



AAMA 507-07 THERMAL PERFORMANCE REPORT

Rendered to:

US ALUMINUM INC., DIVISION OF CR LAURANCE CO., INC.

SERIES/MODEL: 400T Thermal Door

TYPE: Swinging Door - Single

Report No: C3011.04-201-45
Report Date: 11/01/12



AAMA 507-07 THERMAL PERFORMANCE REPORT

Rendered to:

US ALUMINUM INC., DIVISION OF CR LAURANCE CO., INC.
200 Singleton Drive
Waxahachie, Texas 75165

Report No: C3011.04-201-45
Report Date: 11/01/12
Simulation Date: 11/01/12

Project Summary:

Architectural Testing, Inc. was contracted by US Aluminum Inc., Division of CR Laurance Co., Inc. to provide U-Factor and Solar Heat Gain Coefficient thermal performance ratings on the 400T Thermal Door Swinging Door - 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

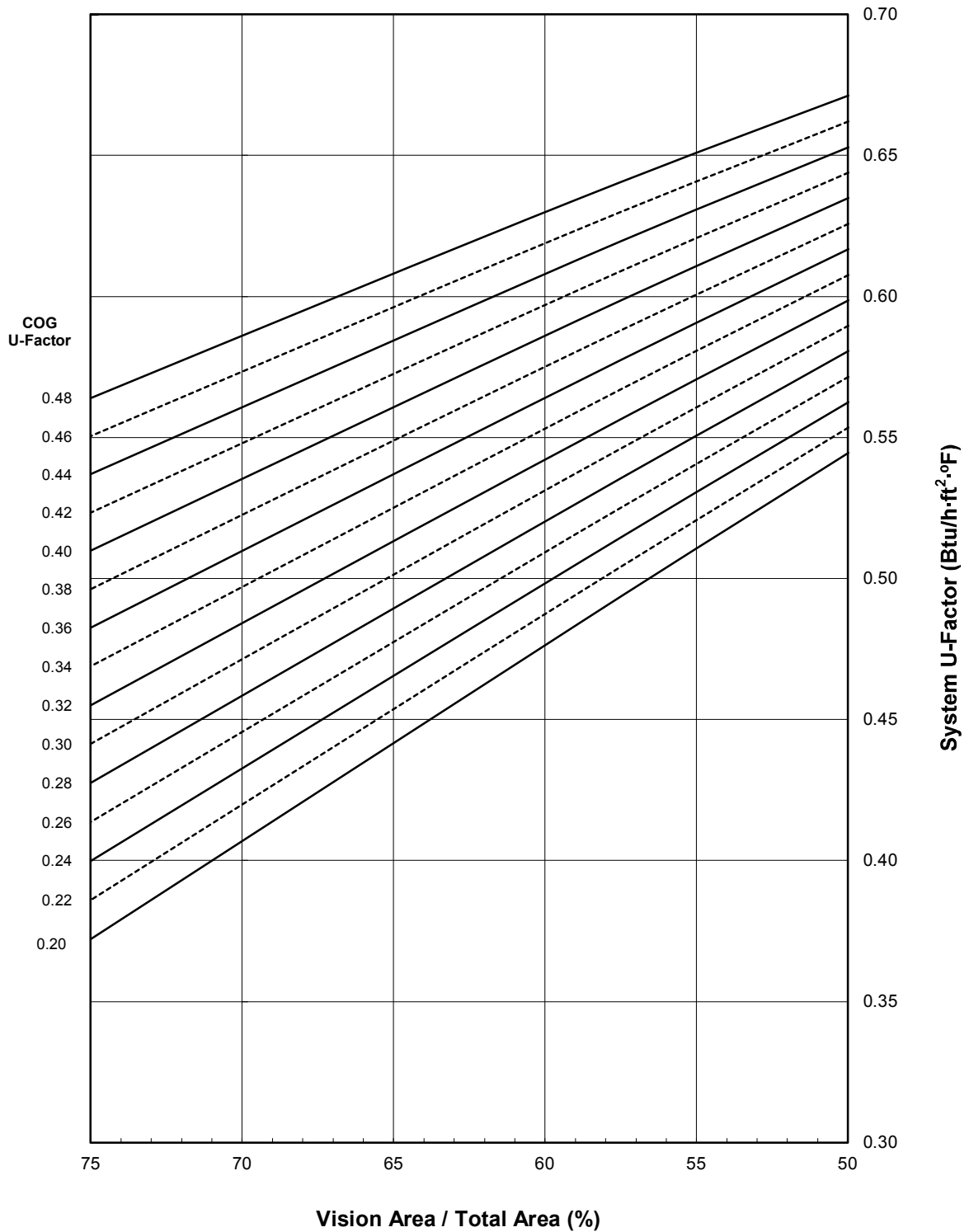
NFRC 200-2010, Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence

Simulation Specimen Description:

Series/Model: 400T Thermal Door
Bottom Rail: 7-1/4"
Frame: 1" Thermally Broken Aluminum
Type: Swinging Door - Single
Frame Material: Aluminum Thermally Broken Framing System
Material Finish: Painted Aluminum
Specimen Size: 960mm wide by 2090mm high (37-3/4" by 82-3/8")
Configuration: Single vision lite

US Aluminum Inc., Division of CR Lurance Co., Inc.
400T Thermal Door - Swinging Door - Single

System U-Factor vs. Percentage of Vision Area



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

**US Aluminum Inc., Division of CR Laurance Co., Inc.
400T Thermal Door - Swinging Door - Single**

Size Specific U-Factor Matrix*

Glazing Option	Center of Glass U-Factor	Overall U-Factor
1	0.48	0.63
2	0.46	0.62
3	0.44	0.61
4	0.42	0.60
5	0.40	0.59
6	0.38	0.58
7	0.36	0.57
8	0.34	0.56
9	0.32	0.55
10	0.30	0.54
11	0.28	0.53
12	0.26	0.52
13	0.24	0.51
14	0.22	0.49
15	0.20	0.48

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	0.47
0.70	0.44
0.65	0.41
0.60	0.38
0.55	0.35
0.50	0.32
0.45	0.29
0.40	0.26
0.35	0.23
0.30	0.20
0.25	0.17
0.20	0.14
0.15	0.11
0.10	0.08
0.05	0.05

Size Specific VT Matrix*

Center of Glass VT	Overall VT
0.75	0.44
0.70	0.41
0.65	0.38
0.60	0.35
0.55	0.32
0.50	0.29
0.45	0.27
0.40	0.24
0.35	0.21
0.30	0.18
0.25	0.15
0.20	0.12
0.15	0.09
0.10	0.06
0.05	0.03

*Size Specific U-Factor, SHGC, and VT Matrices are based on the standard Swinging Door - Single specimen size of 960mm wide by 2090mm high (37-3/4" by 82-3/8"). This represents 59% 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		
							50% Vision Area	NFRC 100-2010	75% Vision Area
							30.07" by 65.45"	37.80" by 82.28"	65.14" by 141.79"
1	0.48	43.7	Head	5.6161	0.8714	0.5416	0.6712	0.6343	0.5641
			L. Jamb	5.5224	0.8256	0.5416			
			R. Jamb	5.5224	0.8256	0.5416			
			Sill	8.1166	0.9132	0.5416			
2	0.46	44.8	Head	5.6161	0.8709	0.5269	0.6621	0.6235	0.5505
			L. Jamb	5.5224	0.8250	0.5269			
			R. Jamb	5.5224	0.8250	0.5269			
			Sill	8.1166	0.9128	0.5269			
3	0.44	45.8	Head	5.6161	0.8704	0.5126	0.6530	0.6127	0.5370
			L. Jamb	5.5224	0.8244	0.5126			
			R. Jamb	5.5224	0.8244	0.5126			
			Sill	8.1166	0.9124	0.5126			
4	0.42	46.8	Head	5.6161	0.8699	0.4984	0.6439	0.6020	0.5234
			L. Jamb	5.5224	0.8238	0.4984			
			R. Jamb	5.5224	0.8238	0.4984			
			Sill	8.1166	0.9121	0.4984			
5	0.40	47.9	Head	5.6161	0.8695	0.4843	0.6348	0.5912	0.5098
			L. Jamb	5.5224	0.8232	0.4843			
			R. Jamb	5.5224	0.8232	0.4843			
			Sill	8.1166	0.9117	0.4843			
6	0.38	48.9	Head	5.6161	0.8690	0.4704	0.6257	0.5805	0.4962
			L. Jamb	5.5224	0.8226	0.4704			
			R. Jamb	5.5224	0.8226	0.4704			
			Sill	8.1166	0.9114	0.4704			
7	0.36	50.0	Head	5.6161	0.8686	0.4564	0.6167	0.5697	0.4826
			L. Jamb	5.5224	0.8221	0.4564			
			R. Jamb	5.5224	0.8221	0.4564			
			Sill	8.1166	0.9110	0.4564			
8	0.34	51.0	Head	5.6161	0.8682	0.4426	0.6077	0.5590	0.4689
			L. Jamb	5.5224	0.8216	0.4426			
			R. Jamb	5.5224	0.8216	0.4426			
			Sill	8.1166	0.9107	0.4426			
9	0.32	52.0	Head	5.6161	0.8678	0.4288	0.5986	0.5482	0.4551
			L. Jamb	5.5224	0.8210	0.4288			
			R. Jamb	5.5224	0.8210	0.4288			
			Sill	8.1166	0.9103	0.4288			
10	0.30	53.1	Head	5.6161	0.8674	0.4152	0.5896	0.5374	0.4413
			L. Jamb	5.5224	0.8205	0.4152			
			R. Jamb	5.5224	0.8205	0.4152			
			Sill	8.1166	0.9100	0.4152			

Vision Area Data

Option No.	COG U-Factor	COG Temperature	Cross Section	Frame Height	Frame U-Factor	Edge U-Factor	Total Product U-Factor		
							50% Vision Area	NFRC 100-2010	75% Vision Area
							30.07" by 65.45"	37.80" by 82.28"	65.14" by 141.79"
11	0.28	54.2	Head	5.6161	0.8670	0.4014	0.5806	0.5266	0.4275
			L. Jamb	5.5224	0.8200	0.4014			
			R. Jamb	5.5224	0.8200	0.4014			
			Sill	8.1166	0.9097	0.4014			
12	0.26	55.2	Head	5.6161	0.8666	0.3879	0.5715	0.5158	0.4137
			L. Jamb	5.5224	0.8196	0.3879			
			R. Jamb	5.5224	0.8196	0.3879			
			Sill	8.1166	0.9094	0.3879			
13	0.24	56.3	Head	5.6161	0.8662	0.3743	0.5625	0.5051	0.3999
			L. Jamb	5.5224	0.8191	0.3743			
			R. Jamb	5.5224	0.8191	0.3743			
			Sill	8.1166	0.9091	0.3743			
14	0.22	57.3	Head	5.6161	0.8659	0.3610	0.5536	0.4943	0.3861
			L. Jamb	5.5224	0.8186	0.3610			
			R. Jamb	5.5224	0.8186	0.3610			
			Sill	8.1166	0.9087	0.3610			
15	0.20	58.4	Head	5.6161	0.8655	0.3475	0.5446	0.4835	0.3721
			L. Jamb	5.5224	0.8182	0.3475			
			R. Jamb	5.5224	0.8182	0.3475			
			Sill	8.1166	0.9085	0.3475			

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:



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Michael D. Topitzhofer
Simulation Technician

REVIEWED BY:



Digitally Signed by: Michael Resech

Michael P. Resech
Senior Project Manager

MDT: mdt

C3011.04-201-45

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

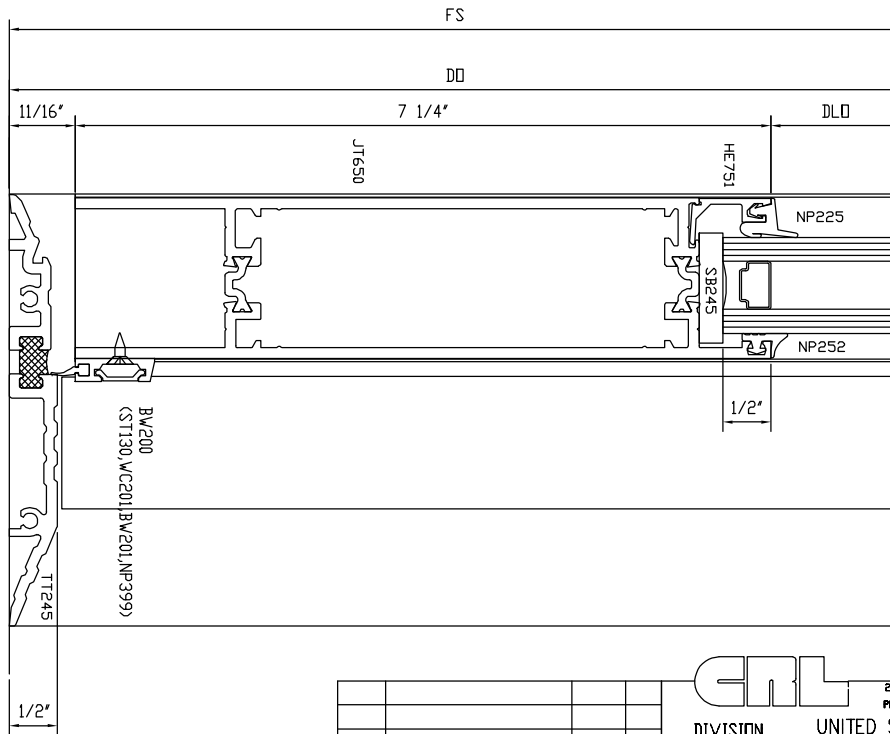
Appendix A: Drawings and Bills of Material (13)

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
04-R0	11/1/2012	All	Original Report Issue

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

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2100 E. 38TH STREET VERNON, CA 90058
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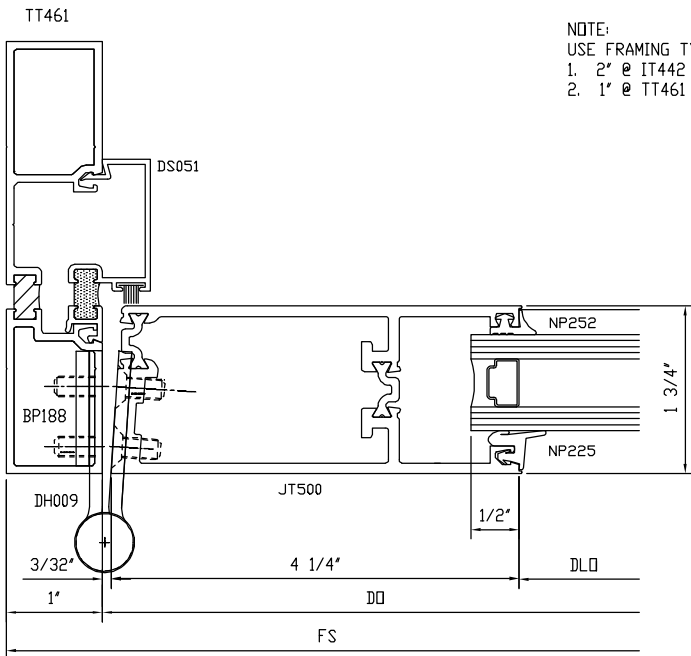
DIVISION UNITED STATES ALUMINUM

REV	REV_DESCRIPTION	DATE	XXX
SYN	REVISION	DATE	BY

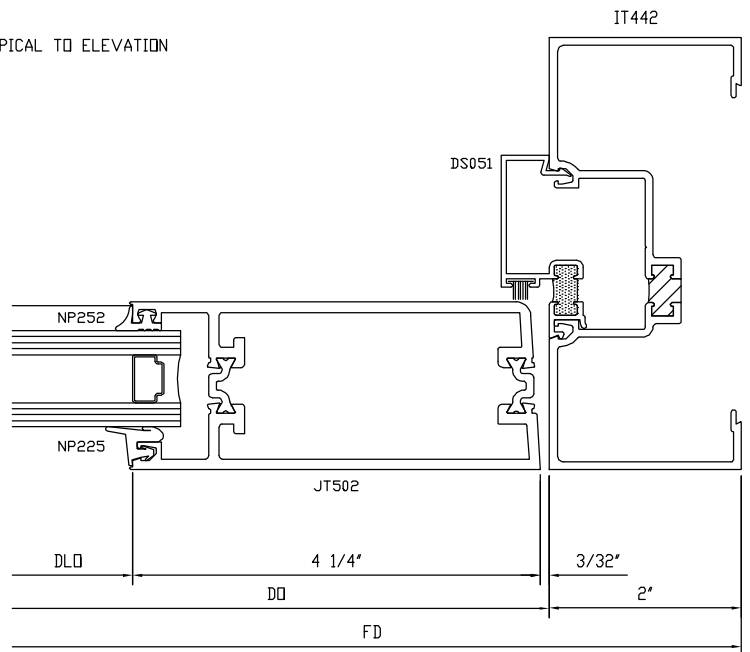
DCW
 08.31.12
 FULL

THERMAL_TEST_NFRC_AAMA_1503
 SERIES: 400T THERMAL DOOR

DWG NO.
 MU2012-012-03



NOTE:
 USE FRAMING TYPICAL TO ELEVATION
 1. 2" @ IT442
 2. 1" @ TT461



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				ENL		2100 E. 38TH STREET VERNON, CA 91058	
						PHONE: (323) 598-1281 FAX: (323) 232-2523	
				DIVISION		UNITED STATES ALUMINUM	
				DRAWN BY: DCW		THERMAL_TEST_NFRC_AAMA_1503	
				DATE: 08.31.12		SERIES: 400T THERMAL DOOR	
				SCALE: FULL		DWG NO.	
						MU2012-012-05	

THERMAL DOOR EXTRUSIONS

