

AAMA 507-07 THERMAL PERFORMANCE REPORT

Rendered to:

TUBELITE, INC.

SERIES/MODEL: Transom

TYPE: Door Transom

Report No: 79406.01-116-45
Report Date: 01/16/08

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Rendered to:

TUBELITE, INC.
3056 Walker Ridge Drive NW
Walker, Michigan 59544

Report No: 79406.01-116-45
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Project Summary:

Architectural Testing, Inc. (ATI) was contracted by Tubelite, Inc. to provide U-Factor and Solar Heat Gain Coefficient thermal performance ratings on the Transom - Door Transom. 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 100-2004, *Procedure for Determining Fenestration Product U-Factors*

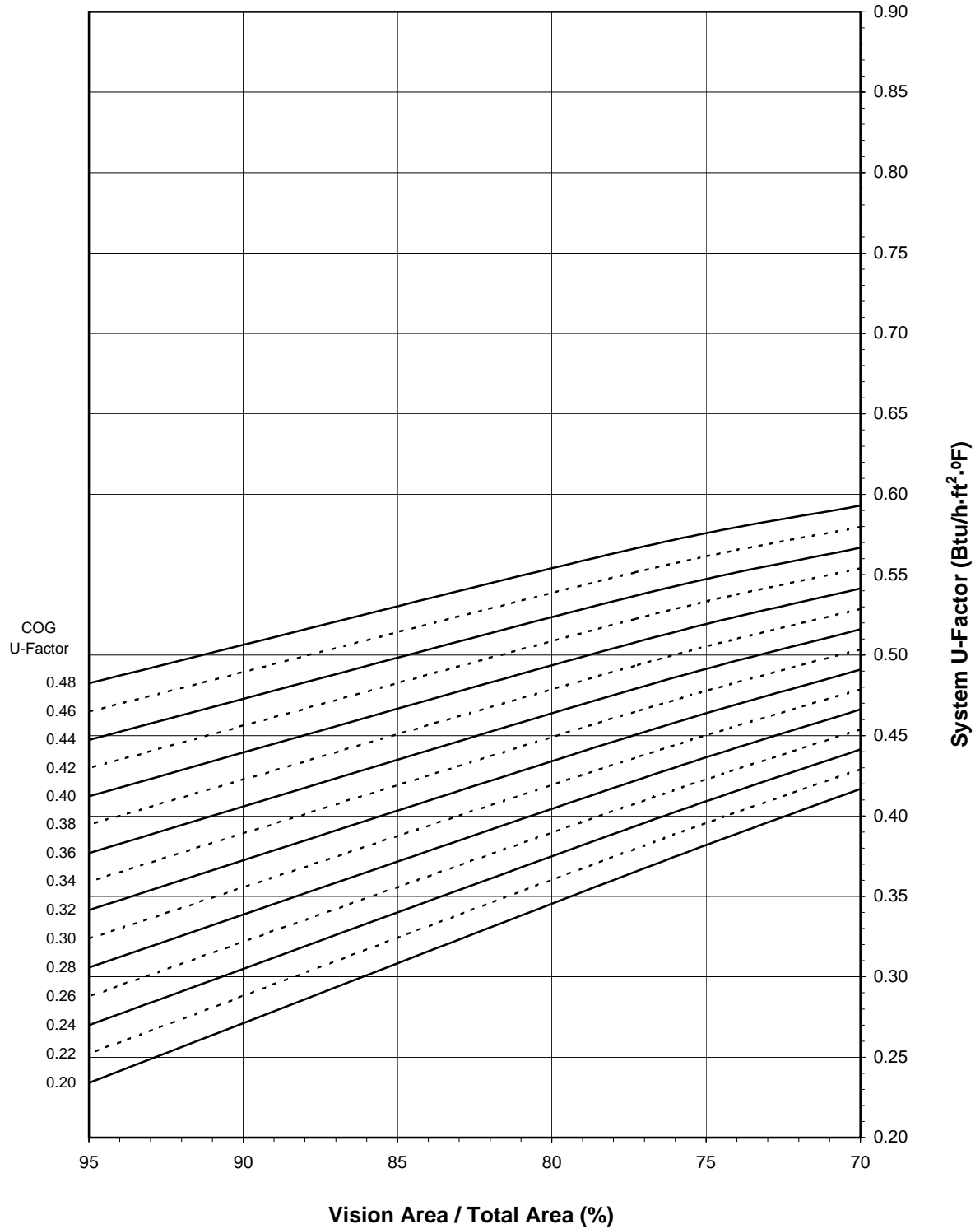
NFRC 200-2004, *Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence*

Simulation Specimen Description:

Series/Model: Transom
Type: Door Transom
Frame Material: Aluminum Thermally Broken Framing System
Specimen Size: 2000mm wide by 600mm high (78-3/4" by 23-5/8")
Configuration: Single Vision Lite

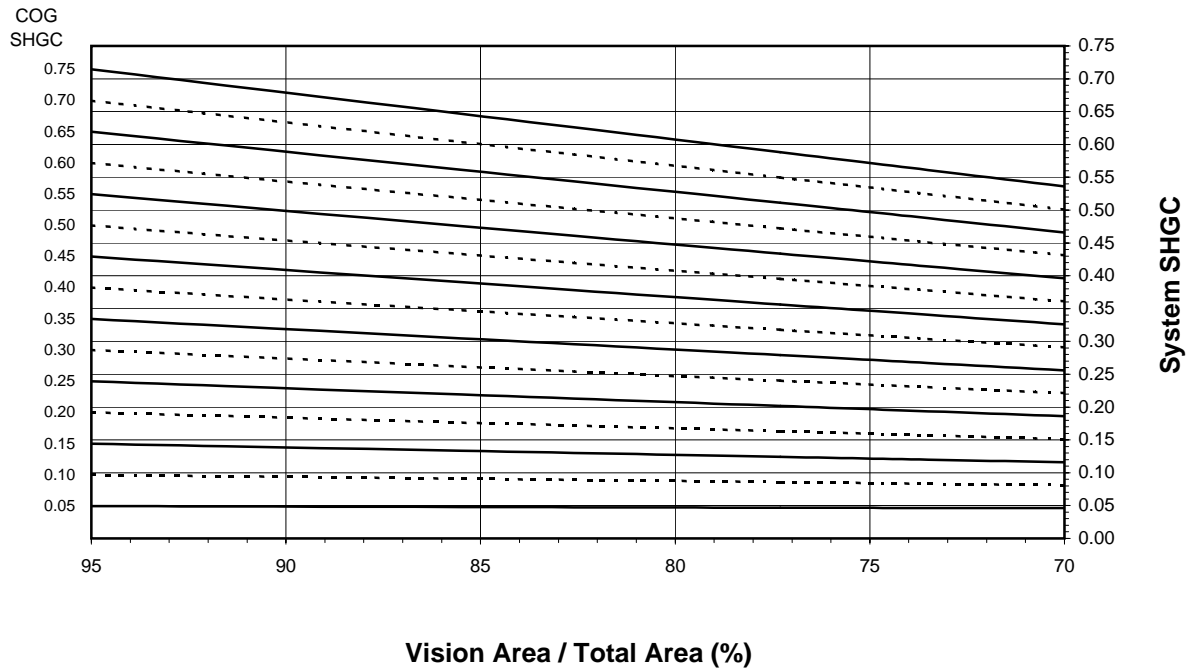
Tubelite, Inc.
Transom - Door Transom

System U-Factor vs. Percentage of Vision Area

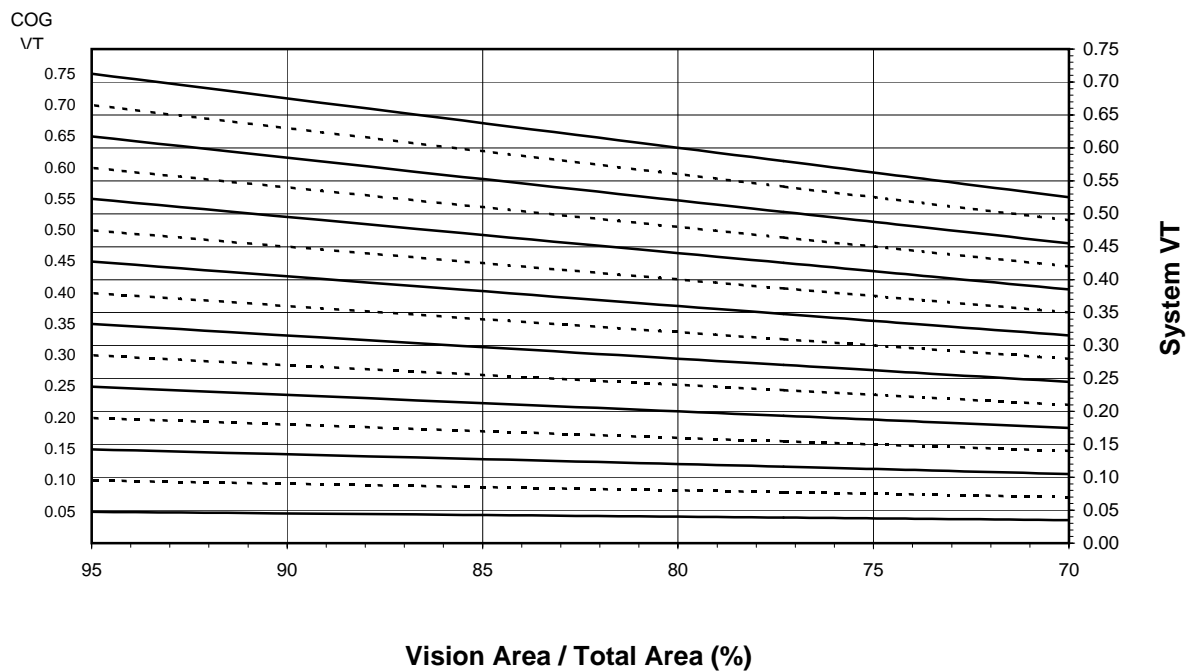


Tubelite, Inc.
Transom - Door Transom

System SHGC vs. Percentage of Vision Area



System VT vs. Percentage of Vision Area



Tubelite, Inc.
Transom - Door Transom

Size Specific U-Factor Matrix*

Glazing Option	Center of Glass U-Factor	Overall U-Factor
1	0.48	0.57
2	0.46	0.55
3	0.44	0.54
4	0.42	0.52
5	0.40	0.51
6	0.38	0.49
7	0.36	0.48
8	0.34	0.46
9	0.32	0.45
10	0.30	0.44
11	0.28	0.42
12	0.26	0.41
13	0.24	0.39
14	0.22	0.38
15	0.20	0.37

Size Specific SHGC Matrix*

Center of Glass SHGC	Overall SHGC
0.75	0.59
0.70	0.55
0.65	0.51
0.60	0.47
0.55	0.43
0.50	0.40
0.45	0.36
0.40	0.32
0.35	0.28
0.30	0.24
0.25	0.20
0.20	0.16
0.15	0.12
0.10	0.09
0.05	0.05

Size Specific VT Matrix*

Center of Glass VT	Overall VT
0.75	0.58
0.70	0.54
0.65	0.50
0.60	0.46
0.55	0.43
0.50	0.39
0.45	0.35
0.40	0.31
0.35	0.27
0.30	0.23
0.25	0.19
0.20	0.15
0.15	0.12
0.10	0.08
0.05	0.04

*Size Specific U-Factor, SHGC, and VT Matrices are based on the standard Door Transom specimen size of 2000mm wide by 600mm high (78-3/4" by 23-5/8"). This represents 77.3% 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		
							70% Vision Area	NFRC 100-2001	95% Vision Area
							58.60" by 17.58"	78.74" by 23.62"	369.29" by 110.79"
1	0.48	43.7	Head	2.1496	0.7958	0.5083	0.5931	0.5663	0.4825
			Jamb	2.1496	0.8551	0.5078			
			Sill	2.1496	0.7954	0.5081			
2	0.46	44.8	Head	2.1496	0.7939	0.4942	0.5798	0.5513	0.4648
			Jamb	2.1496	0.8521	0.4938			
			Sill	2.1496	0.7934	0.4940			
3	0.44	45.8	Head	2.1496	0.7932	0.4802	0.5669	0.5368	0.4473
			Jamb	2.1496	0.8514	0.4798			
			Sill	2.1496	0.7927	0.4801			
4	0.42	46.8	Head	2.1496	0.7925	0.4664	0.5542	0.5223	0.4298
			Jamb	2.1496	0.8508	0.4661			
			Sill	2.1496	0.7921	0.4662			
5	0.40	47.9	Head	2.1496	0.7919	0.4526	0.5414	0.5078	0.4123
			Jamb	2.1496	0.8502	0.4524			
			Sill	2.1496	0.7915	0.4525			
6	0.38	48.9	Head	2.1496	0.7913	0.4390	0.5288	0.4934	0.3946
			Jamb	2.1496	0.8497	0.4388			
			Sill	2.1496	0.7908	0.4388			
7	0.36	50.0	Head	2.1496	0.7907	0.4253	0.5162	0.4790	0.3770
			Jamb	2.1496	0.8492	0.4252			
			Sill	2.1496	0.7902	0.4252			
8	0.34	51.0	Head	2.1496	0.7902	0.4119	0.5036	0.4646	0.3592
			Jamb	2.1496	0.8486	0.4118			
			Sill	2.1496	0.7897	0.4117			
9	0.32	52.0	Head	2.1496	0.7896	0.3983	0.4911	0.4503	0.3414
			Jamb	2.1496	0.8482	0.3983			
			Sill	2.1496	0.7891	0.3982			
10	0.30	53.1	Head	2.1496	0.7891	0.3851	0.4787	0.4361	0.3237
			Jamb	2.1496	0.8477	0.3851			
			Sill	2.1496	0.7886	0.3849			
11	0.28	54.1	Head	2.1496	0.7886	0.3716	0.4662	0.4218	0.3058
			Jamb	2.1496	0.8473	0.3717			
			Sill	2.1496	0.7881	0.3715			
12	0.26	55.2	Head	2.1496	0.7882	0.3583	0.4538	0.4076	0.2878
			Jamb	2.1496	0.8469	0.3584			
			Sill	2.1496	0.7877	0.3582			
13	0.24	56.3	Head	2.1496	0.7877	0.3451	0.4415	0.3934	0.2700
			Jamb	2.1496	0.8465	0.3453			
			Sill	2.1496	0.7872	0.3450			
14	0.22	57.3	Head	2.1496	0.7873	0.3320	0.4292	0.3793	0.2520
			Jamb	2.1496	0.8461	0.3322			
			Sill	2.1496	0.7868	0.3319			
15	0.20	58.4	Head	2.1496	0.7869	0.3188	0.4169	0.3651	0.2341
			Jamb	2.1496	0.8458	0.3191			
			Sill	2.1496	0.7864	0.3187			

Detailed drawings, simulation data disks, and a copy of this report will be retained by ATI for a period of four years. The above results are the exclusive property of the client so named herein and are applicable to the sample simulated. This report does not constitute an opinion or endorsement by this laboratory. This report may not be reproduced except in full without the approval of ATI.

For ARCHITECTURAL TESTING, INC.:

SIMULATED BY:

REVIEWED BY:

Kevin S. Louder
Project Engineer

Michael J. Thoman
Director - Simulations and Thermal Testing
Simulator In Responsible Charge

KSL:ksl
79406.01-116-45

Attachments (pages):

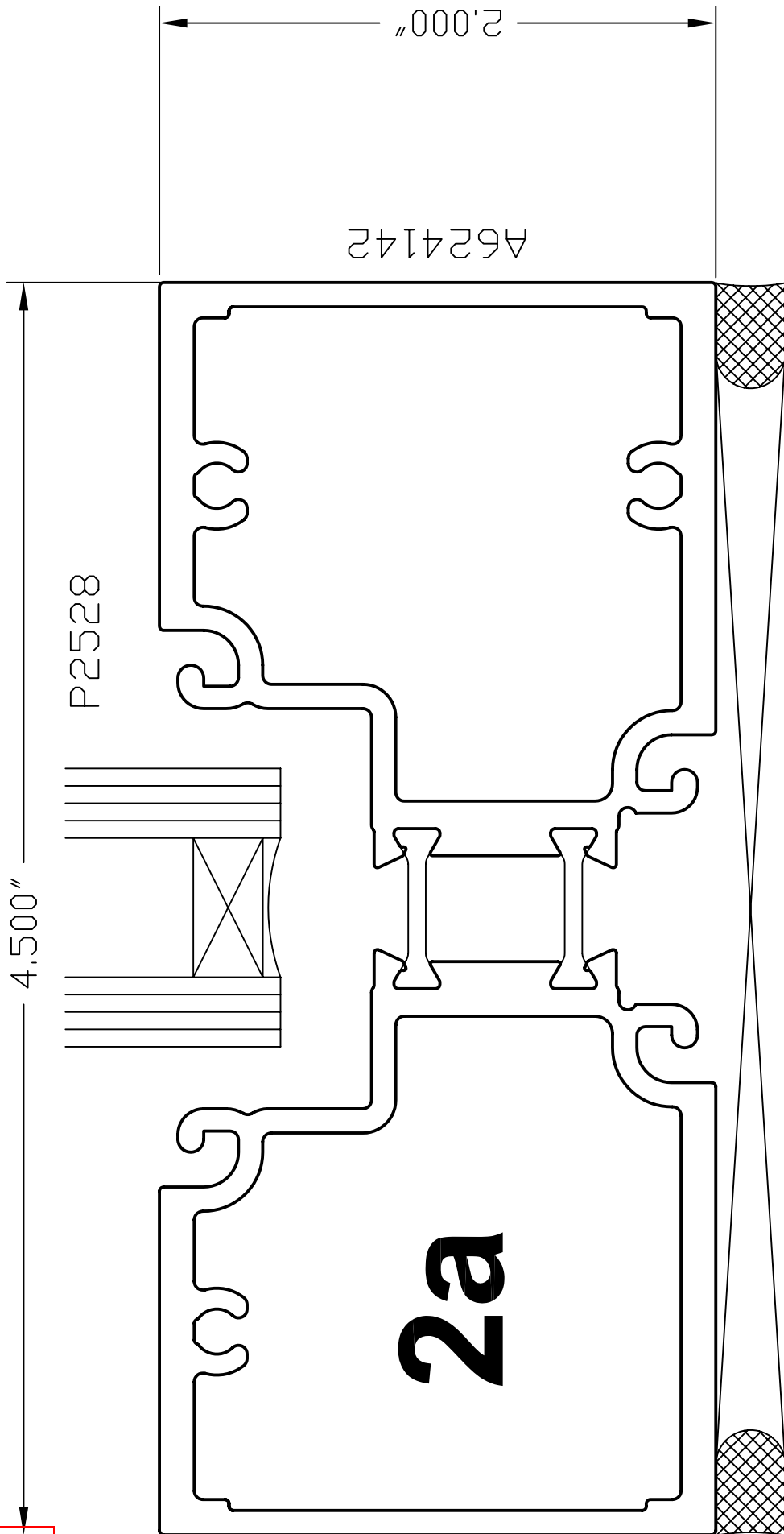
Appendix A: Drawings and Bills of Material (1)

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
.01 R0	1/16/2008	All	Original Report Issue

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

Appendix A



ATI

Report # 79406

Date 1/16/08

Simulator *Ken Lusk*