

AAMA 507-07 THERMAL PERFORMANCE REPORT
(Revised)

Rendered to:

UNITED STATES ALUMINUM

SERIES/MODEL: 7600 Projected Vent
TYPE: Projecting (Awning - Single)

Report No:	A2572.01-116-45
Original Report Date:	08/09/10
Revised Report Date:	09/13/10



AAMA 507-07 THERMAL PERFORMANCE REPORT (Revised)

Rendered to:

UNITED STATES ALUMINUM
200 Singleton Drive
Wacahachie, Texas 75165

Report No:	A2572.01-116-45
Original Report Date:	08/09/10
Simulation Date:	08/09/10
Revised Report Date:	09/13/10

Project Summary:

Architectural Testing, Inc. was contracted by United States Aluminum to provide U-Factor and Solar Heat Gain Coefficient thermal performance ratings on the 7600 Projected Vent - Projecting (Awning - Single). 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

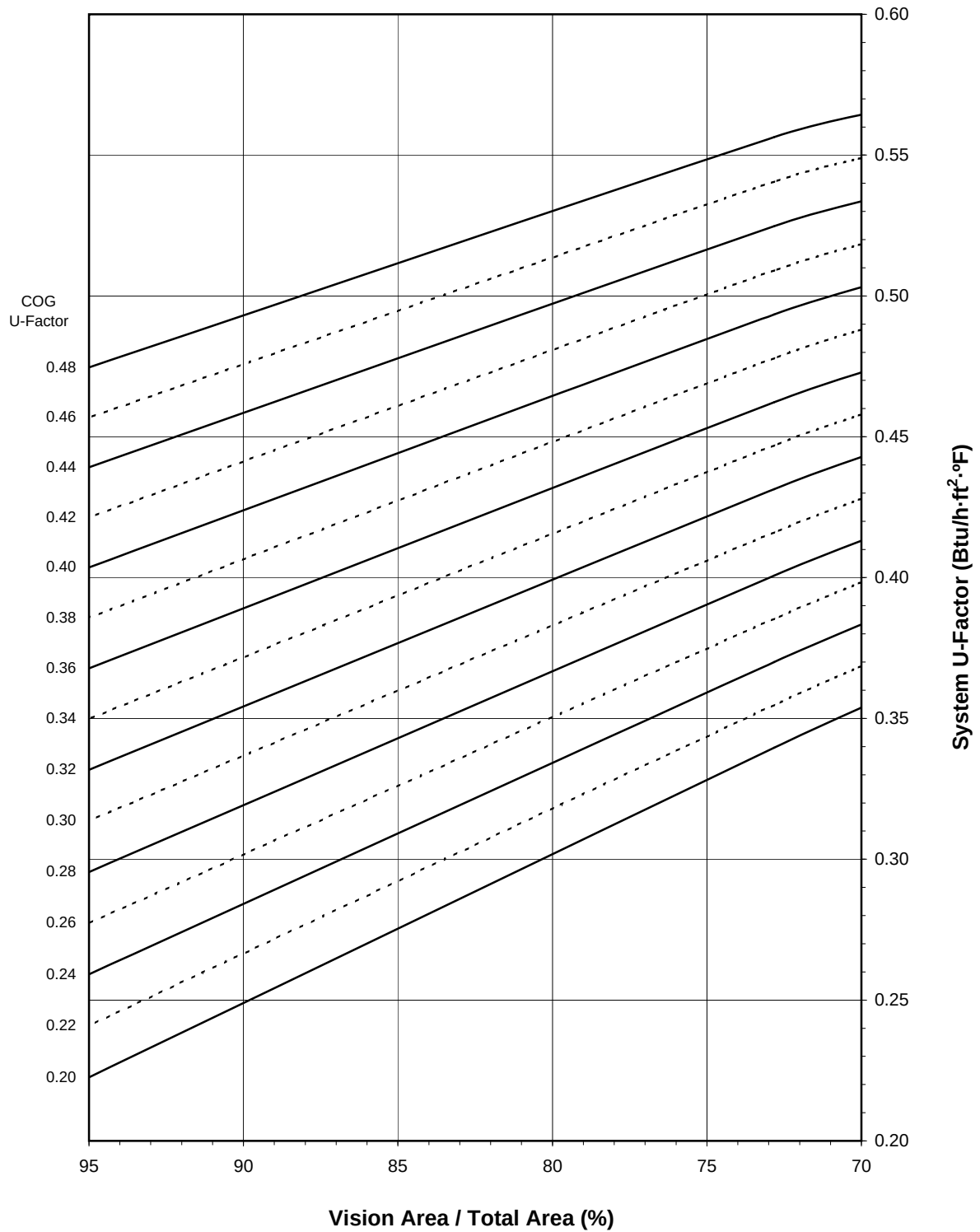
NFRC 200-2010, Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence

Simulation Specimen Description:

Series/Model:	7600 Projected Vent
Type:	Projecting (Awning - Single)
Frame Material:	Painted Aluminum
Specimen Size:	1500mm wide by 600mm high (59-1/16" by 23-5/8")
Configuration:	Single Vision Lite
Drawing Reference:	United States Aluminum Drawing: 7600 Projecting

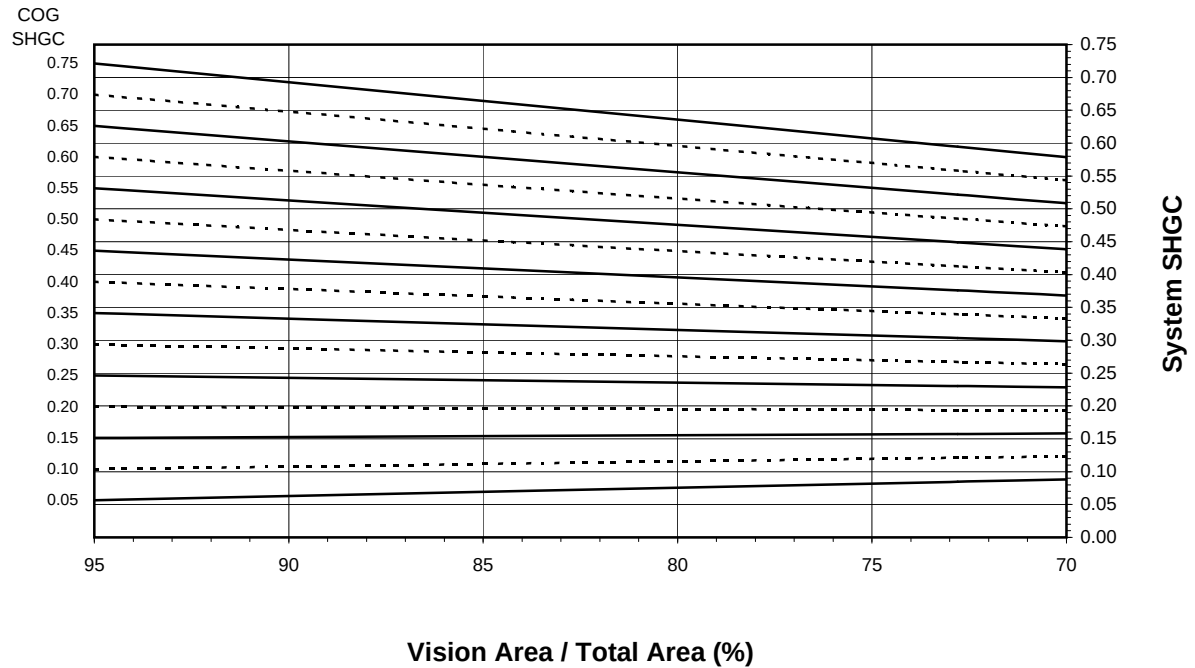
United States Aluminum
7600 Projected Vent - Projecting (Awning - Single)

System U-Factor vs. Percentage of Vision Area

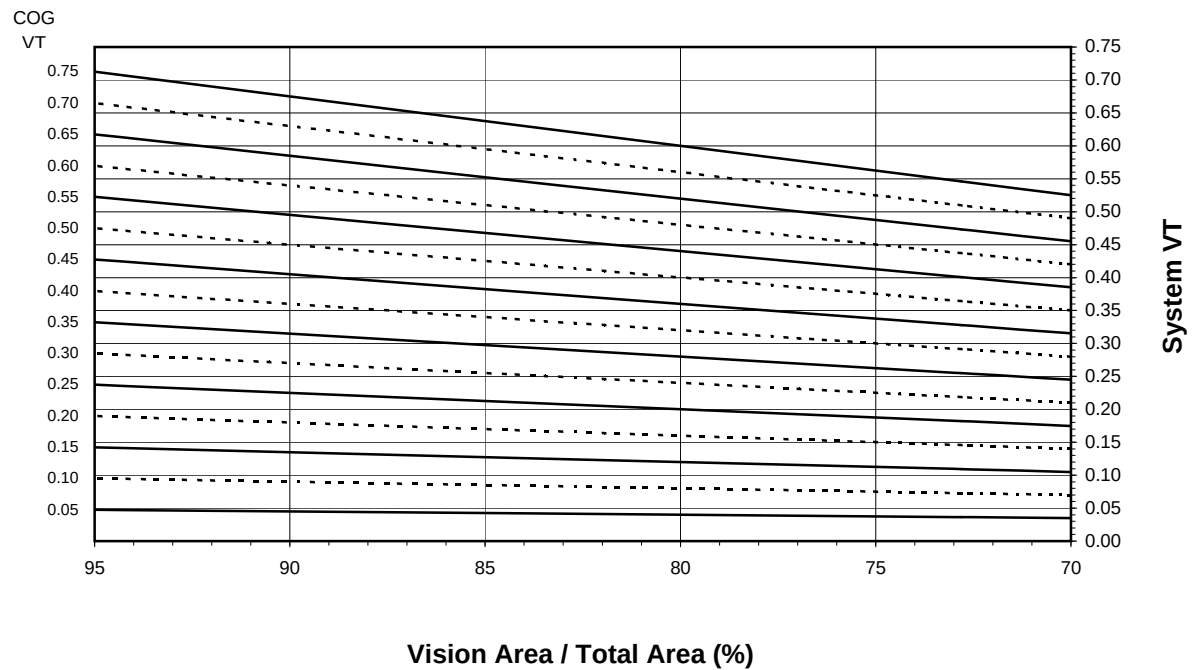


**United States Aluminum
7600 Projected Vent - Projecting (Awning - Single)**

System SHGC vs. Percentage of Vision Area



System VT vs. Percentage of Vision Area



**United States Aluminum
7600 Projected Vent - Projecting (Awning - Single)**

Size Specific U-Factor Matrix*

Glazing Option	Center of Glass U-Factor	Overall U-Factor
1	0.48	0.56
2	0.46	0.54
3	0.44	0.52
4	0.42	0.51
5	0.40	0.49
6	0.38	0.48
7	0.36	0.46
8	0.34	0.45
9	0.32	0.43
10	0.30	0.42
11	0.28	0.40
12	0.26	0.39
13	0.24	0.37
14	0.22	0.35
15	0.20	0.34

Size Specific SHGC Matrix*

Center of Glass SHGC	Overall SHGC
0.75	0.59
0.70	0.56
0.65	0.52
0.60	0.49
0.55	0.45
0.50	0.41
0.45	0.38
0.40	0.34
0.35	0.30
0.30	0.27
0.25	0.23
0.20	0.19
0.15	0.16
0.10	0.12
0.05	0.08

Size Specific VT Matrix*

Center of Glass VT	Overall VT
0.75	0.55
0.70	0.51
0.65	0.47
0.60	0.44
0.55	0.40
0.50	0.36
0.45	0.33
0.40	0.29
0.35	0.25
0.30	0.22
0.25	0.18
0.20	0.15
0.15	0.11
0.10	0.07
0.05	0.04

*Size Specific U-Factor, SHGC, and VT Matrices are based on the standard Projecting (Awning - Single) specimen size of 1500mm wide by 600mm high (59-1/16" by 23-5/8"). This represents 72.8% 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		
							70% Vision Area	NFRC 100-2010	95% Vision Area
							53.13" by 21.25"	59.06" by 23.62"	337.40" by 134.96"
1	0.48	43.7	Head	2.4362	0.7489	0.4670	0.5643	0.5564	0.4746
			L Jamb	2.4362	0.7794	0.4668			
			R Jamb	2.4362	0.7794	0.4668			
			Sill	2.4362	0.7455	0.4668			
2	0.46	44.8	Head	2.4362	0.7426	0.4503	0.5489	0.5405	0.4569
			L Jamb	2.4362	0.7729	0.4501			
			R Jamb	2.4362	0.7729	0.4501			
			Sill	2.4362	0.7391	0.4501			
3	0.44	45.8	Head	2.4362	0.7366	0.4336	0.5336	0.5248	0.4391
			L Jamb	2.4362	0.7669	0.4334			
			R Jamb	2.4362	0.7669	0.4334			
			Sill	2.4362	0.7331	0.4333			
4	0.42	46.8	Head	2.4362	0.7306	0.4170	0.5183	0.5091	0.4214
			L Jamb	2.4362	0.7609	0.4169			
			R Jamb	2.4362	0.7609	0.4169			
			Sill	2.4362	0.7270	0.4167			
5	0.40	47.9	Head	2.4362	0.7247	0.4004	0.5031	0.4934	0.4036
			L Jamb	2.4362	0.7551	0.4004			
			R Jamb	2.4362	0.7551	0.4004			
			Sill	2.4362	0.7211	0.4002			
6	0.38	48.9	Head	2.4362	0.7190	0.3841	0.4880	0.4779	0.3857
			L Jamb	2.4362	0.7494	0.3840			
			R Jamb	2.4362	0.7494	0.3840			
			Sill	2.4362	0.7153	0.3838			
7	0.36	50.0	Head	2.4362	0.7132	0.3676	0.4728	0.4623	0.3678
			L Jamb	2.4362	0.7437	0.3676			
			R Jamb	2.4362	0.7437	0.3676			
			Sill	2.4362	0.7096	0.3673			
8	0.34	51.0	Head	2.4362	0.7076	0.3514	0.4579	0.4469	0.3498
			L Jamb	2.4362	0.7381	0.3514			
			R Jamb	2.4362	0.7381	0.3514			
			Sill	2.4362	0.7039	0.3511			
9	0.32	52.0	Head	2.4362	0.7020	0.3349	0.4428	0.4314	0.3317
			L Jamb	2.4362	0.7325	0.3350			
			R Jamb	2.4362	0.7325	0.3350			
			Sill	2.4362	0.6983	0.3346			
10	0.30	53.1	Head	2.4362	0.6965	0.3188	0.4280	0.4161	0.3136
			L Jamb	2.4362	0.7271	0.3189			
			R Jamb	2.4362	0.7271	0.3189			
			Sill	2.4362	0.6928	0.3185			
11	0.28	54.2	Head	2.4362	0.6911	0.3025	0.4131	0.4007	0.2955
			L Jamb	2.4362	0.7217	0.3026			
			R Jamb	2.4362	0.7217	0.3026			
			Sill	2.4362	0.6873	0.3022			

Vision Area Data

Option No.	COG U-Factor	COG Temperature	Cross Section	Frame Height	Frame U-Factor	Edge U-Factor	Total Product U-Factor		
							70% Vision Area	NFRC 100-2010	95% Vision Area
							53.13" by 21.25"	59.06" by 23.62"	337.40" by 134.96"
12	0.26	55.2	Head	2.4362	0.6857	0.2864	0.3982	0.3854	0.2772
			L Jamb	2.4362	0.7164	0.2865			
			R Jamb	2.4362	0.7164	0.2865			
			Sill	2.4362	0.6819	0.2860			
13	0.24	56.3	Head	2.4362	0.6801	0.2703	0.3833	0.3700	0.2591
			L Jamb	2.4362	0.7105	0.2705			
			R Jamb	2.4362	0.7105	0.2705			
			Sill	2.4362	0.6762	0.2699			
14	0.22	57.3	Head	2.4362	0.6748	0.2543	0.3685	0.3547	0.2409
			L Jamb	2.4362	0.7053	0.2545			
			R Jamb	2.4362	0.7053	0.2545			
			Sill	2.4362	0.6709	0.2539			
15	0.20	58.4	Head	2.4362	0.6696	0.2383	0.3539	0.3396	0.2226
			L Jamb	2.4362	0.7002	0.2386			
			R Jamb	2.4362	0.7002	0.2386			
			Sill	2.4362	0.6657	0.2379			

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:

Jason A. Mitzel
Simulation Technician

Kevin S. Louder
Project Engineer

JAM:jam
A2572.01-116-45

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

Appendix A: Drawings and Bills of Material (9)

Revision Log

Rev. #	Date	Page(s)	Revision(s)
.01 R0	8/9/2010	All	Original Report Issue
.01 R1	9/3/2010	All	Revised Series/Model
.01 R2	9/13/2010	All	Revised Drawing Reference on page 1

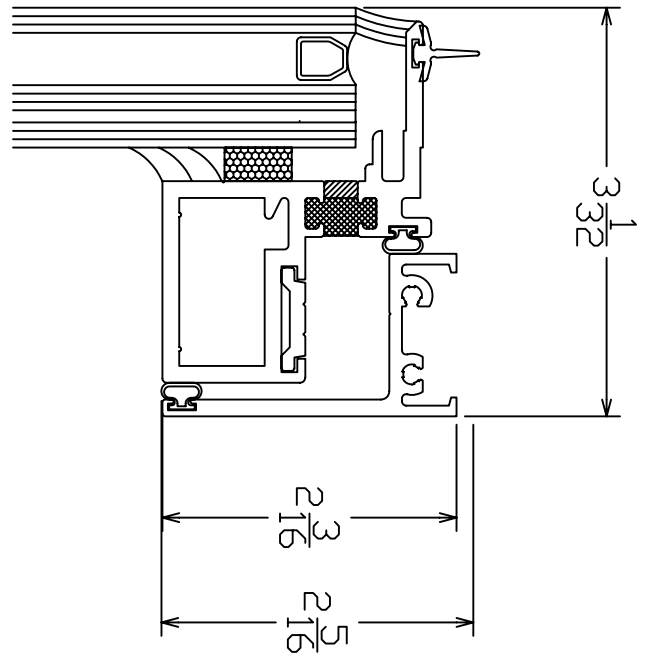
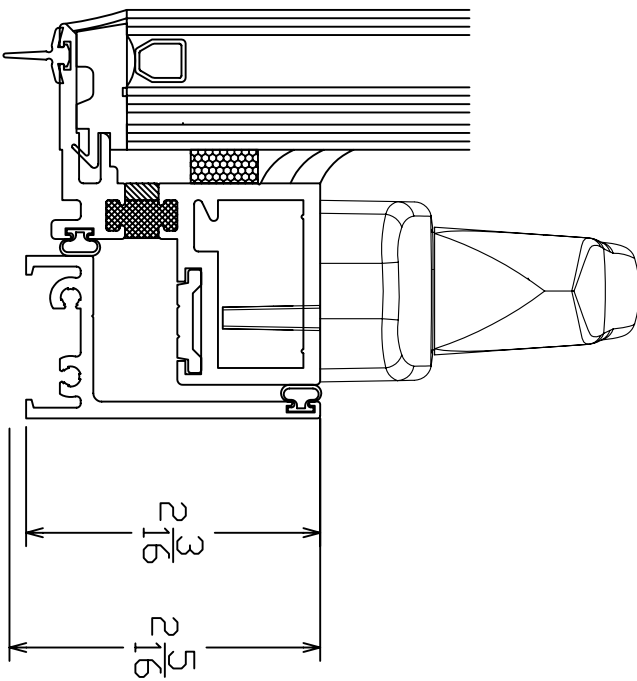
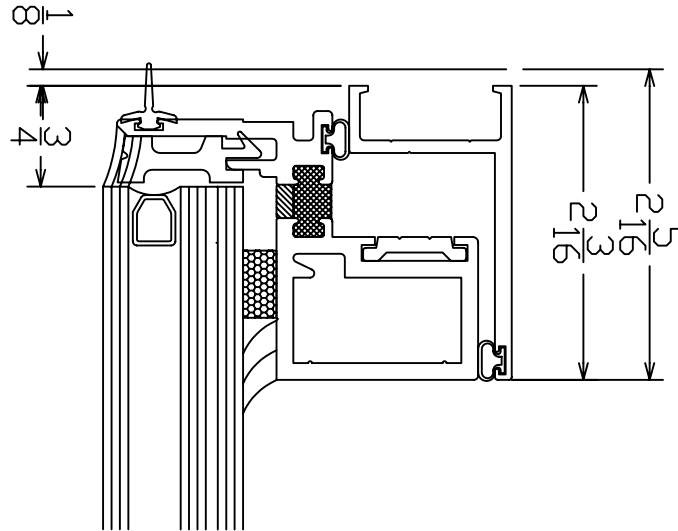
All drawings and Bills of Material used in simulating this product are enclosed in this Appendix.

ATI

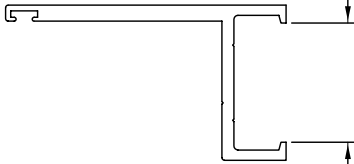
Report # A2572

Date 8/9/10

Simulator *Jason R. Mifal*

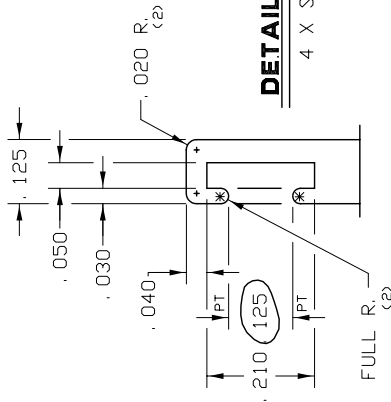


EXPOSED



ACTUAL SIZE

ATI
Report # A2572
Date 8/9/10
Simulator Jason R. Mifflin



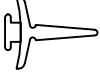
NOTES:

- 6063-T5 ALLOY AND TEMPER.
- PAINT PERIMETER: 6.153"

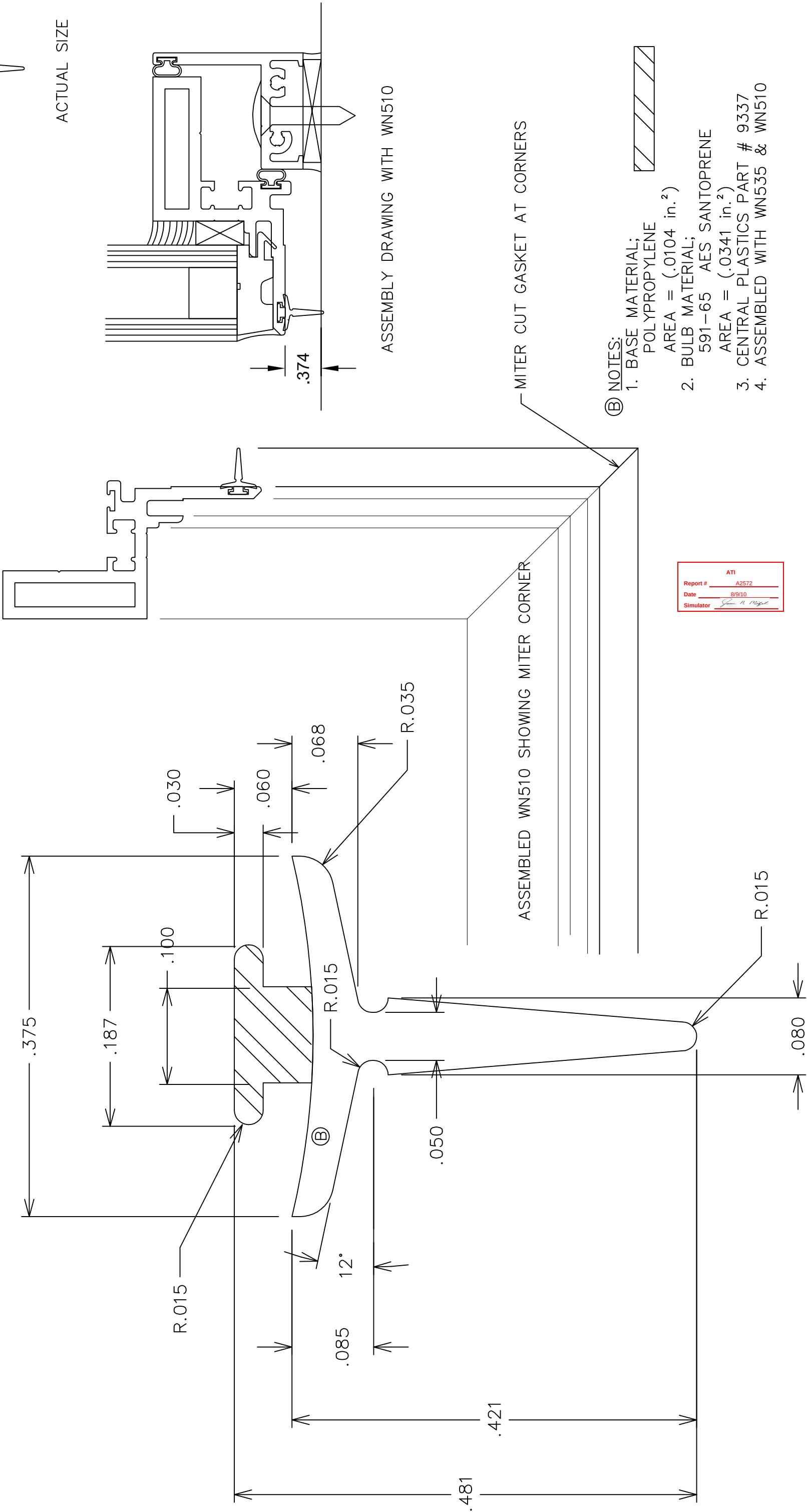
9X2 DIE 1/2 RECESS



.380	C-1737	2
.456	2.493	9 X 61583
8.098	SOLID	.STD-2
18	7" 54/PRESS 2	T-61583



ACTUAL SIZE



Ⓑ NOTES:

1. BASE MATERIAL;
POLYPROPYLENE
AREA = (.0104 in.²)
2. BULB MATERIAL;
591-65 AES SANTOPRENE
AREA = (.0341 in.²)
3. CENTRAL PLASTICS PART # 9337
4. ASSEMBLED WITH WN535 & WN510

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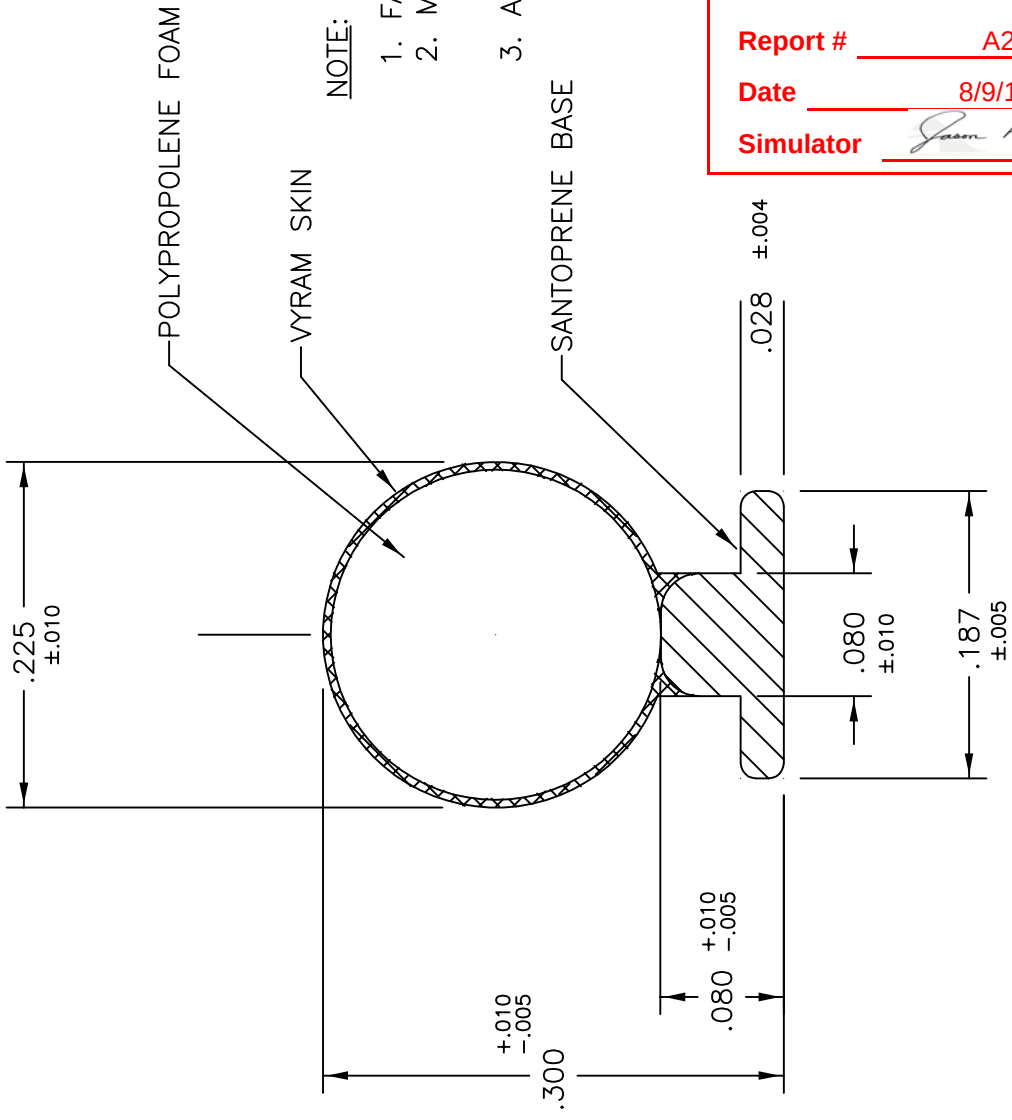
#	DATE	DESCRIPTION	INITIALS
Ⓑ	08/07	REVISE SHAPE, MATERIAL, SUPPLIER	JSM

DESCRIPTION		NAME
FINGER GASKET FOR 7500 WINDOW PART # NP810		JSM
		DATE 11-6-06
		SCALE 10X

United States ALUMINUM COMMERCIAL PRODUCTS GROUP	

		NUMBER
		FAB-6B

USA-1820

ACTUAL SIZE

NOTE:

1. FACE CLEARANCE = .125
2. MATERIALS: POLYPROPYLENE SANTOPRENE™
VYRAM™
3. AMESBURY 32007 or EQUAL

ATI

Report # A2572

Date 8/9/10

Simulator Jason A. Mitzel

U.S. ALUMINUM CORP.

PART NO. WH342
BULB GASKET for
7200 WINDOWS

USA-1820

GLH

7/20/99

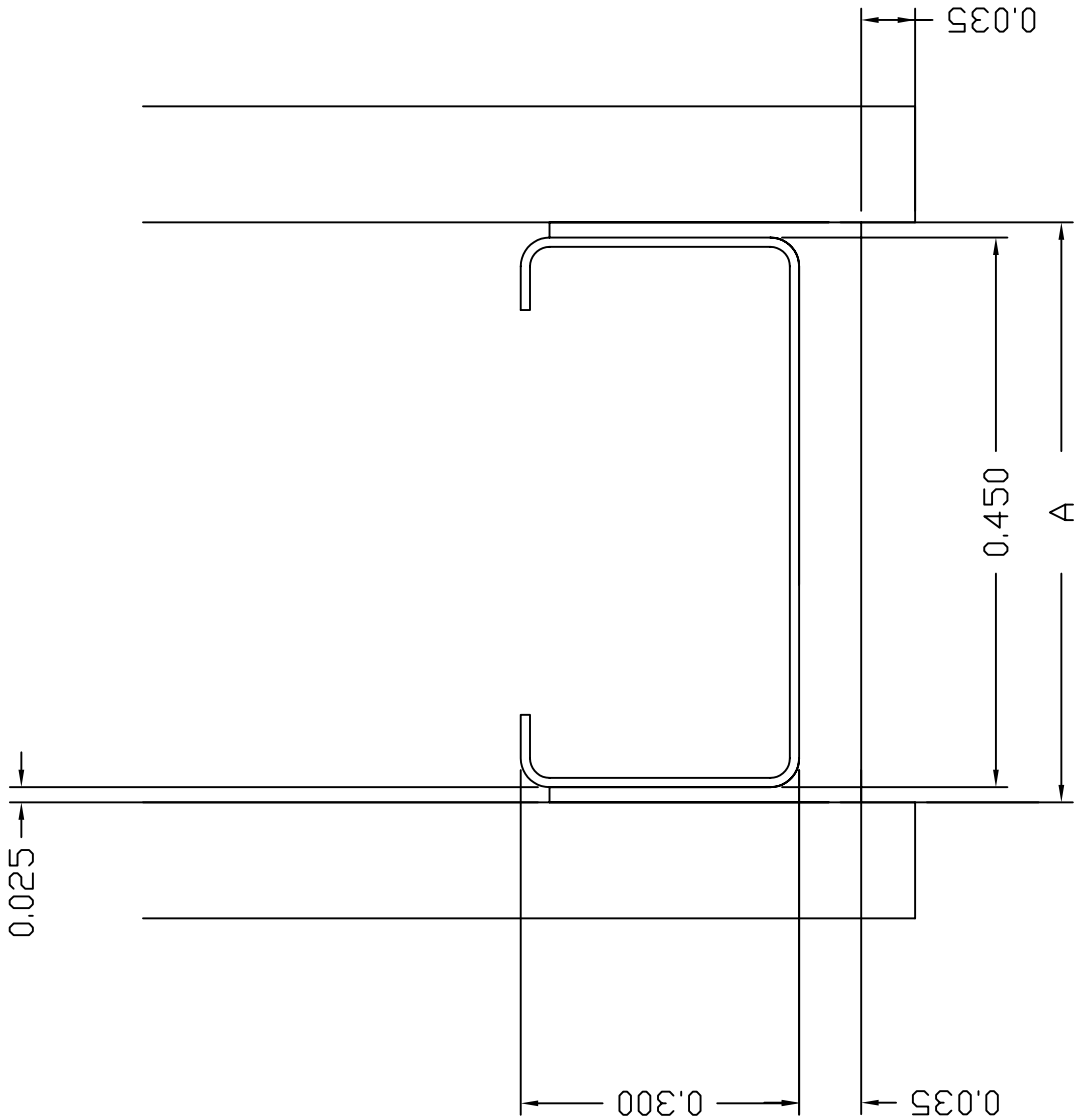
8 X SIZE

ATI

Report # A2572

Date 8/9/10

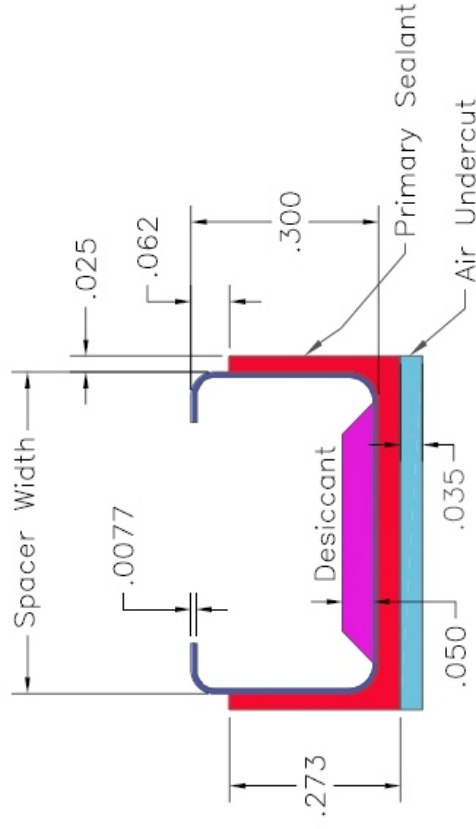
Simulator *Jason A. Mifal*



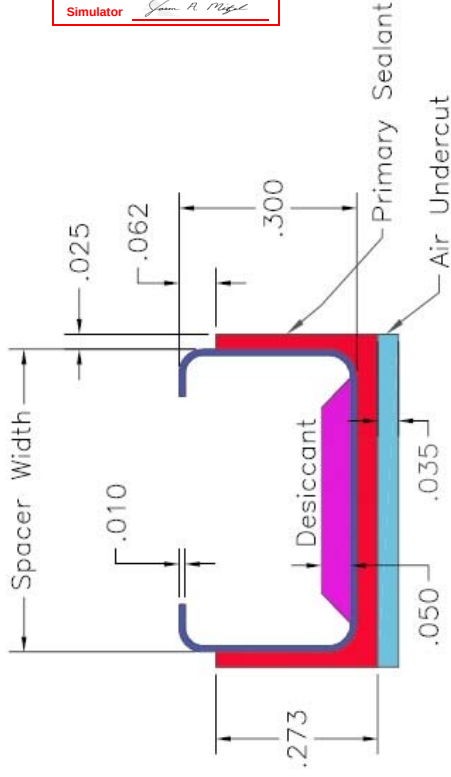
Offset: 0.035"
Primary Sealant: 0.035"
A: 0.500"

MATERIAL - .010 STEEL (Galv.)

**Intercept® ULTRA Stainless Steel—Standard Profile
SINGLE SEAL**

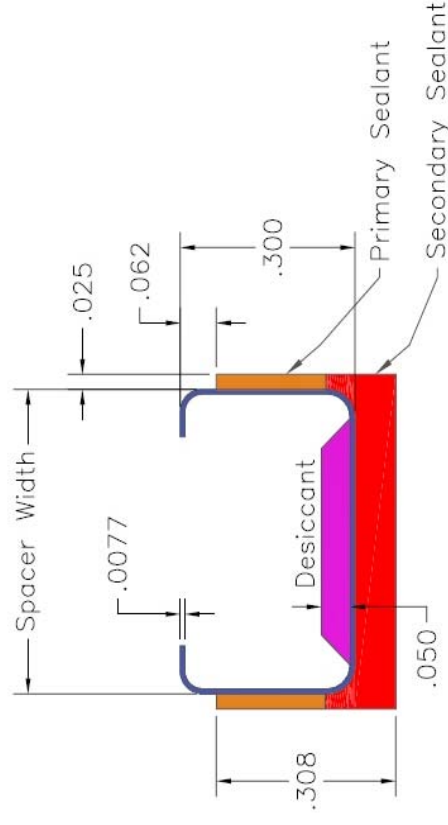


**Intercept® Blackline or Electrolytic Tin Plated Steel—Standard Profile
SINGLE SEAL**



Report #	ATI
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	John A. Mager

**Intercept® ULTRA Stainless Steel—Standard Profile
DUAL SEAL**



**Intercept® Blackline or Electrolytic Tin Plated Steel—Standard Profile
DUAL SEAL**

