER RIDGE NW, SUITE G  
 WALKER, MICHIGAN 49544

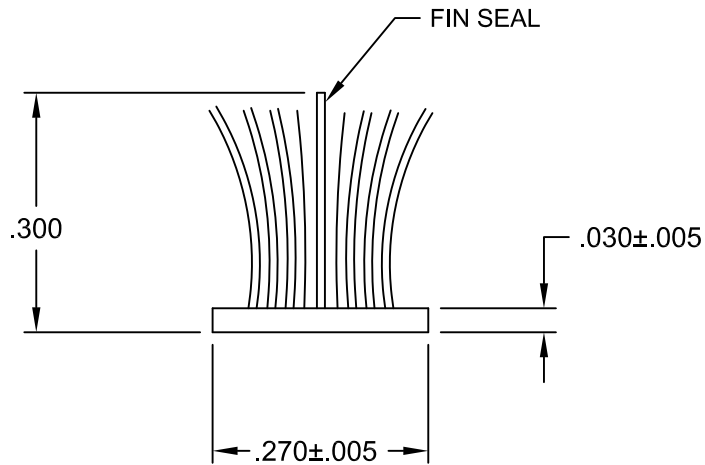
REV	DATE	DESCRIPTION	INTL
	7/29/83	Released Part per ED 128	PJ
A	05/17/90	ED #1222 Dim was 34.875	KMH
B	8/24/01	Redrawn for CAD	DMT
C	06/19/03	OUTSOURCE - ADD S064 SCREWS	SRD

Door Seal to use with  
E2058 Threshold

DRAWN BY PJ	DRWG DATE 05/09/83	APPV,D BY	DATE APPV'D	REV
DRWG SCALE Full	PRODUCT CODE 380	P1275		C

P1098A

B



Actual Size

**ATI**

**Report #** B3772-116-45

**Date** 10/20/2011

**Simulator** Eric Borilka

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\* INDICATES .031 RADIUS

□ DENOTES CRITICAL DIMENSION

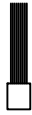
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3056 WALKER RIDGE NW, SUITE G  
WALKER, MICHIGAN 49544

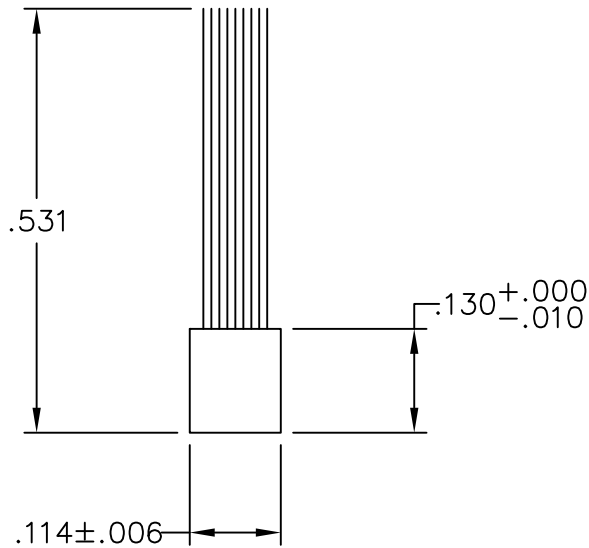
REV	DATE	DESCRIPTION	INTL
A	03/08/83	Release Part per ED 109	
B	05/29/02	Redrawn for CAD	DMT

**Poly Bond Fin-Seal Weathering**  
use with Door Stop E1377

DRAWN BY <b>Don H</b>	DRWG DATE <b>06/03/83</b>	APPV,D BY	DATE APPV'D
DRWG SCALE <b>Noted</b>	PRODUCT CODE <b>380</b>	<b>P1098A</b>	
			<b>B</b>



Actual Size



Four Times Size

Purchased Part

Schlege Pile Weathering  
Part Number 364-1006-5101

<b>ATI</b>
<b>Report #</b> <u>B3772-116-45</u>
<b>Date</b> <u>10/20/2011</u>
<b>Simulator</b> <u>Eric Bakula</u>

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ALL UNSPECIFIED RADII .015

\* INDICATES .031 RADIUS

□ DENOTES CRITICAL DIMENSION

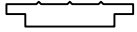


3056 WALKER RIDGE NW, SUITE G  
WALKER, MICHIGAN 49544

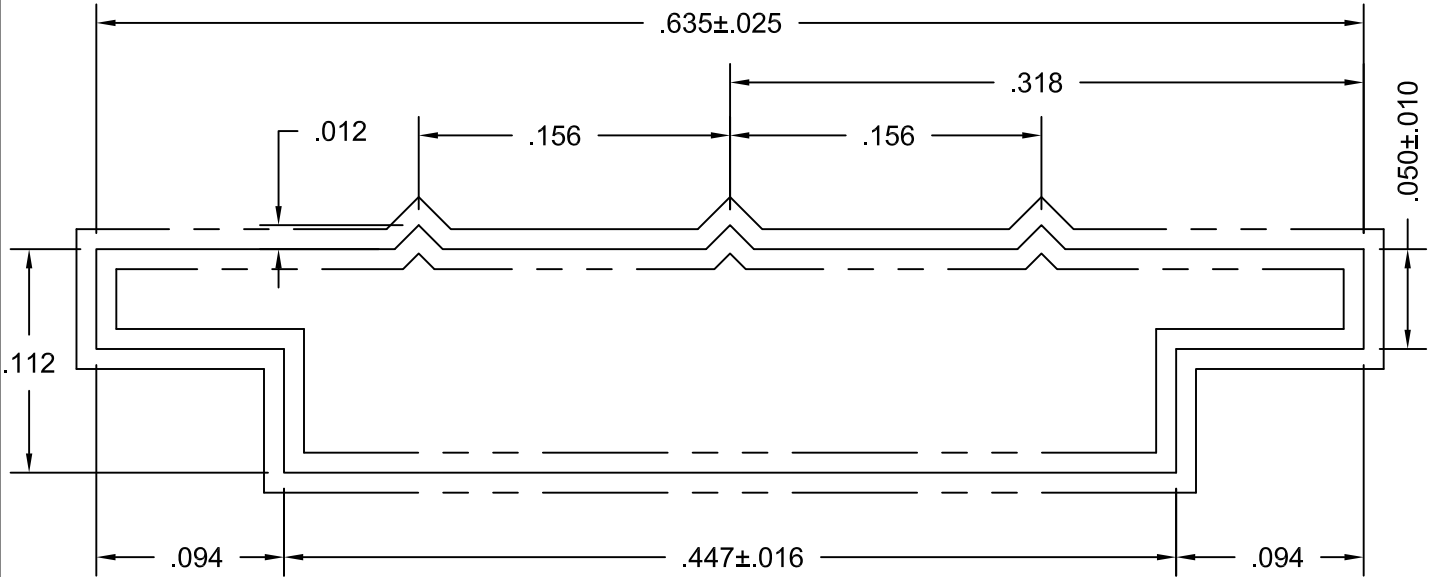
REV	DATE	DESCRIPTION	INTL
A	05/03/02	Redrawn for CAD	DMT

Pile Weathering to use with E1195 and E1152			
DRAWN BY PJ	DRWG DATE 10/03/75	APPV,D BY	DATE APPV'D
DRWG SCALE Noted	PRODUCT CODE 110	P938	REV A

ATI  
 Report # B3772-116-45  
 Date 10/20/2011  
 Simulator Eric Beriber



ACTUAL SIZE



Ten Times Size

NOTE: Part to receive Silicone Bath after Extruding

Purchased Part  
 Avon Rubber  
 90 Durometer  
 250' Rolls

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ALL UNSPECIFIED RADII .015

\* INDICATES .031 RADIUS

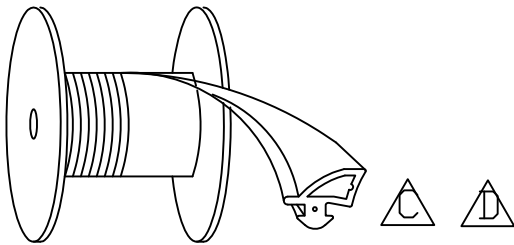
□ DENOTES CRITICAL DIMENSION

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 CURTAINWALL AND ENTRANCE SYSTEMS

3056 WALKER RIDGE NW, SUITE G  
 WALKER, MICHIGAN 49544

REV	DATE	DESCRIPTION	INTL
A	01/19/96	Redrawn for AutoCAD	DMT

<p>EPDM Rubber Glazing          Use with M1061, M1063, M1202</p>			
DRAWN BY	KMH	DRWG DATE	01/19/96
APPV,D BY		DATE APPV'D	
DRWG SCALE	Noted	PRODUCT CODE	380
<p>P914</p>			<p>REV A</p>



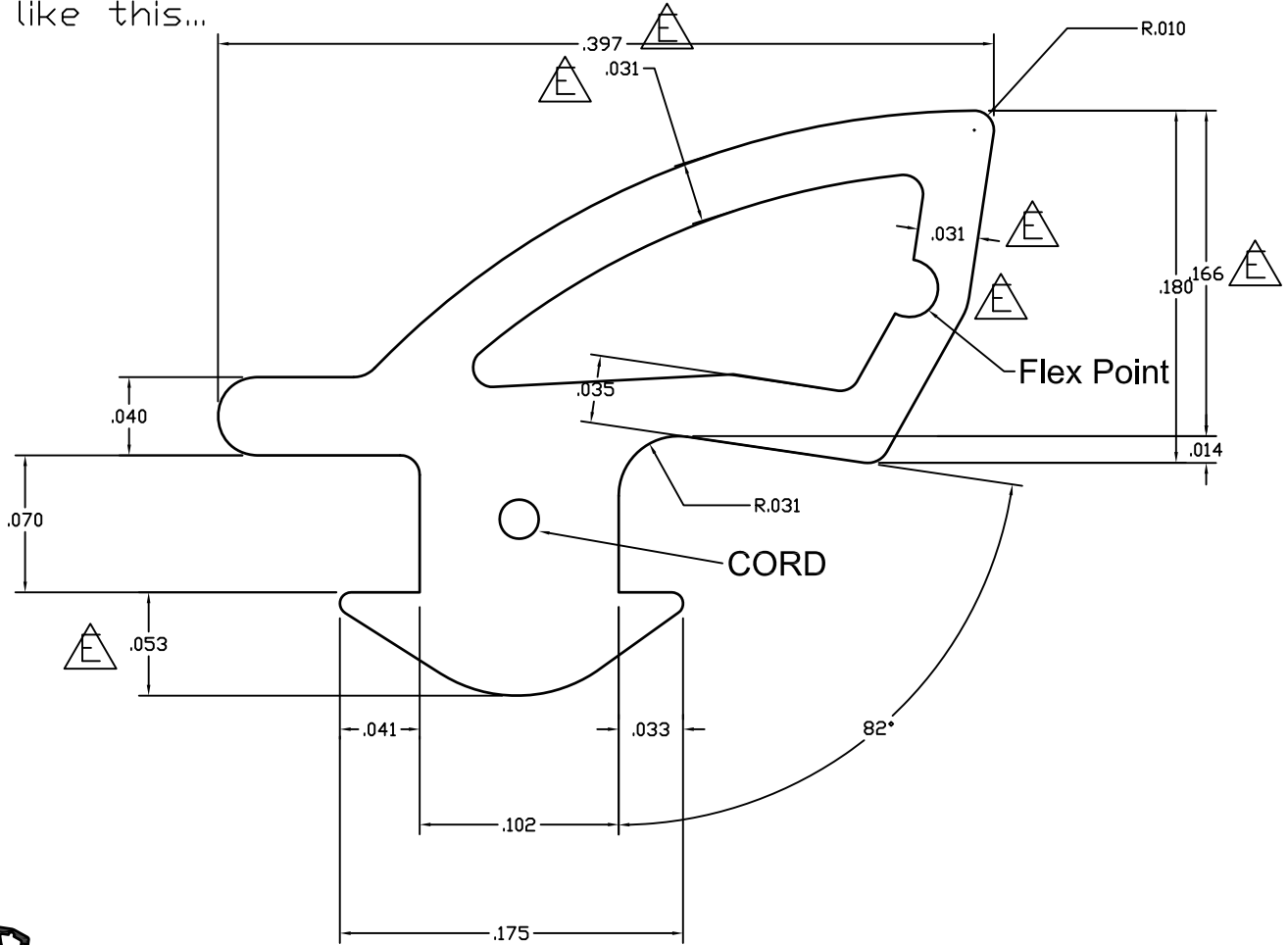
**ATI**

**Report #** B3772-116-45

**Date** 10/20/2011

**Simulator** Eric Barilko

Material must UNREEL like this...



ACTUAL SIZE

MATERIAL: EPDM 60 DUROMETER WITH CORD

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ALL UNSPECIFIED RADII .015

\* INDICATES .031 RADIUS

□ DENOTES CRITICAL DIMENSION

**TUBELITE®**  
DEPENDABLE  
LEADERS IN ECO-EFFICIENT STOREFRONT,  
CURTAINWALL AND ENTRANCE SYSTEMS

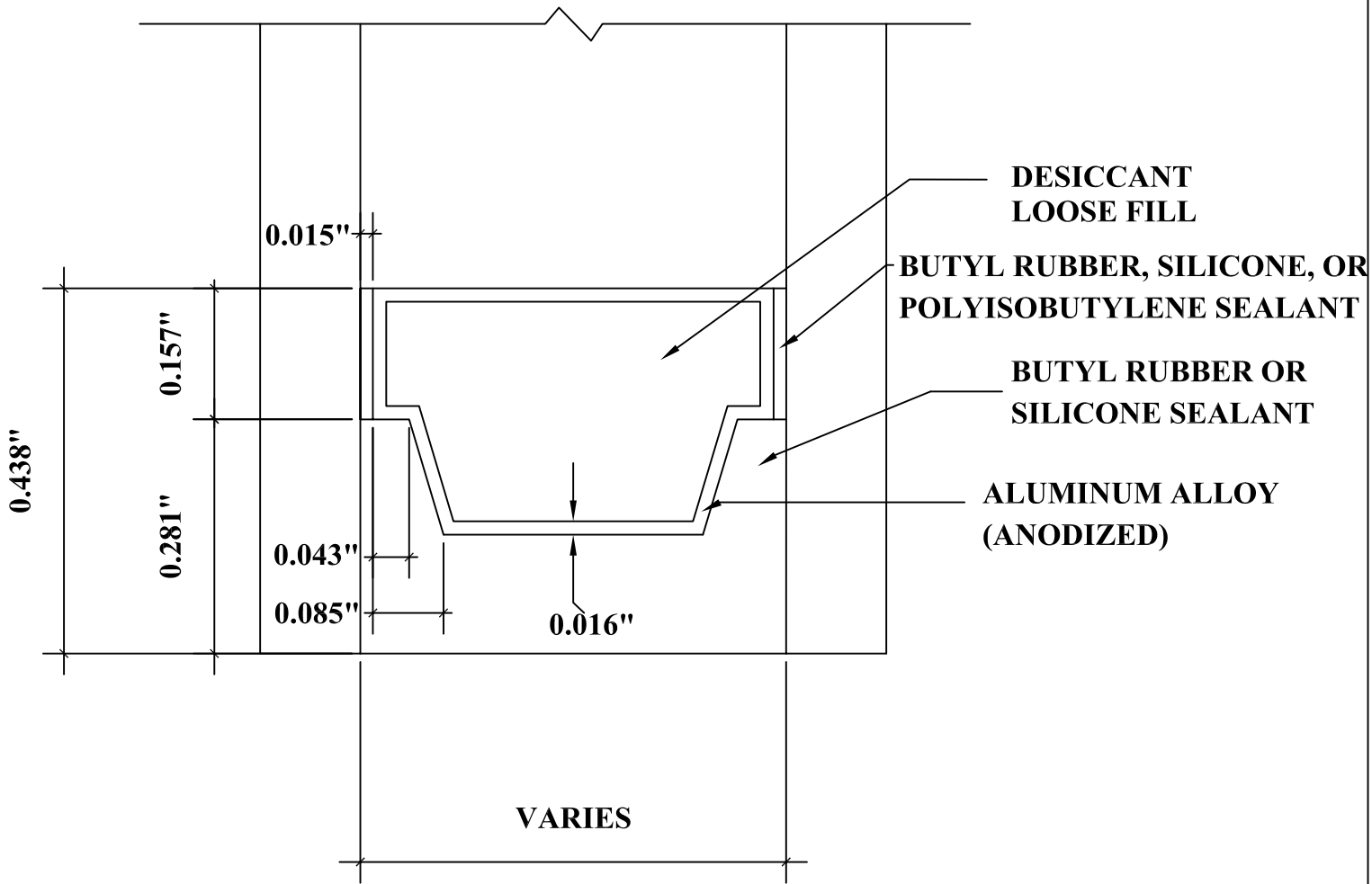
3056 WALKER RIDGE NW, SUITE G  
WALKER, MICHIGAN 49544

REV	DATE	DESCRIPTION	INTL
A	08/20/07	MODIFIED DART: .070 WAS .060 AND .051 WAS .061 ADDED CORD	NIK
B	10/16/08	ADDED MANUFACTURER'S TOLERANCES FOR REFERENCE	SRD
C	10/22/10	Modified gasket position of how the reel should roll	TT
D	12/16/10	Modified gasket position of how the reel should roll	TT
E	02/15/11	Rev flex pt, thickness was .032, .180 was .188	TT

1/4"-1" DOOR GLAZING GASKET  
500' ROLLS

DRAWN BY NIK	DRWG DATE 4-17-07	APPV.D BY	DATE APPV'D	REV
DRWG SCALE 10X	PRODUCT CODE 100	P0017		E

	<b>ATI</b>
<b>Report #</b>	<u>B3772-116-45</u>
<b>Date</b>	<u>10/20/2011</u>
<b>Simulator</b>	<u><i>Eric Barilac</i></u>



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